



IIAS Public Governance Series Vol. 7

VIKSIT BHARAT

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GOVERNANCE TRANSFORMED



EDITED BY:

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Viksit Bharat @2047

Governance Transformed

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*This work stands as a testament to the visionary generosity of the
Department of Administrative Reforms and Public Grievances, whose
steadfast commitment to advancing public administration reforms in India
provided both the inspiration and foundation for these pages to take shape*

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Message

Dr. Jitendra Singh¹

Public administration is the foundation of governance, and in a country as vast and diverse as India, it holds unparalleled significance. It is the system through which policies are translated into action, societal goals are pursued, and the aspirations of the people are addressed. In India, public administration not only manages the complexity of governance across federal, state, and local levels but also grapples with a wide spectrum of developmental challenges, economic disparities, and cultural diversities. Its role in ensuring inclusive, transparent, and effective governance is both pivotal and indispensable.

This book offers a deep and nuanced exploration of public administration in India, tracing its historical evolution, key frameworks, and the contemporary challenges it faces. The convergence of global influences, technological advancements, and the rising demands for accountability and citizen-centric governance are shaping the future of administration in ways both complex and promising.

In recent decades, the transformation of public administration has been rapid. Digital governance, e-governance platforms, and increasing public engagement have redefined how governance is perceived and practiced. Civil servants are no longer just implementers of policy; they are thought leaders, innovators, and bridge-builders between the government and the citizens. This book captures these shifts while also reflecting on

¹ Minister of State (Independent Charge), Ministry of Science and Technology, Ministry of Earth Sciences, Minister of State, Prime Minister's Office, Ministry of Personnel, Public Grievances and Pensions, Department of Atomic Energy, and Department of Space, Government of India

the historical foundations that continue to influence the present system.

For students, scholars, policymakers, and practitioners of public administration, this book provides a crucial resource, blending academic rigor with practical insights. It delves into the heart of how public administration can become more responsive, accountable, and participatory in a rapidly changing world. As India continues on its path of growth, the role of public administration in shaping the nation's future cannot be overstated.

This volume is an essential contribution to the discourse on governance in India. It not only enriches our understanding of the administrative systems that govern our lives but also inspires those who seek to make public service more effective and equitable. I believe that this book will serve as a valuable guide for anyone committed to improving the governance landscape of India and ensuring that it meets the evolving needs of its people.

Foreword

Paul Joyce²

The first serious discussion of the need for a new book on public administration and public governance in India occurred within a conversation involving Secretary V. Srinivas of the Indian Administrative Services (whose responsibilities included being head of the Department of Administrative Reforms and Public Grievances, abbreviated to DARPG) and the International Institute of Administrative Sciences (IIAS). This was followed, in November 2023, by an important meeting to frame the content and aims of the new book. This was chaired by DARPG and involved IIAS officials. Critical decisions emerged from this meeting. One of these concerned the composition of the editorial group. Also important in terms of the projected approach of the book, Steve Troupin, Executive Secretary of IIAS, spoke at this meeting on the importance of a reference book on Public Administration in India, and Fabienne Maron, Scientific Secretary of IIAS, suggested the desirability of the new book looking at administrative theory and practice.

Two considerations influenced thinking on when the new book should be finished and published. The first was an important anniversary in the history of public governance in India. On January 26, 1950, the Constitution of India was adopted by the nation. This meant that the 75th anniversary of the Republic of India would be in January 2025. And it can be appreciated from reading the book that many of the authors who contributed to it had this momentous anniversary in mind. The second consideration was the IIAS-DARPG conference scheduled

² Director of Publications, IIAS

for February 2025. This was planned to take place in India and be hosted by DARPG.

This book has been written by a team of experts with a deep knowledge and understanding of the practical affairs of governance and public administration in India. As a result, the book is an impressively authoritative reference on public governance and public administration in India. It should be of great interest to early-career civil servants and early-career policymakers in India and of enormous interest to many policymakers, government administrators, and university academics around the world. It contains much detail, much factual material, and much rich description of not only what has been happening in recent times but also of historical developments that will surely help readers to better understand some of the distinctive features of public governance and administration in India.

The subjects covered in the book justify calling this a comprehensive treatment of public governance and administration in India. The following list highlights just a few of the subjects addressed: the Constitution, democracy, decentralisation, social justice, citizen empowerment, gender inclusion, the civil service, digital change, and major policy sectors (health, higher education, rural development, urban development, agriculture, climate change and the environment, relations with the world, etc.).

As IIAS approaches its own anniversary in 2030, when it will be 100 years since it was founded as an institution with scientific purpose in Madrid by the International Congress of Administrative Sciences, it remains focused on the importance of its scientific mission of addressing the problems and challenges facing national and international public administrations. It addresses this scientific mission by facilitating and hosting discussions of practical experience and theoretical analyses by practitioners and academics from all regions of the world, from all cultures. It appreciates the everlasting unfolding of experiences and problems, and the international diversity of

those experiences and problems. To pursue its scientific mission, it is currently embarked on encouraging research and publications that carry out “deep dives” into public governance and administration in individual countries and comparative analysis of multiple countries to draw out lessons about actions and consequences and causes and effects.

The collaboration between DARPG and IIAS in the design and realisation of this new book on India can therefore be seen as a contribution to a long-term strategic endeavour to advance international knowledge creation and exchange in public administration. It could turn out to be a very fruitful collaboration in the sense that the experiences of India over the last decade could be of great practical and theoretical significance for the international exchange of knowledge and lessons. In 2015 the Cabinet of the Government of India authorised a fundamental reform of India’s public governance institutions. It had been decided to replace the long-established system of planning, which the Cabinet had set up in 1950, with a new system for strategic policymaking and to officially lodge part of the government capability in strategic policymaking in a new body, NITI Aayog. This decision was the subject of a Cabinet Resolution:

In the context of governance structures, the changed requirements of our country, point to the need for setting up an institution that serves as a Think Tank of the government—a directional and policy dynamo. The proposed institution has to provide governments at the central and state levels with relevant strategic and technical advice across the spectrum of key elements of policy. This includes matters of national and international import on the economic front, dissemination of best practices from within the country as well as from other nations, the infusion of new policy ideas and specific issue-based support. The institution has to be able to respond to the changing and more integrated world that India is part of.

From other aspects of the 2015 Cabinet Resolution, it was clear that the new system was not intended to be a totally centralised and totally technocratic system of strategic policymaking. The role of the State level of government and the new system's "pillars" were envisaged as follows. First, the States were to be partners. Thus, NITI Aayog was charged with developing "a shared vision of national development priorities, sectors and strategies with the active involvement of States in the light of national objectives". Second, the pillars specified a public governance system with the following elements: serving the aspirations of society and individuals, responsiveness, citizen participation, empowering women, social inclusion (i.e., inclusion of all groups), equal opportunities for the youth of India, and technology-enabled government transparency. In all respects, this was a progressive agenda.

This reform can be regarded as a large-scale experiment in public governance. Even when steered by assumptions, beliefs, insights, theories, and so on, the development of public governance in history is always, in the last instance, experimental. And such experiments can be opportunities for the global community of public administration—practitioners and academics—to scientifically evaluate and learn from the trial and error of pioneering experiments.

Nothing I have just written here should be taken to mean that this book is being offered as a systematic evaluation of the success of this very recent experiment with a strategic policymaking reform to the public governance system, but it is important for the reader to bear in mind that India has been transitioning from its decades-old planning system and has been approaching public policymaking and execution in a totally new way since 2015.

There have been signs that the new system of strategic policymaking is compatible with positive national development results. In the years since 2015, some of the statistical data available on India shows the following:

1. Poverty: estimated percentages of the population living in poverty are reducing.
2. Economy: unemployment is falling as a percentage of the total labour force between 2015 and 2024.
3. Health and Education: the percentage of the population using at least basic drinking water services is rising; government spending on health and education is increasing as a percentage of GDP; neonatal and under-five mortality rates are reducing; and life expectancy at birth is increasing (until 2020, when the global pandemic reversed the positive trend in life expectancy).
4. Environmental trends: CO₂ emissions per capita from fossil fuel combustion and cement production are increasing; the renewable energy share in total final energy consumption is increasing (over the period 2015 to 2020).

So, it seems that the human development-type indicators (access to drinking water, health, education, and poverty) moved in a positive direction, and there was a positive trend in terms of renewable energy. The emission of CO₂ per capita is the exception in this clutch of indicators, with India showing a negative trend in this respect.

These achievements by India in relation to human development and sustainability indicators are worth underlining. The “average” country over the last decade has made only modest progress on sustainable development indicators, and it is noticeable that India is one of the countries we might describe as doing better than average. Some of the other countries in this category are situated in East Asia and the Arabian Peninsula. I am thinking of Cambodia and Indonesia in East Asia, and Saudi Arabia, UAE, Kuwait, and Bahrain in the Arabian Peninsula. This may suggest that India’s experiences over the last decade may resonate particularly strongly with these other societies that appear to have progressed relatively well in terms of national development and sustainability.

It may be too early to conclude if a new approach to strategic policymaking has now been institutionalised within the public governance system of India and is now delivering the required policy dynamism and agility, but the book does provide some interesting data and insights about new policies and successful government innovations in the past decade.

Some examples of innovation and the government demonstrating agility, which are to be found in the book, include the following.

A chapter on the health sector (Chapter 10) includes a description of the third National Health Policy (2017) and the government's recent efforts to improve health care. Within this description is a mention of the increases to the government-financed insurance scheme, Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (AB-PMJAY), which is reported to have increased substantially since 2014. This is a government health-care programme operated on a massive scale. As stated in the chapter, "Under AB-PMJAY 345 million Ayushman cards have been issued, and 29,914 hospitals have been empanelled. Sixty-five million authorised hospital admissions have taken place under the scheme".

The chapter on agriculture (Chapter 4) includes a discussion of what the government has been doing since 2014. It is stated that the Prime Minister announced an ambition to double the income of farmers. Consistent with this ambition, since 2014, there have been a number of new government programmes and schemes introduced. "These include a scheme for soil health cards to all the farmers, National Agriculture Market (e-NAM), Pradhan Mantri Krishi Sinchayee Yojana (PMKSY), and Pradhan Mantri Fasal Bima Yojana (PMFBY) which provides very low premium for farmers." The PMKSY scheme, launched in 2015, supports the use of micro-irrigation technologies. The PMFBY scheme, which is a crop insurance scheme, differs from previous schemes because the insurance premium for farmers is very low, with obvious implications for its acceptability and take-up.

A chapter on digital public infrastructure (Chapter 4) argues that India's economic development plans rest heavily on digital transformation. Developments in this respect began with a plan for e-governance in 2006. Three years later, in 2009, came the Aadhaar Project which was set up to provide each person in India with a unique identity number. Then, after 2014, the Indian Government had a policy of integration of Aadhaar with other government programmes, which we might assume was critical for its exploitation to increase government productivity. For example, it is reported that this led to greater efficiency and less fraud in welfare services:

By linking Aadhaar with Jan Dhan bank accounts and mobile numbers (the “JAM” Trinity), the government streamlined the delivery of social welfare programs, reducing fraud and ensuring that benefits reached the intended recipients directly and efficiently. This proved particularly crucial during the pandemic, enabling swift and targeted disbursement of financial aid to those most in need.

In the period up to March 2021, it seems, the Indian Government had saved slightly over an estimated 1% of GDP due to Direct Benefit Transfers and other reforms.

Another chapter (Chapter 3) also addresses the Direct Benefit Transfer reforms applied to the government's operations in making payments as a part of welfare services. This chapter includes an analysis and evaluation of what happened when COVID-19 came to India in 2020. The economic consequences of the pandemic soon hit the incomes of many including those living in poor households. Pradhan Mantri Garib Kalyan Yojana (PMGKY) was launched in March 2020 and provided direct cash transfers and free food grains, helping the poor, women, and senior citizens. Within a few months, some 200 million people had been helped through this scheme.

As our final example, we turn to the subject of energy and in particular renewable energy (Chapter 11). The Indian Government in 2008 formulated the National Action Plan on

Climate Change (NAPCC), and work began on various missions which included missions related to solar energy and energy efficiency. In 2015 the Indian Government launched a scheme known as Faster Adoption and Manufacturing of Hybrid and Electric Vehicles in India (FAME India) that was intended to begin the phasing out of fossil fuel-based vehicles. In 2016 the Cabinet of the Indian Government approved funding related to the development of clean coal technologies. In 2024 the Indian Government launched the Surya Ghar Scheme under which households are provided with free electricity, and they can access financial support to enable solar panels to be installed on their roofs. This last scheme is aimed at 10 million (1 crore) households.

These and other examples in the book build a credible picture of some adeptness by the Indian Government and civil service in using strategic policymaking in public governance. The examples in which the innovation involves digital technology also suggest an ability to increase government efficiency and achieve large-scale public service system reforms (e.g., Direct Benefit Transfer).

From the point of view of international knowledge creation and exchange, and the global dialogue on lessons for public administration, it would be good to see this volume succeeded by a book that reports on the extent to which strategic policymaking in India has been firmly institutionalised as part of a decentralised and inclusive public governance system providing both innovation and agility. This might involve enquiring into the mechanics of strategic policymaking in India and how the civil service adapted and developed appropriate capabilities to make it a success. But in the meantime, this book surely offers many opportunities for policy learning for practitioners and academics in India and for practitioners and academics in the rest of the world.

Introduction

C. K. Mathew, Surendra Nath Tripathi,
C. Sheela Reddy, & A. P. Singh

Governance has often been defined as the manner in which the authority, control, and power of an elected government are exercised in mobilising a society's economic and social resources to address issues of public interest. It also refers to the interaction between government and other factors of the social sphere, including the process of decision-making in a complex set of circumstances. The United Nations Development Programme (UNDP) views governance as the exercise of political, economic, and administrative authority in the management of a country's affairs at all levels. Similarly, the World Bank defines governance as the manner in which power is exercised in the management of a country's economic and social resources. According to the Organisation for Economic Co-operation and Development (OECD), the concept of governance denotes the use of political authority and the exercise of control in a society in relation to the management of its resources for social and economic development. In a unitary system, it refers to the national government and its administrative management of the country. However, in a federal system such as India, it refers to both the national and state-level governments which manage areas of responsibility duly assigned to them by the Constitution of the country.

Governments operate in the world of public policy. Policy can broadly be defined as a proposed course of action by an individual, a group, an institution, or a government to realise a specific collective objective within a given environment. Public policies are goal-oriented, formulated, and implemented with a view to attaining the objectives which the government considers

essential for the ultimate benefit of the masses in general. Thus, it can be said that the objective of public policy is always, and for all times, the betterment of the entire society. Good governance is required to ensure that policies have their desired effect.

In this context, it is essential to think of the present systems of government as a natural progression of the historical and sociological context from which it evolved. The sub-continent we inhabit, vast as it was and is, grew from the great empires that ruled over it across the millennia preceding. Undoubtedly, they were disparate and varied, and as diverse as it was possible to be: from the great realms of the Deccan to the magnificent empires of the Mauryas, the Mughals, and the Marathas. When British mercantilism gained a foot hold in the subcontinent, we experienced depravation and exploitation, leading to the impoverishment of a once flourishing economy. The British government took over the affairs of the land in 1858 and set about creating instruments of governance, most of which still survive today. These include the Westminster form of parliamentary democracy and government, the bicameral legislative control, the judicial systems from sub-district to federal level, the modes of collection of taxes, etc., including the establishment of the pivotal role of the district as the basic unit of administration and the creation of a civil service to manage the affairs of state and country. With the dawn of freedom in 1947 and the formation of the Republic of India in 1950, we became an independent and sovereign nation with the capability and competence to manage our own affairs. With time, we grew to be the most populous country in the world, being the fifth largest economy and an enviable skilled labour force, showcasing a demographic structure that promises rich dividends in the days ahead.

In the 75 years gone by, we have transformed ourselves from an improvised and controlled socialistic country with a planned economy, taking ourselves through dynamic economic reform in the early 1990s, to a thriving nation where free enterprise is encouraged, even as the poor and deprived are fully provided for with massive budgetary support through national and state-level

programmes that take care of them. The three quarters of a century that has gone by have seen dramatic growth in nearly all sectors. According to NITI Aayog, India's GDP which stood at ₹4.97 lakh crore in 1950–1951 (at constant prices) has climbed to ₹173.82 lakh crore in 2023–2024. In the mid-1950s, it was estimated that 65% of the country's population was below the poverty line; today it is about 5%. Life expectancy which was about 36 years in 1950 stands today at 68 for men and 71 for women. Literacy was but less than 20% then; it is over 74% today.

The changes have been invigorating and have drawn the attention of India watchers abroad and thinkers and policy formulators within the country. It is in this context that the concept of Public Policy and Good Governance has once again started to arouse the keen interest of researchers, academicians, and policymakers in the government. It has also been felt that policy experts in and outside the government are required to have a good understanding of how policy decisions are made, how the government functions, the nature of the environment in which the government is embedded, the interplay between the government and the environment, and how this interplay affects policy choices. The chapters of this volume have been written by authors, many of them were career administrators, who have held important assignments at the level of the Government of India. The subjects cover a wide array of disciplines and reflect the observations of those who have formulated policy and have overseen their implementation over the last four or five decades. The book consists of twenty chapters examining in depth the many different and complex aspects of public policy and governance.

Shri V. Srinivas, in the chapter “Viksit Bharat: New Paradigms in Governance—Empowering Citizens and Reaching the Last Mile,” focuses on the period from 2019 to 2024 which marks a transformative era in Indian governance, characterised by new paradigms that prioritised accountability, transparency, and inclusiveness. Under the leadership of Prime Minister Narendra Modi, India's governance model embraced Next Generation

Reforms, bridging the gap between government and citizens through technology and innovative practices. The Digital March, led by the Central Secretariat and supported by state-level e-Governance initiatives, revolutionised service delivery and public grievance redressal. The emphasis on efficiency, effectiveness, and modern digital institutions positioned India as a global leader in digital public infrastructure, with significant impacts on rural areas and regions like Jammu and Kashmir. This governance evolution reflects the nation's broader vision of a Viksit Bharat, or a developed India, during its Amrit Kaal (2022–2047).

The chapter “The Institution of Civil Service of India” by Dr. N. Ravi Shanker highlights the historical evolution of the civil service in India, tracing its roots from the Mauryan Empire through the Mughal period to British rule and its continuation in independent India. It highlights the significance of the civil service in governance, particularly the influence of the East India Company (EIC) and the British Raj in shaping modern administrative structures. The chapter examines the transition from traditional governance methods to the establishment of a formal, merit-based civil service system, comparing it to similar developments in other parts of the world, such as China. The key aspects include the importance of loyalty, kinship, and merit in civil service appointments, as well as the role of the civil service in sustaining governance values. The analysis emphasises the need for the civil service to adapt to contemporary challenges remain relevant.

Dr. R. S. Sharma's chapter “Improving Public Service Delivery: An Indian Experience” provides a comprehensive analysis of India's Direct Benefit Transfer (DBT) system, which aims to modernise and digitise the delivery of welfare benefits to enhance efficiency, transparency, and inclusivity. The chapter presents the historical context of welfare distribution in India, the challenges of traditional benefit delivery systems, and the transformative impact of the DBT initiative. The key components discussed include the creation of unique identities through

Aadhaar, the role of technology in financial inclusion, and the integration of banking systems with mobile technology to ensure seamless fund transfers. The essay also identifies the challenges faced during implementation, such as Aadhaar seeding accuracy and connectivity issues in rural areas, as well as the success stories of DBT in various sectors.

Dr. Siraj Hussain, in the chapter on “Indian Agriculture: Green Revolution Stagnates, Allied Sectors Grow,” discusses multifarious aspects of Indian agriculture, including the Green Revolution and the growth of allied sectors. India’s agricultural sector, once revolutionised by the Green Revolution, faces new challenges as it grapples with the stagnation of crop productivity and the environmental impacts of intensive farming practices. While the Green Revolution ensured food security for the nation, it also led to soil degradation, water depletion, and health concerns due to chemical use. However, the past two decades have seen significant growth in allied sectors like horticulture, dairy, and fisheries, showcasing India’s adaptability and resilience. The success of these sectors, combined with advances in science and governance, has allowed India to not only maintain food security but also inspire other nations facing similar challenges. This evolution underscores the importance of sustainable agricultural practices in the face of climate change.

Dr. Noor Mohammad, in “Building of a Thriving Democracy in India,” examines the evolution of democratic governance and the challenges faced in India, with a keen eye on how electoral democracy grew and flourished. Recognising that the spirit of democracy requires a congenial environment to flourish, this study assesses the strengths and weaknesses of India’s democratic system. Drawing on international best practices, including election observation and the recommendations of the Electoral Integrity Project, it identifies areas for improvement to ensure the objectives of free and fair elections. The chapter explores potential electoral reform proposals with a view to deepen democracy in India and addresses concerns and

shortcomings to enhance the integrity and effectiveness of the electoral process.

The concept of “Vishwa Guru” or “Teacher of the World” reflects India’s historical role as a global knowledge leader, excelling in science, mathematics, astronomy, and more. This has been elaborated by Amb. Anil Trigunayat in the chapter “Vishwa Guru and Vishwa Mitra: Relations with the World.” India’s contributions, such as the invention of zero, have laid the foundation for modern scientific advancements. As India approaches the 100th year of independence, it aspires to reclaim this status. Additionally, India is also emerging as “Vishwa Mitra” or “Friend of the World,” as has been demonstrated by its global humanitarian efforts, including Vaccine Maitri during the COVID-19 pandemic and its leadership as the "Voice of the Global South" during its G20 Presidency. India’s unique ability to blend tradition with modernity has solidified its cultural diplomacy and soft power, positioning it as a global leader. The principles of non-violence and truth, as championed by Mahatma Gandhi, continue to influence India’s international relations, promoting a non-intrusive yet impactful form of leadership.

India’s rapid economic growth over the past two decades has been closely linked with the development of quality infrastructure. The chapter “Infrastructure Development: Bridging the Critical Gaps” by Dr. V. Sathyanarayana and Shri K. Jayakishan examines the initiatives taken by the central and state governments to boost the infrastructure sector, which is expected to grow at a compound annual growth rate (CAGR) of 8.2% by 2027. The chapter reviews the harmonised master list of infrastructure sub-sectors, focusing on key areas such as transportation, energy, and telecommunications, which constitute nearly 70% of the National Infrastructure Pipeline. By mapping the growth of these sectors since India’s independence, the chapter identifies critical gaps and challenges. It also discusses significant projects, policies, and regulations, recommending steps to achieve the infrastructure goals outlined in Vision@2047, which aims to make India a developed nation.

India's digital transformation has been pivotal in driving its economic development, with investments in digital infrastructure and governance reforms leading to substantial savings, estimated at 1.1% of GDP by March 2021. Shri Alkesh Kumar Sharma, in the chapter "Digital Public Infrastructure as Digital Public Good," examines the impact of Digital Public Infrastructure (DPI) on economic growth, focusing on the government's role in enhancing productivity and reducing leakages in social programmes. Citing studies by the UNDP, the chapter suggests that DPI initiatives could contribute to a 1–1.4 percentage point increase in GDP growth by 2030, particularly in low- and middle-income countries. The study highlights India's journey in digital transformation and its potential as a model for other developing nations to catalyse economic growth through DPI.

Dr. Sanjeev Chopra's chapter "The Medium Is 'More' than the Message" elaborates on the contribution of Indian culture in creating the soft power of India. In the contemporary global landscape, the concept of soft power has gained prominence, contrasting traditional notions of military and economic dominance with cultural and ideological influence. Originating from Joseph Nye's formulation, soft power is defined by a nation's ability to attract and co-opt others into desiring its preferred outcomes through cultural appeal, political values, and foreign policies perceived as legitimate and morally authoritative. For India, anchored deeply in its civilisational ethos and cultural heritage predating its modern statehood, soft power manifests through its rich tapestry of ancient wisdom, vibrant arts, and philosophical traditions encapsulated in texts like Kautilya's *Arthashastra* and the epics of *Ramayana* and *Mahabharata*. Leveraging public diplomacy, India strategically promotes its cultural assets, supported by a dynamic diaspora that enhances its global footprint. However, challenges persist in optimising these resources, requiring coordinated efforts to strengthen institutional frameworks, expand cultural outreach, and assert influence commensurate with its geopolitical stature.

As India navigates towards securing a greater role on the global stage, the strategic integration of soft power becomes pivotal in shaping international perceptions and advancing national interests.

Dr. Amarjit Singh highlights the many complex issues in the health sector in India in the chapter “Problems and Prospects in the Health Sector in India: Learning from the Past Going Forward.” The evolution of India’s health sector is deeply intertwined with its colonial past, marked by high mortality rates due to frequent epidemics, famines, and inadequate medical infrastructure. Between 1891 and 1921, the death toll from diseases like cholera, malaria, plague, and influenza was staggering, exacerbated by recurrent famines and the colonial government’s *laissez-faire* response. The early 20th century witnessed a dire shortage of medical professionals, which severely impacted public health and life expectancy. However, post-1921, a significant decline in death rates was achieved due to improved sanitation, mass vaccination, and malaria treatment, setting the stage for a gradual increase in population and life expectancy. This period, known as the “Great Divide,” marked a pivotal shift in India’s demographic and health landscape, laying the groundwork for future health improvements.

The chapter by Chiranjiv Choudhary on “Climate Change and the Environment: With Special Sections on Energy and Water” discusses climate change and the environment with a special focus on key sectors such as energy and water. The acceleration of climate change poses significant environmental and socio-economic threats, including water and energy insecurity. Every continent is affected by water scarcity, with predictions indicating that by 2030, nearly half of the global population will experience high water stress, further exacerbating energy security concerns. Despite the growing impact of climate change on water and energy resources, most communities lack resilience to face these changes. The global average surface temperature has already risen by approximately 1.1°C since pre-

industrial times, intensifying extreme weather events. If it rises by 4°C to 6°C by 2100, it will lead to irreversible environmental shifts. While 189 nations have committed to reducing CO₂ emissions by 30% by 2030, global emissions continue to rise. Urgent measures are required to limit global warming to 1.5°C and transition towards climate-resilient development for a sustainable future.

The chapter entitled “The Evolution of the Constitution of India” by Shri Devender Singh Aswal, explores the historical development of India’s Constitution, from ancient Vedic republican traditions to its modern framework. The chapter highlights key legislative acts during British rule, such as the Regulating Act of 1773 and the Government of India Act of 1935, which laid the foundation for India’s constitutional journey. It also details the framing of the Constitution by the Constituent Assembly, influenced by global models and the need for a robust democratic structure. The chapter concludes by discussing the Constitution’s unique features, such as federalism, balance of powers, fundamental rights, and judicial review, emphasising its role as a dynamic and enduring document.

Durga Shanker Mishra describes India’s urban renaissance, which has been empowering cities and transforming the nation in the chapter “Urban Development: Rise of the City-State India’s Urban Renaissance, Empowering Cities, Transforming the Nation.” Prime Minister Narendra Modi’s 2022 Independence Day address outlined a transformative vision for India@2047, aiming for a developed nation by its centennial year. This vision encompasses economic growth, social progress, environmental sustainability, good governance, and an enhanced quality of life for all citizens. Central to this vision is the rejection of colonial mindsets, embracing India’s rich heritage, fostering unity, and instilling a sense of duty and integrity. Guided by the principles of “Collective Efforts, Inclusive Growth, Trust of All, and Efforts of All,” and the catch phrase of “Reform, Perform and Transform,” India is on a path of rapid development. The chapter explores the historical context, current policies, and future

projections, emphasising the crucial role of urban development in realising the vision of a developed India by 2047.

In the chapter “Rural Development: The Village in Focus,” Dr. Jugal Mohapatra discusses the evolution of rural development programmes in India, tracing their progression from the 1950s and 1960s. The initial focus, driven by the Mahalanobis model and Gandhian ideals, aimed at industrial diversification, self-sufficiency, and revitalising the rural agrarian economy. The community development programme sought to empower rural communities through participatory planning and the strengthening of Panchayati Raj Institutions (PRIs). The mid-1960s introduced the Green Revolution, emphasising technology transfer, high-yielding crop varieties, and agricultural extension services to achieve food self-sufficiency. Despite these advancements, benefits were mainly confined to irrigated areas, leaving other regions and social groups underserved. By the early 1970s, it was apparent that growth rates did not effectively reduce poverty, with about 55% of the population still classified as poor. The uneven distribution of growth benefits highlighted the need for more inclusive and effective rural development strategies.

The chapter on “Development in Public Administration and Governance” by Dr. Anita Chaudhary tracks the evolution of public administration and governance in India, tracing its roots through ancient texts such as Kautilya’s *Arthashastra*, which provides timeless insights into statecraft and governance. The chapter delves into Kautilya’s recommended strategies for addressing internal strife and external threats, underscoring the treatise’s emphasis on dharma—righteousness and justice—as essential for the well-being of subjects. The impacts of colonial rule on the centralised administrative structure post-Independence are analysed, while also highlighting the challenges posed by entrenched inefficiencies and corruption. As globalisation and technological advancements reshape governance, the author discusses the rise of New Public Management (NPM) and the shift towards decentralisation and performance-driven public services. Despite significant efforts to

enhance governance, India faces mixed outcomes in global governance rankings, particularly highlighted by its position in the World Governance Index (WGI). It also looks at critiques against the current governance indices, emphasising the need for context-sensitive indicators and the importance of recognising the diverse institutional landscapes across countries. The analysis extends to India's ambitious initiatives like the Digital India programme and financial inclusion efforts, which aim to harness technology for better governance and welfare delivery.

The chapter "Higher Education: From Dream to Reality for Every Indian" by Ashok Thakur and S. S. Mantha analyses India's higher education landscape, tracing its evolution from ancient Gurukul traditions to the modern era. India's higher education system, with 44.3 million students, is the second largest globally, following China. The number of institutions—1,168 universities, 45,473 colleges, and 12,002 stand-alone institutions—has grown over 400% since 2001, predominantly driven by the private sector. Notable achievements include the success of Indian alumni like Sundar Pichai and Satya Nadella, highlighting the system's global impact. However, challenges persist, particularly in quality and employability, with only 46.7% of graduates deemed employable. Despite a modest increase in education funding, the current allocation represents only 2.9% of GDP, falling short of the 6% target set by the National Policy on Education (NPE) 1986. Research investment is also low at 0.64% of GDP, lagging behind other major economies. Addressing these issues is crucial for ensuring that the expansion of higher education benefits all regions, including less developed areas, and avoiding commercialisation pitfalls.

In the chapter "Democratic Decentralisation: Power to the People," Prof. Anil B. Suraj expresses the view that the development of any nation, whether economic or social, hinges on the efficient distribution and use of resources. In the context of public welfare, the challenge lies not only in the provision of essential goods and services but also in the efficiency of the distributive mechanisms that ensure equitable access. Public

administration, as a field of study, examines the people, processes, and principles that govern the optimal use of resources for the betterment of society. In designing systems aimed at large-scale distributive efficiency, localisation and decentralisation are often the preferred approaches. In India, the challenge of achieving equitable and sustainable public welfare is further complicated by the nation's vast size and diversity. As the most populous country in the world, India's public governance and administration must continuously evolve to address issues of equity and efficiency in social welfare and economic development. Factors such as population, regional plurality, and cultural heterogeneity add layers of complexity to this task. The diversity of India is reflected in its 22 constitutionally recognised languages and the varied socio-economic conditions across its 28 states. The Constituent Assembly of India, with representatives from over 40 provinces and princely states, encapsulated this diversity and the inherent challenges in policy-making and governance. The principle of "Unity in Diversity" aptly captures the essence of India's approach to governance, aiming to unify the nation while respecting its inherent differences.

Ms. Shalini Prasad, in the chapter "Building Social Capital Through Gender Inclusion," discusses how social capital can be enhanced through gender inclusion. Post-independence, India embarked on a journey to fulfil the constitutional promise of a vibrant democratic republic, where every citizen, irrespective of gender, would enjoy dignity and equality. However, the socio-cultural milieu, characterised by conservatism and patriarchy, posed significant challenges to achieving this vision. Gender, as a cross-cutting identity, remained a major social category excluded from policy and decision-making, resulting in pervasive disparities across sectors such as health, education, employment, and political representation. Recognising that gender equality is not only an end in itself but also a means to societal progress, the successive Five-Year Plans integrated equity and equality as foundational principles of development.

Early interventions focused on social welfare, led by the Central Social Welfare Board (CSWB), laid the groundwork for a more inclusive growth model that addresses the needs of women and promotes their full participation in the nation's development. Recent innovations to enhance gender equality across the gamut of social development have been highlighted in the chapter.

In the chapter "Social Justice and Affirmative Action," Dr. Amarjeet Sinha analyses the influence of the Indian Constitution on shaping public policies aimed at achieving social justice through affirmative action. By examining key indicators of human well-being from the time of India's independence to the present, the chapter assesses how multi-dimensional poverty and social disparities have been addressed over 75 years. It delves into the impact of affirmative action on social participation within India's evolving democracy, analysing the performance of different states, the role of devolution, and the significance of educating girls. Additionally, the chapter considers the influence of social and political movements on advancing social justice. The chapter concludes with an evaluation of current achievements and future steps necessary to ensure that every Indian citizen has the opportunity to realise their full potential and live a fulfilling life, highlighting the role of affirmative action in enhancing political participation.

Aadil Zainulbhai delves into the potential trajectory of India as it marches towards becoming a fully developed nation by the year 2047, marking the centenary of its independence in the chapter "Into the Crystal Ball: Looking Towards 2047." India's economic growth has been nothing short of remarkable, with its GDP reaching US\$3.42 trillion, positioning it as the world's fifth largest economy. The chapter explores the reforms and policies that have propelled this growth and the demographic advantages that will support sustained development. By 2027, India is expected to become the world's third largest economy, with its GDP projected to reach US\$30 trillion by 2047. The concept of "Viksit Bharat"—a developed India—envisioning a nation that provides equality of opportunity and fully realises the

capabilities of its citizens. The paper also reflects on Prime Minister Narendra Modi's call for a collective resolution towards achieving the goal of a developed India, emphasising the role of both institutions and individuals in this mission.

In many ways, this volume of essays encapsulates the bold strides made by independent India in the last 75 years in all areas of governance. It could serve as a handbook for those interested in the story of progress that this country has achieved in these seven and a half decades. It could also provide lessons for other countries that are still struggling on the path of comprehensive development. The volume would also serve as a reference book for any thinking person interested in learning how India navigated the path of development in these past years.

We are very grateful to all the contributors of the present volume for their keen interest and cooperation, without which this venture would not have seen the light of day. We hope this volume will help administrators, researchers, policymakers, academicians, and all those genuinely concerned with public policy and governance. We would be remiss in our duties if we do not state that Shri V. Srinivas, IAS, Director General, NCGG and Secretary, Department of Administrative Reforms, Government of India, has been the guiding spirit behind this work.

Chapter 1. Viksit Bharat: New Paradigms in Governance—Empowering Citizens and Reaching the Last Mile¹

V. Srinivas²

Remember the time before independence ... yes, people had different methods of working but the goal was big—the freedom of India. In this Amrit Kaal we have to come together and work towards another big goal of a Viksit Bharat.
Prime Minister Narendra Modi

¹ An earlier version of this manuscript has been published as Srinivas, V. (2023), “New Paradigms in Governance 2019-2024”, VIF Paper, Vivekananda International Foundation, <https://www.vifindia.org/sites/default/files/new-paradigms-in-governance-2019-2024.pdf>

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Introduction

In the period 2019–2024, a new paradigm of governance emerged. India's governance model focused on accountability, transparency, responsiveness, and equitable and inclusive governance, which is participatory, consensus-oriented, and follows the rule of law with an emphasis on efficiency and effectiveness. Under the visionary leadership of Prime Minister Modi, the governance landscape of India radically changed in scale, scope, and learning paradigms. India succeeded in transforming technologically obsolete institutions into modern-day digital institutions which benefited millions of Indians. Today, India's rural countryside has changed—banking correspondents, e-Mitras, and common service centres have bridged the gap between the Internet-poor and the Internet-rich.

As India celebrates its Amrit Kaal period, Prime Minister Modi has given a clarion call for the adoption of Next Generation Reforms by bridging the gap between the government and citizens. In his address at the Special Session of Parliament, Prime Minister Modi said,

The first rays of the Amrit Kaal (golden era) are illuminating the nation with a new belief, fresh self-confidence, new enthusiasm, new dreams, new resolutions and a renewed strength of the Nation. Achievements of Indians are being discussed everywhere and with a sense of pride. This is the result of a collective effort in our 75-year Parliamentary history. As a result, today, the echo of our accomplishments is being heard world-wide.³

This vision of next-generation administrative reforms by the Prime Minister has been diligently translated into reality by the Department of Administrative Reforms and Public Grievances (DARPG). Secretariat reforms, special campaigns, benchmarking

³ Address of Prime Minister Shri Narendra Modi in the Special Session of Parliament, on September 18, 2023 (www.pmindia.gov.in).

of governance and services, redressal of public grievances and improving service delivery, recognising meritocracy, and replication of good governance practices formed the core of India's good governance model. Technology adoption in the Central Secretariat also gained significant momentum, with ASOs/SOs/Under Secretaries undergoing reskilling in emerging technologies using i-GOT Mission Karmayogi. The digital march of the Central Secretariat has had significant spillover effects on attached, subordinate, and autonomous bodies, all of which adopted e-governance practices.

State Secretariats adopted e-Office, and 16,500 services were operationalised as e-Services. Strong digital platforms formed the bulwark of the Digital Public Infrastructure push of India in the G20 deliberations as a global public good. The impact of technology in governance was most visible in Jammu and Kashmir which provided an all-time high of 1,080 e-Services, adopted e-Office, saving crores of rupees from the abolition of the Darbar movement, developed the JK-IGRAMS, and convened regional and national conferences on e-governance.

Maximum Governance Minimum Government

India's governance model in the years 2019–2024 has undergone radical reforms. E-governance has simplified a citizen's interface with the government, brought the government and citizens closer, and enabled the benchmarking of service quality. The central government's e-governance models have benefited in bringing transparency and openness to government processes. The widespread adoption of e-Office version 7.0 has created paperless offices in all ministries/departments in the Central Secretariat, with 93% of files being handled as e-files and 94% of receipts being handled as e-receipts. In 2023, the Centralised Public Grievance Redress and Monitoring System (CPGRAMS)

helped redress 21 lakh public grievances, and in 2024, until March, 9.58 lakh public grievances were redressed. The organisational reforms, coupled with significant reforms in personnel administration like Mission Karmayogi, lateral recruitment, timely promotion policies, regional conferences for the replication of good governance practices, and recognising excellence in public administration by scaling up the scheme for Prime Minister's Awards for Excellence in Public Administration, represent the new paradigm in India's governance model. New India's strong institutions are best symbolised by the adoption of e-governance practices. The best manifestation of "Maximum Governance Minimum Government" policy is a "digitally empowered citizen" and a "digitally transformed institution."

Prime Minister's Awards for Excellence in Public Administration and Civil Services Day

India observes April 21 every year as "Civil Services Day," the day is marked as an occasion for civil servants to rededicate themselves to citizens and renew their commitment to public service and excellence in work. The theme of the 16th Civil Services Day on April 21, 2023, was "*Viksit Bharat: Empowering Citizens and Reaching the Last Mile*." The Hon'ble Vice President of India inaugurated the Civil Services Day events on April 20.

The Conference deliberations were held during the two plenary sessions: "Empowering Citizens: Leveraging Public Digital Platforms" and "Promoting Circular Economy for Sustainable Development," as well as four breakaway sessions: "Piped Water for All: Jal Jeevan Mission," "Holistic Health Care for All: Health and Wellness Centres," "Improving Quality of Education: Improving Outcomes Through Vidya Samiksha Kendras," and "Aspirational Blocks Programme: Reaching the Last Mile" on April 20, 2023. The Conference was attended by

more than 25,000 delegates, with officials attending physically at Vigyan Bhawan and through the web-casting of the event in virtual mode. This was the highest ever participation in Civil Services Day events. The 16th Civil Services Day 2023 was a landmark event.

The Hon'ble Prime Minister conferred the Prime Minister's Awards for Excellence in Public Administration 2022, instituted to recognise the efforts and exceptional work done by civil servants, to 15 award winners. On this occasion, Prime Minister Modi said,

The Civil Services Day should become an opportunity to infuse new energy within us to make new resolutions. We should handhold the new officers with new enthusiasm. We should infuse them with enthusiasm to be a part of this system. We should take our colleagues forward while living our life to the fullest.

The 2022 PM's Awards were given for innovations in Central Government, State Governments, and District Level innovations. In the Priority Programmes, district performances were evaluated for Har Ghar Jal Yojana, Health and Wellness Centres, Samagra Shiksha, and Aspirational Districts Programme. Hon'ble Prime Minister personally reviewed the scheme, and the restructuring of the scheme was undertaken as per his directions to ensure maximum participation, with a focus on empowering citizens and reaching the last mile with a saturation approach. In 2022, an all-time high number of nominations were received from States/UTs (Union Territories): 743 District Collectors submitted 2,520 nominations for the PM's Awards 2022. This was 97% of the total districts in the country which participated in the PM's Awards 2022 scheme. Committees at various levels—Screening Committees chaired by Additional Secretaries and an Expert Committee chaired by the Secretary—DARPG screened the applications based on the parameters of the scheme, presentations by District Collectors and other Heads of Departments, around 5.5 lakh citizen feedback calls, and “on the

spot” studies conducted by two-member teams of the rank of Directors/Deputy Secretaries for all shortlisted initiatives. An empowered committee chaired by the Cabinet Secretary made the final selections from 32 shortlisted nominations. Of these, 15 nominations received the PM’s Awards for Excellence in Public Administration 2022. The award-winning nominations were also presented in the exhibition at Vigyan Bhavan.

Amongst the PM’s Awards winners 2022 in the Innovations Category are:

Innovations: Centre

1. Under National COVID-19 Vaccination Programme of the Ministry of Health and Family Welfare, COVID-19 vaccines were made available free of cost at all government COVID Vaccination Centres (CVCs). The programme was built on four strong pillars that included a structured governance mechanism, ramping up vaccine production, efficient logistics management, implementation strategies for equitable vaccine administration, and an effective communication strategy for managing the infodemic-generated vaccine hesitancy and eagerness.
2. The PM Gati Shakti National Master Plan of the Department for Promotion of Industry and Internal Trade provides a GIS-enabled platform to facilitate planning and decision-making for the creation of next-generation infrastructure and seamless multimodal connectivity for ease of living and doing business.

Innovations: State

1. Mission Youth is an initiative of Government of the state of Jammu and Kashmir to provide a vibrant medium for youth engagement and empowerment in Jammu and Kashmir. The

innovation places youth at the centre of the Youth Policy, where local youth provide input for initiatives and become a part of transformative schemes.

2. *The State Organ and Tissue Transplant Organisation (SOTTO) of Gujarat* has developed a strong ecosystem, with SOTTO Gujarat at its core, to ensure that the most vulnerable and underprivileged have access to prohibitively expensive life-saving treatments.

Innovations: District

1. *Operation Parivartan: Eradication of Illicit liquor of Solapur District, Maharashtra* aims for the complete eradication of illicit liquor through the rehabilitation of people involved in it. This initiative has positively affected the incidence of crime, social tensions, and domestic violence associated with illicit liquor.
2. *Project “SANVARDHAN” (VOCAL FOR LOCAL) of Rampur District, Uttar Pradesh*, aimed to tackle the issue of malnutrition in a mission mode. Deriving inspiration from the vision of Hon’ble PM, “Project Sanvardhan” was started to fight malnutrition by developing a multipronged strategy focusing on the preparation of “Poshan Kits”. Locally produced raw materials, aligned with the Prime Minister’s motto of “Vocal for Local,” are processed at local processing centre for the preparation of “Poshan Kits” which has led to increase in income levels of farmers.
3. *The New Age Learning Centre (NALC) in Changlang District, Arunachal Pradesh*, provides children of various age groups with fun and interactive learning under one roof. It places special emphasis on providing end-to-end learning solutions at a single delivery point by integrating the features of a library, motivation centre, personality development space, skill training centre, and fun learning unit to make the learning more comprehensive and interesting at the same

time.

The winners of the PM's Awards in four District Priority Sector Programmes were as follows:

1. *Har Ghar Jal Yojana*: Under this category, two awards were presented to the districts of Kancheepuram, Tamil Nadu, and Burhanpur, Madhya Pradesh.
2. *Promoting quality education with an equitable and inclusive classroom environment through Samagra Shiksha*: Under this category, two awards were presented to the districts of Chitrakoot, Uttar Pradesh, and Mehsana, Gujarat.
3. *Promoting Swasth Bharat through Health and Wellness Centres*: Under this category, two awards were presented to the districts of Latur, Maharashtra, and Anakapalli, Andhra Pradesh.
4. *Aspirational Districts Programme*: Under this category, two awards were presented to the districts of Baramulla, UT of Jammu and Kashmir, and Gumla, Jharkhand.

The DARPG has made significant efforts for the dissemination and replication of the award-winning nominations. This was in accordance with Prime Minister Modi's vision of organising experience-sharing sessions by the award winners for a larger nation-wide audience. The National Good Governance Webinar Series, conceptualised in 2022–2023, presented 24 nominations in 12 monthly webinars in which 15,000 officials participated. The PM's Awards winners presented in the National Good Governance Webinar Series included Sakala of Government of Karnataka; e-Seva of Government of Andhra Pradesh; Sickle Cell Anaemia Control Programme of Government of Gujarat; Making Medicines Affordable in Chittorgarh district, Rajasthan; Holistic Development through the One District-One Product Scheme in Siddharth Nagar district, Uttar Pradesh; Promoting Jan Bhagidari in Poshan Abhiyan in Asifabad district, Telangana; Prajavani Janahita of Siricilla district, Telangana; Sarkar Aapke Dwar of Changlang district, Arunachal Pradesh; Reviving Sasur Khaderi of Government of Uttar Pradesh; Canal Top Solar Power Project

of the Government of Gujarat; NDMC for Seamless End-to-End Delivery of Services without Human Intervention of NCT Delhi; Seva Sindhu Portal of Government of Karnataka; River Linking Project of Jalgaon district, Maharashtra; Innovative Participatory Drinking Water Approach in Rural Areas of Gujarat; etc. The themes covered included Improving Public Service Delivery, Initiatives in Health Sector, Aspirational District Programme, Redressal of Public Grievances, Environment, Innovations, Jal/Water Management, and Namami Gange. The response to the National Good Governance Webinars indicated the enthusiasm and interest that the series had generated amongst District Collectors and State Governments in the pursuit of good governance practices.

A compendium of the National Good Governance Webinar Series 2022–2023 was released by the Hon'ble Vice President of India on April 20, 2023, in the inaugural session of Civil Services Day events 2023. In 2023, DARPG curated the weekly Sansad TV television series *Abhinav Pahal*, in which award-winning nominations are presented by the award winners. An innovation portal, <https://darpg-innovation.nic.in>, has been launched to document the award-winning nominations.

National Conferences on e-Governance and National e-Governance Awards

The government implements the awards scheme for National Awards for e-Governance. This scheme is recognised as one of the most competitive and prestigious digital governance awards schemes in the country. In the year 2023, 425 nominations were received, out of which 16 nominations were conferred the National Awards for e-Governance. The National Annual e-Governance Conferences were held in Mumbai in 2020, in Hyderabad in January 2022, and in Katra in November 2022. This

year, the 26th National e-Governance Conference was held in Indore, Madhya Pradesh, on August 24–25, 2023.

The key takeaways from the 26th National e-Governance Conference were as follows:

1. The Conference drew inspiration from the words of Prime Minister Modi who stressed the role of technology in making governance and justice delivery systems reach the poorest of the poor, the marginalised, and women living in the hinterland. The vision of the Prime Minister of India's "Techade" can be realised through a vigorous and all-pervasive digital governance push.
2. Closer synergy amongst researchers, academia, industry, and startups in the field of e-governance is the way forward for India to become an Atmanirbhar Nation. The Vision India@2047 on governance is truly e-Vision India@2047, marked by the saturation and benchmarking of high-quality e-Services reaching out to the last man in the queue for service delivery in the true spirit of Antyodaya, with a focus on young policymakers and creating interactive forums between academia and startups.
3. Open digital platforms are tremendous force multipliers and are critical for providing affordable, inter-operable technology to India's citizens. Digital governance can enable massive reach and benefits in the conduct of special campaigns aimed at reducing pendency and institutionalising Swachhata with the objective of providing good governance.

The National e-Governance Conferences have had significant spillover effects on e-governance in States and Union Territories where they were held. The biggest transformation was witnessed in Jammu and Kashmir, where the number of e-Services was scaled up from 15 in 2019 to 225 in 2022, and to 1,080 in 2023. This represents a remarkable achievement. The dissemination of the

award-winning nominations through the National e-Governance Webinar Series is a new initiative of DARPG.

Regional Conferences

DARPG regularly conducts Regional Conferences for the replication of good governance and e-governance practices. In 2022–2024, Regional Conferences were held in Srinagar, Bengaluru, Itanagar, Mumbai, Bhopal, Jaipur, and Guwahati. These Conferences, attended by 500 officers per conference, have helped in presenting the States' best governance practices in addition to the Prime Minister's award-winning nominations. DARPG has also commenced curating the regional e-governance conferences which have facilitated the dissemination of the best e-governance practices. The Regional Conferences have enabled the creation of fully digital public institutions, strengthened linkages between stakeholders, and enhanced state portals and service portals for digital empowerment. The movement for the saturation of e-Services across the nation has been significantly strengthened during this period.

Good Governance Index 2021

DARPG launched the Good Governance Index (GGI) framework to gauge the performance of the States and UTs following the recommendations of the Group of Secretaries on Governance. It published the rankings for States and UTs for 2019 and 2021. The GGI framework assesses the state of governance across the States and UTs and ranks them accordingly. The objective is to create a tool which can be used uniformly across the States and UTs to assess the impact of various interventions undertaken by the Central and State governments, as well as UTs. The GGI 2019 encompassed 10 sectors and 50 indicators, while the GGI 2021 encompassed 10 sectors and 58 indicators. Each sector carries equal weight and is composed of indicators with different

weightings. The sectors of GGI 2020–2021 are: (a) Agriculture and Allied Sectors, (b) Commerce and Industries, (c) Human Resource Development, (d) Public Health, (e) Public Infrastructure and Utilities, (f) Economic Governance, (g) Social Welfare and Development, (h) Judicial and Public Security, (i) Environment, and (j) Citizen-Centric Governance.

The GGI 2020–2021 categorises States and UTs into four categories: (i) Other States—Group A; (ii) Other States—Group B; (iii) North-East and Hill States; and (iv) Union Territories. GGI helps assess the status of governance in States and UTs. Gujarat, Maharashtra, and Goa contribute to the composite score of 10 sectors under the GGI 2021 assessment. Uttar Pradesh has shown an 8.9% increase over the GGI 2019 performance. The GGI 2021 states that 20 States have improved their composite GGI scores over the GGI 2019 scores. This indicates that the overall governance in the States of India is moving in a positive direction. The biannual publication of Good Governance 2023 is under formulation and will be released in the coming months.

District Good Governance Index

As the District is a basic unit in field administration and governance, implementing various programmes and innovative projects for the well-being of citizens, measuring their performance becomes important for proper assessment and planning which will lead to the development of the districts and the region as a whole. The District Good Governance Index (DGGI) represents the next-generation administrative reform in benchmarking governance at the district level. This Index is prepared after extensive stakeholder consultations for benchmarking governance in all the districts of a State on a number of indicators under different sectors. The ranking fosters healthy competition amongst districts to address existing gaps, plan to bridge these gaps, and aid decision-making tools.

District Good Governance Index of Jammu and Kashmir: The Department of Administrative Reforms and Public Grievances (DARPG) has conceptualised, formulated, and released the DGGI for Jammu and Kashmir in consultation with the Government of Jammu and Kashmir. India's first DGGI was designed and developed for the UT of Jammu and Kashmir by Centre for Good Governance, Hyderabad, as a knowledge partner was launched by the Home Minister of India on January 22, 2022. The DGGI is a framework comprising performance under 10 governance sectors, having 58 indicators with 116 data points. The DGGI helps to identify the impact of various government interventions at the district-level and provides a futuristic roadmap for improving district-level governance and service delivery with targeted interventions.

District Good Governance Index of Gujarat: The DGGI for Gujarat provides significant data insights to the State of Gujarat and other stakeholders in their efforts to address existing gaps, plan to bridge these gaps, and serve as a decision-making tool. The ranking is expected to foster healthy competition amongst districts in the quest to provide citizen-centric administration and governance. DGGI Gujarat is the first for any large State of India, as the Index benchmarks governance in all 33 districts of Gujarat on 65 indicators under 10 sectors. The DGGI Gujarat was released by the Chief Minister of Gujarat during the valedictory session of the three-day "10th Chintan Shibir"—a brainstorming session for senior and junior government officials of Gujarat—at Kevadia in Narmada district of Gujarat on May 21, 2023.

District Good Governance Index of Arunachal Pradesh: DGGI Arunachal Pradesh is first DGGI for a northeastern State of India. The Index benchmarks governance in all 25 districts of Arunachal Pradesh on 65 indicators under 8 sectors. The ranking fosters healthy competition amongst districts and provides guidance to the State government as well as the District administration of Arunachal Pradesh in their efforts to address existing gaps, plan to bridge these gaps, and serve as a decision-

making tool. The District Good Governance Index of Arunachal Pradesh was released on June 8, 2023.

Good Governance Week

The nation-wide weekly celebrations of good governance were organised by DARPG in 2021, 2022, and 2023. The hallmark event of Good Governance Weeks in 2021 and 2022 was the weeklong nation-wide campaign “Prashasan Gaon Ki Ore 2022,” aimed at addressing public grievances and improving service delivery.

Prime Minister Modi, in his message on the eve of Good Governance Week 2021, said,

In the Amrit Period of Independence, we are marching ahead rapidly to create a transparent system, efficient process and smooth governance to make development all-round and all-inclusive. In this context, the theme of the week—Prashasan Gaon ki Ore—assumes even greater significance.

The second nationwide campaign, “Prashasan Gaon Ki Ore,” was conducted from December 19–24, 2022. Guided by the principle of Citizen-First, the government strived to make the eco-system transparent and faster by simplifying procedures and processes at every level. Various citizen-centric initiatives, including redressal of public grievances, online services, disposal of service delivery applications, sought to expand the outreach of service delivery mechanisms and make them more effective. The emphasis was on projecting the immense potential of technology to bring citizens and government closer, as a powerful tool to empower citizens and as a medium to optimise transparency and accountability in day-to-day functioning. The government’s endeavour was to increase the impact of governance and reduce the interference of government in every citizen’s life, to increase opportunities and remove obstacles from the citizen’s path.

The message from Prime Minister Modi was conveyed by Dr. Jitendra Singh, Minister of State for Personnel, Public Grievances and Pensions, at an event attended by District Collectors, Chief Secretaries/Additional Chief Secretaries, and Administrative Reforms Secretaries of 36 States and UTs, along with Senior Officials from Central Ministries/Departments. During the “Prashasan Gaon Ki Ore” campaign, District Collectors organised special camps/events at Tehsil Headquarters/Panchayat Samitis to resolve public grievances and improve service delivery. The campaign was monitored centrally in real time through a dashboard created for this purpose on the “Prashasan Gaon Ki Ore” Portal. In 2023, the Good Governance Week events included a series of workshops on Good Governance, Secretariat Reforms, Institutionalising Swachhata and Reducing Pendency, Capacity Building Programmes, Innovations in State Governments, and Pensioner-Centric Reforms.

The National e-Services Delivery Assessment 2021

The National e-Governance Service Delivery Assessment (NeSDA) was undertaken to boost the e-government endeavours and drive digital government excellence. The study report assesses States, UTs, and focuses on Central Ministries regarding the effectiveness of e-governance service delivery. NeSDA helps the respective governments improve their delivery of citizen-centric services and shares best practices across the country for all States, UTs, and Central Ministries to emulate.

The Department has undertaken NeSDA 2019 and 2021. The preparation of NeSDA 2023 is currently in progress. In the assessment of State portals, Kerala remains a front-runner and the progress made by Tamil Nadu, Jammu and Kashmir, and Uttar Pradesh in NeSDA 2021 is commendable. In service portals, Rajasthan, Punjab, Jammu and Kashmir, and Meghalaya have topped the rankings. All States/UTs have shown improvements in

the promotion of integrated service portals and the number of services being offered on their State portals. India's e-governance policies have shown improvements and citizen satisfaction levels have risen. In many ways, technology has succeeded in bringing government and citizens closer. The NeSDA 2021 report assessed 1,400 e-Services across States and UTs and reported that India's e-Services had grown by 60% in the period 2019–2021. Sixty-nine per cent of the mandatory e-Services have been delivered by States/UTs in 2021, up from 48% in NeSDA 2019. Seventy-four per cent of the respondents of the nation-wide citizen survey are satisfied or very satisfied with the e-Services.

DARPG is collaborating with States and UTs to ensure the timely implementation of recommendations of the NeSDA 2021 for the rollout of all mandatory e-Services by States and UTs in a time-bound manner. The DARPG is also coordinating with States and UTs to strengthen the State Portals and Service Portals to enhance the ease of living for citizens. The objectives of the monitoring and collaboration are to adopt the 56 mandatory services and to achieve saturation e-Service delivery by all the States/UTs. DARPG has designed the NeSDA-Way Forward, Status of Implementation Dashboard in line with the focus areas of e-governance. While Central and State Governments are taking utmost care and importance to improve their service delivery through digital channels, this enhanced dashboard aims to create the baseline for online service delivery and build an inclusive digital ecosystem. The monthly reports institutionalise the nation's endeavours for improved delivery of e-Services and prepare States/UTs for NeSDA 2023. The objectives of the monthly progress are the saturation of e-Services, the promotion of faceless and suo-moto entitlement-based delivery of services, the identification of bottlenecks in the implementation of recommendation process, and the dissemination of best practices. Starting from April 2023, 12 monthly editions have been released until April 2024. In the period from April to December 2023, the nation's e-Services increased from 11,500 to

16,500. It is expected that the number of e-Services will reach saturation by 2025.

Effective Redressal of Public Grievances

Prime Minister Modi has said “effective redressal of public grievances” is one of the most important aspects of Indian democracy, and he has accorded the highest priority to the subject with a focus on citizen engagement. The Prime Minister’s commitment to an effective grievance redressal mechanism emanated from his early years in government as Chief Minister of Gujarat when he launched the SWAGAT portal in 2003. The SWAGAT portal of Gujarat celebrated its 20th anniversary in 2023 and was a pioneer in introducing citizen interaction, categorisation of grievances, and effective redressal of public grievances.

The Department of Administrative Reforms and Public Grievances is the nodal agency responsible for policy initiatives on public grievance redressal mechanisms and citizen-centric initiatives.

The Centralised Public Grievance Redress and Monitoring System (CPGRAMS) is an online platform available to citizens 24/7 to lodge their grievances with the public authorities on any subject related to service delivery. It is a single portal connected to all the Ministries/Departments of the Government of India and States. Every Ministry and State has role-based access to this system. CPGRAMS is also accessible to citizens through a standalone mobile application downloadable through Google Play Store and a mobile application integrated with UMANG. Citizens can access the system online through the portal www.pgportal.nic.in. The efficacy of the CPGRAMS portal has been an important thrust area of the nation’s Grievance Redressal Systems.

The grievances received by the Department of Administrative Reforms and Public Grievances are forwarded to the concerned Ministries/Departments/State Governments/UTs which deal with the substantive functions linked with the grievance for redressal, with intimation to the complainant. India's policy for grievance redressal has placed emphasis on timely grievance redressal and quality of grievance redressal. An upper limit of 30 days was introduced, along with staggered redressal of grievances based on priority, with an appeal mechanism in cases where the citizen is not satisfied.

Under CPGRAMS 7.0, grievances are routed to the last-mile grievance officer level. The Department of Administrative Reforms and Public Grievances has issued guidelines to all Ministries/Departments to sensitise grievance officers for effective redressal of public grievances. There exist several digital portals in the Government of India for effective redressal of public grievances—CPGRAMS, Rail Madad, and e-Nivaran—all of which are linked to CPGRAMS. All Ministries/Departments have designated nodal Grievance Redressal Officers for effective redressal of grievances. Periodic reviews by the Hon'ble Prime Minister have enabled the ushering-in of transformational reforms in CPGRAMS, as represented by the 10-step reform programme of CPGRAMS launched in 2022.

The implementation of CPGRAMS 10-step reforms has resulted in a significant increase in the number of public grievances being redressed every month, reaching over 1 lakh cases, and a reduction in timelines for disposal to 16 days in Central Ministries/Departments over the past 22 months. The CPGRAMS portal has mapped 1.01 lakh Grievance Redressal Officers, and 25 lakh citizens have registered to file over 20 lakh grievances per year. The grievance redressal time has decreased from 28 days in 2019 to 10 days in March 2024. Considerable success was achieved in effective redressal of public grievances during the COVID-19 pandemic with the launch of the COVID-19 Grievance Redressal Dashboard and portal on the CPGRAMS portal. During this was a period, 1.25 lakh COVID-19 public

grievances were redressed with an average disposal period of 1.45 days.

The status of the grievance filed in CPGRAMS can be tracked with the unique registration ID provided at the time of the complainant's registration. CPGRAMS also provides an appeal facility to citizens if they are not satisfied with the resolution by the Grievance Officer. After the closure of a grievance, if the complainant is not satisfied with the resolution, he/she can provide feedback. If the rating is "Poor," the option to file an appeal is enabled. The status of the appeal can also be tracked by the petitioner with the grievance registration number. Since July 2022, DARPG has also reached out to citizens filing a grievance through CPGRAMS by contacting them through an outbound call centre and soliciting their feedback on their closed grievance.

Grievance Redressal Machinery in the States

The State governments have developed advanced mechanisms for redressal of public grievances. States have operationalised public grievances cells which receive complaints from citizens, forward them to the concerned departments, and follow them up. Several Chief Ministers hold regular citizen interactions through physical or virtual meetings for hearing and redressal of public grievances. In several States, senior officers visited districts and villages as part of Good Governance Week celebrations in 2021 and 2022, when nation-wide campaigns for the effective redressal of public grievances were conducted. The impact of multiple grievance redressal platforms functioning in unison during Good Governance Week from December 19 to 25, 2022, was quite significant—315 lakh service delivery applications being disposed of and 6 lakh public grievances being redressed. The Department of Administrative Reforms and Public

Grievances has collaborated closely with States on several initiatives for effective redressal of public grievances.

The areas of collaboration included:

1. Institution of an award category for Improving Service Delivery and Redressal of Public Grievances under the Scheme for the Prime Minister's Awards for Excellence in Public Administration 2020.
2. National Workshop on Technology Platforms in Public Grievance Redressal on February 18, 2021, and the National Workshop on Sevottam in November 2022 and May 2023.
3. One Nation One Portal initiative involves the integration of CPGRAMS with State Grievance Portals and reverse integration.
4. Sevottam Capacity Building Programmes for Grievance Redressal Officers.
5. Publication of monthly reports from 2022.
6. Collaboration with the Government of Jammu and Kashmir for revamping the Awaaz-e-Awam portal and relaunching it as JK-IGRAMS.

In pursuance of the decisions taken by the Prime Minister on April 16, 2022, CPGRAMS reforms were implemented by DARPG to improve the quality of grievance disposal and reduce the disposal time. A comprehensive 10-step CPGRAMS reform programme was adopted after several rounds of consultations with key stakeholders. DARPG established collaborations with Common Service Centre (CSCs), Indian Institute of Technology Kanpur (IIT-K), National Institute of Smart Governance (NISG), National Institute of Design in Ahmedabad (NID), Quality Council of India (QIC), Centre for Development of Advanced Computing (C-DAC), Bharat Sanchar Nigam Limited (BSNL), Centre for Good Governance Hyderabad, and Haryana Institute of Public Administration (HIPA) Gurgaon through MOUs and work orders.

The 10-step reforms of CPGRAMS are outlined as follows:

1. Universalisation of CPGRAMS 7.0: Auto-routing of grievances to the last mile

2. Technological Enhancements: Automatic flagging of urgent grievances leveraging artificial intelligence (AI)/machine learning (ML)
3. Language Translation: CPGRAMS portal in 22 scheduled languages, along with English
4. Grievance Redressal Index: Ranking of Ministries/Departments based on their performance
5. Feedback Call Centre: A 50-seat call centre to collect feedback directly from every citizen whose grievance is redressed
6. One Nation One Portal: Integration of State portal and other Government of India portals with CPGRAMS
7. Inclusivity and Outreach: Empowering the most remote citizens to file grievances through CSCs
8. Training and Capacity Building: Conducted by ISTM and State Administrative Training Institutes (ATIs) under Sevottam scheme to enable effective grievance resolution
9. Monitoring Progress: Monthly reports for both the Central Ministries/Departments and States/UTs
10. Data Strategy Unit: Established at DARPG for insightful data analytics

Two project management units (PMUs) were established at DARPG: (a) a PMU with the QCI team for preparation of the CPGRAMS monthly reports for Central Ministries and States and (b) a PMU with Centre for Good Governance Hyderabad team for the preparation of Grievance Redressal Index, in addition to the Data Strategy Unit with Data Analytics specialists in collaboration with the National Institute of Smart Governance. The Public Grievances Division of DARPG was strengthened with comprehensive redeployment, and all vacant posts were filled. DARPG collaborated with 22 State ATIs for implementation of the Sevottam programme following extensive discussions with HIPA Gurgaon.

In pursuit of the deliberations at the Chintan Shivir, the DARPG has further enhanced the processes for establishing a

greater connection with citizens. The steps include improvements in call centre engagement with citizens, speech records being examined in senior-level meetings, training programmes for operators, sharing speech records of appeals filed through the call centre with appellate officers, introduction of chatbot, introduction of an outgoing call centre, and addition of new call centre operators.

The CPGRAMS reforms received considerable national and international appreciation. *India Today* featured CPGRAMS reforms as amongst 100 big tech ideas for the revolutions needed in 10 key sectors to make India a developed nation by 2047. In April 2024, *CPGRAMS: A foundation for SMART government* was presented at the 3rd Biennial Meeting of the Pan-Commonwealth Heads of Public Service/Secretaries to the Cabinet on “institutionalisation of SMART government to enhance public service delivery” and was recognised as a state-of-the-art grievance redressal system that has engaged and empowered citizens across India having a transformative impact on the transparency and accountability of government. The evolution of India’s vision to use AI for further policy, process, and people-related changes; to operationalise the CPGRAMS mobile app; and to adopt the CPGRAMS 7.0 version in all States/UTs was also recognised in the Outcome Statement of the Commonwealth Biennial Meeting.

Best Practices in State Grievance Portals

SPANDANA (Andhra Pradesh): The Government of Andhra Pradesh’s grievance redressal portal, operationalised at www.spandana.ap.gov.in, is one of the most comprehensive grievance redressal portals in India. The common platform through the SPANDANA portal integrates all levels. The process flow of SPANDANA envisages that grievances are received from multiple sources—on the portal; through toll-free numbers; through petitions received via e-mails; and through grievance

cells at district, division, and tehsil levels. Village-level volunteers receive door-step SPANDANA applications and deliver them to the GRAMA SACHIVALAYAM for redressal. Mondays are designated as grievance days, and the integration of all offices at District, Sub-Division, and Mandal is through video conferencing on grievance days. A 14-digit unique ID is issued through the SPANDANA website. Citizens can track their grievances using the tracking ID provided in the acknowledgement slip. The Action Taken Report is uploaded on the portal and sent by SMS to the citizen. A dedicated toll-free call centre (18002331077) has been operationalised for feedback, and a 100% quality audit on redressal is undertaken. There is an option for reopening a grievance if the citizen is not satisfied with the quality of disposal.

SWAGAT (Gujarat): The CMO Gujarat has been operating an ICT-based programme since April 2003 for effective, transparent, and speedy redressal of citizens' grievances at various levels of the government throughout the State, including at the highest levels, through direct interaction with the Chief Minister. The SWAGAT portal is a combination of digital and communication technology designed to resolve public grievances effectively. Under SWAGAT, citizens can register their grievances at village, taluka, and district levels. Citizens can view the status of their applications online using their allotted password and login ID at any Internet access point. The software application enables an online review of sub-district, district, and State SWAGAT outcomes, and the disposal of grievances is also monitored by the software. Cases requiring the attention of the Chief Minister are selected based on criteria such as being long-standing, acute humanitarian issues, difficult to resolve at other levels in government, and those that have policy implications. Applications are registered in three categories: (i) policy matters, where a limitation or gap in the policy requires attention; (ii) long pending grievances, where the application has remained unresolved after the initial application; and (iii) first-time grievances which are sent to lower levels. There are four levels of

SWAGAT: on every fourth Thursday of the month, the SWAGAT hearings are held in the state capital Gandhinagar, by the Chief Minister of Gujarat through video conference. The District SWAGAT is held in all 33 districts, and the Sub-District SWAGAT and GRAM SWAGAT are also held as per prescribed schedules. The four levels are well integrated by software. SWAGAT has enhanced the accountability of the government, led to systemic changes as decisions lead to policy reform, increased citizen satisfaction, ensured total transparency and monitoring, and raised awareness at the highest levels of authority regarding public grievances. SWAGAT received the 2010 UN Public Service Award for improving transparency, accountability, and responsiveness in public service.

JK-IGRAMS (Jammu and Kashmir): JK-IGRAMS along with LG's (Lieutenant Governor) monthly *mulaqaat* with citizens and review with officers, provides an institutional framework that is accessible to all in Jammu and Kashmir (J&K). The JK-IGRAMS portal is www.jkgrievance.in, and key features include the decentralisation of grievance system by mapping subordinate offices up to the block level, setting up of two call centres in Jammu and Srinagar for registering grievances. Collectors have been made epicentre and all Districts/Blocks are linked to CPGRAMS. Grievance analysis teams are deployed to study and share findings for monthly *mulaqaat* with the LG of J&K. The impact increased disposal from 41% to 74% in a 4-month period across all categories. The dedicated call centre provides a unique JK-IGRAMS number which is forwarded to the grievance officer, and the online status is available to the citizen for effective follow-up. Various analytical reports and other MIS (management information system) options on the portal assist the administration in data filtering.

SAMADHAN (Uttar Pradesh): SAMADHAN is an integrated web-based application system which brings all grievance redressal mechanisms onto one platform. It enables instant and easy communication between the government and citizens, resulting in the speedy resolution of grievances from anywhere

and at any time. It also provides a facility for the online submission of grievances by aggrieved citizens. The grievance input mechanism includes Janta Darshan by the Chief Minister at State level and District Collector at the District level. The SAMADHAN portal integrates different channels and portals, including the PG-Portal, Anti Bhu Mafia Portal, Anti-Corruption Portal, CM Helpline, etc. The citizen relationship management system includes online registration and tracking of grievances, project management and monitoring, analytical reports, calls/SMS/e-mail, integrated and single platform, send reminders, and giving feedback. Feedback is obtained through the CM Helpline call centre and the complainant can also provide online feedback through the portal. Negative feedback is reviewed by one level higher, through grading opinion, if senior officer finds disposal of the grievance insufficient/not satisfactory then he/she can revive the disposed complaint.

Special Campaigns

The Special Campaign 2.0 was implemented in the central government from October 2 to 31, 2022, with the objective of institutionalising Swachhata and minimising pendency in government. Under Special Campaign 2.0, 4.18 lakh public grievances were redressed, cleanliness campaigns were carried out in 99,706 office spaces, 29.10 lakh files were weeded out, 88.25 lakh square feet of space was freed, and scrap disposal earned ₹364.50 crores. The Special Campaign 2.0 brought in a number of success stories in digitisation, efficient management of office spaces, enhancement of office premises, environment-friendly practices, inclusivity, protocols and mechanisms being put in place, and waste disposal. Departments/Ministries gave special attention to attached/subordinate/filed offices, including in the remotest parts of India, during the month-long campaign period from October 2 to 31, 2022. Special Campaign 2.0 was 17 times larger than the Special Campaign of 2021 in terms of cleanliness

campaign sites. The Special Campaign 2.0, holistic in size and scale, witnessed widespread participation from thousands of officials and citizens who came together to create a movement for Swachhata in Government Offices. Cabinet Ministers and Ministers of State participated in the Special Campaign 2.0, providing leadership and guidance in its implementation.

The Department of Posts has conducted the cleanliness campaign in 24,000 post offices, the Ministry of Railways has conducted it in 10,716 railway sites, the Department of Defence in 5,922 campaign sites, and the Ministry of Home Affairs in 11,559 campaign sites. Sixteen Ministries/Departments have conducted the Special Campaign 2.0 in over 1,000 campaign sites, and 31 Ministries/Departments have conducted the Special Campaign 2.0 in over 100 campaign sites. The progress of Special Campaign 2.0 was monitored on a dedicated portal (<http://www.pgportal.gov.in/scdpm22>) on a daily basis. About 215 Nodal Officers/Sub-Nodal Officers were appointed in all Ministries/Departments. The Special Campaign 2.0 was reviewed on a weekly basis by Secretaries to the Government of India. The progress of the Special Campaign has been widely reported in social media with over 67,000 social media tweets by Ministries/Departments. About 127 PIB (Press Information Bureau) statements were issued by Ministries/Departments. Over 300 best practices in conducting the Special Campaign 2.0 as a citizen-centric movement, to bring citizens and government closer and create an aesthetically pleasant work environment, were reported by Ministries/Departments.

The Special Campaign 3.0, held from October 2 to 31, 2023, was India's largest campaign for institutionalising Swachhata and reducing pendency in government offices and witnessed many best practices and milestones. A saturation approach was adopted and the Swachhata campaign covered 2.56 lakh office spaces in the remotest parts of India, freed up 159 lakh square feet of office space for effective use, 48.42 lakh files were reviewed, and ₹547 crore of revenue earned from disposal of

office scrap and condemned vehicles. The Special Campaign 3.0 gained significant traction on social media with over 1 lakh social media posts by Ministries/Departments; 900 tweets from the DARPG Twitter (now X) handle; 1,200 infographics on #specialcampaign3; and issue of 282 PIB Statements. In the period 2021–2023, government has conducted three successful Special Campaigns which have helped in institutionalising Swachhata and reducing pendency in government. The cumulative progress achieved in the three Special Campaigns included 4.02 lakh office spaces being covered, 351 lakh square feet of office space being freed, 96.08 lakh files being weeded out, and ₹1,153.50 crores of revenue being earned.

Special Campaigns 1.0–3.0 also had a significant impact in reducing pendency and enhancing digitisation in Central Secretariat. Given the effectiveness of special campaign model, government has decided that all Ministries/Departments will devote 3 hours per week for Swachhata activities. DARPG publishes the monthly Secretariat Reforms covering various aspects of Special Campaign: (a) Swachhata Initiatives and Reducing Pendency, (b) Initiative for Increasing Efficiency in Decision Making, and (c) Adoption of e-Office in Central Secretariat. The Special Campaign model and Secretariat Reforms were replicated by the Government of Maharashtra as Mantralaya Reforms.

Initiative for Increasing Efficiency in the Central Secretariat

In 2022, the Central Secretariat continued to implement the Initiative for Increasing Efficiency in Decision Making in government. Under this initiative, a four-pronged approach was adopted by the Central Government, with DARPG as the nodal department:

1. Delaying review of channels of submission for creating flatter organisations—the channel of submission was

reduced to not more than four levels from seven to eight levels

2. Delegation of financial/administrative powers to lower functionaries
3. Adoption of Desk Officer system to ensure single points of file disposal
4. Adoption of e-Office version 7.0 and digitalisation of all receipts in the Central Registration Units.

Some of the key highlights are as follows:

1. All Ministries/Departments of the Government of India have reviewed their channels of submission and adopted delayering (60 fully delayed; 19 partially delayed). With this, the channel of submission for most subjects has been reduced to up to four levels. Financial delegation for miscellaneous and contingent expenditure was made to Deputy Secretary/Director-level officers. Officers were divided into separate categories. Delayering entailed reducing the number of levels, and level jumping was adopted amongst officers and staff with the guideline that no officer falling in a particular category will submit files to another officer in the same category, which means they work in parallel, horizontal organisational structures. Additional Secretaries/Joint Secretaries were placed in category II, and Deputy Secretary/Under Secretary were placed in category III across Ministries/Departments. Several areas of financial delegation, which had not been revisited for several years, were reviewed.
2. The Initiative for Increasing Efficiency in Decision Making has led to the creation of flatter organisations. In 2020, the average number of distinct levels for active files was 8.01 which decreased to 5.54 levels in December 2023 and further down to 4.11 levels in November 2023. As of March 2024, the average number of distinct levels for active files stands at 4.4.
3. All Ministries/Departments have upgraded to e-Office version 7.0. Ninety-five per cent of the new files opened in March 2024 were e-files. A significant reduction in the e-files to p-files

ratio has been witnessed. E-Office has also created the option for inter-ministerial e-file movement and monitoring of e-receipts. Ninety-five per cent of receipts were digitised in April 2024. E-Office version 7.0 has facilitated inter-ministerial e-file movement. The use of heavy-duty scanners in central registration units was adopted, and fresh receipts were replied to in digital form. The digitalisation of Central Registration Units, along with e-Office, has resulted in a significant reduction in paper consumption in several Ministries/Departments. Flatter organisations have enabled faster decision-making.

4. To enable a work-from-home environment during the pandemic, the Central Secretariat Manual of Office Procedure 2019 provided a Virtual Private Network Facility up to the Deputy Secretary level, and laptops were provided up to Under Secretary level. Desk Officer system is operationalised in 40 Ministries/Departments where it was feasible. The Ministry of External Affairs has operationalised 223 Desk Officers with specific assignments of responsibilities. The adoption of the Desk Officer system has had significant benefits in service-related areas.
5. The government's initiative for "Increasing Efficiency in Decision Making" represented one of the most complicated and far-reaching administrative reforms witnessed in the Central Secretariat. It brought about a silent reform in work culture, reduced hierarchies, and resulted in significant adoption of new technology. It has also enabled responsive communication and enhanced efficiency in processing of receipts. The initiative has been incorporated into the Central Secretariat Manual of Office Procedure 2022 and duly institutionalised. The DARPG has collaborated with the Government of Maharashtra in updating the Manual of Office Procedure and replicating the digital Secretariat model in one of the largest State Secretariats of India. The adoption of e-Office has enabled the creation of permanent digital repositories of file records, enhanced transparency, and

increased accountability levels in the government.

Vision India@2047

The DARPG is amongst the Ministries/Departments of government that is formulating its Vision India@2047. The DARPG constituted an Advisory Group under the chairmanship of the Minister of State for PMO, Personnel, Public Grievances and Pensions with 15 Sector Specialists including National Experts from Senior Civil Servants, IITs, IIMs, central and state universities, and public policy research organizations. A working group under the chairmanship of the Secretary of DARPG was constituted for the formulation of the Vision India@2047 under the overall supervision of the Advisory Group. The Indian Institute of Public Administration served as the Knowledge Partner of DARPG in formulating its Vision India@2047. The Advisory Group held three rounds of meetings, and the Working Group held seven rounds of meetings. Based on the deliberations of the Working Group and the Advisory Group, DARPG prepared a Vision India@2047 document with the theme of Bringing Citizens and Government Together.

National Centre for Good Governance

The National Centre for Good Governance (NCGG) has the mandate to promote good governance by conducting training and capacity-building programmes at the national/international levels on public policy and governance. It serves as a think tank for governance and policy reform initiatives, carrying out studies on issues relating to governance, and organising consultations, workshops, and seminars to promote improved governance.

In the period 2019–2024, the NCGG has emerged as one of India's largest capacity-building institutions for International Civil Servants. The NCGG has scaled up its international capacity-

building programmes from 5 programmes a year in 2018–2019 for 1 country to 47 programmes a year in 2024–2025 for 17 countries. The NCGG has successfully created a global outreach and interest in India's governance model, with webinars covering 54 countries and a national outreach through the National Good Governance Webinars. Furthermore, the NCGG has successfully established collaborations with a number of apex public policy institutions in India, and capacity-building programmes for State Civil Servants have also been held. The NCGG has received several requests for collaboration from ITEC (Indian Technical and Economic Cooperation) countries (Maldives, Gambia, Tanzania, Iran) and Administrative Staff College of India (ASCI)/IIMs for setting up Centres of Excellence for scaling up State capacity.

Since 2014, 2,660 civil servants from Bangladesh, 1,000 civil servants from the Maldives, 118 civil servants from the Gambia, 97 civil servants from Myanmar, 95 civil servants from Sri Lanka, and 150 civil servants from Cambodia have undergone capacity-building programmes at NCGG. Seventy-one capacity-building programmes were conducted for Bangladesh, 33 capacity-building programmes were conducted for Maldivian civil servants during this period. The NCGG has developed and conducted one-week programmes for Permanent Secretaries and two-week programmes for Secretary Generals, District Collectors, and Deputy Secretaries. The focus areas for capacity-building programmes included administrative reforms and effective redressal of public grievances, digital public infrastructure as a global good, open network for digital commerce, bringing transparency to government procurement, making of Aadhaar: A Tool for Governance, Ayushman Bharat Pradhan Mantri Jan Arogya Yojana, India's Fiscal Policy Reforms, Poverty Alleviation Initiatives in India, NITI Aayog—Vision India@2047, Mission Karmayogi, Capacity Building of Officials—Indian initiatives, Anti-Corruption strategies, Lok Pal in India, Pricing of Goods in India, PM Gati Shakti, India's COVID-19 vaccine journey, etc. Country-specific subjects included bilateral

relations with India, leadership and motivation, ethics in administration, group discussions, and presentations. The Minister of State for Personnel, Public Grievances and Pensions interacted with the delegates and exchanged views on the government's "Maximum Governance Minimum Government" policies.

The High Commission of the Republic of Gambia acknowledged the NCGG after the successful completion of the programme for Permanent Secretaries on May 27, 2022, stating that "the Special Training Program will be of immense help to the Senior Government Officials as they work on the implementation of the National Development Plan of the new Government."

The Civil Services Commission of Maldives following the India-Maldives workshop on good governance on February 24, 2023, said that "We have received very good feedback from the participants of the workshop. They found the workshop to be very informative and speakers to be very inspirational and shared valuable guidance pertinent to current times."

During the capacity-building programmes a lot of emphasis has been placed on group work and the creation of horizontal linkages in organisations, in line with the Chintan Shivar model of the Government of India. The focus has been on adopting technology in governance to reduce the interface between citizens and government.

The NCGG has also conducted domestic capacity-building programmes for State Civil Service officers for the States of Gujarat, Arunachal Pradesh, and the Union Territory of Jammu and Kashmir. Seventy-five officers of the Gujarat Administrative Service, 310 officers of the Jammu and Kashmir Administrative Service, and 150 officers of the Arunachal Pradesh Administrative Service have attended capacity-building programmes at the NCGG.

For further dissemination of India's Good Governance practices, the NCGG conducts a number of international webinars called the "ITEC-NCGG" webinars on a range of subjects. The 2020 webinar series, titled "Good Governance

Practices in a Pandemic,” witnessed the participation of over 400 officials from more than 50 ITEC member countries.

Conclusion

I have tried to collate the vast gamut of work undertaken to usher in the technology revolution in governance from 2019 to 2024 which has enabled millions of Indians to reap the benefits of transparency in governance, faster timelines for disposal, and quality decision-making. It can be said that the imposing 182-metre Statue of Unity of Sardar Vallabhbhai Patel provides inspiration for the nation’s relentless commitment to excellence in the Amrit Kaal period.

To conclude, I quote the words of Hon’ble Prime Minister Modi from his address to the US Congress in June 2023:

When I first visited the US as Prime Minister, India was the tenth largest economy in the world. Today, India is the fifth largest economy. And, India will be the third largest economy very soon. We are not only growing bigger but we are also growing faster. When India grows, the whole world grows. After all, we are one sixth of the world’s population. In the last century, when India won its freedom, it inspired many other countries to free themselves from colonial rule. In this century when India sets benchmarks in growth, it will inspire many other countries to do the same. Our vision is Sabka Saath, Sabka Vikas, Sabka Vishwas, Sabka Prayas. Jai Hind.

Chapter 2. The Institution of Civil Service in India

Dr. N. Ravi Shanker

Introduction

The institution of civil service in India dates back over 2,000 years, to the times of the Mauryan Empire. Governance structures have existed in some form or another through ancient and medieval times. The Civil Service as we now know it owes its origin to the East India Company (EIC), with oversight exercised by the British Parliament for about 100 years, and subsequently governed directly by the Crown—often referred to as the British Raj—for 90 years. This framework has continued in independent India. The District Office, created by the EIC, is the enduring image and allure of the civil service, from then to now. The civil service in India, like elsewhere across the world, needs to re-engineer itself for modern times to stay relevant.

It was said of the Indian Civil Service (ICS) that it was “neither Indian, nor Civil, nor a Service.” This was the view of the freedom fighters of that era. On the contrary, for the Raj, the ICS was the soul of the British administration in India.

Historical Background

Mauryan Period

Indian civil service had its origin in the Mauryan Empire in ancient India. The *Arthashastra*, written by Kautilya (Vishnugupta), lays down the principles of selection and promotion of civil servants, the conditions of loyalty for appointment to the civil service, the methods of their performance evaluation, and the code of conduct to be followed by them. Kautilya also suggested some checks and balances on the appointment of civil servants. He recommended a continuous watch on the functioning of the civil service and a briefing to the king on the performance of the civil servants on a regular basis. Kautilya laid down a code of conduct for the civil services, which prescribed swift promotions for efficient and effective officials and severe punishment for those who were corrupt (More, 2023, p. 1). For a study of public administration in India, one would need to go back to the Mauryan Empire (300–200 B.C.E.), where it was detailed at length in Kautilya's *Arthashastra*. Kautilya was the advisor and chief minister to the first Mauryan Emperor, Chandragupta. The *Arthashastra* became the first manual on statecraft and proper management of an empire. The empire was well-governed (Gupta, 2019, p. 2).

Mughal Period

During the medieval period, Mughal Emperor Akbar founded and nurtured the civil service. He introduced a number of administrative measures, including a land revenue tax collection system, local manufacturing of industrial goods, and exports of arts and crafts to other nation-states. His civil service had a welfare and regulatory orientation (More, 2023, p. 1). The Mughal

system was essentially a military despotism with the primary aim of ensuring its own existence, expanding its territories wherever possible, defending those territories, and collecting taxes and revenues to maintain itself. Higher appointments gradually tended to become hereditary. In Akbar's administration, each *subah* (province) was under a *subedar*, whose duty was to administer criminal justice and maintain law and order. Associated with him was a *dewan*, who was directly appointed by the government and was responsible for revenue administration and civil justice. The *subahs* were sub-divided into *sarkars*, each under a *faujdar*, who was the main executive functionary and military commander. The collection of revenue was the responsibility of the *amalguzar*. The district revenue officer did not hold the dominant position. The *faujdar* acted as a check on him. Every *faujdar's* district was divided into a number of *thanas* (police stations) under the charge of a *thanedar* (police inspector), appointed by the *faujdar* (Gupta, 2019, p. 3).

British Period

The strength of the British Empire in India was largely based on its efficient system of administration, run mainly by the Indian Civil Service, also known as the Imperial Civil Service. The term "Civil Service" is comparatively recent and has come into use over the past century or so. Before that, the civil administration of British India was referred to as the Covenanted, or Superior Services, and Uncovenanted Services. In fact, the term "Civil Service" was used to designate the British administration in India. The British Empire called its employees working on the civil side "Civil Servants" in contrast to those employed for military and naval duties (Mohyuddin and Ali, 2021, pp. 81–82). *Civil service* is the generic name given in English to the administrative apparatus of the state. Historically, bureaucratic administrations were developed in Egypt and China to serve the rulers or the dynasty. These bureaucrats were engaged in

activities such as land registration, water allocation, tax collection, and, above all, war-related affairs. The emergence of the *modern* civil service is directly connected to the crystallisation of the European-style state. A professional, career civil service (based on entrance examinations) was first introduced in Prussia and France and subsequently in Britain and the United States (Galnoor and Oser, 2015, p. 695). The term *civil service* generally refers to administrators paid for implementing the policies of national governments. Under the British system of administration, which was divided into military and civilian administration, some officials performed civil duties and some military duties. Hence, the civil service is different from military service. Both civil and military officers are part of the state administration, but the functions of the two groups are different and, because of this, a distinction has been drawn between the two categories of officers (More, 2023, p. 82).

The British introduced a new paradigm in India which contributed to altering the culture of power in the country. An efficient and effective bureaucracy established by the British is considered among the best administrative machinery in the annals of history (Niaz, 2006, p. 187). The structure of the Indian Civil Service was gradually shaped. Originally, administration of the EIC was a mercantile service. Later, when the company became a territorial sovereign as well, its civil servants had to combine their commercial and administrative duties (Ghosal, 1944, p. 4). The Indian Civil Service, and indeed much of our present administrative system, is the product of the British rule in India. This developed initially to manage the affairs of the EIC as it transformed from being a mere trading company to becoming first an administrator, then successively a colonising force, an arm of the empire, and, finally, a ruler. Later, it became the instrument of the British government as it presided over an empire, first strengthening it and then stubbornly reluctant to let it go. The Civil Service managed unique conditions over a long period of time and, in the process, became an institution in itself. The ICS became the premier service occupying all the senior

positions in the government—administrative and judicial offices both at the Centre and Province levels. It played a major role in the administration of both civil and criminal justice. It was not merely an executive agency of the government but helped to formulate, legislate, and direct policy. Some of its senior members became governors of provinces and were members of both executive and legislative councils. It thus became, as some have termed it, the “ruling caste.” It established its own traditions and acquired a formidable reputation. British rule also led gradually to the institution of the *District Officer*, which became the most visible symbol of the Raj and still survives as an important cog in the administrative wheel (Gupta, 2019, pp. 1–2).

Chinese Civil Service

The Chinese Civil Service, the administrative system of the traditional Chinese government, was one in which its members were selected by competitive examination. The Chinese civil service system provided the Chinese Empire with stability for more than 2,000 years and offered one of the major avenues for social mobility in Chinese society. It later served as a model for the civil service systems that developed in other Asian and Western countries.

The Qin Dynasty (221–207 B.C.E.) established the first centralised Chinese bureaucratic empire and thus created the need for an administrative system to staff it. Recruitment into the Qin bureaucracy was based on recommendations by local officials. This system was initially adopted by the succeeding Han Dynasty (206 B.C.E.–220 C.E.), but in 124 B.C.E., under the reign of Han Emperor Wudi, an imperial university was established to train and test officials in the techniques of Confucian government. The Sui Dynasty (581–618) adopted the Han system and applied it in a more systematic way as a method of official recruitment. The Tang Dynasty (618–907) created a system of local schools where scholars could pursue their studies. Those

desiring to enter the upper levels of the bureaucracy then competed in the *Jinshi* exams, which tested a candidate's knowledge of the *Confucian Classics*. This system gradually became the major method of recruitment into the bureaucracy; by the end of the Tang Dynasty, the old aristocracy was destroyed, and its power was taken by the scholar-gentry, who staffed the bureaucracy. This non-hereditary elite would eventually become known to the West as "mandarins," in reference to Mandarin, the Chinese dialect which they employed. The civil service expanded to what many consider its highest point during the Song Dynasty (960–1279). Almost all Song officials in the higher levels of bureaucracy were recruited by passing the *Jinshi* degree and the examinations became regularly established affairs. Under the Ming Dynasty (1368–1644), the civil service system reached its final form, and the succeeding Qing Dynasty (1644–1911/1912) copied the Ming system virtually intact. The examination system was finally abolished in 1905 by the Qing Dynasty in the midst of modernisation attempts. The whole civil service system as it had previously existed was overthrown along with the dynasty in 1911/1912.¹

Reflections in Time

The history of the world is the history of civilisations (Indus Valley, Chinese, Mesopotamian, Egyptian) and of empires (Roman, Persian, Mongol, Mauryan, Gupta, Mughal, Russian, British, etc.) until the dawn of the Industrial Age. What is characteristic of these institutions is that each one of them had a governance mechanism in place—a combination of military and non-military or civil components built into them. Maintaining such a governing elite necessitated the empires to constantly be on the lookout for sources of revenue to sustain themselves and also to be in the quest for additional sources of revenue through the conquest of territories. Thus, empire building became an

¹ <https://www.britannica.com/topic/Chinese-civil-service>

endeavour in itself. Bureaucracy, public administration, or civil service became a concomitant necessity to achieve it. The shape of this institution of civil service was dictated by the needs of the Emperor or King. Loyalty and kinship were the two important factors in choosing the men who would hold positions of importance in the administration. Alongside that came merit—the meritorious being given positions of importance—as the post of a Commander of the forces to a person of valour, the post of a Treasurer to a person of acumen and calibre, etc. So, in effect, the world over, it was a combination of the spoils system with some elements of meritocracy built into it. It was not open to all in the sense that we understand it today. Nevertheless, the attributes of civil service stood the test of time. The old world and the medieval world were predominantly run on those lines.

Timeline of the East India Company and the Creation of a Civil Service

It would help to draw up a timeline of the history of the East India Company (EIC) in India, as it provides a perspective on the evolution of the institution of civil service in India. Masulipatnam (1611), Surat (1613), Madras (1639), and Hugli (1651) were the locations where the EIC set up their factories. EIC gained control of Bombay in 1661, and a trade centre was established at Calcutta in 1690. This way the establishments on the west and east coasts of the Indian subcontinent paved the way for a mercantile company to truly set a base in India. This was in the 17th century (1600–1700). The period between 1700 and 1750 was one where the grip of the Mughal Empire was receding over its provinces. In the early 1750s, the mercantile company became involved in skirmishes in Arcot, Arni, and in Kaveripak—all not far off from Madras. Robert Clive led the defence of Arcot in 1751. The capture of the Gheria Fortress (known as the Vijaydurg Fort) on the west coast in Maratha territory in 1756 by Robert Clive signalled the rising power of the military prowess of the EIC. The

incident of the Black Hole of Calcutta in 1756 spurred the EIC to embark on a confrontational path. The EIC began to control its own territories in India. In early 1757, the 1st Bengal Native Infantry, the first sepoy battalion, was set up. The EIC was readying itself for battle. The victories in the Battle of Plassey (1757) and the Battle of Buxar (1764) were inflection points. They paved the way for EIC to change gears from a mercantile company to that of a conqueror. Its territories expanded with the passage of time when opportunities beckoned it.

The administrative organisation that Sher Shah had initiated, Akbar had revived, and the other Great Mughals had conserved came to pieces in the general anarchy which set in soon after the death of Aurangzeb in 1707. Between 1707 and 1750, many of the attributes of sovereignty slipped out of the hands of the Nawab and were usurped by the great territorial magnates, the Zamindars of revenue. The Battle of Plassey (1757) gave the final blow to a crumbling structure of organised government in Bengal. The Nawab of Bengal, Bihar, and Orissa now became merely a puppet. The period from 1757 to 1765 thus saw the apotheosis of anarchy in the Premier *Subah* of the Mughal Empire. The little administrative organisation which had survived the ravages of the last 50 years also disappeared during this period when the old order had changed, but the new had not taken place. In 1765, the EIC at last thought it right to accept the *Diwani* of Bengal, Bihar and Orissa at the behest of the Emperor of Delhi. The administration of revenue and civil justice was vested in the Company's representative of this Presidency. The Company further made the Nawab a mere pensioner and transferred the *Nizamat* to a nominee of its own. Thus, the EIC became responsible both for *Diwani* and *Nizamat*, for the administration of revenue and civil justice, as well as indirectly for the maintenance of law and order and the administration of criminal justice (Roy, 1935, p. 1-3).

The duties undertaken by the EIC, first in Bengal and then in other parts of the country, were onerous and required men of ability and energy to carry them out. Unfortunately, these

officers were drawn from the ranks of the old servants of the Company—the writers, factors, and merchants who had been sent to keep the books of the Company's establishments or to manage their warehouses. Neither their early education nor their subsequent experience in any way fitted them for the administrative duties they were now invited to perform. The general mass of the Company's servants remained too saturated with the atmosphere of the factory and the warehouse to adapt themselves to the new field of work. None of the three Acts of Parliament, which attempted between 1773 and 1793 to regulate the Company's administration in Indian territories, were concerned in any way with the most important question of the education and training of civil servants in this country. The appointment of Lord Wellesley as the Governor-General of Bengal in 1798 opened a new epoch in the history of the Indian Civil Service. He himself was a finished classical scholar and was endowed with a large fund of constructive imagination. He thought that an arrangement must be made without delay for the general cultivation of the intellect of the Company's junior servants and also for their technical education in Indian languages, laws, and regulations. Accordingly, without waiting for the sanction of the Court of Directors, the Governor-General in Council issued a regulation in May 1800 for the immediate establishment of the Fort William College. A 3-year educational course was drawn up. It was of a mixed and comprehensive character. It provided for instruction in Liberal Arts—Modern History and Literature, Classical History and Literature, Laws of Nations and Ethics, and Jurisprudence. This side of education was meant for broadening and liberalising the mind and quickening the imagination of the future civil servants. The syllabus also included Indian subjects, like Sanskrit, Arabic, Persian, Urdu, Bengali, and Marathi; the different codes followed in this country, the Regulations which had been passed from time to time by the Governor-General in Council, and the History of India from all stand points. It was enacted that all the new arrivals in the Civil Service would be admitted into the college

and remain associated with it as students for 3 years. This rule was to apply not only in the case of junior civil servants on the Bengal establishment but also in the case of those of Madras and Bombay, who would likewise be compelled to undergo training in this college for the same period. Wellesley's ambition in insisting on Madras and Bombay civilians being trained and educated at Fort William was to break down the barrier of suspicion, rivalry, and jealousy between the three Presidencies and give their future administrators the same outlook and angle of vision. The college, as conceived by Wellesley, had been founded in anticipation of the sanction of the Court of Directors. But the Court set its face against the step already taken by the Governor-General in Council at Calcutta. The Fort William College was allowed to continue on a comprehensive scale only until 1805, when the Company's desire to establish in England a suitable institution for the training of its young cadets in its Indian Civil Service was fulfilled. The Haileybury College was started the following year, in 1806. It was enacted that young recruits to the covenanted Civil Service must spend 2 years at Haileybury, where their general education would be continued and strengthened and where they would also receive their first acquaintance with Indian languages, laws, and history. After retaining them for four terms in this institution, those of them on the Bengal establishment would be sent down to Calcutta, and here at Fort William they would add to their knowledge of Indian languages. The Fort William College was thus degraded to become merely a language school (Roy, 1935, pp. 8–18). It was whittled down to a school of oriental languages for Bengal alone. For many years, the young men who came to the Bengal service lived in Writers' Buildings until they had passed examinations in these languages; this was all that remained of the Fort William College. There was a good deal at Haileybury that was borrowed from Fort William (Woodruff, 1954, p. 280). For 50 years, the Indian Civil Service was the product of Haileybury College. It had its unmistakable stamp on the outlook, ability, and character of all the covenanted civil servants who administered for half a

century and more the British territory in India. The period of the Haileybury Rule represents the golden period of the patronage system. The Civil Servants of the Company had to be nominated as usual by the individual Directors. Each Director had at his disposal one nomination. The Chairman and Deputy Chairman were entitled to nominate two candidates each, and two such nominations were placed out of courtesy at the disposal of the President of the Board of Control. The Directors, as a rule, nominated their own sons or nephews or those of their cousins and friends. Membership was almost exclusively confined to the Anglo-Indian families in England and Scotland. A typical person at the time of nomination was on average about 16 years of age. The social life of the college was, according to all testimonies, one of the very best. The college became noted for its corporate life and excellent camaraderie of spirit which bound the inmates of the institution together. This corporate outlook and this spirit of comradeship were carried down to India by the Haileyburians. The honesty and integrity of some proved to be contagious and soon became the fundamental ideas of the whole covenanted service (Roy, 1935, p. 20).

It was in the century from 1757, when the EIC gained victory at the Battle of Plassey, until 1857, when the EIC lost the plot in governing the subcontinent, leading to the First War of Independence, that the Civil Service was established, first in a rudimentary manner and, with the passage of time, in a comprehensive manner. As the EIC took charge of the *Diwani* and *Nizamat*, it entrusted British civilians with the responsibility of being *Supervisors* in a district and handling all administrative functions. This was the precursor to the institution of the District Officer. In 1772, the designation of *Supervisor* was replaced with that of *Collector*—the person responsible for the collection of land revenue in a district. Warren Hastings and Lord Cornwallis played a pioneering role in the establishment of the Civil Service. During the time of Lord Cornwallis, the head of the district was all-powerful, with the offices of collector, judge, and magistrate all concentrated in one individual. The role of Lord Wellesley in

setting up the training college at Fort William in Calcutta deserves special mention. It was truly the first training effort with elements of Indian language training being imparted. The guiding philosophy was that the men who were to rule India ought not to rue the fact that they did not understand the local lingo. Haileybury served as the training school for the next 50 years, even as it borrowed several elements from Fort William. The period from the 1770s to the 1850s saw the EIC in an expansionary mode, through wars across several regions—Anglo-Maratha wars, Anglo-Mysore wars, Anglo-Nepal war, Anglo-Sikh wars, etc. Expansion of territories consequent to victories at war was followed by expanding the territories where the District Officer came to rule the roost. The military and the non-military or civil authorities worked in unison. This civil-military coordination works to this day, albeit mostly at the state level.

British colonial rule in India underwent a fundamental change in the 1850s. Not only were open examinations and merit introduced as the chief norms for recruiting British civil servants to the ICS, but sovereign control over British India was also transferred from EIC to the British Crown, and in particular to the newly created India Office and the Secretary of State for India (Kaminsky, 1986), following the Mutiny of 1857 (Cornell and Svensson, 2022). In 1853, Mr. Gladstone, as the Chancellor of the Exchequer, appointed Sir Stafford Northcote and Sir Charles Trevelyan to enquire into the condition of the civil service in England and recommend methods by which it might be thoroughly reorganised and made a more efficient instrument of public administration. After a detailed enquiry, they submitted their report in which they suggested that appointments in the civil service should no longer be made by patronage. Instead, they should be made henceforth by some kind of open competitive examination. This provision for competitive examination was embodied in the Government of India Act passed in 1853. The Macaulay Report of 1854 recommended that 23 should be the highest age limit at which candidates should be allowed to compete, and 18 should constitute the lowest limit.

The committee recommended that the competitive examinations should be concerned only with subjects of liberal study like European Sciences and Arts. Sanskrit and Arabic were also, of course, included in the syllabus, but they were only given half as much weight as Greek and Latin (Roy, 1935, p. 20). In Britain, the recommendations of the 1854 Northcote–Trevelyan Report were implemented in relation to the recruitment of civil servants. Since the merit reforms in India were introduced in a more comprehensive, unified, and decisive manner, many have considered the ICS as the blueprint and testing ground for gradual changes that were implemented in the Home Civil Service (Mueller, 1984, p. 197; Kerry, 2015;). The recruitment of civil servants to the EIC underwent a change in the first half of the 1850s. Open competition, available to “any natural born subject of Her Majesty being more than 18 years and less than 23 years old,” was introduced in 1855 in the ICS as a direct result of the Charter Act of 1853 and Lord Macaulay’s 1854 Report in the Indian Civil Service (Compton, 1967, p. 99). The first competitive examination was held in 1855 under the supervision of the Board of Control. It was not until 1858 that Her Majesty’s Civil Service Commissioners were placed in charge of these examinations. From 1858 onwards, the recruits had to pass a period of probation in England before they were allowed to take up their duties in India (Roy, 1935, p. 38).

Perceptions About the ICS

The ICS did more than administer India: it represented the Raj and was charged with securing its dominance. ICS officers were responsible for enforcing laws during periods of civil disobedience, arresting nationalist leaders at particularly volatile times, and spreading pro-government propaganda. They had a large say in the formulation of policy and a great deal of discretion while executing it, often describing themselves as “rulers” rather than “servants” (Woodruff, 1954). For many

people, the ICS— with its concentration of legislative, executive, and judicial power—was the Raj (Burra, 2007). For Indian nationalists, on the other hand, the ICS officers, were “neither Indian, nor civil, nor servants” (Potter, 1986). The ICS served as a backbone for the control of the British Empire in India. Selected on merit, it was the most literate and educated administrative service to rule a colony. The officers of the ICS made and executed policies in an efficient and effective manner (Niaz, 2006, p. 203). The dominant perception was that “the Indian civil servant exercised a power for good or evil which no English servant—*perhaps no functionary in the world*—possessed” (Cornell and Svensson, 2022, p. 538). An extract of British Premier Lloyd George’s celebrated speech in Parliament in 1922, in the context of the role of ICS, opined that he could foresee no period when “they can dispense with the guidance of a small nucleus of British Civil Servants.” They were the *steel frame* of the Indian constitutional structure. “I do not care what you build on it. If you take the steel frame out, the fabric will collapse” (Roy, 1935).

Indianisation of the Civil Service

The “Indianisation” of the service had been an early nationalist demand: the ICS was the pinnacle of aspiration for educated Indians, and the social class from which the ICS was recruited also provided many nationalist leaders (Burra, 2007, p. 5).

The British did not rule all of India. They directly administered eleven provinces: Punjab, Bengal, Sind, Bihar, Assam, Orissa, Madras, Bombay, the North-West Frontier Province (NWFP), the United Provinces (UP), and the Central Provinces (CP). But two-fifths of the total area of India consisted of some 583 princely states of varying sizes and British presidencies (Copland, 1997; Bandhopadhyay, 2004, p. 113).

Though the British did not directly administer the Princely States, in practice, they exercised a great deal of control through Political Agents (also called Residents) appointed by the

Governor-General. Rulers who defied the Residents were, from time to time, removed from the throne. Political Agents were usually members of the “Political Department,” the diplomatic service of the British in India. It was staffed almost entirely by the British: K. P. S. Menon was the first Indian to be taken into the Department (in 1921). He records with pride the fact (Roy, 1935, p. 49) that “he could win the respect of the ‘*wild frontier tribes*’ just as easily as the British” (Menon, 1981).

The district was the primary administrative unit at the provincial level. It was headed by an ICS officer, variously known as the “District Magistrate” or the “District Collector,” whose duties included the enforcement of law and order, the collection of land revenue, the administration of institutions such as municipal schools and hospitals, and certain kinds of judicial work. ICS writings are often very nostalgic about the life of the “District Office” (a term encompassing the collector and junior officials such as Assistant Collectors and Sub-Divisional Officers). This is not surprising, for the Collector had a great deal of power and discretion in running the affairs of the district, and it was in the districts that ICS officers had the greatest contact with the people over whom they ruled (Roy, 1935).

Because of the great size of British India, its administration was conducted by an army of Indian officials in subordinate posts (Potter, 1986, p. 21). Provincial Civil Services (PCS) were created in the late nineteenth century as a way of accommodating the growing political demands of the educated Indian middle class, not only for representation in government but also for government employment. In addition to the PCS, the administration consisted of a variety of All India Services, so called because they were recruited and supervised by the Government of India rather than the individual provinces. These included the Indian Police Service, the Indian Medical Service, the Indian Forest Service, and the Indian Educational Service. At the apex of the administrative executive stood the Indian Civil Service, which was superior to all other All India Services in terms of pay, power, and prestige (Roy, 1935).

Factors that Facilitated the Enhanced Representation of Indians in Civil Services

With the administration passing from the East India Company to the British Crown after the First War of Independence in 1857, there was direct involvement of the British Parliament to exercise oversight. Following the implementation of the Macaulay Report recommendations, the first Indian selected for the ICS was Satyendranath Tagore in 1864. He sat for the exam in London. A development that had a significant bearing on the question of Indian participation in the Indian Civil Service was the establishment in 1857 of three universities in Calcutta, Bombay, and Madras—the capital cities of the three Presidencies of Bengal, Bombay, and Madras. Bright young graduates of these universities aspired to join the ICS, and nationalist freedom fighters were willing to support their ambition by sponsoring them for higher education in Britain, on the condition that they took part in the ICS exam held in London. Very few Indians, however, were able to succeed in that period, even as there was a clamour for holding the examinations in India, as not many aspirants could travel to London to participate in the open competition. It took a long time for the Imperial authority to concede the demand for opening a centre for an exam in the Indian subcontinent. It was only in 1922 that Allahabad was given the honour of holding the simultaneous exam for the ICS. The outbreak of the First World War in 1914 absorbed the attention of the British Government. A compromise was reached as a quid-pro-quo to gain the support of Indians for war efforts by granting more powers to Indians through the elections to local governments in various provinces. The Montagu–Chelmsford Report formed the basis of the Government of India Act of 1919 which led to the system of “dyarchy”—elected provincial governments to which the civil servants would report. All these developments increased the representation of Indians in the ICS.

The need to report to elected Indian public representatives in the provinces caused disenchantment among the whites, and consequently, fewer showed interest in joining the ICS. With many vacancies available from the 1920s onwards, more and more Indians began to be recruited to the ICS compared to the previous decades. The British tried to improve conditions of service to encourage whites to enter the ICS. This, however, had a marginal effect. The Government of India Act of 1935 strengthened the provincial government system. This, combined with the gathering pace of the struggle for independence and developments leading to the Second World War, put the brakes on whites joining the ICS. In fact, sensing Indian independence post-War, many were preparing to leave the sub-continent to start a new phase of their lives in Britain and the Western Hemisphere.

Training

During the Crown's supremacy from 1858 to 1947, officers were given training at different institutions across the country and abroad. Candidates from the services, both foreign and Indian, under covenanted and uncovenanted services, respectively, were trained at various colleges in Oxford, Cambridge, and at Trinity College, Dublin. In later years, they were trained at the historic Metcalfe House, New Delhi (LBSNAA, 2019, p. 7). The Public Service Commission in India was first established in 1926 in accordance with the provisions of the Government of India Act 1919. Its purpose was to protect the civil service from political influences and afford it stability and security. The Commission came to be known as the Federal Public Service Commission in 1937 as a result of provisions in the Government of India Act, 1935. In 1950, with the coming into force of the Constitution of India, it was renamed the Union Public Service Commission (UPSC). It conducts the recruitment of civil servants through a competitive examination. A report published by the UPSC in 1957

documented some of the issues that the institution faced. Interestingly, a month after this report was released, Pandit Govind Ballabh Pant, the then Minister of Home Affairs, expressed the need for the establishment of a separate training institution for the Indian Administrative Service (IAS) and other cadre services. He felt that the Metcalfe House in Delhi, from where training had hitherto been imparted, would no longer suffice. In 1958, Pandit Pant formally announced in the Lok Sabha that the government would set up a National Academy of Administration where training would be given to all recruits of the Civil Services to work towards upholding the values enshrined in the Constitution of India (LBSNAA, 2019, p. 11).

The Services: Central Services and All India Services

Independence in 1947 saw the transition from the ICS to the IAS. While there was criticism about the role of the ICS, Sardar Vallabhbhai Patel, as the Union Home Minister, opined that a strong civil service was essential to preserve the unity and integrity of the country. The IAS and IPS were created through executive orders. The need for an independent Civil Service was debated in the Constituent Assembly, and it was subsequently incorporated into the Constitution of India.

The Central Services (Group A) are under the administrative control of the Union Government. The broad categories of these Central Services are the Indian Foreign Service (IFS), Indian Audit and Accounts Service (IA&AS), Indian Revenue Service (IRS), etc. The All India Services comprise the Indian Administrative Service (IAS), Indian Police Service (IPS), and Indian Forest Service (IFoS). The All India Services personnel are recruited by the Centre and allotted to various State cadres. They have the accountability to serve both under the State and the Centre. Overall, the structure and administration of the Civil Services fortify the nationalistic character among its personnel.

Lal Bahadur Shastri National Academy of Administration

The Lal Bahadur Shastri National Academy of Administration (LBSNAA) in Mussoorie has been training officers of the Civil Services of India since 1959. Since its establishment, this premier institution has played a critical role in nation-building by serving as an effective catalyst in the moulding of the country's administrators. Over the last 60 years, it has influenced hundreds of young minds, turning entrants to the services into capable officers who constitute the backbone of the country's administrative structure (LBSNAA, 2019, p. 4).

Motto

Yogah Karmasu Kaushalam

In Chapter 2, verse 50, of the Bhagavad Gita, Krishna talks to Arjuna about “Sthitaprajna”—a person endowed with the wisdom of equanimity, who is firm in thought and action under all circumstances. The ideal person is not swayed by every gust of wind; he is committed to excellence in action. Perfection in action is Yoga. (LBSNAA, 2019, p. 31)

National Civil Services Day

The Government of India commemorates National Civil Services Day on April 21 every year to appreciate the officers engaged in various public departments in the country. On this day, civil servants are recognised for their hard work and dedication towards serving the people. It is also an acknowledgement of the important role they play in the country's administration. The first celebration was held on April 21, 2006, in New Delhi, and that day ever since has been celebrated as National Civil Services Day ever

since. Sardar Vallabhbhai Patel, the first Home Minister of Independent India, addressed probationers of Administrative Services Officers in 1947 at Metcalfe House in Delhi, referring to civil officials as the “steel frame of India” (www.cnbctv18.com).

District Office

The District Collector is a traditional role in the Indian authoritative framework. The role was cut out by the colonial masters, and the officials designated as District Collectors were responsible for the appraisal and assortment of land revenue. This is where the “Collector” part in the designation of District Collector originates. The office of the District Collector and Magistrate is the backbone of district administration in India. These officers are the essence of administration at the grassroots level. It is through their office that administrative plans are communicated to the public, law and order are maintained at the local level, and open public grievances are addressed. Their office serves as the channel of vertical and horizontal accountability for the organisation. The foundation of the Collector has been regarded as irreplaceable in achieving coordination among various departments, organisations (including NGOs), authorities, and so forth. The Collector is considered the key functionary, best equipped to foster collaboration across the entire spectrum of regional organisations. As the number of activities, institutions, and departments involved in rural development has increased, the organising and harmonising role of the Collector in the government’s endeavours of the administration has multiplied and assumed greater significance (Pathak, 2021, p. 1022). It is well known that India owes much of its legal and administrative structure to the legacy left behind by the British when they left the country in 1947. Many of their statutes continue to provide an excellent framework for the administration of justice and maintenance of law and order. The most visible and effective

element of administration, extant in the country for the past 250 years in an unbroken line of historical evolution, is the institution of the District Collector (also known as Deputy Commissioner in some states and, while encompassing the role of the District Magistrate, is ubiquitously translated as the District Officer). An office, invented in the days of the East India Company and strengthened when the British Parliament took over the reins of administration in 1858, has, over the years, grown into a crucial and indispensable element in the country's bureaucratic and administrative hierarchy. It is one on which the government, at both the state and central levels, is heavily dependent (Mathew, 2020, pp. 5–6).

The district administration, as evolved under British rule, had to perform various tasks like the maintenance of public order, management of public affairs, and revenue generation and collection. For this purpose, the institution of the Deputy Commissioner was created, and that system not only played a significant role in the administration under British rule but has also continued to play quite an important role in district-level administration in independent India. Although the administration at the district level evolved during the British period, the provincial administration system with its hierarchy and organisation had been in place even before British rule (Dubey, 1995). In the Mauryan period, the administration of a *Janapada* or District was under a triumvirate, namely the *Pradesika*, the *Rajuka*, and the *Yukta*. The *Pradesika*, equivalent to the modern Deputy Commissioner, was assisted by a subordinate official known as the *Rajuka*, or modern *Lekhpal*, whose duties and responsibilities were to survey and assess land for the prompt realisation of land revenue. The *Yukta* was basically a treasury officer (Kaur, 2022, p. 172).

The District Officer (District Collector/District Magistrate) holds multiple responsibilities. Once an incumbent is appointed by the State Government as the Collector-cum-District Magistrate of a district, they derive their powers from the provisions of various Acts passed by the Centre or State governments, wherein

the designation of Collector/District Magistrate is mentioned. Prominent among them are:

1. Uttar Pradesh Land Revenue Act, 1901
2. Criminal Procedure Code, 1973 (substituted now by Bharat Nagarik Suraksha Sanhita, 2024)
3. Arms Act, 1959
4. Bonded Labour System (Abolition) Act, 1976
5. Cable Television Networks Regulation Act, 1995
6. Census Act, 1948
7. Consumer Protection Act, 1986
8. Essential Commodities Act, 2020 (it replaced the Essential Commodities Act, 1955)
9. Indian Evidence Act, 1872 (substituted now by Bharatiya Sakshya Adhiniyam, 2024)
10. Indian Forest Act, 1927
11. Indian Stamp Act, 1899
12. Juvenile Justice (Care and Protection of Children) Act, 2015
13. Land Acquisition Act, 2013 (it replaced Land Acquisition Act, 1894)
14. Maintenance of Parents and Senior Citizens Act, 2007
15. The Mental Health Act, 2017
16. Motor Vehicles Act, 1988
17. National Security Act, 1980
18. National Disaster Management Act, 2005
19. Representation of People Act, 1951
20. Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act, 1989

The above list is not exhaustive. There are more Acts and Executive Orders, as old Acts are substituted by new Acts, or as new Acts are promulgated ab initio. Keeping in view the needs of the times, the District Officer comes more into focus. It would be evident that the duties and responsibilities are onerous. It is a 24-hour job in the true sense of the word. In addition, the District Officer is the chief representative of the State at the District level.

All petitions addressed to the high offices of the Chief Minister or the Governor of a State, or the Prime Minister or the President of the country, are submitted to the District Officer at the local level. When these dignitaries visit any region in the country, it is the District Officer, as head of the district administration, who is vested with the responsibility to liaise, coordinate, and manage all protocol functions. There is perhaps no other institution comparable anywhere in the world where one individual office is vested with so many responsibilities. As organisations and structures go, there is a large body of literature on modern corporates, and from the dawn of the industrial age to the Internet age at present, there have been quite a few transformations. The District Office as an institution is unique: it was an institution or office created by a mercantile company to meet its objectives as it transitioned from a trading entity to a conquering entity. The British Raj under the Imperial Crown did not dispense with this institution; on the contrary, they strengthened it. In independent India, the institution has endured. The multifarious duties that devolve upon the District Officer only go to show that from a predominantly revenue-collecting and law and order maintenance authority, the development administrator role has now become prominent. In the age of technology, where information processing becomes the key, the District Office will continue to be relevant and a crucial component of good governance at the grassroots.

Perceptions on the District Office

The Collector's post is an awkward job because of it being an administrative nightmare. There is virtually no fixed responsibility for this post. The fundamentals of the system, created by the British 150 years earlier, for collectors of those times, remain the same for those in the present. I have worked at different types of government posts in my 36 years with the IAS—as secretary as well as cabinet secretary. I have also worked as the CEC, which is incidentally not part of the government. Of all these posts, working as a collector brought me far greater happiness than any other post I ever held. An individual in need can be directly and immediately helped by a collector. (Seshan, 2023, p. 47)

The best example of a large and successful information-based organisation has no middle management at all. The British ran the Indian subcontinent for 200 years, from the middle of the 18th century through the Second World War, without making any fundamental changes in organisation structure or administrative policy. The organisation structure was totally flat. Each district officer reported directly to the “COO,” the provincial political secretary. Each political secretary had at least 100 people reporting directly to him, many more than what the doctrine of span of control would allow. Nevertheless, the system worked remarkably well, in large part because it was designed to ensure that each of its members had the information to do his job (Drucker, 1988, p. 6).

The focal point of district administration is the Collector and District Magistrate. He represents the government at the district level, and it is his job to address the grievances of the people and also to implement the policies of the government, ensuring that these policies do not remain on paper alone. He must lead, coordinate, push, and harmonise various departments and diverse aspects of government functioning at the district level.

These responsibilities amply justify his pre-eminence in the Indian administration (Ranjan, 1994).

Civil Service Reforms

An important aspect of a modern bureaucracy is that civil servants are recruited and promoted based on their skills and merits rather than on the basis of political and other connections (Weber, 1978; Dahlstrom & Lapuente, 2017).

OECD Report

Today's civil servants are addressing problems of unprecedented complexity in societies that are more pluralistic and demanding than ever. At the same time, the systems and tools of governance are increasingly digital, open, and networked. Civil servants need the right skills to keep pace. This presents a double challenge: the first is to identify which skills will be needed for civil service that are fit-for-purpose today and into the future; the second is to figure out how civil service can invest in these skills—through attraction, recruitment, and development—to improve policies and services.

Public Sector Skills in the Search for Public Value

To assess changes in the skills needed in today's civil services, the Organisation for Economic Co-operation and Development (OECD) has developed a framework which identifies four areas, each representing specific tasks and skills required in the relationship between the civil service and the society it serves.

1. *Policy Advice and Analysis*: Civil servants work with elected officials to inform policy development. However, new

technologies, a growing body of policy-relevant research, and a diversity of citizen perspectives, demand new skills for effective and timely policy advice.

2. *Service Delivery and Citizen Engagement*: Civil servants work directly with citizens and the use of government services. New skills are required for civil servants to effectively engage with citizens, crowd source ideas, and co-create better services.
3. *Commissioning and Contracting*: Not all public services are delivered directly by public servants. Governments throughout the OECD are increasingly engaging third parties for the delivery of services. This requires skill in designing, overseeing and managing contractual agreements with other organisation.
4. *Managing Network*: Civil servants and governments are required to work across organisational boundaries to address complex challenges. This demands skills to convene, collaborate, and develop a shared understanding through communication, trust, and mutual commitment.

The skilled civil service of the future: The capacity and capability of the civil service workforce are fundamental to the success of all public policy and reform. Public investment in the skill sets of civil servants is required for the government to become humble, agile, and adaptable (OECD, 2016).

ARC (Administrative Reforms Commission) Report on Executive and Public Administration

Administrative Reforms and All India Services

The structural problem of two of the All India Services, namely the Indian Administrative Service and the Indian Police Service, is that they were founded on the imperial idea of territorial control. It was at the district level that the Raj became an operational reality. The colonial idea was not abandoned when the country became independent, for reasons which clearly emerge from the Constituent Assembly debates. Thus, the present structure of the All India Services appears to be incompatible with the development of a full-fledged democratic representative government at the district level. In plain language, it means that “Law and Order” has not been brought within the ambit of the elected district panchayat which is constitutionally entrusted with responsibility for development activity. It is only thus that public service at the district level would acquire significance and be a real stepping stone for political leadership at higher levels.

The absence of a clear-cut relationship between the people and the State functionaries is responsible for much that has gone wrong. All this happened because, inadvertently or otherwise, we allowed the colonial legacy of administration to continue to hold sway in the post-independence era as well. For instance, the change of nomenclature from ICS to IAS did not even constitute a cosmetic change. The so-called “steel frame” of the British Empire became the role model for the fledgling IAS fraternity. The “*guru mantra*” of the old guard, namely the ICS, was the maintenance of the status quo, and the new guard, the IAS, was only too willing to oblige and follow suit. It is a naïve hope to expect the status-quoists to initiate or welcome changes for a

variety of reasons. First, they have a vested interest in perpetuating their dominant advantageous position along with the privileges flowing from it. Secondly, being bureaucrats rather than intellectual leaders, they lack the vision and imagination to devise new and innovative policies, preferring to tread the beaten track, follow precedents, and continue familiar programmes.

Recommendation

Above a certain level—say, the Joint Secretary level—all posts should be open for recruitment from a wide variety of sources, including the open market. We should specialise some of the generalists and generalise some of the specialists through proper career management which has to be freed from political manipulation and influence peddling.

Officials, before starting their careers, in addition to taking an oath of loyalty to the Constitution, shall swear to abide by the basic principles of good governance. This would renew the commitment of the executives to the basic tenets of the Constitution.

The specialist should not be required to play second fiddle to the generalist at the top. Conceptually, we need to develop a collegial style of administrative management where the leader is a facilitator, not an oracle delivering verdicts from a high pedestal (ARC, 2005).

Mission Karmayogi

In a young and continuously evolving democracy like India, civil servants have remained at the epicentre of all government activities, both as the agents of policymaking and as the executive hand that delivers and implements those policies on the ground. Today, we are at another crossroads: a new world is emerging before our eyes. Three forces are shaping this new world. First, with the rise of information and communication technology, we

are becoming more inter-connected globally. Young Indians living in small towns and villages are connected to the wider world, which is shaping their aspirations and desires. Second, this more informed citizenry is giving shape to a more mature political system, one in which politicians across the spectrum recognise the importance of delivering on their campaign promises of better health, education, and social benefits. Third, these two forces have led to a sharper focus on citizen-centricity, citizen engagement, and citizen partnership, which the Prime Minister has called *Jan Bhagidari* (public as a stakeholder is the third force).

Mission Karmayogi is heralding a new era in public administration in India. Mission Karmayogi—the National Programme for Civil Services Capacity Building (NPCSCB)—encapsulates this transition: the first transition is a change in the mindset of government officials from considering themselves as *karmacharis* to considering themselves to be *karma-yogis*. The second transition is a change in the workplace, from assigning individual responsibility for performance to diagnosing the constraints of a civil servant's performance using the Means, Motives, and Opportunity (MMO) framework. The third transition is moving the HR management system and the corresponding capacity-building apparatus from being rule-based to role-based. An institutional framework is put in place, with oversight from the highest level of political office (Balasubramaniam, 2022).

The recent launch of the National Civil Services Capacity Building (NCSCB) initiative, aims at professionalising the bureaucracy to meet our future development needs, brings a breath of fresh air. The NCSCB (Mission Karmayogi) employs a multi-pronged strategy to achieve its objective, which includes, inter alia, a comprehensive training programme for civil servants with active participation from eminent institutions of learning in both public and private sectors. The foundation of this multi-pronged strategy for change will be laid through the Framework of Roles, Activities and Competencies (FRAC). Through this

framework, each individual position in government, whether at national, state, or local level, will be assigned a pre-defined role or set of roles, a task not undertaken with proficiency to date and urgently required for the rejuvenation of public organisations in India. This comprehensive role definition, apart from clarifying the premises for decision-making in complex administrative situations, will also provide much-needed direction to the careers of civil servants through its linkages with performance management, training, and promotions (Garg, 2022).

Civil Services: Yesterday, Today, and Tomorrow

Good governance is all about getting things done—efficiently, effectively, economically, and equitably. This has been the expectation of public administration, bureaucracy, or civil service through the ages. The civil service was the preserve of a few in both ancient and medieval times. In modern times, it is a fair and open competition all across the world. Civil services as a career choice are popular with graduating students from all categories of institutions across India. The same is the case with China. In both these populous countries, there is a lot of prestige attached to being a member of the Civil Service. With the pace of technology, it is imperative for civil servants everywhere to skill, reskill, and upskill themselves in order to ensure that the delivery of public services is of a high order. The public are customers of government services, and they have a right to its delivery in an efficient and effective manner. People, processes, public representatives, and public administrators represent the *chaukambha* (four pillars) on which a society's well-being rests. It is incumbent on the civil service to be that strong pillar, the *steel frame*, to ensure that.

Personal Reflections

As a former member of the IAS (1980–2015), I have some reflections on both my personal experience and the public perception of what the Civil Service means to the people.

In 1982, when I was posted as SDM (Sub-Divisional Magistrate) in Amroha (then a part of District Moradabad, in Uttar Pradesh), a matter concerning a ration shop falsifying records came to me. On the recommendation of the Supply Inspector, I suspended the operation of that Fair Price Ration Shop. A day or two later, an elderly person, who had lost his vision due to old age, met me. He apologised for the wrongful act of his grandson, who operated the ration shop, and requested that I kindly revoke the suspension. He promised me that he would ensure no recurrence of the infringement that had occurred. The elderly person, Shri Bal Govind Gupta, was a freedom fighter and a Gandhian in his traits. Hearing him out and convinced that he meant what he said, I ordered the revocation of the suspension of the ration shop. A few weeks later, he came to make a courtesy call, thanking me profusely for my act, and mentioned how his grandson had turned over a new leaf. My small act seemed to have made a big impact on their lives. He visited me many times later on, merely to spend some moments with me. He had taken a liking to me. On one occasion, what he said amazed me. He stated that he recognised only three authorities: *Parganadeesh* (SDM), *Ziladeesh* (District Magistrate/District Collector/District Officer), and *Dwarakadeesh* (Lord of Dwaraka or Lord Sri Krishna). To the common man, the District Officer is not just a symbol of authority; there is an inherent faith in him that the authority will deliver justice. To me, as a young person, it was a lesson for a lifetime—to live up to the expectations of the public at large.

In 1983–1984, I was posted as Additional District Magistrate (Development) in District Uttarkashi, a hill district in the north-western-most part of Uttar Pradesh. My office was in a tin structure which housed many offices. A room adjacent to mine

was allotted to a group known as Seven Sisters. For most of the time, it remained locked. With the onset of summer in 1984, one day I heard some activity there. Puzzled, I desired to meet the people who came there. I met a group of young ladies who mentioned that they were driven by a common cause—trekking and mountaineering—and had formed the group known as Seven Sisters. They queried me about what work I did. I explained to them my development functions and the focus on promoting the socio-economic development of members of the Scheduled Castes and Scheduled Tribes. One young lady, who belonged to the Bhotia community (a Scheduled Tribe in District Uttarkashi), was keen to avail herself of economic benefits. I wrote a note to the BDO (Block Development Officer) of Dunda Block, where she resided, and asked her to hand over the note to the BDO, with the promise that he would help. A few days later, the BDO came to meet me stating that the Branch Manager of a nationalised bank was reluctant to sanction a loan under one of the schemes, as the young lady needed it for the purchase of mountaineering equipment. I told the BDO that I would sort out the matter. A day or two later, the young lady met me and mentioned that she had been chosen for that year's Everest expedition. I quickly rang up the Lead Bank Officer of the District and said, "Sharmaji, how would you like the flag of State Bank hoisted atop Mount Everest?" Soon enough, the papers were processed, and the young lady was sanctioned a loan. It is another matter that once chosen for the Everest expedition, she got a major sponsor (Tata Group). As it turned out, the young lady, Ms. Bachendri Pal, was the first Indian woman to ascend Everest. We accorded her a civic reception in Uttarkashi town on her return. A few days later, I was in for a surprise—she visited me at home and gave me an autographed photo of Everest (autographed by the full team). My only thought then was "benefactor turns beneficiary."

In 1988, when I was posted as Collector and District Magistrate of Muzaffarnagar district (in Uttar Pradesh), a trader met me one evening at my residence office and lamented that his son had fallen into bad company and that their family was aggrieved by

this. What he requested stunned me—he wanted his son to be bumped off in a police encounter with bad elements. I politely told him that the District Administration works according to the rule of law, and that his request was both unethical and illegal. I, however, told him that I would like to meet his son one-on-one. A few days later, a young man, the son of the trader, met me. I told him that his father and family elders were unhappy about his wayward ways. I mentioned to the young man that while I have no legal right to interfere in a family matter, as the Head of the District, I felt that it was my moral duty to help a family in distress, as they sought my counsel. I advised the young man to disassociate from elements that had a bad influence on his personality and to focus on helping his father in the family business. A month or so after that, the trader met me and presented a wedding invitation. It transpired that his son respected my advice, focused his energies on the family business, and consequently, the elders found a nice match for him. I felt a great sense of satisfaction, individually and as the head of a venerated institution—the District Office.

In my public administration experience, I have always felt that those of us who are part of the district administration act as a release valve for the public to vent their anger against the government system. It is our ability to absorb their angst, lend an ear to hear patiently, and try to solve their problems in the quickest possible time that marks us out as efficient and effective administrators. Quoting rules and trying to hide behind them will not do. We have to constantly think “out of the box,” and be able to justify our actions. My experience tells me that “If administration is the art of the possible, then administrators are the artistes, who are expected to do the impossible” (quote is author’s views).

Shakespeare’s famous quote is: “All the world’s a stage, / And all the men and women merely players; / They have their exits and their entrances; / And one man in his time plays many parts” (*As You Like It*: Act II, Scene VII). To me, that person is the District Officer in India.

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Chapter 3. Improving Public Service Delivery: An Indian Experience—*DBT Dilli Se Beneficiary Tak*

Dr. R. S. Sharma

Introduction

Direct Benefit Transfer (DBT) represents a transformative approach in India's welfare distribution landscape, designed to enhance efficiency, transparency, and inclusivity. Launched as part of a broader strategy to modernise and digitise government services, DBT aims to directly transfer subsidies, financial aid, and welfare benefits into the bank accounts of intended beneficiaries, thereby reducing leakages and improving delivery. This article provides a comprehensive analysis of DBT's implementation, impact, and challenges, examining its role in reshaping social security mechanisms in India.

According to the Mission Statement provided on the DBT portal,¹ it seeks to establish a “governance regime which ensures a simple and user-friendly Government to People (G2P) interface and directly delivers entitlements to eligible individuals and households in a fair, transparent, efficient and reliable manner.”

The story of how India transformed the delivery of benefits to its people using technology to achieve this mission objective is a fascinating one. This article attempts to describe this journey since its inception.

¹ <https://dbtbharat.gov.in/>

In order to fully understand the evolution of DBT in India, it is important to briefly study the chronology of its development over the last 15 years or so.

Problems of Benefit Delivery Systems

India has a tradition of distributing welfare benefits and subsidies to its poor and marginalised populations, a practice that dates back several decades. Following independence, the government embraced the philosophy of Community Development (CD). This approach was founded on the belief that by fostering development in entire communities or areas, the benefits would naturally extend to all their inhabitants. This model was prevalent throughout the 1950s and 1960s. However, it soon became evident that this broad-based approach was inadequate when it came to addressing the needs of the poorest and most marginalised individuals.

As a result, the focus shifted towards a more direct method of delivering benefits and subsidies. This led to the development of programmes specifically designed to assist the identified poor directly. Such programmes included subsidised food grains and sugar distributed through the Public Distribution System (PDS), discounted Liquefied Petroleum Gas (LPG) cylinders, and various rural employment and social safety net initiatives.

To ensure that these benefits reached the intended recipients, efforts were made to identify eligible beneficiaries through various databases. The concept of Below Poverty Line (BPL) families emerged, with these databases becoming a cornerstone of many individual schemes. Village-level functionaries and Panchayati Raj institutions were tasked with identifying BPL families and maintaining these databases. However, this approach was fraught with challenges. Issues such as wrongful inclusions, exclusions, and the presence of duplicates and ghost entries started plaguing the system. Some individuals exploited these lists for fraudulent gains, leading to significant leakages in

the distribution of benefits. Corruption further undermined the system's efficiency. One Prime Minister famously highlighted the problem, stating that out of every rupee allocated for the poor, only 17 paise (17%) effectively reached them.

The Solution: Unique Identity for Everyone

To address the persistent issues of duplicate and ghost entries, the creation of unique IDs for each Below Poverty Line (BPL) family emerged as a potential solution. By implementing unique identities for every family, the system could effectively eliminate duplicates and ghost entries, thereby enhancing the efficiency and transparency of the benefit delivery process.

In 2006, an Empowered Group of Ministers (eGOM) was established, chaired by the then External Affairs Minister, late Shri Pranab Mukherjee, who later became the President of India. The eGOM was tasked with the mandate of developing a system to provide unique identities for BPL families across the country.

The eGOM conducted several meetings between 2006 and 2008, exploring various alternatives for creating a comprehensive database of BPL families. Ultimately, the committee decided to establish a new authority—the Unique Identification Authority of India (UIDAI). The UIDAI was assigned the responsibility of generating unique identities for all residents of India. This approach recognised the dynamic nature of families and poverty. Families evolve due to events such as marriages, deaths, and births, while poverty levels can fluctuate due to unforeseen circumstances. By providing unique IDs (later christened as Aadhaar) to every individual, the UIDAI aimed to resolve the issues of duplicates and ghost entries, ensuring a clean and reliable database for all purposes. The uniqueness of Aadhaar IDs would prevent individuals from obtaining multiple IDs and eliminate the creation of fake IDs.

This initiative laid the groundwork for India's Unique ID project, which was officially launched in 2009. Despite encountering numerous challenges, the programme ultimately succeeded and has become a central element of India's digital infrastructure and public service delivery.

Aadhaar, a 12-digit random number, is issued to each individual and is immutable, meaning it is never reused even after a person's death. This number serves as a universal identifier for individuals. It also provides an authentication service which enables any individual to authenticate his/her identity anytime, anywhere. To date, Aadhaar has facilitated over 118 billion authentications, with approximately 70 million authentications occurring daily across various service delivery contexts.²

Several digital products have emerged from the Aadhaar framework, including electronic KYC (eKYC), Digital Locker (DigiLocker), digital signatures on demand (eSign), and digital consent artefact. eKYC simplifies the process of subscribing to services using digital identification, with 14 billion eKYCs issued thus far. eSign allows for digital signatures without the need for physical tokens or dongles, while digital consent artefact enables the issuance of consent tokens for data sharing and other transactions. These innovations have significantly enhanced the efficiency of financial transactions and benefit distribution.

The creators of Aadhaar were keenly aware of its potential for financial inclusion. They envisioned Aadhaar as a universal financial address, simplifying and securing financial transactions. Prior to Aadhaar, transferring money required complex bank account numbers and IFSC codes, which were prone to errors and misuse. With Aadhaar as a financial identifier, the process of money transfer was streamlined, reducing the risk of errors and fraud. This transformation has greatly improved the efficiency and reliability of benefit

² https://uidai.gov.in/aadhaar_dashboard/

distribution systems, making Aadhaar a cornerstone of India's digital ecosystem.

DBT in LPG Cylinder Distribution: PAHAL

DBT was first initiated with the subsidy transfer of Liquefied Petroleum Gas (LPG) in 2013. Previously, LPG cylinders in India were sold at subsidised rates to household consumers, with the Government of India paying subsidy amounts to Oil Marketing Companies (OMCs) in bulk. The OMCs, in turn, distributed these cylinders at reduced prices through their distributor network to eligible consumers. However, this system led to significant leakages and black-marketing. Subsidised cylinders were frequently diverted to hotels and restaurants, and LPG distributors engaged in black-marketing, depriving eligible beneficiaries of their rightful cylinders.

To address these issues, the government introduced PAHAL, an acronym for **Pratyaksha Hastaantarit Laabh** (Direct Benefit Transfer). This initiative aimed to streamline the subsidy process by directly transferring the subsidy amount into the beneficiaries' Aadhaar-linked bank accounts.

Under PAHAL, when an eligible consumer purchased a cylinder at the full (non-subsidised) price, the subsidy amount was instantly credited to the beneficiary's bank account linked with Aadhaar. The programme was initially launched in select states and was gradually expanded nationwide.

PAHAL marked the introduction of the first Direct Benefit Transfer (DBT) scheme in India. It effectively curtailed leakages in the LPG distribution system by removing intermediaries from the pricing process. Under this scheme, intermediaries no longer had the opportunity to profit from dual pricing. Consumers paid the full price for cylinders, and the subsidy was directly

transferred to their bank accounts. If a consumer was ineligible for the subsidy, they paid the full price without any reduction.

The scheme also enhanced transparency by providing a clear trail of the subsidy reaching the final beneficiary. Additionally, PAHAL incentivised the opening of bank accounts for beneficiaries and their linkage with Aadhaar.

Despite its success, the implementation of PAHAL faced several challenges. Accurate seeding of Aadhaar numbers into bank accounts was a significant issue. Connectivity problems in rural areas further complicated the rollout. Recognising these challenges, the government acknowledged the need to expand bank account access on a massive scale to support the DBT system in other sectors and areas.

Enablers of Direct Benefit Transfer (DBT)

For the successful implementation of Direct Benefit Transfer (DBT) programmes, several foundational elements must be established. These enablers ensure the system's efficiency, transparency, and reach. Let's explore these key prerequisites and how they have been systematically addressed in India.

Clean Database of Beneficiaries

A clean and accurate database of beneficiaries is essential for effective DBT. This database must be free from duplicates and “ghost” entries—non-existent individuals who might otherwise receive benefits fraudulently. Ensuring the accuracy of such a database prevents wrongful denial of benefits and unauthorised access to resources.

The Aadhaar system, introduced in 2009, was pivotal in addressing these issues. Aadhaar assigns a unique 12-digit number to each resident of India, which serves as a primary

identifier. By incorporating Aadhaar numbers into beneficiary databases, the system effectively eliminates duplicates, as each number is unique to an individual. This integration guarantees that every entry is valid and traceable, preventing the creation of fraudulent or fictitious entries. The uniqueness of Aadhaar numbers ensures that no individual appears more than once in any database, thus enhancing the accuracy and reliability of beneficiary data. Since Aadhaar is given only to living persons and only living persons can open a bank account (using Aadhaar eKYC), it ensures that there are no ghost entries.

Bank Account for Each Beneficiary

Another crucial requirement for DBT is the establishment of a bank account for each beneficiary. Benefits must be deposited into a financial account that is accessible to the recipient. This account can be with a bank or a post office. Additionally, there must be a mechanism to inform beneficiaries about deposits and transactions.

The Pradhan Mantri Jan Dhan Yojana (PMJDY), launched in August 2014, was instrumental in addressing this requirement. PMJDY aimed to open bank accounts on a massive scale using the JAM (Jan-Dhan, Aadhaar, and Mobile) framework. It facilitated the creation of zero-balance accounts, ensuring that even individuals with no prior banking history could access financial services.

Aadhaar-based electronic KYC (eKYC) has simplified the account-opening process. eKYC allows for electronic verification of identity, eliminating cumbersome paperwork and reducing costs associated with traditional KYC processes. Before eKYC, the cost of KYC was around ₹50, making it challenging to open accounts for individuals with no initial deposits. With eKYC, banks can efficiently open accounts without incurring additional costs, making it economically viable to include a broader population.

Mobile technology also plays a crucial role in enhancing the effectiveness of DBT. Mobile phones provide a means for beneficiaries to receive notifications about transactions and account balances. This real-time communication ensures that beneficiaries are promptly informed when funds are deposited into their accounts. Mobile phones also enable two-factor authentication, adding an extra layer of security to financial transactions.

Accessible Banking

Ensuring that beneficiaries have easy access to their funds is the third critical requirement. Beneficiaries should be able to withdraw money conveniently without travelling long distances to a bank branch. This challenge is particularly significant in rural and remote areas.

The introduction of Business Correspondents (BCs) has helped address this issue effectively. BCs are local agents who provide basic banking services such as deposits, withdrawals, balance enquiries, and peer-to-peer transfers using mobile devices known as micro-ATMs. These micro-ATMs operate using Aadhaar authentication, forming the basis of the Aadhaar-enabled Payment System (AePS).

By leveraging biometric authentication, BCs can offer secure and reliable services even in areas with limited infrastructure. This approach has significantly improved financial inclusion by extending banking services to underserved and remote regions.

System Integration

The integration of these elements—Aadhaar, mobile technology, and accessible banking—creates a robust framework for DBT. The Government of India's JAM initiative, launched in August 2014, was instrumental in uniting these components. JAM

aimed to leverage Jan-Dhan accounts, Aadhaar numbers, and mobile technology to achieve comprehensive financial inclusion.

Under the PMJDY initiative, around 430 million bank accounts were opened across India. This massive effort brought millions of previously unbanked individuals into the formal banking system, significantly increasing financial inclusion. Today, 82% of adult Indians have at least one bank account, a figure comparable to that of many developed countries.

Mobile technology has also advanced significantly. With 1.18 billion mobile connections and a tele-density exceeding 95%, mobile phones have become crucial for financial transactions and communication. The affordability of mobile data and widespread 4G/5G connectivity have further facilitated digital services. With over 800 million internet users and more than 650 million smartphones, mobile technology is deeply integrated into everyday life in India.

Aadhaar penetration is nearly universal, with 1.4 billion Aadhaar numbers issued. This widespread adoption reinforces the reliability of the DBT system.

The Reserve Bank of India (RBI) supported this ecosystem by liberalising bank licencing policies and introducing a differential licencing system for payment banks. These banks handle only payment transactions, which streamlines operations and focuses on financial inclusion. Additionally, BCs, using micro-ATMs, have made banking services more accessible.

In summary, the successful implementation of DBT in India relies on the effective integration of Aadhaar, mobile technology, and accessible banking. With these enablers in place, DBT can be executed on a large scale, ensuring that benefits reach intended recipients efficiently and transparently.

The DBT Architecture

The architecture of the Direct Benefit Transfer (DBT) system in India is designed to ensure that financial benefits reach the

correct recipients efficiently and accurately. While Aadhaar numbers provide a unique identifier for individuals, the challenge of ensuring that funds are routed to the correct bank account requires a robust solution. Addressing issues such as account changes and multiple bank accounts necessitates a well-structured system. Here's how these challenges have been systematically addressed.

Ensuring Accurate Fund Transfer

The core principle behind the DBT system is to use Aadhaar numbers as the routing address or financial address for transferring benefits. This approach eliminates ambiguity by linking the Aadhaar number directly to a bank account. However, to ensure the accuracy of fund transfers, additional mechanisms are necessary.

Firstly, each beneficiary's Aadhaar number needs to be linked to their bank account. This linkage ensures that when a benefit is transferred using an Aadhaar number, the funds are routed to the correct bank account. To manage situations where a beneficiary may have multiple bank accounts, the system allows individuals to specify which account should receive the subsidy. This selection process ensures that benefits are directed to the appropriate account.

The Role of the National Payments Corporation of India (NPCI)

The National Payments Corporation of India (NPCI) plays a crucial role in the DBT architecture. Established in 2008 as a non-profit organisation under the guidance of the Reserve Bank of India (RBI) and the Indian Banks' Association (IBA), NPCI was tasked with creating a robust payment and settlement infrastructure for the country.

NPCI serves as the central hub and clearing system for DBT transactions. Its primary responsibility is to manage the National Payment Switch, which facilitates the routing of funds from the government to beneficiaries through their bank accounts. NPCI maintains an essential component of this system known as the Aadhaar Mapper.

Aadhaar Mapper

The Aadhaar mapper is a two-column table maintained by NPCI. It includes two key pieces of information: the Aadhaar number and the corresponding bank where the beneficiary's account is held. This mapping is crucial for ensuring that subsidies and other benefits are directed to the correct financial institution.

In cases where a beneficiary has multiple bank accounts, they must choose one account for receiving subsidies. This choice is recorded in the Aadhaar mapper, ensuring that all future fund transfers are routed to the selected account. The National Payments Switch then uses this information to route the transfer instructions to the appropriate bank.

System Operation

Here's a step-by-step overview of how the DBT system operates:

1. **Aadhaar Number as Financial Address:** When a benefit is to be transferred, the Aadhaar number of the beneficiary is used as the routing address. This number is linked to the beneficiary's bank account through the Aadhaar mapper.
2. **Routing to the Bank:** The National Payments Switch processes the transfer request by referring to the Aadhaar mapper to determine the correct bank. It then routes the payment instructions to that bank.
3. **Beneficiary Choice:** If a beneficiary has multiple bank

accounts, they must declare their preferred account for receiving subsidies. This selection is updated in the Aadhaar mapper to ensure accurate fund transfers.

4. **Fund Transfer:** Once the bank receives the payment instruction, it credits the beneficiary's account. The beneficiary is then notified of the deposit, ensuring transparency and confirmation of receipt.

Addressing Common Issues

The DBT architecture also addresses several common issues:

1. **Account Changes:** If a beneficiary changes their bank account and this account is to be designated as the recipient for the subsidy and this bank is different from the previous bank, then the new bank need to inform the NPCI/Aadhaar Mapper that the bank ID column in the mapper need to be updated. This update ensures that future payments are directed to the new account without any disruption.
2. **Fraud Prevention:** Using Aadhaar numbers as unique financial addresses helps prevent fraud by ensuring that funds are routed to valid accounts. The system's reliance on biometric verification and secure databases further enhances its integrity.

In summary, the DBT architecture, anchored by NPCI and supported by the Aadhaar mapper, ensures that financial benefits are accurately and efficiently transferred to the correct bank accounts. By using Aadhaar numbers as routing addresses and maintaining a clear mapping of accounts, the system addresses challenges related to account changes and multiple bank accounts, thereby enhancing the reliability and effectiveness of DBT programmes in India.

The Process of DBT at a High Level

The Direct Benefit Transfer (DBT) process is designed to ensure that financial benefits are efficiently and accurately credited to beneficiaries. Here's an overview of how this process works at a high level.

Initiating the Transfer:

1. **Data Submission:** When an entity (such as a government department or agency) needs to execute a DBT, it starts by preparing an encrypted file. This file contains critical details, including the Aadhaar numbers of the beneficiaries and the corresponding amounts to be credited to their bank accounts.
2. **Transmission to Bank:** The encrypted file is sent to the entity's bank, where the entity holds its account. The bank is responsible for processing this file and managing the distribution of funds.

Processing by the Bank:

1. **Beneficiary Verification:** Upon receiving the file, the bank verifies which beneficiaries hold accounts with this bank. It identifies and extracts entries related to its own account holders from the file.
2. **Fund Disbursement:** The bank deposits the specified amounts into the accounts of these beneficiaries. After completing the disbursements, the bank prepares a balance file that reflects the transactions processed.
3. **File Transmission to NPCI:** The balance file is sent to the National Payments Corporation of India (NPCI) for further processing. This file includes information on the transactions that the bank has executed.

NPCI's Role

1. **Segregation and Routing:** NPCI receives the balance file and uses its Aadhaar mapper to segregate the Aadhaar numbers by bank. The Aadhaar mapper matches each Aadhaar number

with the appropriate bank account based on the previously established mappings.

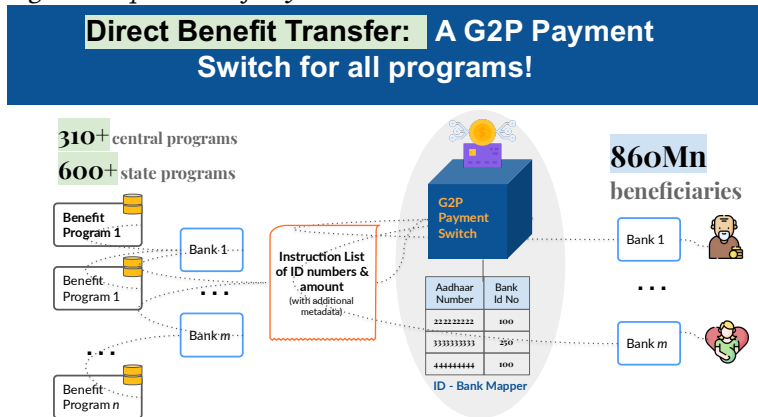
2. **Distribution to Banks:** NPCI sends the segregated files to the concerned banks. Each bank receives a file containing Aadhaar numbers and the corresponding amounts that need to be credited to the accounts it holds.

Final Processing

1. **Account Credit:** The banks, having received the segregated files, process the transactions by crediting the funds to the accounts linked to the provided Aadhaar numbers. Since each account is linked to an Aadhaar number, the bank can accurately credit the amount to the correct account.
2. **Error Handling:** During this process, any errors—such as accounts being closed or incorrect details—are identified. The system generates error lists to address these issues. Banks and entities then reconcile the accounts to correct any discrepancies and ensure that the transactions are accurately reflected.

In summary, the DBT process involves several key steps: initiating the transfer with an encrypted file, processing transactions at the bank level, and utilising NPCI to route and segregate the data. This systematic approach ensures that benefits are transferred efficiently and accurately to the correct bank accounts, with mechanisms in place to handle errors and discrepancies. Figure 1 shows the operation of this payment switch.

Figure 1: Operation of Payment Switch to Deliver DBT



The Challenges in Implementing DBT

Implementing a massive and complex system like Direct Benefit Transfer (DBT) is fraught with challenges, both technological and logistical. Addressing these challenges is critical to ensuring the effectiveness and reliability of the DBT system. Here are some of the key challenges encountered.

Seeding Aadhaar Numbers

A primary challenge in DBT implementation is the accurate seeding of Aadhaar numbers into beneficiary databases. Aadhaar serves as the main identifier linking the beneficiary databases with bank accounts. For the DBT architecture to function correctly, both the beneficiary databases and bank accounts must be accurately linked with Aadhaar numbers. This ensures that subsidies are transferred to the correct accounts.

The accuracy of Aadhaar seeding is crucial. Any error in entering Aadhaar numbers into either the beneficiary database or the bank accounts can result in subsidies being credited to

incorrect accounts. This not only affects the intended recipients but also undermines the reliability of the entire system.

To mitigate these risks, Aadhaar provides demographic authentication, which is used by both subsidy-disbursing entities and banks to detect and correct seeding errors. Despite this, errors cannot be entirely eliminated through authentication alone. Continuous monitoring and grievance redressal mechanisms are essential to improve seeding accuracy and address any discrepancies that arise.

Database Synchronisation

Database synchronisation between the National Payments Corporation of India (NPCI) and banks presents another significant challenge. NPCI acts as a central hub for DBT transactions, requiring accurate and timely updates from various banks. Given that beneficiary lists are frequently updated and modified, it is imperative that Aadhaar seeding is consistently maintained and synchronised.

Beneficiary lists in various programmes are dynamic and subject to frequent changes due to new inclusions, updates, and removals. Ensuring that these changes are reflected accurately in the Aadhaar-linked databases and synchronised with NPCI's records is a complex and ongoing task.

Connectivity Issues

Connectivity, particularly in rural and remote areas, poses a challenge for the effective operation of the Business Correspondent (BC) system. Although connectivity has significantly improved over time, it remains a constraint in some regions. Reliable and stable connectivity is essential for the smooth functioning of micro-ATMs and other digital banking services used by BCs.

Grievance Redressal and Monitoring

Effective grievance redressal mechanisms are crucial for addressing issues that beneficiaries encounter during the DBT process. Continuous monitoring is needed to identify and resolve problems related to Aadhaar seeding, transaction errors, and other system discrepancies.

Establishing efficient grievance redressal systems and maintaining rigorous monitoring processes are necessary to handle complaints and rectify errors swiftly. This helps in maintaining trust in the DBT system and ensures that beneficiaries receive the intended benefits without undue delays.

In summary, while the DBT system has significantly improved the efficiency and transparency of benefit transfers, it needs to address challenges on a continuous basis. Addressing issues related to Aadhaar seeding accuracy, database synchronisation, connectivity in rural areas, and effective grievance redressal is crucial for the ongoing success and reliability of the DBT framework. Continued efforts to overcome these challenges will help in refining the system and ensuring that it delivers on its promise of efficient and equitable benefit distribution.

Organisational Structure for Overseeing DBT

The Direct Benefit Transfer (DBT) initiative was first established in 2013 within the Planning Commission. By September 2015, it was moved to the Department of Expenditure, where it continued until the central government's substantial success with the PAHAL scheme. Recognising the need for a systematic approach to extend DBT to various schemes, the mission was transferred to the Cabinet Secretariat. This shift aimed to ensure better coordination between central and state governments and the development of standardised operating procedures.

The initial phase of DBT was launched in 43 districts and later expanded to 78 more districts, covering 27 schemes related to scholarships, women's welfare, child development, and labour welfare. On December 12, 2014, DBT was further broadened to 300 districts with higher Aadhaar enrolment, including seven new scholarship schemes and the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

In February 2015, the Electronic Payment Framework was established, outlining protocols for all ministries, departments, and their associated institutions. This framework applies to all Central Sector (CS) and Centrally Sponsored Schemes (CSS), as well as schemes involving cash transfers to beneficiaries. While Aadhaar is not mandatory for DBT schemes, it is encouraged due to its role in uniquely identifying beneficiaries and improving targeting.

Currently, nearly all ministries and departments involved in subsidy distribution use DBT for this purpose. There are approximately 315 schemes across 53 ministries utilising DBT. For a comprehensive list of schemes and departments, visit DBT Bharat.

At the state level, all Indian states employ DBT for transferring subsidies in their schemes. To foster a competitive spirit, the Government of India regularly publishes performance rankings of states and Union Territories.

To manage a programme as extensive as DBT, scalability is crucial. This involves not only a scalable technology architecture but also adaptable processes across various domains. Given that different departments have varying functional roles and technological capabilities, a standardised framework and operating procedures are essential. By templating processes, from digitising beneficiary databases to transferring funds, DBT ensures a scalable and efficient model.

Understanding the DBT framework involves examining the procedures that enable diverse stakeholders to collaborate effectively and deliver the benefits efficiently.

DBT Framework: Formalising the Process

The Direct Benefit Transfer (DBT) framework relies on a multi-stakeholder architecture designed to leverage the strengths of various departments and institutions to deliver benefits efficiently and effectively. The framework encompasses four key categories of stakeholders:

1. **Ministries and Departments:** These entities are primarily responsible for implementing DBT within their respective schemes. Each Ministry or Department is required to establish a DBT Cell tasked with overseeing the DBT operations. This Cell identifies suitable schemes for DBT, maintains and updates beneficiary lists, and ensures these lists are linked with Aadhaar numbers. The DBT Cell, supported by the Ministry's or Department's IT team, digitises beneficiary databases and prepares disbursement files for the beneficiaries.
2. **Banks:** Banks, including post offices, are responsible for opening and linking beneficiaries' bank accounts with Aadhaar. They handle tasks such as updating beneficiary data, executing payments within prescribed timelines, and notifying beneficiaries through SMS alerts about fund transfers.
3. **National Payments Corporation of India (NPCI):** NPCI manages the Aadhaar mapper and facilitates the routing of DBT files to various banks, ensuring smooth financial transactions.
4. **Unique Identification Authority of India (UIDAI):** UIDAI provides essential Aadhaar services, including eKYC for opening bank accounts and authentication services to verify Aadhaar seeding in accounts. This helps minimise distribution errors and facilitates cash withdrawals through Aadhaar Enabled Payment Systems (AEPS).

DBT schemes are generally categorised into three types:

1. **Cash Transfers:** Direct payments to beneficiaries, such as LPG subsidies, MGNREGA wages, and National Social Assistance Pensions (NSAP).
2. **In-Kind Benefits:** Transfers of goods, such as subsidised grains at public distribution shops.
3. **Payments to Government Workers:** Payments are made to village-level workers like ASHA and Anganwadi workers. Each department must assess which of their schemes are suitable for DBT implementation.

The entire workflow is standardised, with each stakeholder assigned clear roles and responsibilities. Ministries and their IT cells are responsible for digitising beneficiary databases and preparing disbursement files. For central government schemes, the Public Financial Management System (PFMS) serves as an additional stakeholder, handling information related to fund transfers. Ministries and departments must register their schemes with PFMS.

While DBT utilises a unified channel for fund transfers, individual schemes must implement their own monitoring mechanisms to ensure secure and accurate fund transfers. For example, software like NREGA-SOFT supports the Rural Development Department in monitoring and managing MGNREGA scheme workflows.

Capacity building and grievance management are critical components of DBT. Given that DBT primarily serves rural populations, it must address a wide range of grievances effectively. Errors in Aadhaar seeding can result in benefits being misdirected, while incorrect mobile numbers can prevent beneficiaries from receiving timely updates about their payments. A robust, technology-driven system is essential for resolving these issues and updating databases accurately as beneficiary information changes.

Benefits of DBT to Stakeholders

Direct Benefit Transfer has been a transformational system which has empowered all stakeholders, in addition to reducing leakages and increasing transparency and visibility in fund flows.

The system has been quite beneficial to the government. It ensures subsidy distributions to millions of people without any intermediaries. This has resulted in a reduction in leakages, as there are no intermediaries who could divert subsidies and were responsible for a lot of corruption. It also eliminates distribution costs. It increases transparency as the government has clear visibility into the money trail. The government is quite responsive to the feedback it receives and takes immediate action to improve the system.

It is highly beneficial to the recipients of subsidies. Firstly, when the subsidy is credited to their bank account, they are immediately notified on their phones linked to their bank accounts. They can then withdraw money either by going to the bank branch or by using the Aadhaar Enabled Payment System (AePS), where they can authenticate their identity using Aadhaar and the business correspondent can distribute the money.

It also promotes financial inclusion as people open bank accounts to receive the subsidies. It ensures that there is no diversion of subsidies and that only those who are entitled can receive them. It is highly convenient, as they do not have to go to government offices to get the subsidy amount. Though it is difficult to quantify the benefits accruing from DBT, programmes do make attempts to estimate the savings.

As an example, in the LPG DBT (PAHAL) scheme alone, 33.4 million duplicate, fake, or inactive consumers were weeded out; 148.5 million new consumers were registered; and the total subsidy transferred under PAHAL (from January 1, 2015, to December 2020) was ₹287 billion. The implementation of DBT and Aadhaar seeding has resulted in estimated savings of ₹146.72 billion during 2014–2015. Estimated savings from LPG consumers

who have given up the subsidy amount to about ₹31 billion, with average savings of approximately ₹178 billion per annum.

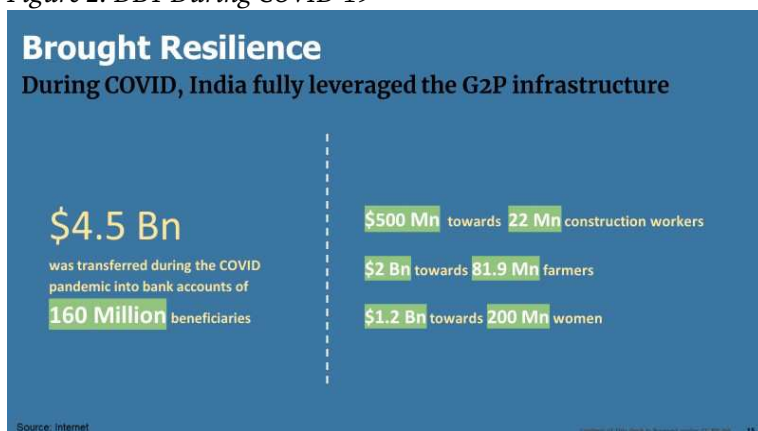
COVID-19 and DBT

In March 2020, COVID-19 struck the world. The entire health-care system of the country faced huge challenges, and the nation experienced lockdowns and widespread distress. The lockdowns and restrictions imposed during COVID-19 led to a significant economic downturn. The World Bank estimated that the Indian economy contracted by 7.3% in 2020. This had a severe impact on daily wage workers, informal sector employees, and low-income households. India's response to COVID-19 involved a range of measures, with Direct Benefit Transfer (DBT) being a significant component aimed at supporting the poor and marginalised populations.

To address the economic impact of the pandemic, the Indian government expanded its DBT schemes to include a wider array of beneficiaries. Announced in March 2020, the Pradhan Mantri Garib Kalyan Yojana (PMGKY) included direct cash transfers to the poor and vulnerable, free food grains, and cash transfers to women and senior citizens. Under the PMGKY, approximately ₹31,000 crore was allocated for cash transfers. This included ₹500 per month for women holding Jan Dhan accounts, ₹1,000 for senior citizens, and ₹2,000 for farmers.

By mid-2020, the PMGKY scheme had reached around 20 crore (200 million) individuals with cash transfers and other forms of financial aid. The scheme continues to be implemented even now. The DBT model demonstrated scalability and adaptability, which could be useful for future welfare programmes and emergencies. The success of DBT during the pandemic has led to discussions on improving and expanding the system for broader social security purposes.

Figure 2: DBT During COVID-19



Overall Transfers Under DBT in the Country

By mid-2024, the Indian government has transferred over ₹19.9 lakh crore (₹19.9 trillion) through various DBT schemes since their inception. This includes various forms of financial aid, subsidies, and welfare benefits.

As of today, there are a large number of ministries and departments, both at the centre and the state levels, which are using DBT for various schemes. According to the DBT portal, there are 316 schemes from 53 central ministries which are using DBT for benefit transfer to their target groups. The entire list of central ministries can be found at DBT portal.³ Major users of DBT include ministries and departments such as Agriculture, Rural Development, Human Resource Development (HRD), Social Justice and Empowerment, Women and Child Development, Labour and Employment, Health, and Minority Affairs.

³ <https://dbtbharat.gov.in/central-scheme/list>

At the state level, many more schemes are using DBT as the G2P transfers at the state level are utilised in numerous programmes.

Success Stories

The DBT portal provides good documentation of success stories from across the country in the implementation of DBT. A summary of two of these stories, one from a central ministry and the other from a state, is given below.

Pradhan Mantri Matru Vandana Yojana (PMMVY)

This scheme is implemented by the Ministry of Women and Child Development and addresses the nutrition issues of women, especially pregnant women. Under-nutrition remains a critical issue for women in India, with one in three undernourished and half anaemic. This problem contributes to low birth weight and affects both maternal recovery and the ability to breastfeed. In response, the Indian government introduced the Pradhan Mantri Matru Vandana Yojana (PMMVY) on January 1, 2017, as part of the National Food Security Act. The PMMVY aims to provide financial support to pregnant women and lactating mothers, specifically targeting those who are not employed by the government or receiving similar benefits. The programme offers a total cash incentive of ₹5,000 in three instalments: ₹1,000 for early pregnancy registration, ₹2,000 after six months with at least one antenatal check-up, and ₹2,000 post-birth once the child has received basic vaccinations.

The scheme uses Direct Benefit Transfer (DBT) to streamline payments, reducing delays and administrative bottlenecks. It leverages Aadhaar for unique beneficiary identification and real-time monitoring, enhancing efficiency and accountability. The PMMVY-CAS system enables better tracking and grievance

redressal, aiming to provide timely and adequate support to improve maternal and infant health outcomes across the country.

Pension Disbursement Through DBT in Andhra Pradesh

The JAM-based pension disbursement system in Krishna District, Andhra Pradesh, aims to provide timely social security to vulnerable populations, including the elderly, widows, disabled individuals, weavers, and toddy tappers. With approximately 4.3 million pensioners across the state, the programme involves a monthly expenditure of ₹4.60 billion and an annual cost of ₹50 billion. In Krishna District, which has 333,000 pensioners, 84% (279,000) are included in the new system. Disbursements amount to about ₹0.30 billion monthly.

The system uses biometric authentication through fingerprint and potentially iris scanning, with Business Correspondents (BCs) equipped with Micro ATMs for transactions. Out of 1,269 planned locations, BCs are active in 1,243. Currently, 13 banks participate, with 24 identified for potential involvement. Initial pilot tests in 2015, covering six locations, have expanded significantly to cover 1,243 locations and 279,000 pensioners.

The system allows pensions to be received at beneficiaries' doorsteps, enhancing convenience and fostering savings habits. Pensioners with PMJDY accounts benefit from additional insurance and overdraft facilities. The initiative has garnered attention from various national and international organisations, including the World Bank and the Bill and Melinda Gates Foundation, highlighting its success and innovative approach.

Conclusion

Direct Benefit Transfer (DBT) represents a significant reform in the delivery of welfare services in India, offering a model for efficiency, transparency, and inclusivity. By directly transferring benefits to beneficiaries' bank accounts and leveraging digital technologies, DBT has addressed many of the inefficiencies and corruption issues associated with traditional welfare systems. The scheme's impact on reducing leakages, fostering financial inclusion, and improving accountability highlights its potential as a transformative tool for social security. However, for DBT to reach its full potential, ongoing efforts are needed to address challenges related to digital access, infrastructure, and data security. As the scheme continues to evolve and expand, it holds promise for further enhancing the effectiveness of welfare programmes and contributing to broader socio-economic development goals.

Chapter 4. Indian Agriculture: Green Revolution Stagnates, Allied Sectors Grow

Siraj Hussain

Introduction

India's agriculture has provided food security to a large population. This was possible due to the success of the Green Revolution. However, in the last few years, it has come in for a lot of criticism. It has been blamed for the deterioration of soil, depletion of underground water resources, excessive use of chemical fertilisers and pesticides, and poorer quality of food grains produced in the country. The residues of chemicals are also blamed for the prevalence of cancer in certain pockets of India. While some of these points may be true, it is also a fact that in the absence of the Green Revolution, India would not have found itself capable of feeding the increasing population in the country. Indian agriculture is a success story, but it faces several challenges, most notably from climate change.

In the last two decades, crop productivity in the original Green Revolution has stagnated, but the country has achieved great success in the allied sectors of horticulture, dairy, and fisheries.

India's success in achieving food security is a fascinating story of the coming together of science, governance, and farmers' willingness to adopt technological advances. It has inspired several food-insecure countries in Africa and Asia.

Indian Agriculture at Independence

When India achieved independence from British colonial rule, the country was very poor, and the agriculture sector was hardly able to produce enough to meet the domestic requirement for food. Pakistan received more irrigated area than India. The productivity of food grains, including wheat, rice, maize, and gram, in the area which went to Pakistan was 40% higher than in India in 1945–1946.¹⁰

In the pre-colonial period, India exported several items of agricultural produce, including cotton, fine textiles made from muslin, silk, sugar, rice, spices, etc. Nearly 25% of world manufacturing was in India. The colonial policies of the British resulted in the transfer of wealth to Great Britain.¹¹ As a result, India experienced severe food shortages, leading to famines and deaths of many people. Climatic conditions, especially deficient rainfall, may have contributed to these shortages, but the colonial government's failure to ensure the distribution of available food grains also contributed to the same. It is estimated that famines resulted in more than 30 million deaths in the 18th, 19th, and early 20th centuries (Table 1).

The famines were caused not only by scarcity of food grains, but they were also facilitated by unaffordability of food, not least due to the insensitivity of British colonial regime. The early history of the Green Revolution is quite revealing about the importance of food security for any nation.¹²

¹⁰ NITI Aayog. (2023). *From Green Revolution to Amrit Kaal*. NITI Aayog, Government of India.

¹¹ Aiyer, Shankkar. (2012). *Accidental India: A history of the nation's passage through crisis and change*. Aleph Book Company.

¹² Chand, Ramesh. (2023, March). *India's White Revolution: Achievements and the next phase*. NITI working paper 01/23, NITI Aayog.

Table 1: Famines in Pre-independent India

S. no.	Indian famine	Year	Deaths (million)
1	Bengal Famine	1769–70	2–10
2	Chalisa Famine	1783–84	11
3	Doji Bara Famine	1791–92	11
4	Agra Famine	1837–38	0.8
5	Upper Doab Famine	1860–61	2
6	Orrisa Famine	1865–67	4–5
7	Rajasthan Famine	1868–70	1.5
8	Bihar Famine	1873–74	2.5
9	Southern India Famine	1876–78	6–10
10	Indian Famine	1896–97	12–16
11	Indian Famine	1899–1900	3–10
12	Great Bengal Famine	1943	2–3

Source: *Indian Agriculture after Independence (ICAR)*, 2022.

The deaths in famines would have had the highest influence on the minds of independent India's first generation of leaders and policymakers. It is no wonder that India's first Prime Minister, Jawaharlal Nehru, said that "everything can wait but agriculture."

Independence to Green Revolution to Impressive Growth in Allied Sectors

The first two decades after independence did not see any improvement in overall food availability; per capita annual production of total food was stagnant at 296 kg until 1966–1967. NITI Aayog in its paper, "From Green Revolution to Amrit Kaal," has divided the growth of the agriculture sector into seven phases.

In the pre-Green Revolution (1950–1951 to 1961–1962) phase, the growth in agriculture came from the expansion in the area

under cultivation. In the food crisis phase (1961–1962 to 1967–1968), India experienced food shortages and depended on import of wheat, largely from the USA. This was followed by the Green Revolution (1967–1968 to 1975–1976). The seeds of dwarf wheat, coupled with the use of urea, setting up of the Commission for Agriculture Costs and Prices (CACP), and procurement of surplus produce of wheat and rice at minimum support price (MSP), starting with Punjab, Haryana, and western Uttar Pradesh, were the main drivers of substantial increase in productivity. However, this was largely confined to the north-west region of India. Since the area under the Green Revolution was quite restricted, the next phase of five years witnessed a decline in the growth of agriculture and allied sectors. However, from 1979–1980 to 1996–1997, the Green Revolution technology covered newer crops, and a wider area was brought under high-value crops.

Then came the phase of globalisation (1996–1997 to 2005–2006) in which there was a decline in global prices, and growth rate of agriculture dropped. Then came the emphasis on the expansion of the Green Revolution to eastern India which had low productivity. Coupled with higher procurement in these regions (Odisha, Chhattisgarh, and West Bengal) and high global prices, the agriculture sector witnessed high growth by enabling the export of agricultural produce. The NITI Aayog paper documents the value of output in various sectors of agriculture in different phases. In terms of value of output, the fisheries sector showed an impressive growth of 7.1% in value of output from 2005–2006 to 2020–2021. The livestock sector also witnessed a handsome growth during the Green Revolution period, and the same has continued since then. In fact, there has been stagnation in the value of output of the crop sector (Table 2).

Table 2: Growth Rate in Value of Output of Various Sub-sectors/Segments of Agriculture and Allied Sectors During Various Phases Since 1950–1951

Sub-sector/ segment	Pre-Green Revolution	Food crisis period	1st phase of Green Revolution	Green Revolution in restricted area	Wider adoption and diversification	Start of globalisation	BGREI + diversification + export
	1950–51 to 1961–62	1961–62 to 1967–68	1967–68 to 1975–76	1975–76 to 1979–80	1979–80 to 1996–97	1996–97 to 2005–06	2005–06 to 2020–21
1. Crop sector	3.09	0.78	2.19	–0.01	2.88	1.6	2.55
1.1 Fruits and vegetables	0.96	6.15	5.43	1.96	3.25	2.86	4.53
1.2 Other crops	3.36	0.09	1.65	–0.41	2.81	1.27	1.91
2. Livestock	1.45	0.49	2.7	4.45	4.41	3.44	5.36
3. Fishery	5.43	4.25	4.34	0.54	6.12	2.9	7.1
4. Forestry	0.68	4.25	2.03	–4.51	0.2	1.64	1.53
5. Total (1 to 4)	2.29	1.61	2.27	–0.24	2.88	2.07	3.44

Source: From Green Revolution to Amrit Kaal, NITI Aayog Working Paper, February 2023.

Note: Output at 2011–12 prices. BGREI, Bringing Green Revolution to Eastern India.

Even if the benefits of the Green Revolution in cereal crops were stagnating, livestock sector had already become a beacon of India's success story. The policymakers also gave attention to allied sectors like horticulture and fisheries, and impressive growth was witnessed in these sectors. Between 1970–1971 and 2020–2021, the milk sector alone contributed about 25% of the increase in the total output of agriculture and allied sectors. The share of fruits and vegetables in the incremental value of output of agriculture and allied sectors was 16.72% which is higher than cereals which contributed 13.23% of the increase in output.

India's success in allied sectors is examined in the following sections.

Livestock and Dairy

Shortages of milk and milk products were common as the milk output increased by just about 1.36% per year during 1950–1951 to 1973–1974. This was lower than the rate of population growth.¹³ In 1970, the Government of India launched the “Operation Flood” or White Revolution to transform India from a milk-deficient nation into the world’s largest milk producer. The seeds of the White Revolution were sown by Sardar Vallabhbhai Patel who conceived a model through cooperatives of dairy farmers in 1942. The three-tier model integrated village-level dairy farmers with district- and state-level federations.¹⁴

In 1950, Dr. Kurien joined the Kaira District Co-operative Milk Producers’ Union (KDCMPU) as General Manager. By 1957, the KDCMPU evolved into Anand Milk Union Limited (AMUL). He was the brain behind seeking financial and infrastructure support from a number of sources, including UNICEF, the Government of New Zealand (under the Colombo Plan), and the Government of Bombay.¹⁵ In 1964, he invited Prime Minister Lal Bahadur Shastri to spend a night with milk producers. This visit later led to the formation of the National Dairy Development Board (NDDB) with Kurien as its first Chairman in 1965. The NDDB planned Operation Flood (OF), which came to be known as “the billion-litre” idea.

But government’s policies continued to favour cooperatives, and the Industrial Development and Regulation Act of 1951 prescribed a highly restrictive licencing regime for milk processing units. Entry of the private sector was restricted through the Industrial Development and Regulation Act, 1951, which had a very restrictive licencing and registration system. It was only in 2003 that the private sector was allowed to invest, and

¹³ BIRTHAL, P. S., PANDHEY, G., JUMRANI, J., & JAWERIAH, N. (2019). Supply response in Indian dairying. *The Indian Journal of Animal Sciences*, 89(4), 459–465.

¹⁴ Kurien, Verghese. (2005). *I too had a dream*. APH Publishing Corp.

¹⁵ Department of Fisheries. (2023). *Annual report 2022–2023*. Ministry of Fisheries, Animal Husbandry and Dairying, Government of India, p. 6.

the dairy industry was completely de-licenced. Since then, the private sector has been investing in the sector and is now a major contributor to the growth of the dairy industry in India.

In 1951, India produced only 17 million tonnes of milk, while the production in the USA was 53 million tonnes. By 2020–2021, India had become the largest producer in the world (221 million tonnes), while the USA produced 102 million tonnes. The most remarkable achievement of India's dairy revolution is that it was achieved by small holders, mainly women, who reared only a few cows or buffaloes, and it is not industrial livestock management where the dairy farms produce a much higher quantity of milk.

Horticulture

In the Tenth Five-Year Plan (2005–2006 to 2010–2011), the Union Government launched the National Horticulture Mission (NHM). The scheme was continued during the Eleventh Five-Year Plan. To incentivise the production of horticulture crops, the Centre's share in the scheme was fixed at 85%, and the States' share was only 15%. The Centre also provided a 100% grant for northeast and Himalayan States. The scheme provided for the supply of high-quality planting material of horticulture crops and nurseries. Tissue culture units were supported for providing high-yielding and disease-resistant material to farmers. Protected cultivation through polyhouses, green houses, etc. was also supported to improve productivity and grow off-season high-value vegetables and flowers.

In 2014, NHM was merged under an umbrella scheme titled Mission for Integrated Development of Horticulture (MIDH). Under a review of the funding pattern of all the centrally sponsored schemes, the Centre's share under MIDH was also reduced to 90% for northeastern and Himalayan states and 60% for other states. It has been a highly successful intervention. Since the launch of the NHM, the productivity per hectare of

fruits has increased by an impressive 44.7%, while the productivity of vegetables has increased by 20.6% (Table 3).¹⁶

Table 3: Horticulture: Area, Production, and Productivity

Crop	Area (lakh ha)			Production (lakh tonnes)			Productivity (tonnes/ha)		
	2004-05	2020-21	2021-22*	2004-05	2020-21	2021-22*	2004-05	2020-21	2021-22*
Fruits	50.49	69.3	70.49	508.67	1024.81	1072.42	10.07	14.79	15.2
Vegetables	67.44	108.59	113.48	1,012.46	2,004.45	2,048.35	15.01	18.46	18.1
Flowers	1.18	3.22	2.83	6.59	29.8	31.28	5.58	9.25	11.1
Aromatic and medicinal crops	1.31	6.53	6.68	1.59	8.25	6.89	1.21	1.26	1
Plantation crops	31.47	42.55	42.39	98.35	166.29	154.88	3.13	3.91	3.7
Spices	31.5	44.57	44.87	40.01	111.17	108.14	1.27	2.49	2.4
Others	1.06	—	—	1.72	1.25	1.33	—	—	—
Total	184.45	274.76	280.75	1,669.39	3,346.03	3,423.29	9.05	12.18	12.2

Source: Annual report 2022–2023 (Department of Agriculture and Farmers Welfare, 2023).

Sugar

Sugar production in India has also been a success story. This is primarily due to the support and protection it receives from the government. While the domestic consumption is 28–29 million tonnes, production in normal years of monsoon rain ranges between 38 and 39 million tonnes. A new variety of sugarcane, Co-0238, was responsible for the transformation of sugar production in Uttar Pradesh which has overtaken Maharashtra in some years as the largest sugar-producing state. It has delivered a higher yield of sugarcane (80 tonnes per hectare against an average of 60 tonnes/ha) and a higher recovery of sugar from

¹⁶ Department of Agriculture and Farmers Welfare. (2023). Annual report 2022–2023. Ministry of Agriculture and Farmers Welfare, Government of India.

sugarcane, up from 9.25% to 11.5%.¹⁷ Every step of the sugar supply chain, from the production of sugarcane to the sale price of sugar and its by-products, including ethanol in recent years, is controlled by the government.¹⁸

Fisheries

Fish production has increased from 6.57 million tonnes in 2005–2006 to 16.25 million tonnes in 2022–2023. The growth was spearheaded by the significant contribution of inland fisheries. Freshwater aquaculture had a share of only about 34% in inland fisheries in the mid-1980s. It has now increased to about 76% in recent years. Out of this, 12.12 million tonnes is produced in the inland sector and 4.13 million tonnes in the marine sector.¹⁹ In February 2019, the Union Government set up a separate Department of Fisheries from the Department of Animal Husbandry, Dairying and Fisheries. Export of marine products during 2021–2022 was 1.37 million tonnes with a value of US\$7.76 billion.

Poultry

Another success story of India's agriculture and allied sectors is poultry. In the last four decades, the sector has evolved from conventional backyard poultry to a highly commercialised production system with a high level of backward and forward

¹⁷ Damodaran, Harish. (2022, February 5). Uttar Pradesh is Ganna Pradesh. *The Indian Express*. <https://indianexpress.com/article/opinion/columns/uttar-pradesh-is-ganna-pradesh-sugarcane-sugar-mills-7757547/> (Accessed June 10, 2024).

¹⁸ Saini, S., Khatri, P., & Hussain, S. (2022). Indian sugar policies: Connecting production, consumption, and health. *Agricultural Economics Research Review*, 35(2), 1–25.

¹⁹ Department of Fisheries. (2023). *Annual report 2022–2023*, supra.

integration. The production of eggs has increased from 66.45 billion in 2011–2012 to 129.6 billion in 2021–2022.²⁰ About 80% of poultry production is now in the commercial sector, and only about 20% is contributed by backyard poultry. The success of the poultry sector is attributed to integrator-led production, under which the poultry producer's risk is minimised as the integrator provides 1-day-old chicks, poultry feed, antibiotics, etc. The producer offers physical space, labour, and maintenance of the poultry farm. The poultry farmer provides land, shed, labour, water, and equipment like litter shed. The farmer provides day-to-day management, but veterinary services are provided by the integrator, whose representative pays regular visits to the producer's premises. The integrator takes back 35-day-old chicks, and the marketing risk of prices is entirely borne by the integrator.

The poultry sector witnessed a tectonic shift from indigenous bird varieties to hybrid birds with much faster growth of eggs and meat per bird. Like the NDDB in the milk sector, the National Egg Coordination Committee (NECC), set up in 1982, provided enormous support in creating demand for eggs and subsequent innovations in hatcheries and extension services to poultry producers. India has successfully increased the feed conversion ratio (the amount of feed ingested by a bird which can be converted into one kilo of live weight) from 2.20 in the 1990s to about 1.65.²¹

The model of contract production of poultry through integrators has been so successful that the Government of India has issued detailed guidelines for commercial contracts between

²⁰ Department of Animal Husbandry and Dairying. (2023). *Annual report 2022–2023*. Ministry of Fisheries, Animal Husbandry and Dairying, Government of India, p. 11.

²¹ Gulati, A., Ganguli, K., & Vardhan, H. (Eds.) (2022). *Agricultural Value Chains in India: Ensuring competitiveness, inclusiveness, sustainability, scalability, and improved finance*. Springer.

the producers and the contracting company.²² The demand for eggs would be even higher if the state governments provided eggs under the Poshan scheme. The system of voluntary compliance with prices declared by NECC is still holding as the integrators follow the price advisory issued by NECC. The poultry producers receive about 75% of the price of eggs paid by the consumers, but the main success of the presence of integrators is that the risk of price fluctuation is borne by them and not by the poultry producers.

Current Challenges Confronting Agriculture and Allied Sectors

Despite all the successes of agriculture and allied sectors, it cannot be denied that India is facing enormous challenges. For the crop sector, the following five challenges are most critical.

Food Security

Despite the slowing growth of the population since the 1980s, India is projected to have nearly 1.7 billion people by the mid-2060s. India will continue to be the most populous country even beyond 2100.²³ It is estimated that India's population growth rate is now below the world average. The foremost challenge is to provide food and nutritional security to every Indian. India's Public Distribution System (PDS), legislated through the National Food Security Act 2013 (NFSA), is the world's largest food-based welfare programme which annually distributes about 62–65

²² Department of Animal Husbandry and Dairying. (2022, December 21). Commercial contract guidelines for broiler production jobwork between farmers and contracting company (Poultry Integration Contract Agreement). Ministry of Fisheries, Animal Husbandry and Dairying, Government of India.

²³ Rukmini, S. (2024, April 16). Why is India's population growth slowing down. The Wire. <https://thewire.in/urban/why-is-indias-population-growth-slowing-down>

MMTs of food grains, mainly rice and wheat, to about 813 million identified people of the country. By producing enough rice and wheat, India has achieved food security at the macro-level; however, at the micro-level, nutritional deprivation and absorption issues persist. Rice and wheat alone cannot resolve India's nutritional challenges, and therefore, PDS in its current form, at least for financially better-off states, requires a rethink.²⁴

In the last few decades, food habits have undergone a change across expenditure classes. In both rural and urban areas, the consumption of staple food grains like wheat and rice has been going down, while the consumption of protein and nutritious food items, like milk, poultry, fruits, vegetables, and even processed food, has been going up. The latest Household Consumption Expenditure Survey 2022–2023 finds that, for the first time, household expenditure on food is less than 40% in urban India. Even in rural India, it is less than 50% of the total consumption expenditure.²⁵

Despite the survey showing lower household expenditure on staple grains, food inflation is a perennial issue, and the government struggles to keep it in check. In 2023–2024, the inflation, even in wheat and rice, was in double digits. In March 2024, year-on-year food inflation was 7.68%. It looks low because of negative inflation of 11.72% in the case of edible oils, due to cheaper imports. Pulses, a major source of protein for a large section of the population, witnessed an inflation of 17.71%. Being

²⁴ Saini et al. (2017). Indian food and welfare schemes: Scope for digitization towards cash transfers. ZEF-discussion papers on development policy no. 241, ZEF Center for Development Research, University of Bonn.
https://www.zef.de/uploads/tx_zefnews/dp_zef_241.pdf

²⁵ National Sample Survey Office (NSSO). (no date). Factsheet of Household Consumption Expenditure Survey (HCES) 2022–2023. Ministry of Statistics and Programme Implementation, Government of India.

perishable, there is a large fluctuation in the inflation of vegetables. In March, inflation in vegetables was 28.34%.²⁶

Sustainability Under Climate Change

The second challenge is not only to produce enough food but to do it sustainably. In the last few years, the impact on climate change has become quite visible. Climate change has already resulted in higher temperatures, changes in the pattern of rainfall with intensive rain hitting the ground on just a few days, and frequent droughts in parts of India. And it is not only the crops which would be adversely impacted by climate change. Livestock and fisheries will also suffer from climatic stress.²⁷

Lack of Surpluses and the Residual Nature of Agricultural Exports

For rice, India is world's largest exporter, and about 40% of global trade in rice originates from India. For wheat, India is an occasional exporter. For edible oils, India is largely dependent on imports, and about 55% to 60% of edible oil consumption is imported, with about 60% in the form of palm oil from Indonesia and Malaysia. In the case of sugar, India generally produces more than its requirement, and it is an occasional exporter. In some years, exports are not permitted by the government to keep domestic inflation in check.

It is feared that climate change will result in significant adverse impacts on production and productivity, especially in the tropical regions of India. It is estimated that climate change may cause a 12% lower production of kharif crops and 6% for rabi crops. Wheat crop of 2022–2023 was adversely impacted due to

²⁶ National Statistical Office (2024, April 12). Consumer Price Index numbers on base 2012=100 for rural, urban and combined for the month of March 2024. Press release Ministry of Statistics and Programme Implementation.

²⁷ Aggarwal, P. et al. (2022). Managing climate risks in agriculture in Indian agriculture towards 2030. Springer.

higher-than-normal temperatures in February 2022. Since then, the government has been forced to take several measures to augment the domestic availability of agricultural produce. Due to the evolving aggressive mandates under ethanol-for-fuel blending, the dedicated area for crops-for-fuel requires strategic land-planning by policymakers.

Table 4: Electricity Subsidy to the Agriculture Sector in FY2022–2023

S. no.	State	Total subsidy (in crores)	Agriculture subsidy (in crores)	Agriculture's share in total subsidy (%)
1	Rajasthan	25,260	20,394	80.74
2	Karnataka	13,000	12,480	96
3	Andhra Pradesh	11,123	9,512	85.52
4	Punjab	12,164	9,064	74.51
5	Gujarat	9,892	8,300	83.91
6	Uttar Pradesh	13,600	7,097	52.18
7	Telangana	8,221	6,736	81.94
8	Haryana	6,758	6,050	89.52
9	Tamil Nadu	12,558	5,984	47.65
10	Maharashtra	12,841	5,808	45.23
11	India	1,64,105	1,01,745	62

Source: Communication from Council on Energy, Environment and Water.

It is acknowledged that the success of the Green Revolution was achieved through the expansion of irrigation, but it has resulted in the indiscriminate and overuse of water, leading to the depletion of groundwater resources. Highly subsidised or free electricity (Table 4) has resulted in an enormous increase in the use of pumps which extract water. It has also resulted in the distortion of crop choices, ignoring the agro-ecological suitability of crops to a particular area. It must be noted that it is not the

state of Punjab alone which is providing a large subsidy for electricity to the agriculture sector.

A NABARD-ICRIER study²⁸ has estimated the irrigation water productivity of crops rather than per hectare productivity. It found that although Punjab and Haryana have high productivity per hectare of cultivated area, they have very low irrigation-water productivity, even though the entire area under paddy is under assured irrigation. They are thus rapidly depleting their groundwater resources. In India, about 78% of freshwater resources are used for agriculture, but the use of irrigation water is highly distorted. Paddy and sugarcane are grown on only about 25% of the gross cropped area but consume over 60% of irrigation water. The other crops are therefore deprived of water, resulting in low productivity.²⁹

If the over-exploitation of groundwater resources is to be checked, a policy has to be evolved which will incentivise the cultivation of crops in accordance with the agro-ecological needs of various regions. It will mean a lower area under paddy in Punjab and Haryana. Efficient use of irrigation water through drip, sprinklers, and sensors has to become mainstream rather than being confined to certain states of India (Maharashtra, Karnataka, and Tamil Nadu). It is not only the misuse of water resources which is a cause of concern for the sustainability of crop production. There is indiscriminate use of chemical fertilisers and pesticides, some of which may also be leaching into the soil and water bodies, ultimately finding their way into the food chain.³⁰ Some pesticides of the older generation are

²⁸ Sharma, B. R., Gulati, A., Mohan, G., Manchanda, S., Ray, I., & Amarasinghe, U. (2018). *Water productivity mapping of major Indian crops*. NABARD-ICRIER, p. 40.

²⁹ Sharma et al. (2018), *supra*, p. 212.

³⁰ Sharma, A., Kumar, V., & Zheng, B. (Eds.) (2023). *Pesticides in the Environment: Impact, assessment, and remediation*. Elsevier.

rather cheap, but they can remain in soil and water for years. Many of these have been banned by the government.³¹

Degradation of soil is another area of concern. Due to the intensive cultivation of crops, the erosion of soil has been rising. The Indian Council of Agricultural Research (ICAR) estimates that about 36.70% (120.72 million hectares) of India's total land area is degraded. About 60.27% (73.27 million hectares) is affected by water erosion, while about 10.30% (12.40 million hectares) is attributed to wind erosion. It is a matter of great concern that about 14.50% (17.45 million hectares) of land faces chemical degradation.³² In his book, *From Green to Evergreen Revolution*, Dr. M. S. Swaminathan³³ wrote that countries like India require "do ecology" which will generate an "economic stake in conservation." He referred to the change in attitude of Punjab farmers where the Green Revolution was becoming "greed revolution." Sadly, much has not changed since the book was published in 2010. An important reason contributing to the lopsided cropping pattern in the north-western states of India is the policy of MSP. Almost 90% of market arrivals of paddy are purchased by government agencies at MSP (Table 5).

Since no crop other than sugarcane offers an assured price, Punjab farmers continue to grow paddy, knowing very well that it is extremely harmful to their long-term interests.³⁴ However, the Government of Punjab has also taken several steps to reduce the consumption of water for the cultivation of paddy. The government has banned the cultivation of Pusa-44 (a high-yield variety with better recovery of rice) and other long-duration (155–

³¹ Soman, S. et al. (2024, February 1). An updated status of currently used pesticides in India: Human dietary exposure from an Indian food basket. *Environmental Research*, 242, 117543.

³² Maji, A. K., Reddy, G. P. O., & Sarkar, D. (2010). *Degraded and wastelands of India, status and spatial distribution*. ICAR and NAAS.

³³ Swaminathan, M. S. (2010). *From Green to Evergreen Revolution*. Academic Foundation.

³⁴ Gulati, Ashok, Roy, Ranajana, & Hussain, Siraj. (2017). *Getting Punjab agriculture back on high growth path: Sources, drivers and policy lessons*. Indian Council for Research on International Economic Relations (ICRIER).

160 days) rice varieties since they require much more irrigation water than short-duration varieties. These varieties also produce more stubble, the burning of which causes major pollution in the National Capital Region in October and November. The state is promoting short-duration varieties like PR-126, which are ready in only 120–125 days.

Table 5: Crop-Wise Relative Average Gross Returns (%) with Respect to Paddy, TE 2021–2022

<i>Crop</i>	<i>Relative average gross return over cost of cultivation A2+FL with respect to paddy</i>
A. Cereals	
Paddy	100
Maize	86.2
Jowar	30.7
Bajra	35.3
Ragi	9.7
B. Pulses	
Arhar (Tur)	102.3
Moong	27.1
Urad	29.3
C. Oilseeds	
Groundnut	95.7
Soybean	43.9
Sunflower	54.7
Sesamum	38.2
Niger seed	-4.1
D. Commercial Crop	
Cotton	87

Source: Price Policy for Kharif Crops for the Marketing Season 2023–2024, CACP, Ministry of Agriculture and Farmers Welfare, Government of India, New Delhi, March 2023.

emitted from agricultural activities is not the subject of much scrutiny or debate in India. The GHG in agriculture is contributed by the application of inputs to the soil and the burning of residues, etc. The livestock sector also contributes to GHG through rearing and enteric fermentation, and the contribution of stray cattle, whose population is 5.02 million (20th Livestock Census 2019, Department of Animal Husbandry and Dairying, Government of India), has not even been estimated. There is a need to improve the productivity of dairy animals. As per the Integrated Sample Survey, the average annual productivity of cattle in India during 2019–2020 was only 1,777 kg per animal per year, as against the world average of 2,699 kg per animal per year during 2019.³⁷

Farmers' Income

The third challenge before India is to get a remunerative income for farmers. From time to time, farmers protest for their demands which are basically related to their low incomes.

1. In August 2017, farmers protested against the killing of farmers in Mandsaur, Madhya Pradesh, who were demanding MSP for their produce, including onions.
2. In March 2018, farmers, farm labourers, and tribals staged a march from Nashik to Mumbai. Many of them walked barefoot. It is estimated that they numbered 70,000 by the time they reached Mumbai.³⁸
3. Delhi alone has witnessed a number of protests, primarily

³⁷ Ministry of Fisheries, Animal Husbandry and Dairying. (2021, March 24).

Productivity of dairy animals. Press Information Bureau, India.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1707187#:~:text=As%20per%20Integrated%20Sample%20Survey%20average%20annual%20productivity,per%20year%20during%202019%20%28as%20per%20FAO%20Statistics%29>

³⁸ Kulkarni, D. S. (2023, March 15). Long March' returns: Why tribal people, farmers are again walking from Nashik to Mumbai. *India Today*.

<https://www.indiatoday.in/india-today-insight/story/long-march-returns-why-tribal-people-farmers-are-again-walking-from-nashik-to-mumbai-2347091-2023-03-15>

demanding a fair price (MSP) and debt waiver.³⁹

4. From November 25, 2020, to December 9, 2021, there was a massive protest by farmers at Delhi borders and in adjoining states.⁴⁰

Table 6: Average Monthly Income of Agricultural Households (Considering Paid-Out Expenses Only) During the Agricultural Year July 2018–June 2019

<i>State/group of UTs</i>	<i>Average monthly income of agricultural household</i>
Andhra Pradesh	10,480
Arunachal Pradesh	19,225
Assam	10,675
Bihar	7,542
Chhattisgarh	9,677
Gujarat	12,631
Haryana	22,841
Himachal Pradesh	12,153
Jammu and Kashmir	18,918
Jharkhand	4,895
Karnataka	13,441
Kerala	17,915
Madhya Pradesh	8,339
Maharashtra	11,492
Manipur	11,227
Meghalaya	29,348
Mizoram	17,964

³⁹ Jagga, Raakhi. (2024, February 24). Farmer protest in Delhi over the years. *The Indian Express*. <https://indianexpress.com/article/cities/chandigarh/from-msp-to-debt-waivers-a-look-at-why-farmers-have-been-protesting-in-delhi-over-the-years-9175444/>

⁴⁰ Express Web Desk. (2021, December 9). Farmers end yearlong protest: A timeline of how it unfolded. *The Indian Express*. <https://indianexpress.com/article/india/one-year-of-farm-laws-timeline-7511961/>

Nagaland	9,877
Odisha	5,112
Punjab	26,701
Rajasthan	12,520
Sikkim	12,447
Tamil Nadu	11,924
Telangana	9,403
Tripura	9,918
Uttarakhand	13,552
Uttar Pradesh	8,061
West Bengal	6,762
Group of N E States	16,863
Group of UTs	18,511
All India	10,218

The root cause of farmers' agitations is the low incomes earned by most of them. From January to December 2019, the National Statistical Office (NSO) carried out a survey on "Land and Livestock Holdings of Households and Situation Assessment of Agricultural Households." The survey defined an agricultural household as one which received more than ₹4,000 as the value of produce from agricultural activities which included not only the cultivation of field, fodder, and horticultural crops but also plantation, animal husbandry, poultry, fishery, piggery, bee-keeping, vermiculture, sericulture, etc. Moreover, at least one member of the household should have been self-employed in agriculture, either in the principal status or in subsidiary status, during the last 365 days. Out of 172.44 million rural households, 93.09 million were agricultural households, and 17.24 million were non-agricultural households. The average area (ha) owned per household was only 0.512 hectares. About 94% of households owned less than 2 hectares of land.

It was found that the average monthly income of agricultural households was just ₹10,218. It includes income from wages;

leasing out of land; and net receipts from crop production, from farming of animals, and from non-farm business. Out of this, only ₹3,798 came from crop production while income from wages was ₹4,063. The survey found that an agricultural household earns half of its total income from farming only when the land size exceeds 1 hectare. About 70% of agricultural households do not fall into this category.⁴¹ More worryingly, the income of agricultural households in several states like Bihar, Jharkhand, Madhya Pradesh, Odisha, West Bengal, and Uttar Pradesh was lower than ₹8,000 per month, and in Uttar Pradesh, it was only slightly above that (Table 6).

On February 28, 2016, in a rally, the Prime Minister gave a call to double farmers' income by 2022. It was mentioned in the budget speeches of 2016–2017 and 2017–2018. The NITI Aayog clarified that the target is to double the farmers' income in real terms and not just in nominal terms. In April 2016, the government set up a committee under the chairmanship of Dr. Ashok Dalwai, IAS, Additional Secretary, Ministry of Agriculture, to recommend the strategy to achieve this. The Committee adopted the National Council of Applied Economic Research (NCAER), National Institute of Agricultural Research Policy (NIAP), and the National Centre for Cold Chain Development (NCCD) as knowledge partners. It held consultations across India and took the support of 100 resource persons for preparing the report.

The Committee submitted its voluminous report of about 3,000 pages in 14 volumes in September 2018. It made about 619 recommendations in Volume 14 which is titled "Comprehensive Policy Recommendations." The Committee recommended six areas of action for doubling farmers' income. These are improvement in crop productivity, livestock productivity, resource use efficiency, increase in cropping intensity,

⁴¹ Damodaran, Harish et al. (2021, September 30). Agricultural households and farming income: An initial analysis of variations in income from farming and other sources among agricultural households in India. Centre for Policy Research, New Delhi.

diversification to high-value crops, and enhancement of the real prices received by farmers. The Committee clarified that the target is to double the farmers' incomes in real terms by 2022–2023 over the income level of 2015–2016. It projected that by 2022–2023, the average income is targeted to reach ₹16,118 per month (in real terms) over the average income of ₹8,059 per month in 2015–2016 (as assessed by the Committee). For achieving this, the required growth rate was estimated by the Committee to be 10.4% per annum.⁴² On the basis of previous NSSO surveys on farm incomes from 2002–2003 to 2012–2013, the Committee found that farmers' real incomes grew by 3.6% per annum.

Conscious of the challenge of low income for farmers, the Union Government substantially enhanced the budgetary allocation of the Ministry of Agriculture and Farmers Welfare from ₹27,662.67 crore (BE) during 2013–2014 to ₹125,035.79 crore (BE) during 2023–2024. Even before the objective of doubling farmers income was announced by the Prime Minister, a number of new schemes and programmes have been initiated since the formation of the National Democratic Alliance (NDA) Government under Prime Minister Modi in 2014–2015.⁴³ These include a scheme for soil health cards for all the farmers, National Agriculture Market (e-NAM), Pradhan Mantri Krishi Sinchayee Yojana (PMKSY), and Pradhan Mantri Fasal Bima Yojana (PMFBY) which provides very low premiums for farmers. The maximum premium is only 2% of the sum insured for kharif crops. For rabi crops, it is just 1.5%. In the case of annual commercial and horticultural crops, maximum premium is 5%. The launch of the free-to-air DD Kisan TV channel was also a significant decision to reach out to farmers and producers. The

⁴² Gulati, Ashok, Saini, Shweta, & Roy, Ranjana. (2021). Going beyond agricultural GDP to farmers' incomes in revitalising Indian agriculture and boosting farmer incomes. Springer.

⁴³ Ministry of Agriculture and Farmers Welfare. (2024, February 6). *Target of doubling the income of farmers*. Press Information Bureau, India. <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=2003185> (Accessed June 7, 2024).

funding pattern of several centrally sponsored schemes was also changed in 2015–2016, and the state's share was increased to 40%. In several schemes for agriculture and allied sectors, this led to a doubling of the states' contribution from 20% to 40%.⁴⁴ A flagship scheme, Rashtriya Krishi Vikas Yojana (RKVY), initiated by the United Progressive Alliance (UPA) Government in 2006, provided flexibility to states to design their own schemes. The idea was to incentivise the states to increase public investment in agriculture and allied sectors. It provided autonomy to states in planning and executing agriculture sector schemes. The Central share in the scheme was reduced in 2015–2016 from 100% to 60%. For northeastern and Himalayan states, the Central funding was fixed at 90%.⁴⁵

The NDA Government, since 2014, has, however, continued several schemes which were initiated by the previous UPA Government. These include the promotion of organic farming, beekeeping (National Beekeeping and Honey Mission) micro-irrigation (for which the Micro Irrigation Fund was set up, providing interest subvention), as well as the Mission for Integrated Development of Horticulture (MIDH). The government has also provided a much stronger thrust on Farmer Producer Organisations (FPOs) which enable farmers to form groups which can then source the inputs and market the produce. A major initiative since December 2018 has been to provide direct income support of ₹6,000 per annum to all the landholders (with some exceptions) under PM Kisan. This scheme receives the highest allocation of all the schemes of Ministry of Agriculture. An amount of ₹60,000 crore has been

⁴⁴ Rai, Suyash. (2024, February 12). *Looking back at changes in fiscal policy from 2014 to 2024*. Carnegie India. <https://carnegieendowment.org/india/ideas-and-institutions/looking-back-at-changes-in-fiscal-policy-from-2014-to-2024?lang=en> (Accessed June 10, 2024).

⁴⁵ Department of Agriculture and Farmers Welfare. (2024). Rashtriya Krishi Vikas Yojana (RKVY). Ministry of Agriculture and Farmers Welfare. https://agriwelfare.gov.in/sites/default/files/rkvy_inro.pdf (Accessed June 10, 2024).

provided for the financial year 2024–2025 (BE as per the interim budget).

The most important and meaningful decision of the government to deliver higher income to farmers was the increase in MSP. In the Union Budget of 2018–2019 it was announced that the MSP for all the crops would be at least one and a half times the cost of production.⁴⁶ Since then, the government has been increasing the MSP for all the mandated kharif, rabi, and other commercial crops. In addition, the government announced a substantial hike in the MSP of pulses and oilseed crops (Table 7).

Table 7: Percentage Increase in MSP Between 2013–2014 and 2023–2024

Paddy	66.60%
Paddy A	63.80%
Jowar	112%
Bajra	100%
Maize	59.50%
Arhar (tur)	62.80%
Moong	90.20%
Urad	61.60%
Cotton medium staple	78.90%
Cotton long staple	75.50%
Groundnut	59.40%
Sunflower	82.70%
Soybean	79.70%
Sesamum	91.90%
Rabi Crops	
Wheat	62.50%
Barley	68.20%
Gram	75.50%
Masur	117.80%
Mustard	85.20%
Safflower	93.30%
Sugarcane (FRP)*	54.50%

Source: Author's compilation from data of MSP.

Note: FRP, fair and remunerative price.

⁴⁶ Ministry of Agriculture and Farmers Welfare. (2020, March 3). Calculation of MSP. Press release, Press Information Bureau, India.
<https://pib.gov.in/PressReleasePage.aspx?PRID=1605054>

To ensure that the farmers of crops other than wheat and paddy also receive the MSP announced by the government, it launched an umbrella scheme Pradhan Mantri Annadata Aay Sanrakshan Abhiyan (PM-AASHA) aimed at providing an assurance of a remunerative price. This umbrella scheme comprises the ongoing Price Support Scheme (PSS) for pulses, oilseeds, etc., Price Deficiency Payment Scheme (PDPS) and Pilot of Private Procurement and Stockist Scheme (PPSS) for oilseeds to ensure MSP to the farmers. PSS enabled government agencies like NAFED to procure pulses and oilseeds at MSP, thus providing some support to farmers. However, the procurement operations were not as widespread and consistent as those for wheat and rice. The two new schemes, PDPS and PPSS, have not really been taken up for any crop in any meaningful way.

As a result of the attractive MSP for pulses, their production went up from 19.26 million tonnes in 2013–2014 to 27.50 million tonnes in 2022–2023. However, in 2023–2024, it is estimated to have decreased to 24.49 million tonnes.⁴⁷ This is attributed to low prices of gram in the last few years and non-protection of MSP. As a result, the area under pulses has gone down, and the vision of becoming self-sufficient in pulses looks even farther.⁴⁸ The government also set up the Agri Infrastructure Fund (AIF) to provide an interest subvention of 3% on loans for infrastructure projects, including projects for post-harvest infrastructure and aggregation points. This initiative provides impetus for the development of farm gate and aggregation points, as well as affordable and financially viable post-harvest management

⁴⁷ Ministry of Agriculture and Farmers Welfare. (2024, June 4). Total foodgrain production is estimated at 3288.52 LMT, higher by 211.00 LMT from average foodgrain production of last 5 years. Press release, Press Information Bureau, India. <https://www.pib.gov.in/Pressreleaseshare.aspx?PRID=2022740>

⁴⁸ Hussain, Siraj. (2023, February 17). How can India become self-sufficient in pulses. *The Wire*. <https://thewire.in/agriculture/india-pulses-self-sufficient-:-text=Subramanian> (Accessed June 9, 2024).

infrastructure.⁴⁹ The government has also launched a National Mission on Edible Oils–Oil Palm (NMEO-OP) to increase the domestic production of edible oils. It is projected that the area under oil palm and its yield will increase as a result of an attractive price for Fresh Fruit Bunches (FFB).⁵⁰

Similarly, the Department of Animal Husbandry and Dairying also started a number of schemes with the objective of increasing the income of farmers. These include a livestock health and disease control programme, the setting up of an Infrastructure Development Fund, and the Rashtriya Gokul Mission. For the promotion of the fisheries sector, the government in 2020 approved the Pradhan Mantri Matsya Sampada Yojana (PMMSY). To meet the infrastructure needs of the fisheries sector, the government set up the Fisheries and Aquaculture Infrastructure Development Fund (FIDF). It provides interest subvention for fisheries infrastructure.⁵¹ While the schemes would have provided much-required support to farmers in various aspects of farming and allied activities, the full impact of the same on farmers' income is not known as there was no survey of income levels of farmers in 2022–2023. Therefore, it is not possible to evaluate if the target of doubling farmers' income was achieved. However, as mentioned above, the latest situation assessment survey shows that the average annual income of agricultural

⁴⁹ Department of Agriculture and Farmers Welfare. (2024). Objectives of National Agriculture Infra Financing Facility. Ministry of Agriculture and Farmers Welfare. <https://agriinfra.dac.gov.in/Home/Objectives> (Accessed June 7, 2024).

⁵⁰ The Union Cabinet. (August 2021, August 18). Cabinet approves implementation of national mission on edible oils: Palm oil. Press release, Press Information Bureau, India. <https://www.pib.gov.in/PressReleasePage.aspx?PRID=1746942#:~:text=The%20Union%20Cabinet%2C%20chaired%20by,scheme%2C%20out%20of%20which%20Rs> (Accessed June 10, 2024).

⁵¹ Ministry of Fisheries, Animal Husbandry and Dairying. (2023, December 14). Year end review 2023. Press release, Press Information Bureau, India. <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1986155-:~:text=With record fish production of,6.724%25 to the agricultural GVA> (Accessed June 7, 2024).

households increased from ₹8,058 per month in 2015–2016 to ₹10,218 in 2018–2019.

Looking Ahead

Going forward, food security for an increasing population through sustainable production will continue to be the foremost challenge, as discussed in previous pages. A Working Group (WG) under the chairmanship of Prof. Pratap Singh BIRTHAL, Director of ICAR-National Institute of Agricultural Economics and Policy Research, New Delhi, was set up by NITI Aayog to project the demand and supply of crops and livestock products up to 2047–2048. Its report was submitted in October 2023.⁵² The WG estimated the normative requirements of rice, wheat, maize, nutri-cereals, pulses, food grains, oilseeds, sugarcane, fruits, vegetables, and animal products like milk, meat, eggs, and fish. The possibilities of exports were also assessed by the WG. In the absence of a Consumer Expenditure Survey, the WG relied on other data sources like the Consumer Pyramid Surveys of Centre for Monitoring Indian Economy (CMIE) and private food consumption expenditure data from the National Accounts Statistics from 2011–2012 to 2019–2020. Under the business-as-usual scenario (BAU), the WG has projected the demand for food grains at 402 million tonnes in 2047–2048. Under the high-income growth scenario, the same is projected at 415–437 million tonnes.

It is projected that the growth in demand for maize, pulses, and nutri-cereals will be higher compared to rice and wheat. The demand for pulses is expected to be 49–57 million tonnes by 2047–2048. By 2047–2048, the demand for vegetables and fruits is expected to increase to 365 million tonnes and 233 million tonnes, respectively, in the BAU. Under a high-income growth scenario, the demand for vegetables may rise to 385–417 million

⁵² NITI Aayog. (2024). Working Group report on crop husbandry, agriculture inputs, demand and supply. NITI Aayog, Government of India.

tonnes and the same for fruits to 252–283 million tonnes. The production of fruits and vegetables is less than the demand, and the shortfall is projected to continue in the future unless there is a substantial increase in yield or there is a diversion of area to fruit and vegetables. India's import dependence for edible oils is also projected to continue as the demand is expected to increase to 31–33 million tonnes. Production of sugar and its products is likely to remain higher than demand. The WG also projects that domestic production of meat, poultry, and eggs will meet the demand in a BAU scenario. In the case of high growth in incomes, however, the demand will be higher.

Despite the current challenges outlined in this paper, the WG has projected that we can expect growth in the yield of all the crops, with maize likely to achieve the highest growth. If India is able to achieve high growth in yield, it will be possible to produce genuine, reliable surpluses for export. As a result of higher yields, the production of various crops (except nutri-cereals in the BAU scenario) as well as milk, meat, poultry, and fish will be higher.

The good news is that the production of food grains will be more than the demand in both BAU and other scenarios, and there will be an opportunity to export the surplus which will mainly come from rice and wheat. The supply of nutri-cereals may fall short of demand unless the yields go up. It is possible that this will be achieved through higher production of maize by both area expansion and higher yield. Therefore, achieving a higher yield of pulses needs to be a high priority for the government. To meet the demand for fruits and vegetables, a much higher growth in yield is needed. In the last two decades, since the launch of NHM, the private sector has contributed significantly to the development of varieties which have led to high yield growth. The use of appropriate technologies and the creation of better cold chain infrastructure will be needed to augment the availability of fruits and vegetables. These projections may face a threat from climate change, as the events since February 2022 (unusually high temperatures and erratic

monsoons) have shown. India had to ban the export of wheat and wheat products, broken rice, non-basmati raw (white rice), and sugar. There is a minimum export price on basmati rice as well.⁵³ Restrictions had to be imposed on the export of onions also. Therefore, adaptation and mitigation must be taken up as a high priority, and investment in research to develop climate-resilient varieties needs to be substantially raised. Now the time has come to allow genetically engineered seeds by taking recourse of new technologies of modification.

At its core, agriculture is a state subject even though the Union Government provides large subsidies on fertiliser, crop insurance, and credit. India needs large investments in agriculture and allied sectors. To attract private investment, stability in the policy regime is required. This is possible when surpluses are consistently produced so that the government does not resort to export restrictions and stock limits under the Essential Commodities Act. The success achieved in the poultry sector is largely due to private sector investment and innovative methods of production. Similar breakthroughs are needed in other sectors as well. India should not close its doors to genetic engineering technologies.

⁵³ Hussain, Siraj, & Khurana, Kriti. (2024, May 10). Can India become a reliable exporter of agricultural produce? *The Wire*.
<https://m.thewire.in/article/agriculture/can-india-become-a-reliable-exporter-of-agricultural-produce> (Accessed June 10, 2024).

Chapter 5. Building of a Thriving Democracy in India

Dr. Noor Mohammad

*The spirit of democracy cannot be imposed from the outside.
It must come from within.*
Mahatma Gandhi

Introduction

The spirit of democracy comes from within. Democratic governance takes root when the environment is congenial to its growth and survival. It suffers reversals when the environment deteriorates, but it often asserts itself again with the changing times. Till then the spirit lies dormant. After a large number of countries adopted democracy as the system of governance, the next step was the deepening of democracy. This necessitated an assessment of the strengths and weaknesses of democracy. A number of international institutions took it upon themselves to study the democratic practices worldwide, so that shortcomings could be identified and corrective measures taken. Free and fair elections being the prerequisite for a good democracy, the practice of observing elections started. Upon invitation, elections are observed by expert groups; the strengths and shortcomings are identified; and recommendations to improve future elections are made. In addition, the Perception of Electoral Integrity Index, calculated under the Electoral Integrity Project, highlights the areas of concern that need to be addressed to ensure an election attains high integrity and to make the elections free and fair.

In this chapter, the growth and challenges of democracy in India, particularly electoral democracy, will be discussed.

Additionally, an effort will be made to explore possible electoral reform proposals to deepen democracy in India.

The Evolution of Democracy

Democracy has evolved over time and across different geographies. In India, many tribal and traditional societies had some form of collective decision-making. Institutions such as *sabhas* and *samitis* existed during the Vedic period, around 1000 B.C.⁵⁴ Around the time of Buddha, several *janpadas* and assemblies of nobles made decisions through debates.⁵⁵ However, comprehensive consultative decision-making involving the general populace seems to have been lacking, as the society was highly stratified. Later with the transformation of the *varna system* into caste system, the consultative process would have been further limited. Ancient Greece had city-states as early democracies in the West. In these states, the entire voting population—which was not very large—participated in decision-making. However, the eligibility for being a voter was not inclusive; women, slaves, and some other categories were excluded, and the entire voter population was around 10% only.⁵⁶ This compares well with the situation in India after the *varna system* ceased to be merit-based.

The idea of representative-based decision-making evolved in the Roman republic. The people chose their representatives from amongst the nobles and the aristocracy, and these representatives had the right to make decisions for the entire population. Later, these representatives were elected through an electoral process, initially with a limited electorate that, over time, became more and more inclusive—women were the last to be included. The process of inclusion was slow, and universal adult franchise came to fruition in Europe only in the early

⁵⁴ Basham, A. L. (1981). *The wonder that was India*. Rupa.

⁵⁵ Basham, *supra*.

⁵⁶ Dahl, Robert. (1991). *Democracy and its critics*. Orient Longman.

twentieth century. Early democracies were developed countries, and as a result, economic development and stability were attributed to democratic governance—a factor that attracted many rulers towards democracy. Rule by the people and rule of law were attractive features of democratic governance which involved the people in governance and guaranteed equality before the law to all citizens. The ruling elites saw merit in sacrificing some of their powers and privileges because of these advantages of democratic governance. However, there have been occasions when the merits of democracy took a back seat, and democracy suffered reverses—democracies returned to autocracies. Such reversals happened when citizens and the civil society became weaker. This led to waves of democratisation followed by reversals.

As evident from the above, the path of democracy faces various challenges during its journey. However, the Indian experience with democracy has been more consistent. India's democratic experiment began with the adoption of its Constitution on January 26, 1950. The story of Indian democracy is one of both successes and challenges, but never of reversals as seen in many other countries. It was shaped by India's democracy warriors—enlightened political leadership, thriving democratic institutions and its citizens. The framers of the Constitution envisioned a nation where citizens would actively participate in governance, fundamental rights would be upheld and justice for all would be ensured. Over the decades, India has navigated through political, social, and economic challenges, ultimately emerging as a vibrant democracy. In a democracy, the very first step that ensures the involvement of the people is the process by which they elect their representatives to form the government. These representatives, sitting in the parliament, make people-friendly legislations and various institutions and constitutional bodies enforce the legislations thus made. Therefore, regular elections conducted in a free and fair manner constitute a necessary condition for a thriving democracy. Among various institutions created for enforcing the will of the people, the

Election Commission of India (ECI) is the most important institution that has helped democracy to take root in India.

India's Electoral Journey

The Indian story of democratisation has been unique. After the British Parliament took over from the East India Company under the Government of India Act, 1858, it provided for the constitution of bodies to legislate on local laws under the Indian Councils Acts of 1861 and 1892. However, the legislative bodies created thereunder were small, consisting only of nominated members, with no representation of the local people under the former Act, and with a small element of local representation under the latter. The representation of the people began with the first Central Legislative Council⁵⁷ constituted in 1909 under the Indian Councils Act, 1909. The members of the Council were elected not by the common people of India, but by special constituencies, such as municipalities, district and local boards, universities, chambers of commerce, trade associations, and groups of persons such as landholders or tea-planters. The said Act provided that certain seats in the legislative councils would be reserved exclusively for Muslims and the members to hold those seats were elected by separate electorates consisting of Muslim electors only. The council functioned until 1915. The Government of India Act, 1919, which brought the Montagu-Chelmsford Reforms, provided for a bi-cameral legislative body at the Centre—the Central Legislative Assembly⁵⁸ and the Council of States.⁵⁹ It continued reservation for Muslims and provided reservation to Sikhs as well. Though the Act provided for direct elections from the constituencies to both Houses, only a limited

⁵⁷ The Council had 68 members of which only 68 were elected, the rest were nominated members.

⁵⁸ The total number of members was 145 of which 105 were elected members. The members had a 3-year term.

⁵⁹ The number of members was 60 of which 34 were elected. The members had a 5-year term.

number of persons were granted the right to vote based on certain high qualifications, such as the ownership of property, payment of income tax, payment of municipal tax, or the holding of land.⁶⁰

The Government of India Act, 1935, provided for a federal set-up of the British Provinces and the Indian Princely States. The Council of States and the Federal Assembly Assembly was to continue with increased number of Members and a tenure of 5 years for the Assembly and 9 years for the Council of which one-third were to retire every 3 years. The concept of constituencies for Hindus, Indian Christians, Anglo-Indian, Europeans, and Scheduled Castes was added to the existing constituencies.⁶¹

The Constitution of India, from day one, granted universal suffrage to all citizens above 21 years of age in the country which had barely 17% literacy and widespread poverty—birth and survival of democracy in such a setting was doubted by many. The voting age was revised to 18 years in 1989. The community-wise reserved seats were abolished, but the Scheduled Castes and Scheduled Tribes were given reservation in the lower houses in the central and the state legislatures. It goes to the credit of the great people of India that they not only nursed democracy but improved it over the years. The Election Commission of India came into existence a day before India became a republic on January 25, 1950, as a one-member commission, which was made into a three-member commission in 1993.

⁶⁰ Rule 8 read with Schedule II of the Legislative Assembly/Council of State Electoral Rules under Sections 23 and 64 of the Government of India Act, 1919.

⁶¹ Rama Devi, V. S., & Mendiratta, S. K. (2007). *How India votes: Election laws, practice and procedure*. LexisNexis.

Social and Economic Dimensions of Democracy

A holistic development of a nation and the well-being of its citizens depend on strengthening the political, social, and economic dimensions of governance. Dr. B. R. Ambedkar's vision for India was one where social and economic democracy went hand in hand with political democracy. He believed that for India to be truly democratic, it must ensure social equality and economic independence for all its citizens. He said, "Political democracy cannot last unless there lies at the base of it, social democracy." His advocacy for the annihilation of caste and the upholding of social justice, state socialism, labour rights, and economic planning remains a guiding framework for policies aimed at achieving an inclusive and equitable society. Ambedkar's insights continue to resonate as India strives to fulfil the promises of its democratic ideals.

Political democracy is characterised by its robust framework of representative institutions, free and fair elections, and the rule of law. India has made significant progress in conducting free and fair elections regularly and periodically, when the people get the opportunity to hold the government accountable. The institutional framework given in India's Constitution provides a solid foundation for political democracy by guaranteeing fundamental rights and laying down the structure of government. Regular elections at the national, state, and local levels ensure that political power remains accountable to the people. The Election Commission of India plays a pivotal role in maintaining the integrity of the electoral process. The presence of numerous political parties allows for a diversity of opinions and competition, which is essential for a healthy democracy. The independent judiciary acts as a guardian of the Constitution, ensuring that the executive and legislature do not overstep their boundaries and protecting the citizens' rights. Civil liberties are guaranteed through freedom of speech, assembly, and association.

India, through its Constitution, aims to ensure equality and social justice for all its citizens by addressing the historical and contemporary inequalities that persist in society. Affirmative action through policies like reservations in education and employment for Scheduled Castes (SCs), Scheduled Tribes (STs), Other Backward Classes (OBCs), and the Economically Weaker Sections (EWS) aims to address historical injustice and promote social equity. Legal frameworks and policies aimed at promoting gender equality, such as the Protection of Women from Domestic Violence Act and reservations for women in local governance (Panchayati Raj institutions), are critical steps towards social democracy. Reservation for women in the House of the People and the State Legislative Assemblies through recent legislation is another step in the direction of gender justice. Social welfare initiatives like the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) and the Public Distribution System (PDS) provide social safety nets for the economically disadvantaged. Efforts to provide universal access to education and health care, such as the Right to Education, Right to Information, and the National Health Mission, are essential steps for promoting social democracy. Besides, the active participation of non-governmental organisations and civil society groups in advocating social justice and the rights of marginalised communities enhances social democracy. India has traversed a considerable distance in this direction, though a lot remains to be done.

India focuses on ensuring equitable distribution of wealth and opportunities and creating conditions for sustainable economic development. Economic policies aim at ensuring that the benefits of growth are distributed equitably across different sections of society. Programmes like Pradhan Mantri Jan Dhan Yojana (financial inclusion), Pradhan Mantri Awaas Yojana (Housing for All), and various social security schemes aim to reduce poverty and improve living standards. Redistribution of land through land reforms and providing land rights to the marginalised attempt to address economic inequalities rooted in

land ownership. Ensuring fair wages, safe working conditions, and the right to unionise are crucial for economic democracy. Labour laws and reforms are continuously evolving to better protect workers' rights. In addition, financial inclusion initiatives, such as expanding banking services to rural areas and providing microfinance, empower individuals economically and support small businesses which are other steps intended to move towards economic democracy. In this regard too, India is continuously on the march ahead, though a lot of space yet remains to be covered.

Quality Concerns

The quantitative progress in terms of an increased number of democratic countries led to concerns about qualitative progress. A number of international organisations invested significant resources in the assessment of democracy:

1. Variety of Democracy (V-Dem) considers five high-level principles of democracy, namely electoral, liberal, participatory, deliberative, and egalitarian aspects, to assess democracies and to share its assessment results through its Democracy Reports. The core principles such as free and fair elections, civil liberty, judicial independence, executive control, gender equality, media freedom, and civil society guide the assessment process. According to assessments made by V-Dem, India is categorised as an electoral autocracy with a rank of 104. According to this assessment, there is an urgent need to improve democracy in India⁶² with regard to some of the core principles under assessment.
2. The Economist Intelligence Unit (EIU), in its Democracy Index Report 2023,⁶³ found that the average global score for

⁶² V-Dem Institute. (2024). *Democracy report 2024*. V-Dem Institute. https://www.v-dem.net/documents/43/v-dem_dr2024_lowres.pdf

⁶³ Economist Intelligence Unit. (2023). *Economist Intelligence Unit report 2023*. EIU. <https://www.eiu.com/n/campaigns/democracy-index-2023/>

democracy fell to its lowest level since the Index began in 2006. According to this report, less than 8% of the world population lives in full democracy, while almost 40% live under authoritarian rule. Increasing incidents of violent conflicts have badly dented global democracy even as world democracies seem powerless to prevent wars. The EIU's Democracy Index provides a snapshot of the state of democracy in 165 independent states and two territories. The EIU places India at rank 41 in the flawed democracy category.

3. Another important assessment is done by Freedom House, and its assessments are disseminated through its annual reports. The latest *Freedom in the world report 2023*⁶⁴ identified manipulations in elections as the leading cause for the decline in global freedom. The report observed that electoral manipulations were widespread; there were efforts to overturn the outcomes of elections; an uneven playing field for the opposition inhibited fair contests; electoral violence; voter apathy; etc. all contributed to the decline in global freedom. Freedom House placed India in rank 161 among 180 countries and in the partly free category. This report also underlines the need for improvement.

As evident from the above discussions, there is a case for taking corrective steps. A number of initiatives have been taken to promote and deepen democracy at the global level. The International Institute for Democracy and Electoral Assistance (The IDEA) was established on February 27–28, 1995, to support democracy globally, with India being one of the 14 founding member countries. The UN Democracy Fund was created in 2005 to support projects that empower civil society, promote human rights, and encourage participation in the democratic process. The India International Institute of Democracy and Election Management (IIIDEM), created by the Election Commission of India in 2011, imparts training to officials of Electoral

⁶⁴ Freedom House. *India: Freedom in the world 2023*. Freedom House.
<https://freedomhouse.org/country/india/freedom-world/2023>

Management Bodies worldwide to build their capacity to conduct free and fair elections.

There have been efforts to evaluate the quality of elections too. The Perception of Electoral Integrity (PEI) Index, calculated under the Electoral Integrity Project, highlights the areas of concern to be addressed for making an election attain high integrity levels and making the elections free and fair. According to the *Electoral Integrity Global report 2023*, India has been assigned 59 as the PEI Index score.⁶⁵ In addition, at the invitation of the countries concerned, the Electoral Observation Missions precisely conduct such evaluations on a real-time basis. The missions carry out an assessment of the entire electoral exercise during poll preparations and also during the poll, providing recommendations in line with international electoral practices so that future elections can be conducted in a more free and fair manner.

However, not all countries welcome election observers, with India being one such country. India has an Election Visitor's programme. Under this programme, participants willing to study Indian elections are allowed to observe the entire process as visitors in pre-decided locations; visitors are not required to submit any reports. Such locations are identified carefully so that the electoral machinery is able to organise such visits without disturbing the poll process.

Free and Fair Election: A Prerequisite for Democracy

A survey conducted in 40 countries in 1990–1991 revealed a global shift from materialistic values to relatively ethereal values, such as a desire for freedom, self-expression, and a better quality of

⁶⁵ Garnett, Holly Ann, James, Toby S., MacGregor, Madison, & Caal-Lam, Sofia. (2023). *Electoral integrity global report 2023*. The Electoral Integrity Project. <https://static1.squarespace.com/static/58533f31bebf99c85dc9b/t/649dee1ee6e6c50219e9fbd9/1688071716978/Electoral+Integrity+Global+Report+2023.pdf>

life. The sample for the survey was drawn from Western countries as well as low-income countries. This change in values is compatible with democratic governance.⁶⁶ And free and fair elections that elect representative governments and make democratic decision-making possible are the prerequisites for democratic governance.

There are distinct advantages⁶⁷ of democratic governance, such as:

1. Relatively greater legitimacy for governments.
2. Greater ability to make decisions without coercion and bloodshed.
3. There are better chances that the government acknowledges mistakes and takes corrective action.
4. Elections provide an opportunity for voters to reward or punish the government based on its performance. This facilitates a change in government through ballots rather than bullets.
5. A democratic government can decentralise operations and engage a far larger talent pool, thereby increasing efficiency in governance.
6. Governance reforms can be introduced more smoothly in a democracy than in any other system.

However, publications like *How democracies die*⁶⁸ encourage us to ask questions like “Is our democracy in danger?” The authors studied the breakdown of democracies in Europe and Latin America to reach the conclusion that democracies no longer end with a bang but with the slow, steady weakening of critical institutions such as the judiciary and the press, and the gradual erosion of long-standing political norms. Other

⁶⁶ Abramson, Paul R., & Inglehart, Ronald. (1995). *Value change in global perspective*. University of Michigan Press.

⁶⁷ Khandwalla, Pradip N. (1999). *Revitalising the state: A menu of options*. Sage Publications.

⁶⁸ Levitsky, Steven, & Ziblatt, Daniel. (2018). *How democracies die*. Crown Publishers.

publications such as *Why elections fail*⁶⁹ and *How to rig an election*⁷⁰ show that the biggest threat to democracy lies in the stealing of elections. Therefore, while discussing democracy in India, there is a strong case for examining how elections are being conducted, what the strengths and weaknesses of the system are, and what can be done to reform the system. The discussion below on the practices in India will explore the strengths and weaknesses of the electoral practices in India and will also discuss various proposals for reform to strengthen the electoral process and democracy.

Electoral System

There is no legal stipulation that a particular kind of electoral system is preferable to another. However, there is increasing recognition of the importance of issues that are affected by electoral systems, such as fair representation of all citizens, the equality of women and men, the rights of minorities, special considerations for the disabled, and so on.⁷¹ These are formalised in international legal instruments such as the 1948 Universal Declaration of Human Rights and the 1966 International Covenant on Civil and Political Rights, and in various conventions and commitments concerning democratic elections made by regional organisations such as the European Union (EU) and the Organization for Security and Co-operation in Europe (OSCE).

India has adopted the First Past The Post (FPTP) system for all direct elections. State Election Commissions conduct elections to elect representatives to the Panchayat Raj institutions and the urban local bodies through this system. The Election

⁶⁹ Norris, Pippa. (2015). *Why elections fail*. Cambridge University Press.

⁷⁰ Cheeseman, Nic, & Klaas, Brian. (2018). *How to rig an election*. HarperCollins.

⁷¹ International Institute for Democracy and Electoral Assistance. (2008). *Electoral system design: The new International IDEA handbook*. International IDEA. [https://www.eods.eu/library/IDEA.Electoral Systems Design EN.pdf](https://www.eods.eu/library/IDEA.Electoral%20Systems%20Design%20EN.pdf)

Commission of India conducts polls to elect members of the Parliament and the Members of the State Legislative Assemblies through this process. The election of the President and the Vice President and members of the Council of States and the State Legislative Councils are carried out through the process of Proportional Representation with Single Transferable Votes.

The FPTP is easy to use and most suited to a country with low literacy. India embarked on universal suffrage with barely 17% literates in 1947. The FPTP system was best suited to that situation. That is the reason why the voting method has undergone changes thrice. The first two general elections in 1951–1952 and 1957 were conducted using as many ballot boxes as the number of candidates—each candidate was assigned one box, and his/her symbol was pasted on that box to facilitate illiterate individuals in identifying the box in which they had to insert their voter's slip. Ballot papers could be introduced only in 1962 when literacy had gone up, and voters had to choose their representatives by putting a cross mark against their chosen candidates. A pre-inked cross mark was provided to the voters so that the wrong marking of ballot papers could be avoided.

The Election Commission of India introduced Electronic Voting Machines (EVMs) in 1970, and the elections to the House of the People in 2014 were conducted with the EVMs in all polling stations country-wide. These EVMs had the Control Unit and the Balloting Unit, but there was no paper trail of the vote cast by the voter. On the intervention of the Supreme Court of India, the Voter Verifiable Paper Audit Trail (VVPAT) was introduced, which prints a slip stating the candidate's name, his/her party name, and party symbol which is visible to the voter for 7 seconds. These voter slips are verified with the results given by the Control Units in respect of randomly selected five polling stations in every assembly constituency. The demand for counting VVPAT slips in respect of all polling stations has been raised by some political parties and civil society organisations, but the Supreme Court refused to intervene.

Table 1: Vote Share of Winners and Runner-Ups: Lok Sabha General Elections

<i>Election year</i>	<i>Winner*</i>			<i>Runner up</i>		
	<i>Party</i>	<i>Seats</i>	<i>Vote share % of valid votes polled</i>	<i>Party</i>	<i>Seats</i>	<i>Vote share % of valid votes polled</i>
1951	INC	354	44.99	CPI	16	3.29
1957	INC	371	47.78	CPI	27	8.92
1962	INC	361	44.72	CPI	29	9.94
1967	INC	283	40.78	SWA	44	8.67
1971	INC	352	43.68	CPM	25	5.12
1977	BLD	295	41.32	INC	154	34.52
1980	INC(I)	353	42.69	JNP(S)	41	9.39
1984–85	INC	424	48.12	CPM	22	5.71
1989	INC	197	39.53	JD	143	17.79
1991–92	INC	244	36.4	BJP	120	20.07
1996	BJP	161	20.29	INC	140	28.8
1998	BJP	182	25.59	INC	141	25.82
1999	BJP	182	23.75	INC	114	28.3
2004	INC	145	26.53	BJP	138	22.16
2009	INC	206	28.55	BJP	116	18.8
2014	BJP	282	31.34	INC	44	19.52
2019	BJP	303	37.7	INC	52	19.67

Note 1. Asterisk () indicates the party leading the coalition. As can be seen, during 1989–2009 the parties shown as winners did not get the majority in the house. Note*

2. *BJP = Bharatiya Janata Party; BLD = Bharatiya Lok Dal; CPI = Communist Party of India; CPM = Communist Party of India (Marxist); INC = Indian National Congress; INC(I) = Indian National Congress (Indira); JD = Janata Dal; JNP(S) = Janata Party (Secular); SWA = Swatantra Party.*

The changing voting systems mentioned above have kept pace with time and the adoption of technology in the country. These changes have made it possible to conduct elections under adverse circumstances. The electoral system of FPTP is not known to deliver governments by a majority of votes.⁷² And, in India, it has done just that. It never delivered a government elected by the majority of voters as evident from Table 1.

The limitations of FPTP in respect to delivering a government elected by the majority of voters are further complicated due to the high level of diversity in India. A political party with a 45% vote share may win 55% of the seats in this system—a disproportionately higher number of seats compared to its vote share. However, it is simple to use and, in addition, it assigns a geographical area for the representative to serve and be accountable to the constituency. It also delivers relatively stable governments. On the negative side, it is divisive, and various ideological groups may collude to target just enough votes, not the majority of votes. The electoral campaigns tend to become violent and divide society—Papua New Guinea responded to this challenge by changing FPTP for Limited Preferential Voting (LPV) with positive results.

The FPTP has a tendency to convert electoral battles into a two-party or, at the most, three-party system. However, it has failed to limit the number of contesting parties in India, primarily due to the rise of caste-based regional parties. These parties will survive until national parties become aggressive enough to threaten their existence; this may force them to ally with one of the national level parties. There have been concerns about

⁷² International Institute for Democracy and Electoral Assistance, *supra*.

addressing the anomalies of mismatch between the vote share and the seats won, but no solution has been found yet. Nepal has recently adopted a mixed system with 60% of seats elected through FPTP and 40% through proportional representation. A mixed system needs to be considered as a solution to address these concerns in India too. There was an opportunity in India to convert the electoral system into the mixed system while granting reservation to women in the House of the People and the State Legislative Assemblies. The additional seats to be given to women could be filled through the Proportional Representation System, as has been done in Bangladesh and Pakistan.

Gender Justice

The Constitution of India prescribes non-discrimination on the grounds of gender. UN Millennium Development Goal 3, “Promote Gender Equality and Empower Women,” provides for empowering women and increasing their representation in governance as well. In a patriarchal society like India, it is easier said than done. The achievements in this direction have been, at best, gradual.⁷³

Voting Rights to Women

Women in India got voting rights and the right to contest elections without much effort. Once they got these rights, they were very slow to take advantage of them. The British extended suffrage to women over 30 years of age only in 1917, and that too on the satisfaction of conditions such as being holders of a college degree, being owners of house property, or being married to a house owner. This was extended to universal adult suffrage after

⁷³ Rai, Praveen. (2017). Women's participation in electoral politics in India: Silent feminisation. *South Asia Research*, 37(1), 58–77. DOI: 10.1177/0262728016675529

more than a decade, in 1928. A delegation of prominent Indian women met the then Viceroy and demanded suffrage rights for all women in India in 1917 itself, but the government did not concede the demand in the 1919 constitutional reforms. Instead, the provincial legislatures, which came into being through the 1919 reforms, were given the freedom to consider and grant these rights. The Madras province was the first to concede this demand for the women of the province, and Muthulakshmi Reddy became the first woman of the Madras Legislative Council in 1927.

The Motilal Nehru Committee, set up by the All Parties Conference to determine the basic principles for India's Constitution in 1928, advocated universal suffrage for all Indians, including women. The Constituent Assembly incorporated universal adult suffrage for all persons above 21 years of age. Universal suffrage was granted to all, including women, in the Indian Constitution. However, this age limit was subsequently revised to 18 years by the Constitution (61st Amendment) Act, 1988.

Gap in Registration of Women as Electors

In the initial years, the registration of women suffered a setback; it was considered below the dignity of the family to give their full name, and they were registered as the wife of or daughter of so and so. Such entries were prohibited by the Election Commission of India to encourage their names to appear on the list. Some such entries were found in the Jammu and Kashmir electoral list as late as 2002—this shows the hesitation of men to reveal the names of the women in the family. Indeed, this hesitation resulted in lower registration of women. Election Commission of India devised a novel method to detect such anomalies. The percentage of women in the polling station area, as in the census figures, was compared with their names in the actual electoral rolls, thus identifying the gaps. Special drives

were launched by the Commission to bridge the gap. Electors/population ratio, gender ratio, and age cohorts in the census figures are used to improve the health of the electoral roll.

Women Candidates

Women contestants in Indian elections have grown with time. The numbers increased from 355 in 2004 and 556 in 2009 to 668 in 2014.⁷⁴ There were 726 contestants in 2019 and 797 in 2024.⁷⁵ However, the number of contesting candidates is dismally low. Its root can be traced to the doctrine of winnability that the political parties follow. In addition, women feel handicapped due to a lack of financial resources and are nominated to contest in lesser numbers by the political parties. The reservation of women in the House of the People and the State Legislative Assemblies, when it comes into effect, will definitely increase their number as candidates and those elected. However, the women from disadvantaged groups will still lag behind unless proactive measures are taken to help them overcome the disabilities. The UN Development Fund for Women and the UN Development Programme have been supporting the participation of women in the political process in many countries. They even provide training to women candidates in political campaigning. Some such initiatives will be desirable in the Indian context too.

Gap in Women Turnout

The Election Commission of India has worked to reduce the women's turnout gap in elections. The gap has decreased from

⁷⁴ Rai, *supra*.

⁷⁵ Mundhra, Shreya. (2024, June 6). Lok Sabha election results 2024: How number of women MPs has fallen from 2019. [Firstpost](#).

8.3% in 1999 to 1.55% in 2014.⁷⁶ In the 2019 elections, the female voter turnout of 67.18% overtook the male voter turnout of 67.01%. The National Election Study data helped studies conclude a positive correlation between women's turnout and factors such as political knowledge, literacy, and media exposure.⁷⁷ The efforts of the ECI's Systematic Voter Education and Voter Participation (SVEEP) programme which started in 2009 have delivered good dividends.

Reservation for Women

Representation of women in elected bodies in India has been very low despite constitutional provisions for universal adult suffrage and for non-discrimination on grounds of sex. As we have already seen, Madras was the first to allow the right to vote and contest elections in pursuance of constitutional reforms in 1919 and gave Dr. Muthulakshmi Reddy as the first woman member of the Legislative Council. The number of women candidates contesting elections was negligible. After India became a democratic republic with the adoption of its constitution in 1950, the number of women contestants and law makers has improved, though it is way below the international norm of one-third of the House. Previously, there was a reluctance to question the democratic credentials of the country, even if women were de facto or de jure excluded from representation. The demand for affirmative action through quotas was rejected by women members of the Constituent Assembly representing the All India Women's Congress on the

⁷⁶ Kumar, Sunaina. (2024, April 20). *Building on friendships and solidarity: How the gender gap in voting was closed*. Observer Research Foundation. <https://www.orfonline.org/expert-speak/building-on-friendships-and-solidarity-how-the-gender-gap-in-voting-was-closed>

⁷⁷ Kumar, Rithika. (2024, April 5). *What lies behind India's rising female voter turnout*. Carnegie Endowment for International Peace. <https://carnegieendowment.org/research/2024/04/what-lies-behind-indias-rising-female-voter-turnout?lang=en>

grounds of equality with men.⁷⁸ However, women lagged behind men even after more than seven decades. The demand for better representation of women in politics rests primarily on the arguments of justice, the fact that women's interests cannot be safeguarded by men, or the need to include women's experiences on the political agenda. But now, gender balance in political decision-making is increasingly seen as a prerequisite for democracy itself.⁷⁹

A number of initiatives were put forth at the international level. The Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) in 1979 recommended that members take temporary special measures to improve the representation of women. The Beijing Platform for Action, UN Resolution 1325, and many other international declarations in the past decades supported affirmative action.⁸⁰ In India, women received reservation in local democratic bodies in the early 1990s through the 73rd and 74th amendments to the Constitution, which provided for not less than one-third of seats for women in Panchayats and Municipalities. And the demand for reservation in the House of the People and the State Legislative Assemblies was accepted in principle. The Constitution (81st Amendment) Bill to reserve one-third of the seats for women was introduced in the House of the People on September 12, 1996. The Bill was referred to the joint committee of the two Houses of Parliament which submitted its report in less than 4 months, but the Bill lapsed in 1997. Subsequently, two Constitution Amendment Bills were introduced on December 14, 1998, and December 23, 1999, respectively, but could not be passed.

In yet another attempt, the Constitution (108th Amendment) Bill, 2008, was introduced to reserve not less than 30% of seats for

⁷⁸ Dahlerp, Drude. (2007). *Women quotas and politics*. Routledge.

⁷⁹ Dahlerp, supra.

⁸⁰ Krook, M. L. (2004). Promoting gender-balanced decision making: The role of international fora and transnational networks. In H. R. Christensen, B. Halsaa, & A. Saarinen (Eds.), *Crossing borders: Re-mapping women's movements at the turn of the 21st century*. Odense University Press.

women in the Upper House and was passed on March 9, 2010, but the Lower House referred it to the Parliamentary Standing Committee on the Ministry of Home Affairs. The Committee could not submit its report, and the Bill lapsed. Finally, the Constitution (128th Amendment) Bill, 2023, saw the light of day. The Bill was passed by both Houses of Parliament, and a new Article 334A was added to the Constitution. The new provision shall be effective after a new census exercise is conducted following this amendment and shall provide reservation for 15 years. Women have to wait until the next delimitation after the said census.

Even after the reservation is made operational, women candidates will face problems with funding as they do not control family resources. They may have to fight the menace of patriarchy and may find it difficult to compete with richer women supported by muscle power. The battle for qualitative representation will still have to be fought in the future.

One Nation, One Election

Elections to the House of the People and the State Assemblies were conducted simultaneously in 1951–1952, 1957, 1962, and 1967. This synchronisation was disturbed because the Constitution of India provided for the dissolution of the house(s) before the completion of their full term. The premature dissolution of the houses increased over time, which has now created a situation resulting in an election to one or more state assemblies or the House of the People, or both, every year. In addition, the State Election Commissions conduct Panchayat and Municipal elections. These multiple elections lead to disruptions in the working of the state and central governments. There have been demands from many stakeholders to address this problem and to realign all these elections in a way that all elections are conducted simultaneously. The main arguments for simultaneous elections are to address disruptions in government

functioning, as valuable human resources have to be diverted to elections again and again, and to reduce election expenditure on the public exchequer and for political parties.

However, there are others opposed to the move. Their argument is that frequent elections provide an opportunity for the voters to hold governments accountable, and this makes it possible to conduct a mid-term evaluation of the government's performance. This leads to increased accountability of the government and also the deepening of democracy.

A number of committees and commissions examined this issue. The reports by the Law Commission,⁸¹ Parliamentary Standing Committee,⁸² NITI Aayog,⁸³ and finally by the High-Level Committee on "One Nation, One Election"⁸⁴ went into the issue in great detail and made their recommendations. The Election Commission of India, being one of the main stakeholders, was also consulted. These reports echo the political agenda to have simultaneous elections so that the political parties are not required to answer to the electorate every year. The

⁸¹ Law Commission of India. (1999). *170th Report on reform of electoral laws*. <https://cdnbbsr.s3waas.gov.in/s3ca0daec69b5adc880fb464895726dbdf/uploads/2022/08/2022082424.pdf>; Law Commission of India. (2018). *Draft report on simultaneous elections*. https://legalaffairs.gov.in/sites/default/files/simultaneous_elections/LCI_2018_DRAFT_REPORT.pdf; Law Commission of India. (2015). *255th Law Commission report on electoral reform*. <https://cdnbbsr.s3waas.gov.in/s3ca0daec69b5adc880fb464895726dbdf/uploads/2022/08/2022081635.pdf>

⁸² Parliamentary Standing Committee on Personnel, Public Grievances, Law and Justice. (2015). *59th Report on feasibility of holding simultaneous elections to the House of the People (Lok Sabha) and State Legislative Assemblies (Vidhan Sabhas)*. https://legalaffairs.gov.in/sites/default/files/simultaneous_elections/79th_Report.pdf

⁸³ NITI Aayog. (2017). *Analysis of simultaneous elections*. https://legalaffairs.gov.in/sites/default/files/simultaneous_elections/NITI_AYOG_REPORT_2017.pdf

⁸⁴ High-Level Committee Report on One Nation, One Election. (2024). *Reports of the committee/commissions and other bodies*. https://onoe.gov.in/report-web/volume_I/volume_I.pdf

fatigue among the political parties from long electoral campaigns is understandable. However, this fatigue can be addressed by excluding the ministers in the state and the centre, including the Chief Ministers and the Prime Minister, from campaigns. With this, the misuse of government machinery will be reduced, and the work of the government will suffer the least. In addition, the concerns about the disruption of the development work can be addressed by reforming the Model Code of Conduct (MCC) suitably. The Code needs to be improved, keeping in view the current needs of the electoral process.

Political Parties in India

A political party is an organised group of people that exercises its legal right to identify with a set of aims and objectives commensurate with the Constitution and the law of the land.⁸⁵ They nominate candidates to contest in an election and, through their elected representatives, influence the policies of the country. They channelise public opinion from citizens to the government and form a government when elected to govern. The guiding principles for political parties include civil and political rights, such as freedom to organise, freedom to stand for election, and freedom of speech and assembly. They include the requirement for the political system to function democratically through fair and peaceful competition, choice from more than one party, engaging parties in various electoral operations, a level playing field to contest elections, media access, transparent and accountable political finance, and internal party democracy.

The Election Commission of India (ECI) has conducted 18 General Elections to the House of the People peacefully, and there has always been a smooth transfer of power. A large number of political parties, as well as a large number of independent candidates, contested elections. There have been

⁸⁵ ACE Electoral Knowledge Network (2013). *The ACE encyclopedia: Parties and candidates*. ACE Project. <https://aceproject.org/ace-en/pdf/pc>

month-long electoral campaigns. Political parties have devised a code for candidates and political parties which is implemented by the ECI. All these positives are success stories for Indian democracy. However, there are numerous areas where things can be improved. Some of these are discussed in the sections that follow.

Laws to Regulate Political Parties

Political parties face numerous challenges in areas of internal democracy, transparency in mobilisation and use of resources, adherence to the Constitution and laws of the land, human rights, gender justice, and so on.⁸⁶ In India, there was no legal provision for registration or de-registration, oversight, and supervision of activities of the political parties. The Election Commission of India came up with The Election Symbols (Reservation and Allotment) Order, 1968,⁸⁷ using its plenary powers under Article 324 of the Indian Constitution. Due to the rise in the number of political parties and in the absence of any legal provisions in this regard, this had become necessary. Surprisingly, there was no mention of political parties in the Constitution until the Anti-Defection Law was passed in 1985.⁸⁸ The Representation of the People Act, 1951, was amended by Act 1 of 1989 by inserting “Part IVA: Registration of Political Parties,” for registering them with entitlement to accept donations and the obligation to declare all such donations.

⁸⁶ United Nations Development Programme. *Handbook on working with political parties*. https://www.undp.org/sites/g/files/zskgke326/files/publications/A_handbook_on_working_with_political_parties.pdf

⁸⁷ Election Commission of India. (2017). *The election symbols (reservation and allotment) order, 1968*. https://upload.indiacode.nic.in/showfile?actid=AC_CEN_3_81_00001_195143_1517807327542&type=order&filename=Election_Symbol_Order_1968.pdf

⁸⁸ Anti-Defection Law in India. https://loksabhadocs.nic.in/Refinput/New_Reference_Notes/English/15072022_111659_1021205175.pdf

Legal provisions on political parties are even now highly inadequate. Most political parties are controlled by only a few people. Political parties take advantage of democracy to attain power but desist from following internal democracy in decision-making on issues such as the nomination of candidates in an election, their internal elections, and so forth. Though these parties give a commitment to work under the Constitution and the laws of the land, there is no mechanism to ensure that they, in practice, follow these provisions. As a result, there is no dearth of political parties that appeal only to certain castes, religions, or regions. There is no mechanism to de-register or disqualify a political party for violating constitutional guarantees like fundamental rights and human rights. As a result, there are many political parties that have never contested elections but are still on the register. Several recommendations have been made to bring about a comprehensive law on political parties with no positive outcome. There is an urgent need for a comprehensive political party law.

Level Playing Field and the Party in Power

Level playing field is an essential pre-requisite for a free and fair election. The Model Code of Conduct for the Guidance of Political Parties and Candidates⁸⁹ precisely aims to achieve this. Part VII of the Code puts some restrictions on the misuse of government machinery in favour of the party in power. However, there are a number of areas of concern that need attention. Ministers, Chief Ministers, and even Prime Ministers use government facilities; they campaign like political functionaries at a great cost to the exchequer and at the cost of the work of the offices they occupy. The politicians occupying other government positions also do the same. The Election Commission has the responsibility to ensure that Code violations do not go

⁸⁹ Election Commission of India. Model Code of Conduct for Political Parties and Candidates. https://en.wikipedia.org/wiki/Model_Code_of_Conduct

unaccounted for. The decisions on Code violations are uploaded on the ECI website and are watched by political parties and other stakeholders. Therefore, the ECI decisions should not only be fair but should appear as fair. The party in power also gets disproportionate coverage in the media which puts the other parties to disadvantage. The Code needs comprehensive revision so that it can address these issues to improve the quality of elections.

Political Finance in India

Political parties need financial resources to maintain their offices and to campaign for their candidates to seek the support of the people. These resources are mobilised through donations and contributions from individuals and corporates. During the freedom movement, the Birlas were one of the leading donors to the Indian National Congress. In the 1960s, the Congress and the Swatantra Party were the main beneficiaries of donations from big business companies such as Tata and Birla, who together accounted to almost 34% of total company contributions between 1962 and 1968.

In 1969, the Indira Gandhi government imposed a complete ban on corporate funding (via the deletion of Section 293A of the Companies Act) to break the nexus between politics and businesses. Thereafter, the political parties started raising funds by publishing souvenirs, in which advertisements were placed by business houses. This also gave rise to cash donations and the entry of black money in political donations. To end these malpractices, the Rajiv Gandhi government took the crucial decision of lifting the ban in 1985. Post-liberalisation in 1991, the volume of corporate funding increased to a point which the country had never witnessed before. Neutral electoral trusts became the major source of political funding. These trusts made the donor anonymous. A major change affecting corporate donations was brought in 2013 by amending the Companies Act.

This legislation raised the earlier 5% limit to 7.5%, allowing corporates to donate up to 7.5% of the net average profits earned in the preceding 3 years. The Finance Act, 2017, removed the earlier limit by amending Section 182 of the Companies Act 2013. In addition, changes were made in the Foreign Contribution Regulation Act (FCRA), 2010, via the 2018 Finance Bill to allow foreign companies registered in India to make political donations. The electoral trusts scheme was floated as early as 1996 by the Tata Group. This method of corporate donations received legal sanctity in 2013 by bringing these entities under Section 25 of the Companies Act, 1956.

Another dimension to corporate donations was added with the introduction of the Electoral Bonds Scheme through the Finance Act, 2017. It allowed anyone, including corporates, to donate to political parties via Electoral Bonds. The Election Commission of India expressed its reservations about the Electoral Bonds, and the Reserve Bank of India did not support the proposal. The Association for Democratic Rights and some others approached the Supreme Court on the grounds that the scheme is illegal as it will promote shell companies and lead to crony capitalism. The Supreme Court of India held these bonds illegal in a recent judgment. The Association for Democratic Rights published data which showed disproportionately higher donations to the ruling parties in the states and at the centre. This will have much more serious implications for the health of democracy in India in the near future.

There is enough proof to suggest that money plays a disproportionate role in determining election outcomes in India and elsewhere. Precisely, this is the reason why many democracies have adopted public funding mechanisms to provide a level playing field to all political parties big, small, old, and new. Equity in political finance is the hallmark of a healthy

democracy. The Indrajit Gupta Committee⁹⁰ went into detail on the subject of state funding of elections in India but could not come up with an acceptable proposal. It is high time India reconsiders the proposal in the interest of democracy. While reformulating the proposal, points to be kept in mind, among other things, are the potential damage a wrong political funding policy can inflict on the quality of democracy in the country. The safest mode of political finance is the state funding of elections. The handbook published by the International IDEA⁹¹ documents various modes of financing political parties and a suitable mix applicable to Indian circumstances can be adopted.

Use of Technology

Use of technology for elections is essentially concerned with meeting three needs: firstly, an anonymous voting interface to ensure secrecy in voting; secondly, an accurate, inclusive, and comprehensive list of electors which ensures universal suffrage and that the eligibility to vote is not challenged at the time of poll; and thirdly, management of the voting process which covers activities from the declaration of the poll schedule, nomination of candidates, electoral campaigns, preparation for elections like deployment and training of staff, all logistics, supervising the voting process on the poll day, counting of votes, and declaration of results. Use of technology increases efficiency in all these processes.⁹²

⁹⁰ Indrajit Gupta Committee. (1998). *Report on state funding of elections in India*. Association for Democratic Reforms.

https://adrindia.org/sites/default/files/Indrajit_Gupta_Committee_on_State_funding_of_Elections.pdf

⁹¹ International Institute for Democracy and Electoral Assistance. (2014). *International IDEA's handbook on political finance*.

<https://www.idea.int/sites/default/files/publications/funding-of-political-parties-and-election-campaigns.pdf>

⁹² ACE Electoral Knowledge Network. *Election and technology*. ACE Project. <https://aceproject.org/main/english/et/et76.htm>

The ECI leverages technology in all these areas very effectively and covers the pre-election, during-election, and post-election periods. A separate Information Technology Division has been set up in the ECI headquarters to plan and execute electoral technology solutions for managing elections. The ECI has also created a training module on the use of electoral technology and imparts training on the subject to election professionals across the world. Some of these IT solutions used in Indian elections are detailed below.

Technologies During Pre-election Period

The pre-election activities include the preparation of electoral rolls. During this period, the election machinery is engaged in improving the health of the rolls. elector/population ratio (E/P ratio) is used to see if males, females, and various age groups are registered in proportion to their population. In addition, online registration of new voters, deletion of names of the deceased and relocated voters, and correction of electors' details, etc. are carried out using *National Voter Service Portal*. An innovative mobile application, *Voter Helpline*, allows electors to search for their names on the rolls. In addition, a universal toll-free number, 1950, is available across India through which voter information can be obtained in more than 22 Indian languages. Such information can also be obtained through SMS on a designated number.

Besides, the ECI has launched such a facility for people with disabilities through its *PWD App*. The Right to Information portal, *RTI Online Portal*, Systematic Voters' Education and Electoral Participation web portal (*SVEEP Portal*), and the *ECI main website* facilitate stakeholders to seek all information relevant to them. Movement of EVMs from the manufacturers to district warehouses and from one district to another district of the state is done using *EMS software*. Randomisation software is used to allocate EVMs to constituencies and polling stations.

Technologies During the Election Phase

Multiple IT solutions are used by the ECI during the election phase. These are briefly listed below:

1. *cVIGIL* is a mobile app which enables people to report code of conduct violations to the ECI on poll day. Users can upload photographs and videos in real time along with a brief description of the violations. The photographs and videos are geo-tagged which helps in identifying the place of violation. This is valuable evidence for disposal of the complaints in a time-bound manner.
2. On *MCC Violation Portal* the Model Code of Conduct violation cases, along with notices issued and decisions taken by the ECI, are uploaded for transparency reasons.
3. The application *Enabling Communication on Real-Time Environment (ENCORE)* is meant for candidate management, poll turnout, and counting management. It integrates all other applications to provide a seamless interface for the Returning Officers to manage candidates, the poll, and the counting of votes. The *Candidate Scrutiny App* forms a part of ENCORE. The stakeholders can view affidavits filed by the candidates on the *Affidavit Portal* and can file counter-affidavits if there is a mistake in the affidavit, which is also uploaded on the *ECI website*.
4. The political parties and candidates can now seek permission for meetings, rallies, etc. online using the *Election Permission Application* and track their application. Moreover, the *Suvidha Candidate Application* can also be used for tracking the application.
5. The *Electronically Transmitted Postal Ballot System (ETPBS)* has improved turnout of service voters considerably.
6. The *Booth App* is used by the Polling Officials, Booth Level Officer, and Sector Magistrate during the poll; the *Voter Helpline Mobile App* is used by the voters to print voter slips which in the near future will serve the purpose of identifying the voter. Another mobile application, *Voter Turnout App*, is

designed to provide polling station wise turnout data in real time in the coming days.

7. Election results are published in real time through the ECI website and on the mobile app.

Technologies for the Post-poll Period

Election expenditure incurred by the candidates is monitored by the *Election Expenditure App*. This has made the task of monitoring election expenditure much easier. The ECI prepares a statistical report after every election. The *Index Card Application* is used to collect all relevant information for the statistical report with accuracy and in a very short time. As evident from the above, the ECI has leveraged technology in almost every activity carried out in the preparation and conduct of elections. Some of these applications are for improving the efficiency of the electoral process, while others are to facilitate transparency among the stakeholders. ECI has the practice of taking the stakeholders on board, particularly before introducing a technology. The stakeholders are consulted, and all relevant suggestions are incorporated before the technology is launched.

Electoral Reforms

There have been regular elections in India, and all elections have resulted in a smooth transition of power. In addition, the mammoth size of the electoral operations adds to the complexities. After each election, the Election Commission of India conducts a post-election workshop to review the performance of various stakeholders and to identify the areas needing reform. Reform proposals are prepared and sent to the government for necessary legal, administrative and political reforms. Besides, a number of commissions and committees have submitted their reports for consideration by the

government. Civil society and advocacy groups have also submitted their recommendations from time to time. Some of these are listed in the box 1.

Box 1: Recommendations of Civil Society and Advocacy Groups for a Thriving Democracy in India

1. Dinesh Goswami Committee on Electoral Reforms (1990)
<http://lawmin.nic.in/ld/erreports/Dinesh%20Goswami%20Report%20on%20Electoral%20Reforms.pdf>
2. Vohra Committee on Criminalisation of Politics (1993)
https://adrindia.org/sites/default/files/VOHRA%20COMMITTEE%20REPORT_0.pdf
3. Indrajit Gupta Committee on State Funding of Elections (1998)
<http://lawmin.nic.in/ld/erreports/Indrajit%20Gupta%20Committee%20Report.pdf>
4. The Recommendation of the Second Administrative Reforms Commission (2007)
<http://arc.gov.in/4threport.pdf>
5. Core Committee on Electoral Reforms (2010)
lawmin.nic.in/legislative/ereforms/bgp.doc
6. Justice Verma Committee on Amendments to Criminal Law (2013)
<http://www.prsindia.org/uploads/media/Justice%20verma%20committee/js%20verma%20committee%20report.pdf>
7. Law Commission Report on Electoral Reforms (2015)
<http://lawcommissionofindia.nic.in/reports/Report255.pdf>
8. Recommendation of Election Commission of India (2016)
<https://eci.gov.in/files/file/9236-proposed-election-reforms/>
9. Initiatives from the civil society/ Advocacy groups
<http://www.adrindia.org/sites/default/files/ADR-NEW%20Recomendations-April20%202011-Final.pdf>

Some of the legal reforms accepted by the government include lowering the age for enrolment as an elector from 21 to 18; open ballot voting at elections to the Rajya Sabha to avoid cross-voting and corruption; voting through proxy for voters belonging to armed forces and para-military forces, introduced by amendment of the Act in 2003; and provisions for enrolment of overseas Indians in the electoral roll made in a recent amendment in 2011. In addition, a provision for the registration

of political parties was introduced by amending the Electoral Law, though it was far below the desired level. A detailed political party law, which prescribes internal democracy, transparency and universal outreach, besides detailed provisions for registration and de-registration, and accountability, is urgently needed. An analysis of the reform proposals sent, and those accepted, clearly reveals that only a few of them have been accepted so far, and there is an urgent need to expedite the process.

Political reform proposals on making the Election Commission of India independent by reforming the appointment process of Commissioners and Chief Election Commissioners need to be addressed urgently. The recent amendments made in this regard have not fully addressed the question of transparency in their appointment. In addition, the proposal for parity in the process for removal from office in respect of Commissioners and Chief Election Commissioners has been pending for more than two decades.

Reforms through the court orders. Surprisingly, a number of reforms in the electoral management process have come through the courts. Given below are some of these reforms:

1. In *N.P. Ponnuswamy v. Returning Officer, Nammakkal* (1952) and *Mohinder Singh Gill v. Chief Election Commissioner and Others* (1978), a blanket ban was prescribed on the jurisdiction of the courts before the electoral process is completed. This ensures that the electoral process is not halted once started.
2. In 1986, the Supreme Court upheld the constitutional validity of the Symbols Order, 1968, and in compliance, Sub-sections 29A, 29B, and 29C were added to the Representation of the People Act, 1951.
3. The Commission became a three-member body in 1993, and all the Commissioners were treated equally. The decision-making in the Commission thereafter has been guided by this ruling. However, the constitutional amendment for the removal of Election Commissioners on par with that of the

Chief Election Commissioner (CEC) through impeachment is yet to be enacted.

4. At the insistence of the Supreme Court, a consultative mechanism was set up in 1993 for placing Central police forces under the supervision of the Commission during elections. This mechanism helps rationalise the deployment of the forces as per needs assessed by the Commission.
5. In *Common Cause v. Union of India and Others* (1995), the apex court directed that the political parties must file their income tax returns, and that the Election Commission could ask, under Article 324, the parties to submit their statements of election expenses to it for scrutiny.
6. In 2003, the Supreme Court prescribed that the contesting candidates must file an affidavit on their background so that the voters can make an informed choice at the time of voting.
7. Persons in custody were debarred from contesting elections (*Jan Chaukidar v. Union of India*). The Patna High Court judgment, upheld by the Supreme Court in 2013, was nullified by an amendment in the Representation of People Act, 1951.
8. MPs and MLAs were disqualified from the date of conviction (*Lily Thomas v. Union of India*).
9. Voters gained the right for negative vote (NOTA case).
10. VVPAT was introduced (*Subramanian Swamy v. Election Commission of India*).
11. Ruling on manifestos (*S. Subramaniam Balaji v. Election Commission of India*), as a result, the ECI added Part VIII to the Model Code of Conduct.
12. Media Certification and Monitoring Committees to vet campaign materials during elections were introduced in compliance with a Supreme Court judgment.
13. Laws on political funding are highly inadequate. The law on electoral bonds has been found illegal by the Supreme Court of India only recently.

Reforms carried out by the Election Commission of India. Many improvements in the electoral management process have been brought about by a finer reading of the constitutional and legal provisions in place, and by their innovative interpretation to improve the process. Effective use of videography to make the process transparent, printing photographs in the electoral rolls, vulnerability mapping to create a level playing field, and the introduction of EPIC (Elector's Photo Identity Card) are some of the initiatives taken by the ECI.

There are a number of reform proposals that need immediate attention to improve the process further. Provisions to check the criminalisation of politics and to curb the influence of money power in manipulating elections and even buying elected representatives using the defection provisions need to be changed for effective improvement on the ground.

Conclusion

India has made remarkable progress in setting up democratic governance infrastructure and improving upon it with time. India's progress towards political democracy has been remarkable, as described above. The Election Commission of India has excelled in managing elections. The elections it conducts have been called a gold standard, though further improvements and reforms are still under consideration, even in the absence of the needed reforms. Managing electorates of India's size is in itself a miracle. Its institutions are moving apace and making progress. Empowering social and economic democracies is a significant challenge. In developing societies, the material deprivations—both in absolute terms and in relation to affluent societies—are very large and the people have to choose between freedom and necessities. It is often not easy for them to opt for democracy, and when such a choice is made, it is difficult to sustain. India has proved to be an exception to this general rule.

As evident from the above discussion, India adopted democratic governance in 1950 and has continued to be governed democratically. It has had regular elections that led to the smooth transfer of power in the past 75 years. Side by side, it has worked towards addressing the question of providing for the necessities of society. The Constitution of India mandated social and economic democracy through fundamental rights, and several legislations facilitated a clearer direction to this end. The political parties express their commitment to eradicating social injustices and ensuring economic justice through their manifestos. India has marched forward by launching various social welfare schemes and by proactively pursuing social and economic justice as mentioned above. It is still a work in progress.

Chapter 6. Vishwa Guru and Vishwa Mitra: Relations with the World

Amb. Anil Trigunayat

Vishwa Guru or the “Teacher of the World” also includes the idea of the Knowledge Giver of the world. This is what distinguished India, which had excelled in science, mathematics, astronomy, surgery, ayurveda, and *sanskriti* (culture) with profound philosophical schools of thought. She achieved the unique distinction of being a fountain of knowledge, the knowledge which was carried by the Arabs, Chinese, and other travellers to the West and the East. India’s gift of “zero” and other numerals is easily the basis of modern-day software programming and scientific developments. Hence, the aspiration of Indians to once again achieve and retrieve that status, especially during this Amrit Kaal (when independent India becomes 100 years old), is unquestionably legitimate and justified. However, this journey is passing through yet another major landmark of being a *Vishwa Mitra* (A Friend of the World) or *Vishwa Bandhu* (Brother of the World), both concepts which are obviously more acceptable, since a friend in need is a friend indeed. This is apparent, given India’s rise as a benign power always working for global welfare and solidarity, be it through the *Vaccine Maitri* (Vaccine Friendship) during the COVID-19 pandemic, or being a First Responder during emergencies and natural and man-made disasters, or for that matter becoming the “Voice of the Global South” so strikingly evident during her Presidency of the G20 (2022–2023). While India is developing her comprehensive power as the largest democracy in the world with aspirations to be the second or third largest economy by 2047 as *Viksit Bharat*

(Developed India), she is already an integral and indispensable part of the high table in this currently fractious global order. India is fast emerging as a “Rule Maker” or “Rule Shaper” rather than a “Rule Taker.”

At the beginning of his third term, Prime Minister Narendra Modi, while addressing National Democratic Alliance (NDA) members after the general elections of 2024, rightly reiterated that what India had done in the last 10 years has enabled her to be trusted by the world as a *Vishwa Bandhu*. He added that NDA for him means New India, Developed India, and an Aspirational India.⁹³ Bharat, or India, is perhaps the only living civilisation which has finely blended tradition with modernity in her domestic and international discourse. Despite onslaughts by nearly all kinds of aggressors through the millennia, she maintained her value systems for societal cohesion. Unity in diversity became the dictum. These also became her inherent strength, with ingrained qualities which became her currency for conversation with the world. Mahatma Gandhi followed the principles of Truth and Non-violence, and by combining these with Bharat’s civilisational heritage, he was able to defeat the mighty colonial power of Great Britain. India may have been ruled by foreigners of all hues and colours, but until the advent of British colonialism, most of them had become absorbed in Indian culture and its civilisational ethos and expanse, while also contributing to her growth.

Overtime, her cultural heft and civilisational heritage turned into a credible instrument for soft power projection and cultural diplomacy. The declaration of June 21 as the “International Day of Yoga” by the United Nations, with the largest number of sponsoring countries across continents, is a testament to India’s cultural depth and expanse. The concepts and epithets of *Vishwa Guru* and *Vishwa Mitra* are organic derivatives of cultural diplomacy, enhancing her leadership role in a non-intrusive yet long-lasting manner through assimilation and osmosis.

⁹³ PM Modi says NDA means “New India, Developed India, Aspirational India.” India TV (indiatvnews.com), June 7, 2024.

Therefore, cultural diplomacy has become an integral part of foreign and public diplomacy. India has recognised the importance of cultural diplomacy as a part of its soft power strategy in promoting its national interest and establishing herself as a dominant regional and global power.⁹⁴

A Dive into the Past and Swimming into the Future

Not many people are aware that India gave birth to at least four religions and several sects. Hinduism, Buddhism, Jainism, and Sikhism all taught universal brotherhood. Again, few people would attribute to the fact that Christianity came to India before it went to many parts of the world and thrives here. Likewise, Islam came to India way before it was adopted by many now Islamic countries, and consequently, India has emerged as the third-largest Muslim nation in the world. Persecuted Persians and Jews sought shelter in India and became Indianised. All these are important indicators which inform the inclusivity aspect of the Indian approach to humanity, which is assiduously practiced by the current political dispensation under Prime Minister Narendra Modi and his global interactions under the rubric of “Vasudhaiva Kutumbakam”—the world is one family. This was most recently underscored in India’s Presidency of G20 (2022–2023), whose underlying theme was “One World, One Future, One Family,” which was witnessed by the world in precept as well as in practice.

Post-Independence, India, once colonised, made a conscious choice to stay non-aligned and away from the bloc politics amidst the rabid Cold War era, when one bloc was led by the United States and the other by the Soviet Union. She crafted her own path and committed trajectory for the cause of decolonisation, an unfettered stand against racism and for the development of the

⁹⁴ Pratap, Bhanu. (2015, September). India’s cultural diplomacy: Present dynamics, challenges and future prospects. *IJHAMS*, 1(9).

newly liberated, under-developed, and over-exploited countries as she embarked on the path to progress herself. “Share and Care” became the mantra for developmental assistance which was marked by India’s capacity-building programmes under the ITEC (Indian Technical and Economic Cooperation) initiative, where more than 160 developing countries from across the continents receive training and assistance through over 200 institutions and specialised courses, training more than 200,000 officials from 160+ countries in both the civilian and defence sectors.⁹⁵ Not a capital-exporting country herself, India also began to offer Lines of Credit on concessional terms, as well as Grants in Aid, to the tune of billions of dollars, thereby creating an exceptional sympathetic constituency in the host countries which appreciated and continue to benefit from these gestures and initiatives a great deal in their developmental aspirations in accordance with their own priorities. This contrasts with several other countries like China, or even the erstwhile colonial powers, who either indulged in neo-colonial practices or debt trap and wolf warrior diplomacy. In this regard, one may simply look at India’s Africa policy crafted and announced by Prime Minister Narendra Modi while addressing the Ugandan Parliament in 2018, where he highlighted the fundamental tenet of “Africa for Africans” through the “Ten Guiding Principles.”⁹⁶

Therefore, the history of India as a major civilisation, a pre-eminent economy, and a disseminator of ideas, values, knowledge, and religions provides credence to why India matters, or should matter, as it no longer wishes to stay as a rule taker but wants to be part of the rule-making process for the global good and universal welfare while pursuing an “India First” approach.

⁹⁵ Indian Technical and Economic Cooperation (ITEC).

<https://www.itecgoi.in/index>

⁹⁶ Padmanabhan, K. (2024, May 16). India’s ramping up Africa engagement, guided by Modi’s “10 principles.” How ties have evolved. *The Print*.

<https://theprint.in/diplomacy/indias-ramping-up-africa-engagement-guided-by-modis-10-principles-how-ties-have-evolved/2085891/>

A First Responder

India has also emerged as the first responder in natural or man-made disasters and challenges not only for our region but anywhere in the world. The earthquake and devastation in Nepal and Turkey are examples where India was the first to reach with help and humanitarian assistance. Moreover, these also cover anti-piracy campaigns by the Indian Navy in the Indian Ocean, Arabian Sea, or the Red Sea to protect the maritime domain for international shipping. Very recently, when the Houthis of Yemen started attacking commercial vessels, New Delhi marshalled her highly professional naval assets to protect global shipping and maritime routes and secured the release of a large number of sailors and others. Currently, 21 naval ships are providing succour, security, and sustenance to safe shipping in the Red Sea and Indian Ocean.⁹⁷ Evacuating Indians and other nationalities safely from conflict zones, even during the pandemic, is a feat few could achieve, the most recent being “Operation Ajay” when Indians were brought back from the conflict zone of Gaza and Israel.⁹⁸

Dr. S. Jaishankar, in the Rajya Sabha, while giving a report card on foreign policy in 2022, underscored the intent, achievements, and direction of our foreign policy:

⁹⁷ Ahmed, S. N. (2024, February 19). *The Indian Navy and maritime security in the Red Sea*. Manohar Parrikar Institute for Defence Studies and Analyses. <https://www.idsa.in>

⁹⁸ Express Web Desk. (2023, October 12). Operation Ajay to repatriate Indians from Israel, Palestine: All you need to know. *The Indian Express*. <https://indianexpress.com/article/what-is/what-is-operation-ajay-india-israel-palestine-8979395/>

Chairman Sir, foreign policy today is no longer just an exercise of a Ministry or even simply that of the Government. It has a direct impact on the daily lives of all Indians. This may be in ensuring that our products have market access or that our talent gets into the global work place. But it is equally an effort to ensure that technology, best practices and capital flow into India. Our endeavour in a difficult global situation is that the welfare of the Indian people is ensured, however challenging the circumstances. This may be in exceptional situations like Operation Ganga in Ukraine or the ability to access key necessities like energy and fertilizers on affordable terms. Or indeed in concluding Migration and Mobility Partnerships as we have just done with Germany. Indian foreign policy is there to serve the Indian people; we will do whatever it takes to discharge that responsibility. It could be in ensuring international support for our policies or in the acceptance globally of our interests and objectives. These may be difficult times but it is also an occasion to display our leadership and make a strong contribution to global peace, stability, growth and security.⁹⁹

Diaspora Diplomacy

Diaspora can be a great asset and an exceptional tool of diplomacy. India has one of the largest diasporas which is also possibly the most successful one. More than 35 million people, comprising Non-Resident Indians (NRI) and Persons of Indian Origin (PIO), have become the living bridge with India and have begun to connect even more strongly given the current dispensation's tremendous outreach and policies. In 2023, they

⁹⁹ Ministry of External Affairs. (2022, December 7). Statement by External Affairs Minister, Dr. S. Jaishankar in the Rajya Sabha on latest developments in India's foreign policy. MEA. <https://www.mea.gov.in/Speeches-Statements.htm?dtl/35952>

remitted over US\$125 billion to India.¹⁰⁰ The late Sushma Swaraj, External Affairs Minister had become the people's minister and had converted Indian embassies abroad to "a Home away from Home." PM Modi's personal outreach from New York to Texas to UAE to Europe and Africa has been exemplary in connecting the diaspora with India and making them partners in India's "Viksit Bharat" journey. Leveraging their talent pool, enterprise, and cultural connect for mutually beneficial interactions has become a reality as they also are looking at India with greater pride and interest. They can play an even bigger role in times to come by being ambassadors of a rising India. The 18th Pravasi Bhartiya Diwas (PBD) has been organised from January 8 to 10, 2025, at Bhubaneswar where the contributions of the diaspora were celebrated. PBD provides an important platform to connect and engage with the Indian diaspora and enable them to interact with each other. PM Modi acknowledged the role of the diaspora played in the freedom struggle in the run up to independence in 1947 and sought their partnership and contributions for making India a Viksit Bharat by 2047. He reiterated and underscored the role of Indian values in global respect for the diaspora:

*In the last ten years, I met several leaders of the country. Every leader of the world lauds the Indian diaspora. One of the main reasons for this is the social values that you embed in the societies of the world. We are not just the "mother of democracy," but democracy is a part of our life, our way of living. We do not have to teach diversity, but our life goes along with diversity.*¹⁰¹

¹⁰⁰ Rahim, Fazal. (2023, December 19). With \$125 billion in 2023, India tops the world remittance chart. *Forbes India*.
<https://www.forbesindia.com/article/news/with-125-billion-in-2023-india-tops-the-world-remittance-chart/90419>

¹⁰¹ <https://www.thehansindia.com/news/national/democracy-ingrained-in-our-lives-pm-modi-at-pbd-convention-936058>

A Strong Leadership Is a Prerequisite

Today, diplomacy is mostly conducted at the highest level of leadership. Personal chemistry often plays a critical role which was so clearly evident even during the recently held G7 Summit in Puglia, Italy, where PM Modi was a special guest. He himself represented India for the sixth time at the G7.¹⁰² It is an established fact that a strong, motivated, and nationally loved leader with a sound vision and clarity of mind can lead the country to newer heights both domestically and in the international domain. India has been blessed with good leaders and statesmen with a nation-centric vision, a global outlook, exemplary following, and resolve. But if one were to objectively assess Prime Minister Narendra Modi's 10 years at the helm of affairs, he has proved to be unlike any other leader in the world today. No wonder, US President Joe Biden in Tokyo called him the most popular person and said he would like to have his autograph. It was already displayed during former President Trump's era when PM Modi took him around the stadium in Texas in front of the largest possible jubilant crowd to the chant of "Modi-Modi." This is not lost upon leaders of powerful countries and conveys a very strong message about a people, their leader, their country, and a unique civilisation, that is, BHARAT. It is no coincidence that the Australian Prime Minister, witnessing the same in Sydney, referred to PM Modi as "The Boss."¹⁰³

In 2014, in the Middle East, there were some apprehensions and reservations about PM Modi due to his connection and

¹⁰² Ministry of External Affairs. (2024, June 13). Prime Minister's departure statement ahead of his visit to Italy for G7 Apulia Summit. Press releases, MEA. <https://www.mea.gov.in/press-releases.htm?dtl/37867/Prime+Ministers+departure+statement+ahead+of+his+visit+to+Italy+for+G7+Apulia+Summit>

¹⁰³ India News. (2023, May 24). Why Australia PM called Narendra Modi the "boss." *The Times of India*. <https://timesofindia.indiatimes.com/india/why-aussie-pm-called-modi-the-boss/articleshow/100463505.cms>

friendship with Israeli leader Benjamin Netanyahu. On Modi's assumption of power, they feared India would be abdicating its ties with the Arab world and the cause of Palestine. But they were proved wrong, and their apprehensions were dispelled in no time as he undertook his first visit to the UAE in the region. The rest is history as the relationship has transcended to a strategic partnership with several regional powers from a transactional matrix. In fact, after the late PM Mrs. Indira Gandhi's tenure, we have had no high-level visits to such important neighbours. This has been bridged effectively across countries and continents from Africa to Asia to the Americas. More importantly, many of these countries conferred their highest titles and honours upon PM Modi, which is unprecedented. The Act West policy has turned out to be a great success. This trust and direction from transactional to a truly strategic partnership is indeed unusual and certainly provides a mutually beneficial relationship. This is good for the country's prestige and development since we depend a great deal on West Asia, especially on the GCC (Gulf Cooperation Council) countries for our energy security, economic engagement, diaspora welfare, and remittances. Moreover, the Pakistan factor, which has long decided our low-key relations with the West Asian countries, is now no longer relevant.

PM Modi's popularity in India and abroad is too well known to be reiterated, as he led the country with the strongest majority for the ruling party. Even in the international discourse, it makes a lot of difference as the most popular and powerful leader is now taken more seriously the world over, especially when he represents the largest democracy with one-sixth of the world's population. He can convey and convince the world leaders rather easily of the Indian approaches and stands on matters of global importance. When Modi said at Samarkand that "the era of war is over," Russian President Putin and the rest of the world took note of it. India's quest for dialogue and diplomacy for peace and progress was clearly evident during the G7 Summit in Italy.

Living with Nature to Fight Climate Change

Renewable energy is India's necessity for green growth in times to come. PM Modi thought of a global initiative, the "International Solar Alliance," and today hundreds of countries across continents are part of this enterprise. At home, he embarked on a target of renewable energy of 450 GW which has been further enhanced as the efforts for energy transition move along with several other initiatives. He also advocated for "One Earth One Grid." There is no Plan or Planet B, at least not for now. India's plans for a World Solar Bank that will mobilise US\$1 trillion of investments in solar projects over the coming decade have been widely appreciated. Likewise, at the Climate Action Summit in 2019, New Delhi and Sweden launched the Leadership Group for Industry Transition. India is on the verge of surprising the world by completing, and even advancing, climate goals due to sheer sincerity and commitment and to set an example. India demonstrates this by example while standing up for the developing world, for whom concessional green finance, green technologies, and "spatial and differential treatment" can make a significant difference.¹⁰⁴ Another major initiative which was announced on the sidelines of the G20 summit was the "Global Biofuels Alliance." After NAM (Non-Aligned Movement), this was perhaps the first time that India embarked on such global multilateral initiatives, which confirms India's universalistic approach to confronting global challenges.

India's National Hydrogen Mission and expanding international partnerships from Africa to the Middle East to Europe to Scandinavia tell their own story. Over the years, India has emerged as a part of the solution and not the problem as it

¹⁰⁴ Trigunayat, Anil (2023, August 11). India leads by example: Growing challenge of climate change. Firstpost.
<https://www.firstpost.com/opinion/india-leads-by-example-growing-challenge-of-climate-change-12984872.html>

diversifies its energy resources through green practices and technology across sectors. Since the transport sector is one of the major polluters, New Delhi aims to replace at least 30% of its vehicles with electric vehicles by 2030. Likewise, the country has expanded its targets of blending ethanol with standard fuel after completing the 10% blending target well ahead of time. Similarly, after achieving its voluntary target of reducing the carbon emissions intensity of GDP by 21% in 2020 compared to 2005, India has undertaken to reduce the emissions intensity of GDP—the volume of carbon emissions emitted for every unit of GDP—by around 35% by 2030 over the 2005 levels. India has also nearly achieved its target of reducing fossil fuel usage for power generation by 40% through the use of non-fossil fuels, almost 7 years ahead of schedule. Even at the household level, the Ujjwala scheme and clean cooking have led the way in reducing carbon intensity. It is also expanding its carbon sink capacity and incentivised carbon trading to expedite its goals. According to Dr. Jitender Singh, Minister of Earth Sciences, India's strategic approach is to establish a bio-based economy, projected to reach US\$150 billion by 2025, by bolstering the bio-manufacturing of low-carbon bio-based products. All this needs to be contextualised in the fact that for an energy-poor country like India, whose per capita energy use is one-third of the global average (680 kilogram of oil equivalent [kgoe] against 1,800 kgoe), it could be unrealistic to expect a virtual flattening of emissions during the initial years of the longer-term trajectory. But the sincerity of the mission is evident by efforts being made by India. India's goal of carbon neutrality by 2070 might be advanced given this pace of progress. According to the 2023 Climate Change Performance Index (CCPI), India is the only G20 country on track to achieve its climate targets.¹⁰⁵ At the same time, in this fight against climate change, India remains committed to the

¹⁰⁵ Press Information Bureau. (2022, November 22). India jumps 2 spots higher, and now ranks 8th as per Climate Change Performance Index (CCPI, 2023). PIB, Ministry of Power, Government of India.
<https://www.pib.gov.in/PressReleasePage.aspx?PRID=1878023>

interests, security, and development of the Global South at every forum.

G20 Was a Game Changer

India's G20 presidency in 2023 is a case in point which began with India defining the most apt theme of "One World, One Family, and One Future," and where it was able to bridge the super power differences while making the G20 the People's G20, hosting over 200 events across India. The purpose was to involve every Indian in this *maha yagna* for the nation and its well-being. This major congregation also strategically enabled India to showcase her Craft, Cuisine, and Culture to the world community. The issuance of the Delhi Declaration was an eventual achievement where consensus prevailed for the larger good. Inclusivity was demonstrated by India holding three Voice of Global South Summits, where the views of the developing world were not only ascertained but mainstreamed. More importantly, it was able to create a consensus to include the African Union—representing 55 countries—as a permanent member which would provide them a voice and capacity to flag their issues directly from within. What can be more telling about India's commitment to inclusivity!

Neighbourhood First

Neighbours are a gift of geography but sometimes can also be the pains of history. The Sino-Pak nexus has become a major challenge despite India's best intentions and efforts to normalise ties with them in keeping with a good neighbourly spirit. India wants good neighbourly relations with all its neighbours including in the extended vicinity of East Asia and West Asia, let alone South Asia, based on mutual respect, mutual interests, and mutual benefit. With her immediate neighbours, she follows a non-reciprocal policy of "Neighbourhood First" which is again in the spirit of "Sabka Saath, Sabka Vikas, and Sabka Samman." To

counter the Chinese “String of Pearls Strategy,” India devised a more comprehensive and inclusive policy of “SAGAR”—Security and Growth for All in the Region. But she also follows a “zero tolerance” policy and advocates a global solidarity and response to fight the universal challenge.

PM Modi tried hard to improve relations even with Islamabad, but when they would not give up cross-border terrorism, there was no way but to respond decisively. We have witnessed the Uri and Balakot surgical strikes against terror outfits across the border. Likewise, when India witnessed that Pakistan would not desist from terrorism and held SAARC hostage, New Delhi devised alternative strategies. India is on the move, and no institution or country can stunt her pace. Hence, new institutionalised sub-regional mechanisms were created, revived, and recharged, like the BBIN (Bangladesh, Bhutan, India, and Nepal) and BIMSTEC (Bay of Bengal Multi-Sectoral Technical and Economic Cooperation) which blended its Neighbourhood First and Act East policies, while also focusing on the development of India’s Northeast which had hitherto been ignored. Such initiatives require a clear vision, a roadmap, and political resolve, which have been assiduously and smartly worked out and are being implemented.

A Principled Foreign Policy

India follows a value-based, principled foreign policy in her international discourse which was evident during the ongoing Russia–Ukraine and Israel–Hamas wars. Hence, the position that India took on the Russia-Ukraine conflict was a principled position for the sake of sanity and peace. She propagated dialogue and diplomacy and immediate cessation of hostilities while supplying provisions and medicines for the hapless Eurasian and Ukrainian refugees when others were pumping in arms and ammunition to fan the war. Many of the Western friends took time to understand India’s position, but they realised

that the largest democracy, biggest dynamic market, largest youth dividend—which PM Modi calls a “talent factory”—fastest growing major economy despite the pandemic and war, and a nuclear and space power of consequence, cannot be bullied. Her strategic autonomy is not merely a choice but a well-thought-out and crafted policy to serve her own national interests and larger humanity. This was clearly evident when India, calling out the hypocrisy of the West, increased her crude oil purchases from Russia. This was a bold move by a bold leadership to keep the price of oil and its impact at acceptable levels for the ordinary citizens as well as the industry and economy and overall cost of living. This step also added to the heft that the country enjoyed especially among the countries of the Global South, whose interests are often commensurate with that of India’s own. Strategic autonomy and multi-alignment have become the drivers of an independent foreign policy of India in this fractious global order.

Voice of the Global South

The decade 2014-2024 saw India increasingly becoming an assertive voice for countries of the Global South. India navigated her own rise in the global order while speaking for the aspirations of developing countries. In 2015, the Paris Agreement adopted a bottom-up approach where contributions from developing countries were “nationally determined” and not imposed by the Global North.¹⁰⁶ Even under India’s presidency of the G20, PM Modi was mindful of the difficulties that the developing world was facing due to the adverse impact of the COVID-19 pandemic and the Eurasian war. He, therefore, called for the “Voice of the Global South” Summit to confer with them about their own problems and issues so that these could be

¹⁰⁶ Pant, Harsh V. (2024). *A decade of Modi’s foreign policy: India shows the way*. Observer Research Foundation.
<https://www.orfonline.org/public/uploads/upload/20240530175050.pdf>

mainstreamed with other G19 members in order to take cognisance of the severity and proposed solutions, be it for accelerating SDGs, containing climate change through Mission LiFE (Lifestyle for Environment), or depoliticisation of food, fuel, fertiliser, and medicines as has been evidenced during the Russia-Ukraine conflict. “Ek Ped Maa Ke Naam” (One Tree in the Name of Mother, an initiative launched on June 5, 2024) on the World Environment Day carried the focus on saving the planet in our own civilisational way. On the domestic front, Modi’s mantra of “Reform, Perform, and Transform,” and “Local for Global,” became the bedrock drivers for the Make in India, Stand up India, Digital India, Innovate India, Swachh Bharat schemes which are engineering the Atmanirbhar Bharat enterprise. This is a Mission Possible during the Amrit Kaal, where an approach for the whole country and the whole of society is needed to make India into a developed nation and US\$30 trillion economy by 2047. Some, like JP Morgan, even estimated that India could reach to US\$50 trillion, almost equal to that of China in terms of GDP by 2050. To drive that, strong inspirational and visionary leadership is a prerequisite with Governance 5.0 in the AI-driven IR 4.0 (Industrial Revolution). Besides, India’s soft power projection and its consistency and staying power are extremely important, which are being assiduously cultivated to interact with the world as a benign and caring power which surely will hold Bharat in high stead in the otherwise global dog-eat-dog spectrum. India’s biggest asset is its exceptional civilisational heritage and cultural diversity. Let us look at how some of these play out in our interactions with the world.

Vasudhaiva Kutumbakam

Vasudhaiva Kutumbakam has always been in the DNA of Indians. The underlying philosophical thought has remained universal. “Aham Brahmasmi” is the dictum for human discourse with divine dispensation. When India talks of the “World as One

Family,” she means it, which is evident in her actions, approaches, and deliberations. This was truly witnessed during the pandemic when COVID-19 struck the citizens of the world, from the poorest to the richest and from the weakest to the strongest countries, exposing their vulnerabilities in no uncertain terms. India, with her 1.4 billion people representing one-sixth of humanity, not only catered for them but also took it upon herself to reach out to the world, especially developing countries. She provided medicines and other humanitarian assistance early on to over 150 countries which was appreciated by one and all. And when she developed her own vaccine and started manufacturing for others, India became the “Vaccine Hub” of the world and embarked on an ambitious “Vaccine Maitri” programme providing hundreds of millions of doses to more than 100 countries bilaterally and under various schemes. This was contrasted with the hoarding spree by many Western countries who wanted to keep millions of doses of the vaccine they were not even going to use for their people. This was to be used as a geopolitical tool by those mighty powers. But the Indian approach called out their bluff and even forced them to yield. Not only that, it offered its “CoWIN” app as a digital public good to whoever wanted it, while training a large set of health workers in the developing world through a number of online training programmes. At the international level, India worked hard to waive the IPR (Intellectual Property Rights) on the vaccines to make them available to all freely. India’s approach stunted the “Vaccine Apartheid” practiced by some Western countries. Former Brazilian President Jair Bolsonaro termed the Indian vaccine supply as the lifesaving legendary “Sanjeevani” drug of the epic Ramayana days. The fact that India, despite her own challenges, rose to the occasion when the Western world was indulging in the “vaccine apartheid,” as claimed by South African

President Cyril Ramaphosa at the Franco-African summit,¹⁰⁷ says it all.

It has also been a fact of history for millennia that when India interacts with others in the international discourse or for a cause célèbre, she does so from the strategic position of peaceful coexistence and non-violence, which remain integral and have been the essence of teachings of the Lord Buddha and Mahatma Gandhi. Even though she claims to be the inventor of algebra and trigonometry or, for that matter, Kautilya's diplomacy and "zero" itself, she does not believe in the "zero-sum" game in international discourse. Instead, she wishes to work with everyone, believing in the global goods and commons that have most recently been witnessed in her Vaccine Diplomacy driven by the guiding principle of "Vasudhaiva Kutumbakam." It is in this spirit that Indian ethos, value systems, and knowledge travelled to vast tracts of Asia and the world and remain vibrant in a transformed yet closely intertwined form, merging with the local belief systems. Having suffered the trauma of the quest for riches perpetrated by all kinds of invaders and colonial powers, India (Bharat Varsha) has learned the art of maintaining unity in diversity. She was thereby enriched further through osmosis and assimilation of ideas, ideals, and cultural nuances that have been reflected through myriads of achievements and expressions. All these cumulatively have impacted India's world view.

Reclaiming Vishwa Guru by Being Vishwa Bandhu

It is important to identify some of the ancient Indian value systems and ethical approaches that are still relevant in today's fractured international discourse and the transitional world

¹⁰⁷ Winning, Alexander. (2021, May 10). South Africa warns of "vaccine apartheid" if rich countries hog shots. Reuters.

<https://www.reuters.com/world/africa/south-africa-warns-vaccine-apartheid-if-rich-countries-hog-shots-2021-05-10/>

order. However, for these to continue to remain relevant and have legitimacy, modern-day India, which aims to become a “Vishwa Guru” once again, must remain a beacon of high moral standards and inclusivity in her domestic discourse. If not, she will be harshly judged by the eternal value systems and standards she has created for herself and propagates to the world. Meanwhile, being a Vishwa Mitra (Friend of the World) is the preferred course of diplomacy and global interactions. India has been professing a sane foreign policy with dialogue, diplomacy, and respect for sovereignty and territorial integrity as enshrined in the UN Charter, with multilateralism as the most viable matrix of cooperation, peace, and security.

India has been a firm believer in global welfare through unfettered access to global commons and global goods. Unfortunately, certain powers have preferred to constrain this access through myopic policies and power play. One could have understood it during the era of colonialism when colonisers dictated the rules of the one-sided game, but it appears that neo-colonialism is as much to be blamed for it in the modern era during the past seven decades in the post-Second World War era. Apartheid of various kinds is still very much in play. The most recent examples have been the vaccine apartheid and green apartheid, where the developing world faced utter discrimination and therefore was denied access to the means to fight the pandemic and the problems of climate change which still remain a major challenge.

BHARAT, can be viewed during the Amrit Kaal, as follows:

1. **B:** Biggest country by population means a large human resource, purchasing power and market; Benign yet assertive power; Bridge between East and West and North and South; Be atmanirbhar.
2. **H:** Home of morality and spirituality.
3. **A:** Action- and result-oriented foreign policy which is robust and resilient,
4. **R:** Reform, Perform, and Transform is the mantra across the spectrum. Rule maker and no longer a rule taker or a shaper.

5. **A:** Assumes responsibility and leadership abandoning the hesitations of history.
6. **T:** Tackles engagement and entanglement adroitly.

India has conclusively shown that democracy delivers and has delivered effectively for Indians and the world.

Even in the area of critical technologies, including Artificial Intelligence (AI), India believes in its humanitarian dimension while containing their harmful and insidious impact. Speaking at the G7 Summit in Italy in June 2024, PM Modi reiterated, “India will collaborate with all countries to make AI transparent, fair, secure, accessible, and responsible.” As a founding member and lead chair of the Global Partnership for AI, India is promoting global cooperation in AI. He highlighted India’s human-centric approach, noting it was one of the first countries to create a national AI strategy, leading to the launch of the “AI Mission” with the mantra “AI for All.”¹⁰⁸

Critical Parameters of Indian Foreign Policy

In times to come, India’s foreign policy will remain world-centric and based on principles of equity, justice, and sanity in international discourse as India grows strongly on a robust economic path. This policy is followed through the 3M principles of Mutual Respect, Mutual Interests, and Mutual Sensitivities and Friendliness with all. The key drivers are 5Vs: Vasudhaiva Kutumbakam (World Is One Family); Vaccine Maitri (Vaccine Friendship); being the Voice of the Global south; Value-based foreign policy with strategic autonomy as a prime mover; and finally, to become a Vishwa Mitra or Vishwa Bandhu which will

¹⁰⁸ HT News Desk. (2024, June 15). G7 Summit: What top world economies, PM Narendra Modi discussed? Key takeaways.

<https://www.hindustantimes.com/world-news/g7-summit-key-takeaways-top-world-economies-narendra-modi-discussion-101718411569879.html>

eventually lead to Bharat being recognised as Vishwa Guru. No doubt there will be many challenges, including from countries like China, which will attempt to undermine India's claims through the Grey Zone Warfare strategy, for which a robust and proactive communication strategy needs to be devised.

India has been a founder member of most international organisations be it UN organisations, WTO, or for that matter WHO, and has always believed in them and worked towards strengthening these multilateral institutions. However, she has been advocating the idea of reforms to reflect the 21st-century reality of the global landscape. The biggest anomaly is the absence of India from the UN Security Council's "Horseshoe Table." Given her exceptional credentials as the largest functioning democracy, the fifth-largest and fastest-growing economy, the most populous country in the world, and the largest contributor to the peacekeeping operations, along with her overall track record as a first responder, she rightly deserves and expects to be a permanent member of the UN Security Council. For reformed multilateralism, India propagates some fundamental tenets that include *Samman* (Respect), *Samvad* (Dialogue), *Sahyog* (cooperation), *Shanti* (Peace), and *Samridhi* (Prosperity) for all. Isn't that the most plausible way out of the morass of defeatism and destruction? India believes in engagement and not entanglement. The world order appears to be heading towards a Cold War 2.0 kind of scenario, especially in the geo-political domain with several geo-economic centres of power emerging. India's leadership of the Global South, with more and more countries wanting to follow multi-alignments, is reflected in the growth of Mini laterals and a quest for a multilateral, multipolar world order with strategic autonomy. India, with its civilisational heritage and universalist approach, could take the lead to create a third alternative of Nations for Strategic Autonomy (NSA).

Conclusion

It is apt to quote Dr. S. Jaishankar, the Indian Foreign Minister who, in his celebrated book *Why Bharat matters*, states that

India can matter by just being there, as a market place, as a contested ground, a resource or a platform, as it did during colonial times or it can matter through the power of the ideas and actions as an engine of growth, a hub of innovation or a democracy that delivers.

He further expostulates:

*the case of India is more than just of demography. For it is among the few civilizational states that has survived the ravages of history... India takes a long view especially in regard to global issues. Many of their goals and objectives are built on traditions that are not readily shared by contemporary peers. Simply put there is not only a scale and history but an exceptionalism about India that makes it matter.*¹⁰⁹

The quintessential message emanating from the idea of India is that civilisational cultures travel from the past through the present and into the future. Bharat stands tall in the comity of nations and has become an integral part of a multitude of mini-lateral and plurilateral arrangements strewn across the global spectrum, from BRICS to QUAD to I2U2, G7, and G20, and at the multilateral organisations following its multi-alignment policy with the underlying principle of strategic autonomy. At the same time, she has rejected the alliance-ridden mindset and approaches of the super powers, wading efficiently through the transitional global order or disorder and carving out a unique place for herself. This is what PM Modi called a “Mix and Match” foreign policy. In a true sense, India has become a trusted Vishwa Bandhu to whom the world, especially the Global South, looks up

¹⁰⁹ Jaishankar, S. (2024). *Why Bharat matters* (pp. 199–200). Rupa Publications.

to for reassurance and leadership, which hopefully BHARAT will provide in times to come as she becomes a developed country herself.

Chapter 7. Infrastructure Development: Bridging the Critical Gaps

Dr. Venkatesh Sathyanarayana¹¹⁰ and K. Jayakishan¹¹¹

Introduction

Good-quality infrastructure leads to sustained demand for better services, and this has been a cornerstone for India's rapid growth of projects, particularly in the last two decades. To respond to this demand and to provide a boost to the economy, central and state governments have been taking several initiatives to give an impetus to the infrastructure sector in India. According to an IBEF¹¹² blog titled "Growth of infrastructure sector: A potential boost to the Indian economy,"¹¹³ India is expected to grow at a compounded annual growth rate (CAGR) of 8.2% by 2027. Government of India (GoI) has set for itself a goal to become a developed nation by 2047. Going forward there needs to be a clear framework to understand the infrastructure needs that may

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¹¹² India Brand Equity Foundation (IBEF) is a trust set up by the Department of Commerce, Ministry of Commerce and Industry, Government of India, to promote and create international awareness of business opportunities to overseas investors.

¹¹³ See <https://www.ibef.org/blogs/growth-of-infrastructure-sector-a-potential-boost-to-the-indian-economy>

occur on account of increasing population, more and more people in the working age group¹¹⁴ contributing to the economic growth of the country, and therefore adequate steps needs to be taken to augment infrastructure in the country for provision of better public services to the people (DEA). Increased public investments as envisaged in the infrastructure sector during the Amrit Kaal ¹¹⁵ would enable increased crowd-in of private investments (LAARRDIS, 2023).

Department of Economic Affairs (DEA), Government of India, has been notifying the harmonised list of infrastructure sub-sectors ¹¹⁶ from time to time (DEA, 2012). In the updated harmonised master list in the year 2022, 37 infrastructure sub-sectors are notified¹¹⁷ in five different categories¹¹⁸ (DEA, 2022). In this chapter, the growth of a select infrastructure sub-sectors since India's independence in 1947 is mapped. These are transportation (highways, railways, ports, and airports), energy, and telecommunication, and these account for nearly 70% of the National Infrastructure Pipeline (NIP). The various initiatives taken by the central government in the development of important policies and regulations, key schemes announced, and resultant benefits accrued in the infrastructure space are presented. Examples of a few significant projects in these sectors are discussed. The objective is to examine the historical progress in the development of infrastructure in India, identify the challenges and gaps, and recommend what steps needs to be

¹¹⁴ According to the National Infrastructure Pipeline (NIP), the working age population of India is likely to grow 1.2 times more in the period 2015–2030.

¹¹⁵ The period between the 75th year of Indian independence and the 100th year: 2022 to 2047.

¹¹⁶ Notification F. No. 13/6/2009-INF dated March 27, 2012, issued by the Department of Economic Affairs (Infrastructure Section), Ministry of Finance, Government of India.

¹¹⁷ Notification F. No. 13/1/2017-INF dated October 11, 2022, issued by the Department of Economic Affairs (Policy and Planning Unit, IPP Division), Ministry of Finance, Government of India.

¹¹⁸ (a) Transport and logistics, (b) energy, (c) water and sanitation, (d) communication, and (e) social and commercial infrastructure.

taken by the stakeholders to achieve the objectives of Vision India@2047.

Overview: Status of Infrastructure

1947–1950

During the early period post-independence in 1947, the country went through different cycles of infrastructure development on account of several reasons. In the First Five Year Plan (1951–1956), the main intent was to increase agricultural production, develop transport, and improve communications. Due to the partition of the country, it was felt that by focusing on these initiatives, the great imbalance in the economic conditions would be ironed out. In the 100 years prior to 1951, the administrators of the country laid increased emphasis on building railway assets for administrative and strategic reasons; therefore, in this period the construction of roads and waterways had been largely neglected. Another reason for un-balanced development in the transport sector was the functional division between different types of transport between the central government and the state governments (Planning Commission, 1951).

1951–1961

During 1951–1956, a sizeable amount—nearly 25% of the total planned outlay (₹388.12 crores)—was set apart for transport and communication (Planning Commission, 1951). From this, three-fourths was for railways (₹200 crores), keeping in view the special needs of this sector, and also due to the additional strain placed on the railways during that period on account of partition of the country. Airports at Bombay (Santacruz), Calcutta (Dum Dum),

Delhi (Palam), and an airfield at Madras for operations on the Malaya–Indonesia–Australia route were developed during the Second Five Year Plan (1956–1961). Later, during 1958–1961, the country witnessed a stark reduction in investments in infrastructure assets due to the foreign exchange crisis (DEA, 2024).

1962–1970

In the next couple of years, by 1964, infrastructure spending gradually increased; however, on account of the Chinese aggression (1962), death of the then Prime Minister Jawaharlal Nehru (1964), and the subsequent war with Pakistan (1965), which was followed by drought conditions across the country (1967–1968) and the war for the liberation of Bangladesh (1971), the infrastructure spending across the country took a substantial hit over this prolonged period (DEA, 2024).

1970–1980

Again, during the 1970s, when infrastructure spending was seen to be increasing, there was another setback in terms of oil shock which had an adverse impact of a dramatic increase in oil prices in the period 1973–1974 (Siddayao, 1987). In 1975–1976, there was a political crisis leading to imposition of emergency, and this further slowed down investments in infrastructure (IDFC Ltd, 2012).

1980–1990

October 1984 saw the assassination of Prime Minister Indira Gandhi. The period 1985–1990 (Seventh Five Year Plan) saw that food grain production had accelerated, and there were increased employment opportunities as well as a general rise in

productivity. A growth rate of 6% was achieved against the targeted 5% during 1985–1990. Also, during this period, the highest infrastructure investments post-independence were seen, peaking at 5.7% of GDP by the year 1991. In May 1991, the former Prime Minister Rajiv Gandhi was assassinated, and this was followed by a financial crisis because of the suspension of the loan programme to India by the International Monetary Fund (IMF). The World Bank also discontinued its assistance (IDFC Ltd, 2012).

Post-economic Liberalisation (1991–2024)

In the annual plans of 1990–1991 and 1991–1992, Dr. Manmohan Singh, then Finance Minister, launched India's free market reforms, and this period was the beginning of privatisation and liberalisation. The Eighth Five Year Plan (1992–1997) was the period of strengthening infrastructure. The Ninth Five Year Plan (1997–2002) noted that the country's transport systems such as railways, roads, ports, and airports, were facing capacity constraints, and therefore, there was a significant loss of opportunities which would lead to economic distress. The Ninth Five Year Plan (1997–2002) also noted that the implementation of the Minimum Needs Programme¹¹⁹ was poorly done where the "earthen tracks and gravel roads" were not adhering to the "technical norms of compaction, drainage and geometrics" (IDFC Ltd, 2012).

By 2010–2011, the pace of development of infrastructure projects in the country reduced significantly, especially the projects taken up under PPP¹²⁰ arrangements, on account of problems in land acquisition, environmental and other

¹¹⁹ Started during the Fifth Five Year Plan in 1974, it was proposed that all villages with a population of 1,500 and 50% of villages with a population between 1,000 and 1,500 would be linked with all-weather roads.

¹²⁰ Public-private partnership.

clearances, and delays in decision-making which led to the declaration of large-scale non-performing assets by the banks. During 2004–2014, while the government took up a large number of PPP projects, many of them failed to take off (Aiyar, 2016). The 12th Five Year Plan (2012–2017) focused on health, education, skill development, environment and natural resources, and infrastructure development. In the Union Budget of 2018–2019, it was estimated by the Finance Minister that infrastructure investments exceeding an amount of ₹50 lakh crores are required to increase the GDP growth of the country for roads, airports, railways, ports, and inland waterways. Therefore, the budgetary allocation was increased to ₹5.97 lakh crore in 2018–2019 against an expenditure of ₹4.94 lakh crores in 2017–2018 (PIB, 2018).

The central government launched the National Infrastructure Pipeline (NIP) in 2019 for the development of infrastructure projects across sectors like energy, roads, railways, and urban development projects to the extent of ₹111 lakh crores. The centre government and states are to have nearly equal contribution (39% and 40%), and it was expected that the private sector contribution will be a 21% share. It is expected that through the NIP, an amount of US\$1.4 trillion will be spent on infrastructure projects in five years (NIP, 2019). In the Union Budget 2023–2024, the outlay towards capital investment is increased by 33% to ₹10 lakh crores, which is 3.3% of the GDP and nearly three times the budgetary outlay during 2019–2020. A new institution known as the “Infrastructure Finance Secretariat” was set up during 2023–2024 to accelerate private investments in the railways, roads, urban infrastructure, and power sectors (Infrastructure Finance Secretariat, 2023-24).

Newer Programmes and Initiatives

The central government has taken several steps to improve infrastructure. Projects were developed at a rapid pace, with public sector capital investment increasing from ₹5.6 lakh crores

in 2014–2015 to ₹18.6 lakh crores in 2023–2024 according to budget estimates. This is a 3.3-fold increase. There has been a significant increase in infrastructure development, such as adding to the length of roads and highways, expressways, freight corridors, airports, metro rail, trans-sea link projects, and digital infrastructure. Newer programmes for the improving air connectivity, both nationally and internationally, were launched, viz., the UDAN scheme for developing new airports and air routes, Bharat Mala for roads and highways, and Sagarmala for the improvement of port infrastructure. In the railway sector, efforts are being made to increase electrification and upgrade railway infrastructure (DEA, 2024). The Prime Minister's Gati Shakti National Master Plan, a digital platform launched in October 2021 intends to bring together 16 ministries on a single platform for integrated planning and coordinated implementation of infrastructure projects in the country.

The Government of India has laid down a framework for monetisation of assets and, accordingly, a potential list of core assets belonging to various ministries and Central Public Sector Enterprises (CPSE) was prepared. The total value of the assets identified in August 2021 is about ₹6.0 lakh crores for the period financial year (FY) 2022–2025. These projects are spread across sectors like roads, railways, aviation, power, oil and gas, and warehousing. The NITI Aayog assisted various ministries in the transaction structuring, and the targeted amount of ₹80,000 crores was achieved in FY2022. A further pipeline of about ₹1.23 lakh crores is under various stages of processing (NITI Aayog, 2022-23).

Sector-Wise Developments

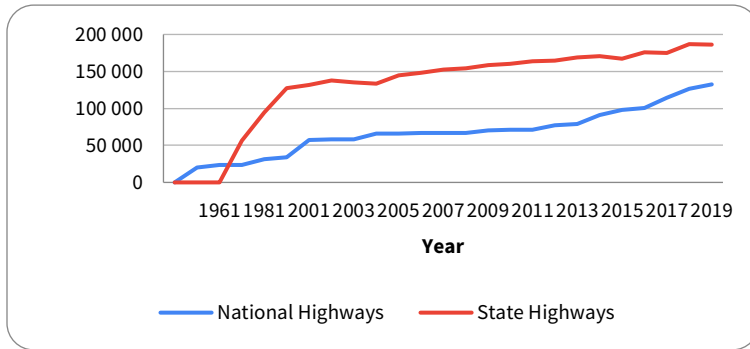
Transportation Sector: Road Infrastructure

Historical context

- National Highways. In the Fifth Five-Year Plan (1974–1978), the Indian national highway system was introduced. By the beginning of 1991, it was recognised that there was a severe budgetary constraint in building and maintaining national highways. Therefore, it was necessary to seek private sector participation in the construction and upgradation of select highways, especially the construction of four-lane highways and expressways so that they could be tolled.¹²¹ The development of highways witnessed very slow progress in the first 50 years post-independence. Given that the national highway network was carrying nearly 65% of freight and 85% of passenger traffic despite being less than 2% of the total road network, it necessitated the adoption of a different approach to its development. It was in this background that the National Highway Authority of India (NHAI) was established in the year 1997 (Nallathiga, 2019), and, as expected, kick-started the development of the national highway network (see Figure 1). NHAI has ever since been taking up projects under EPC and under PPP models. National highway network has expanded by 60% from 91,287 km in 2014 to 146,145 km till 2023.

¹²¹ Eighth Five Year Plan document, para 9.4.5.

Figure 1: Growth of National Highway and State Highway Road Network



- NHDP and Golden Quadrilateral. In 2001 after the launch of the National Highway Development Programme (NHDP), there was a major thrust to highway development in the country, especially after the announcement of the Golden Quadrilateral (GQ)¹²² and the North-South-East-West Corridor (NSEW).¹²³ Subsequently, NHDP was taken up in Phases III to VII, essentially to improve lane capacity by converting two-lane highways to four-lane and six-lane highways. Besides this, the development and maintenance of nearly 41,290 km of national highways was taken up under NHDP. The PPP mode was extensively used by NHAI, particularly in Phases III to VII of highway development. To give a boost to the development of projects under PPP frameworks, the Government of India in 2006 set up the PPPAC¹²⁴ for appraisal and speedy clearances. PPP cells were set up, and Model Concession Agreement (MCA) for the road sector was prepared in 1999. However, as the private sector participants had to face a variety of risks which they did not foresee, many of the initial projects failed, and several of them did not take off (Nallathiga, 2019).

7. State Highways. The trend in the state highways was

¹²² This was later termed as NHDP Phase I.

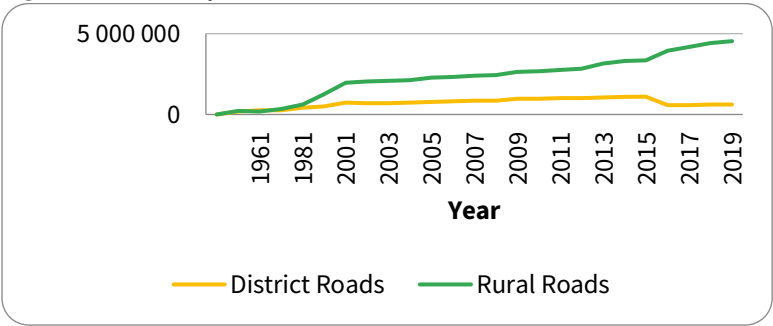
¹²³ This was later termed as NHDP Phase II.

¹²⁴ Public-Private Partnership Appraisal Committee.

quite different from the NHAI, with the state highway network witnessing a steep increase until 1991. However, the focus was primarily to enhance connectivity, and large parts of the network had a lane configuration of two-lane or lesser. Also, over a period of time, owing to a lack of focus on maintenance, the quality of the state highway network deteriorated drastically. In recent years, this trend has seen a reversal through a multi-pronged approach adopted by most states, and budgetary resources have been bolstered by multi-lateral development programmes and through PPPs.

- District and Rural Roads. State governments have control over Major District Roads (MDRs) which are developed through the State Public Works Departments (PWDs) and State Road Development Corporations (KPMG, 2019). In order to ensure rural connectivity to enable smooth movement of agriculture produce and accessibility to health, education, and other facilities to rural communities, the government launched the Pradhan Mantri Gram Sadak Yojana (PMGSY) in 2000. This programme also served as a rural employment scheme. Till February 2024, 763,277 km of rural roads have been developed/improved under the programme (NRIDA, n.d.). Figure 2 shows the growth of rural road network during 1961–2019 in comparison to district roads. A gradual increase in rural roads can be seen from the period 1981 onwards.

Figure 2: Growth of Rural Road Network



Future Plans and Trends

In the future, with the development of significant lengths of national highways and the improvement of state highways, greater focus will be needed to sustainably maintain these roads in the long term; that is, to provide better-quality services to the users. Also, road safety and the adoption of IT-enabled services are likely to receive greater attention. The priorities are likely to be more towards the integration of multimodal transportation, lowering costs, finding newer sources of financing, and PPP establishing arrangements. The development of green infrastructure will also be a focus of the future. The key sector trends and future priorities are given in Table 1.

Table 1: Priorities in the Road Sector

<i>Key sector trends</i>					
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
Bharatmala Pariyojana & other projects	Ease and economy of traffic movement	Focus on road safety	Increased use of IT applications	Alternate sources of funding	Emphasis on green initiatives
<i>Priorities</i>					
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
Maintenance and capacity augmentation of huge road network	Focus on multimodal transport integration	Increase priority on road safety	Adoption of more IT enabled solutions	Bettering costs, exploring new fund sources and new PPP models	Adoption of environment friendly green transport solutions

Source: Roads and highways sector: Current trends and future roadmap (KPMG, 2019).

- **Monetisation of Road Assets:** In order to mobilise revenues for ploughing back into further development of the highway network, the NHAI has adopted the Toll Operate Transfer (TOT) model to monetise its road assets. The TOT model, which grants the right to collect toll by the private sector, was launched in 2018 and has yielded ₹26,366 crores through the monetisation of road assets to date. The model is now also being adopted by various state governments.
- **Development of Economic Corridors.** Another trend is the development of economic corridors that combine the development of highways/expressways with the planned development of industrial and economic nodes alongside. Some recent examples/announcements of such development are:
 1. Ganga and Yamuna Expressways in UP
 2. Mumbai-Nagpur Samruddhi Expressway in Maharashtra
 3. Delhi-Vadodara Expressway
 4. Hyderabad-Visakhapatnam Economic Corridor
 5. Nagpur-Vijayawada Economic Corridor
 6. Chennai-Bengaluru-Mysuru Expressway

Transportation Sector: Railways

Historical Context

In 1950–1951, India's railways covered 53,596 km which had increased to 61,661 km by 1984–1985, with electrification rising from 388 km to 6,440 km.¹²⁵ The Seventh Five Year Plan (1985–1990) increased train traffic by 8%. The plan showed that 25% of rails needed renewal since many lines were old. The Government of India introduced several technological and institutional

¹²⁵ Eighth Five Year Plan document, para 9.1.8.

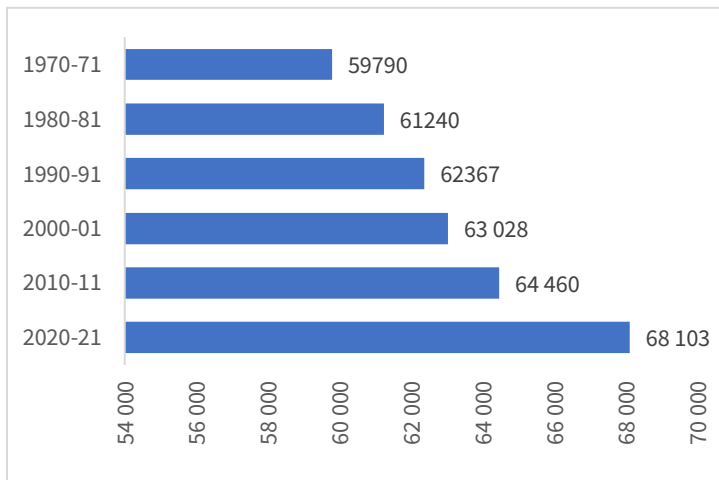
changes to improve railways during the period from 1950 to 1990. A few of them are given in Table 2.

Table 2: Key Developments During 1950–1992

<i>Period</i>	<i>Date/year</i>	<i>Technological and institutional changes</i>
1950–55	January 27, 1950	Chittaranjan Locomotive Works (CLW) is inaugurated, and Assam Rail Link is opened to passenger traffic
	April 14, 1952	The Eastern and North Eastern Railways are formed
	1955	Integral Coach Factory at Perambur in Tamil Nadu is inaugurated South Eastern Railway is formed
1956–61	1956	First fully air-conditioned train, popularly known as the AC Express is introduced between Howrah and Delhi
	1957	Indian Railways decides to adopt 25 KV AC system for electrification. The Research Designs and Standards Organization (RDSO), the Indian Railway Institute for Signal Engineering and Telecommunication (IRISET), and Railway Protection Force (RPF) are established
	January 15, 1958	The Northeast Frontier Railway is formed by splitting the North Eastern Railway
	1961	CLW starts manufacturing electric locomotives and the Diesel Locomotive Works is set up at Varanasi, Uttar Pradesh
1962–67	1964	CLW builds its first locomotive WAG-1
	1965	Fast Freight services or the “Super Express” is introduced on several routes
	1966	The first container service in India starts between Bombay and Ahmedabad and the South Central Railway is formed
1968–73	March 3, 1969	Rajdhani Express, the first high-speed all-AC train, runs between Howrah and New Delhi
	1971	Indian Railways formulates its gauge

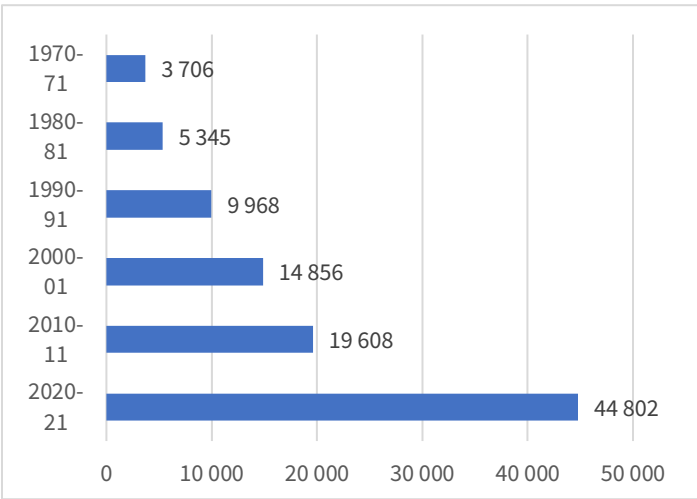
		conversion policy
	1971	The Farakka Railway Bridge and the Pathankot–Jammu Tawi section is opened
	1972	Construction of Calcutta Metro begins
	1973	CLW stops production of steam locomotives
1974–80	1974	Rail India Technical and Economic Services (RITES) is incorporated as a public limited company
	1979	Central Organisation for Railways Electrification (CORE) is formed
	1983	To promote tourism, a tourist train called the Great Indian Rover to sacred Buddhist sites is launched
	1984	Railway Reform Committee recommends creation of four new railway zones
1985–88	1985	A pilot project for computerisation of Passenger Reservation System through the Integrated Multi-train Passenger Reservation System (IMPRESS) has been introduced in New Delhi
	1986	Rail Coach Factory is established in Kapurthala, Punjab
	1988	Container Corporation of India Ltd. (CONCOR) is created
1989–92	1989	Work on Konkan Railway begins
	1989	The Railways Act, 1989, comes into effect replacing the Railways Act, 1890
	1991	India shifts to a new industrial policy, a move towards liberalising the economy through private participation
	1992	The Indian Railways adopts the Uni-Gauge Policy

Source: Relevant extract from the book Indian Railways: A visual journey (Ramaraao Annavarapu et. al., 2020) (compiled by authors).

Figure 3: Increase in Route Length (km)

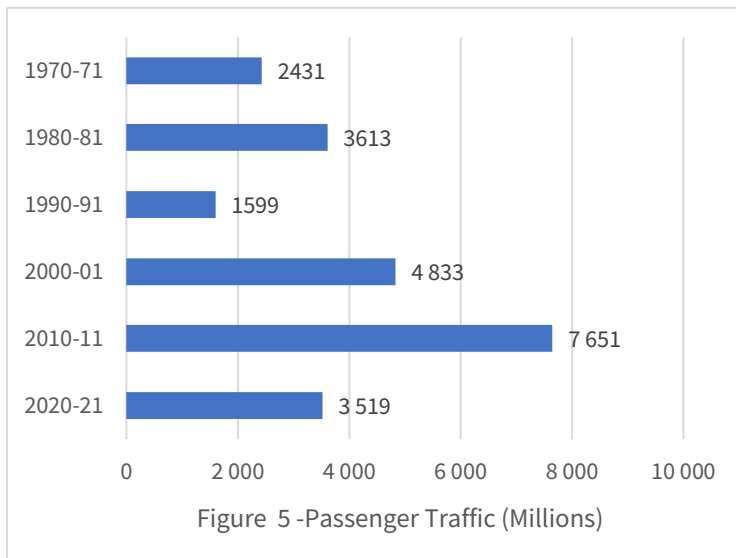
Due to the government's efforts to improve passenger and freight rail connectivity, India's railway lines expanded from 98,546 km in 1970–1971 to 1,26,611 km in 2020–2021. The route length, the distance trains travel, increased slightly from 59,790 km to 68,103 km (Figure 3), reflecting a concentration on capacity along the new lines. Railway electrification, from 3,706 km to 44,802 km, was a major feat (Figure 4). Indian Railways transformed with initiatives such as the Uni-Gauge Policy and Mission Electrification, which increased the operating efficiency, sustainability, and reduced carbon emissions.

Figure 4: Electrified Route Length (km)



Indian Railways launched major initiatives to revamp its system and prepare for the future in both freight and passenger services. A landmark achievement was the commissioning of the 760 km Konkan Railway broad-gauge line in January 1998. However, the Ninth Five Year Plan (1997–2002) highlighted a decline in railway freight traffic from 89% in 1951 to 40% in 1995. The Plan emphasised the need for better, more reliable services and competitive freight rates to reclaim bulk traffic that once relied on rail transport. The decadal trends of passenger traffic during 1970–1971 to 2020–2021 are shown in Figure 5.

Figure 5: Passenger Traffic (in Millions)



Recent Developments

In 2006, the Indian government established the Dedicated Freight Corridor Corporation of India Ltd. (DFCCIL) to develop specialised freight corridors nationwide. This initiative aims to ease the burden on the busy Delhi–Mumbai and Delhi–Kolkata lines, which have seen a surge in cargo movement due to booming international trade and domestic transport. Apart from the above corridors, the DFCCIL also plans to implement dedicated freight corridors along other high-density routes (estimated to be about 7,201 km). Of these, East to West corridor between Kolkata and Mumbai will be 2,328 km and North to South between Delhi and Chennai will be 2,327 km. Along the east coast the corridor between Kharagpur and Vijayawada will be 1,115 km, and the South–West, Chennai–Goa, corridor is also being considered (Ramarao Annavarapu et. al., 2020). Dedicated freight corridors (DFCs), with projects such as the Eastern and Western DFCs, with the objective to create specialised freight

corridors, was intended to reduce congestion and increase efficiency.

In 2016, the Government of India launched the National High Speed Rail Corporation Ltd. (NHSRCL) to develop high-speed rail corridors. The flagship project, the Mumbai–Ahmedabad High-Speed Rail Corridor, promises faster, more efficient travel between these major cities. To further enhance passenger experience, the Vande Bharat Express trains were introduced in 2019, offering safer, quicker, and more comfortable journeys. As of January 2024, there are 82 Vande Bharat trains operating across the country over 10,891 km route of the Golden Quadrilateral and Diagonal Routes (Ministry of Railways, 2024). Indian Railways has introduced Kavach, an advanced automatic train protection system developed in collaboration with the Indian industry by the Research Design and Standards Organisation (RDSO), aimed at enhancing rail safety and prevention of collision (Ministry of Railways, 2022). The station redevelopment programme aims to modernise key railway stations, enhancing passenger amenities. Under the Amrit Bharat Station Scheme, 1,309 stations are slated for revitalisation, focusing on accessibility, waiting areas, restroom facilities, life and escalator installations, cleanliness, and local product kiosks like “One Station One Product” (Statista, 2024).

Transportation Sector: Ports and Maritime Infrastructure

Validation of the development of a country or region can be ascertained through the index of infrastructure facilities available and/or the occurrence of infrastructure developments therein. The port sector in India embraces a vital section of infrastructure that may be considered a gateway to integration with the global economic system. With a massive coastline of 7,517 km and a peninsular setting, Indian ports are strategically positioned for collaboration with other global economies. In

terms of nomenclature, the ports in India are classified as major and non-major ports, with the former falling under the administrative control of the Government of India and later under the purview of respective State Maritime Board.

Out of the 12 major ports in India at present, only six existed in the year 1947 at the time of independence. The other six were established later during the 1970s. During the initial years post-independence, all the major ports in the country were not making profits and were being self-financed with their own funds. They did not have enough reserves at their disposal to improve and modernise the port facilities. There was a significant capacity constraint in the 1970s in the matter of handling bulk cargo, iron ore, petroleum, oil, and lubricants. Also, there were deficiencies in capacity for the handling of fertiliser and general cargo frequently in most of the major ports during this period (IDFC Ltd, 2012). During 1982–1983, the country moved towards the improvement of major ports like Calcutta (Kolkata), Cochin (Kochi), Madras (Chennai), Kandla, Bombay (Mumbai), and others to increase their capacity and efficiency. Additional general cargo berths were constructed at Kandla, Mormugao, New Mangalore, Madras, Tuticorin, Visakhapatnam, and Paradip. Additional POL (petroleum, oil, and lubricants) handling facilities were built at Cochin, Kandla, and Visakhapatnam, and a full-fledged container terminal was built at Madras (Ministry of Finance, 1982).

From the late 1980s, Indian government's focus shifted from the development of major ports to non-major ports. States were encouraged to develop their own port infrastructure in order to reduce congestion at major ports and promote decentralised regional economic growth. Aiding this, the economic liberalisation in the 1990s led to greater private sector participation in port development, and non-major ports started receiving investments for modernisation and expansion. The volume of cargo handled in the country (Figure 6) experienced a CAGR of 1.08 in last 10 years, supported by handling through 12 major ports and 229 non-major ports, aided by the significant

addition of 30 non-major ports gradually in the referred decade. In parallel, the average turnaround time per ship has reduced from 4.2 days to 2.9 days (Figure 7). These significant advancements can be credited to major investments and changes implemented in the sector.

Figure 6: Total Cargo Handled (in Million Tonnes)

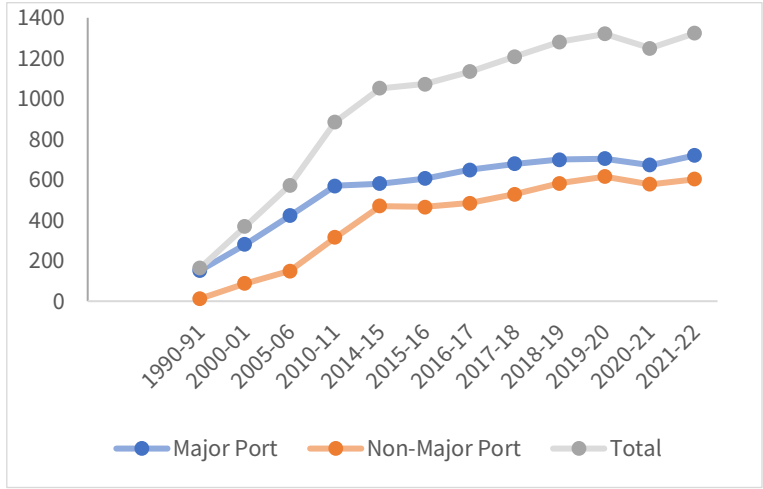
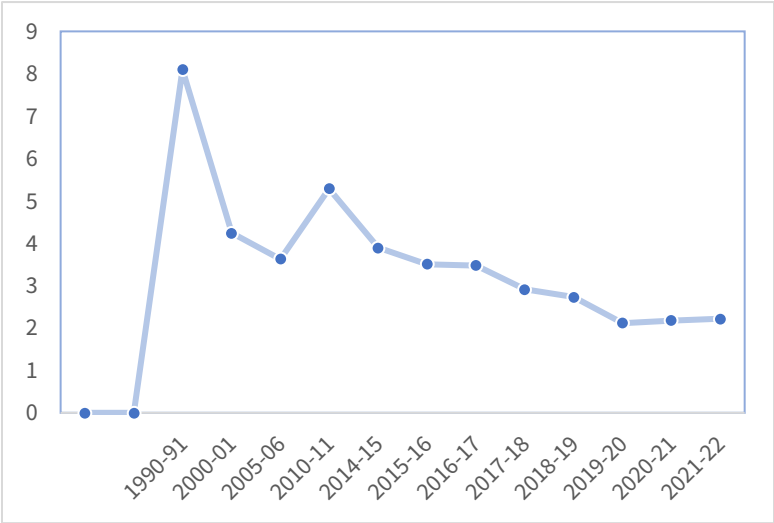


Figure 7: Average Turn Round Time (Days)



The Indian government, through various initiatives like the National Maritime Development Programme (NMDP) and the Sagarmala Programme, has been focusing on upgrading port infrastructure, including non-major ports. These projects aim to enhance connectivity, increase capacity, and improve operational efficiency.

Several Indian states, recognising the economic potential of their coastal regions, have undertaken ambitious port development projects. States like Gujarat, Andhra Pradesh, and Tamil Nadu have developed robust port infrastructure, making non-major ports significant contributors to the maritime economy. Inland waterways development in India presents a transformative opportunity to create an efficient, cost-effective, and sustainable transportation network. By addressing infrastructure gaps, navigational challenges, and environmental concerns, India can fully leverage its vast network of rivers and canals to support economic growth and regional development. The Government of India has taken up the development of inland waterways to improve hinterland connectivity and complement coastal shipping. The Inland Waterways Authority of India (IWAI), established in 1986, is the nodal agency under the Union Ministry of Ports, Shipping and Waterways, mandated to develop and regulate National Waterways (NWs) in India. The navigable waterway in India is about 14,500 km, and a significant amount of cargo and passengers are presently transported through a fuel-efficient and environment-friendly mode of transport. IWAI has taken a quantum leap from just 5 national waterways to 111 NWs in the last 10 years (IWAI, n.d.).

The Ministry of Shipping has compiled more than 300 initiatives to develop India's ports, shipping, and waterways. The "Amrit Kaal 2047" envisions a comprehensive transformation of India's ports, making them pivotal to the nation's economic growth and strategic capabilities by modernising infrastructure, integrating advanced technologies, enhancing connectivity, and promoting sustainable practices (Vision@2047, 2023).

Transportation Sector: Airports

During the period of 20 years from 1990–1991 to 2010–2011, the performance of the domestic air traffic grew at an annual average rate of 10.4%, while in the case of international passenger traffic, it grew at 9.4%. Total passenger traffic during this period grew at an annual average rate of 9.9% (NTPDC, 2012).

Figure 8: Average Turn Round Time (Days)

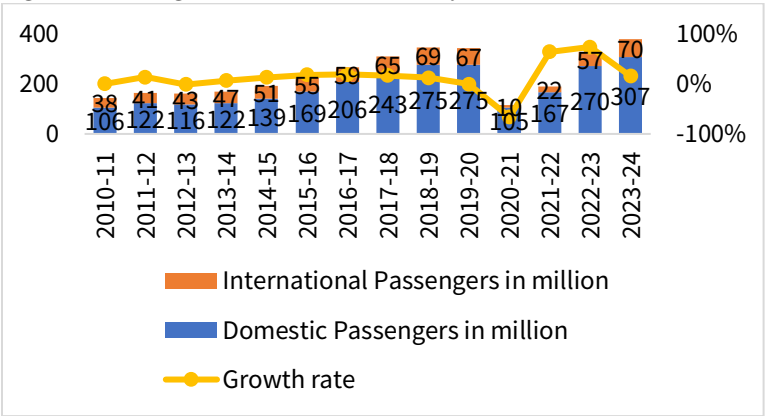
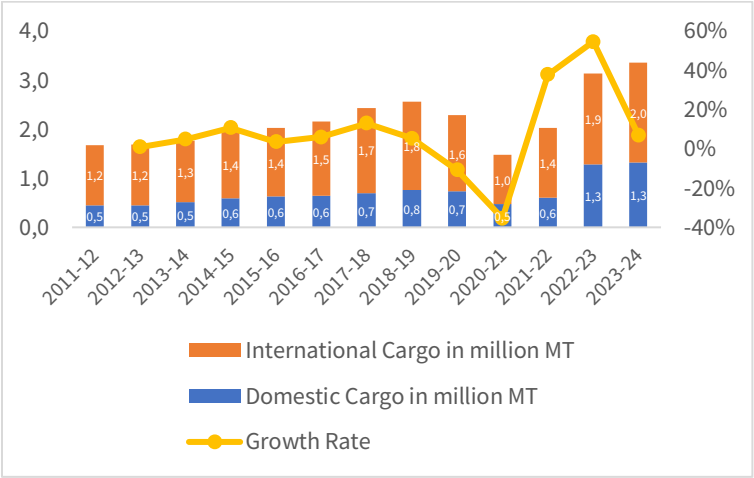


Figure 9: Air Cargo Traffic in India

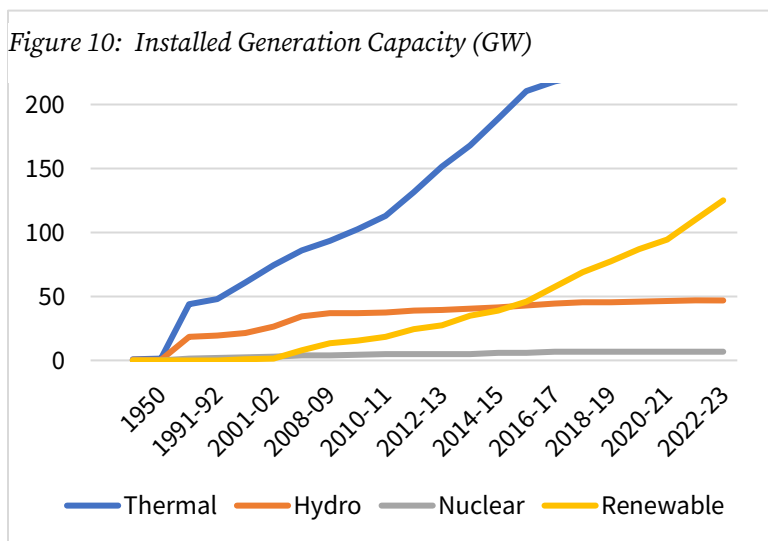


Figures 8 and 9 show the passenger and air cargo traffic in India have been gradually increasing except for a dip during 2020–2021 and 2021–2022 due to Covid-19. The growth in passenger air traffic has inched back to the pre-Covid levels for the year 2023. Air cargo traffic, over the last 12 years, reached its highest level in 2023–2024. With economic recovery and growth rate coupled with macroeconomic stability in the country, the aviation sector is bound to achieve leaps in the coming years. This is witnessed by the various actions and events that have been taking place in the sector as a whole.

From the connectivity perspective, the Regional Connectivity Scheme (RCS UDAN) launched in 2016 has been a game changer, where the idle airports have been put into use and also in unlocking the underlying flying potential by establishing connectivity to Tier 2 and Tier 3 cities (MoCA, 2022). The number of airports is set to increase to 220 from the current 149 by 2025, to build infrastructure capacity to support towards realising the vision of achieving US\$20 trillion economy by 2047. This also increases the investment outlay in the sector and tapping of private investments to address the gaps in financing the capital expenditure by concessioning the feasible airports. Under NIP, capital expenditure of more than ₹98,000 crore is likely to be incurred between 2019 and 2025, where Airports Authority of India to incur about ₹25,000 crore and remaining to be borne by private developers under PPP mode. Under the PM Gati Shakti vision, it is proposed that 16 new airports will be built in five states.¹²⁶ Under the NextGen Airports for Bharat (NABH), the government plans to take up expansion of airport capacity of more than five times in the next 10 to 15 years which will facilitate handling of billions of trips each year. The MRO (maintenance, repair, and operations) industry is expected to grow from US\$800 million in 2018 to over US\$2.4 billion in 2028, and investments worth US\$25 billion would be made in the civil aviation sector by 2027 (IBEF, 2024).

¹²⁶ Chhattisgarh, Madhya Pradesh, Maharashtra, Rajasthan, and Uttar Pradesh.

Energy Sector



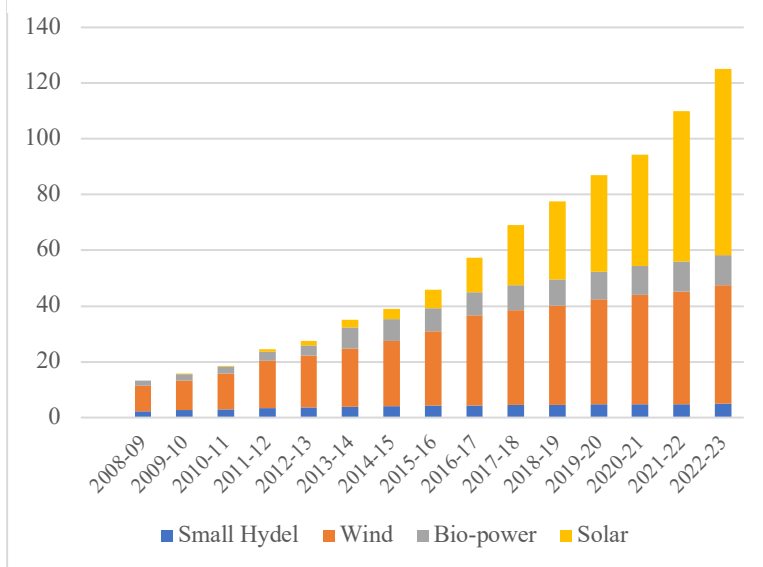
Public sector agencies have been dominant in the Indian energy sector since independence. The construction of thermal plants was a significant step in power generation to meet the growing demand for electricity. Several hydroelectric projects were initiated to harness the potential of rivers and generate clean energy. India also invested in nuclear power plants to diversify its energy source.

In the power sector, as of March 31, 1997, nearly 95% of the total installed capacity of 85,919 MW (Figure 10) consisted of a mix of fuel types: being thermal, hydro, and nuclear capacities which accounted for 72%, 25%, and 3%, respectively. During 1996–1997, the total power generation in the country was about 394 BU (IDFC Ltd). Electricity production from renewable sources, excluding hydroelectric, was 0.5% of total in the year 2000 which increased to 5.4% in the year 2015. In the year 2000, only about 60.3% of India's population had access to electricity which, by the year 2021, has increased to about 99.6% (World Bank, n.d.). The power generation capacity in India as of March 2019 was 356 GW, with the central government having a share of

24%, states 30%, and private sector 46%. In terms of fuel mix, thermal power (64%) accounts for the largest share, which is followed by renewable energy sources (22%), hydel power (13%), and nuclear power (1%).

India has set an ambitious target for renewable energy by including 175 GW by 2022 and 450 GW by 2030. Key sources of renewable energy include hydel, wind, biopower, and solar (Figure 11). The Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) focuses on rural electrification. The Integrated Power Development Scheme (IPDS) aims to strengthen urban power infrastructure (NIP, 2019). In January 2024, the Ministry of New and Renewable Energy (MNRE) launched a new solar power scheme for providing solar power to tribal households in India. The implementation guidelines for this scheme targeted Particularly Vulnerable Tribal Groups (PVTG) under the Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan (PM-JANMAN)

Figure 11: Growth of Renewable Energy (GW)



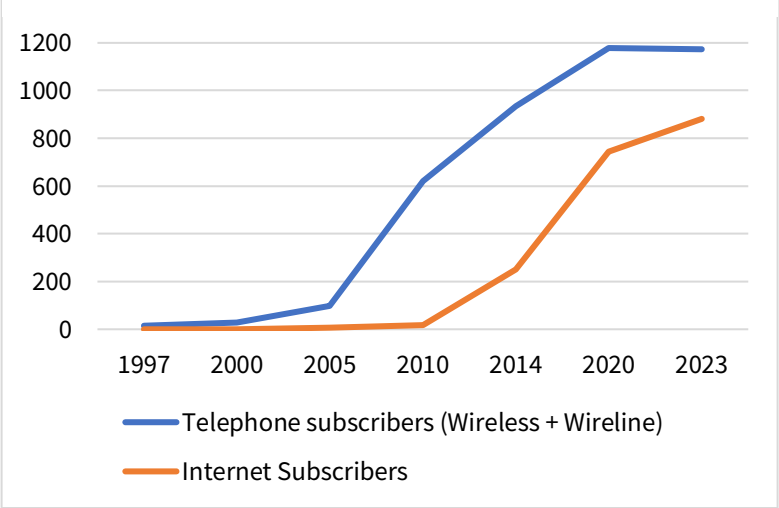
programme and aims to electrify 0.1 million un-electrified households across 18 states in PVTG areas. These households are

identified by the Ministry of Tribal Affairs to provide off-grid solar systems and solar lighting in multi-purpose centres where the supply of electricity through the grid is techno-economically not feasible (Sudip Mahapatra et. al., 2024).

Telecommunication Sector

Until the year 1984, the telecom sector was entirely government-owned. During this period, the sector was plagued by under-investment, leading to archaic equipment and systems, impeding the growth of the sector. In the middle of the 1980s, this sector was included as part of the “Technology Missions.” It was envisaged that the Technology Mission would develop specific programmes that are “welfare-oriented” which would be implemented at the national level (Rekha Jain, 2001). In 1987, the Centre for Development of Telematics was established, which is said to have revolutionised the telecommunications sector in India. Significant investments by the public sector were made in the telecom sector in computers, satellites, etc., which brought down the cost of long-haul telecommunications (IDFC Ltd, 2012). The National Council of Applied Economic Research in its report

Figure 12: Growth of Telephony and Internet Users in India



Telecom sector in India: A decadal profile has observed that the telecom services have significantly grown from 0.96% of GDP in 2000–2001 to 3.78% in 2009–2010 (Figure 12). From the years 2001 to 2011, the number of telephone subscribers grew at a CAGR of 35%, in comparison to the 1980s and the 1990s at 9% and 22%, respectively. Mobile phone and internet users also increased during this period (NCAER, 2012). Individuals using the internet as a percentage of the population which was 0% in 1990 has increased to 46.3% in 2021. It was 7.5% in the year 2010 (World Bank, n.d.).

The BharatNet Project, which is expected to connect nearly 250,000 Gram Panchayats in the country with broadband connectivity, will provide access to applications such as e-health, e-education, and e-governance in rural and remote locations in India. As of January 2024, nearly 210,100 Gram Panchayats have been made service ready (DoT, n.d.). India also has one of the lowest telecom usage costs in the world, both in terms of voice and data. It is estimated that this will not only increase the penetration of mobile phones in the country but also add 500 million new internet users, thus helping to create opportunities for businesses in food delivery, e-commerce, etc. It is envisaged that the 5G technology will give a thrust to Indian economy by US\$450 billion between 2023 and 2040 (Invest India, 2022).

Current Gaps and Challenges

Good governance in building infrastructure is an important aspect of the implementation of large-scale projects and programmes for attracting investment. There are, however, several gaps and challenges that need to be addressed at the earliest. A few of them are described as follows:

1. Land Acquisition and Rehabilitation: The usual problems during acquisition are delays due to the rehabilitation and resettlement of persons, obtaining clearances for forest, wildlife, and environment, shifting of utilities, etc. As has

been the experience, especially in the highways sector, delays in acquiring land in the past have impacted highway development significantly (Ibanez, 2003). Balancing development needs with the rights of people who are affected by the project is a delicate task and it has to be dealt with care. Timely acquisition for the project and proper rehabilitation with adequate compensation for displaced persons is a critical aspect (MOSPI, 2023).

2. **Permits and Clearances:** Timely permissions and clearances for the projects are an important element for the completion of construction. Streamlining the regulatory and clearance process is an important aspect and needs to be addressed.
3. **Implementation and Maintenance of Projects:** This requires skilled personnel, management expertise, and decision-making in a timely manner. Delays due to construction issues, disruptions in the supply chain of raw materials and other components for construction, and unexpected disruptions need to be handled in an efficient manner. Inadequate maintenance may lead to early deterioration of constructed assets.
4. **Political Will and Coordination:** Close coordination between the central and state governments, local bodies, and other relevant stakeholders is an important aspect, and if the projects are not monitored properly, they are likely to fail.
5. **Financing of Projects:** Funding for large-scale projects is difficult, as insufficient allocation of public finances and private investment can impede progress. Balancing fiscal responsibility with the development goals of the government is a challenge.
6. **Cybersecurity:** Of late, with the advent of advanced technologies like artificial intelligence (AI), blockchain, and machine learning, it is important to ensure non-interference in the operations of project assets within airports, ports, railways, etc., from cyberthreats.
7. **Legal Frameworks and Contract Management:** During construction, issues of interpretation of contract conditions,

litigation, and force majeure conditions like Covid-19 and heavy rainfall/floods are also seen. A robust dispute resolution mechanism is crucial.

Table 3 shows infrastructure shortfall in select sectors.

Table 3: Sectoral Shortfall

<i>Sectors</i>	<i>Description</i>
<i>Roads</i>	<ul style="list-style-type: none"> – Out of 100,000 km of National Highways (NH) which constitutes nearly 2% of the country's road network accounts for 40% of traffic, and these roads are highly used. – NHs are the best in the country of all the roads. However, only 24% of NH is four lane or more, 52% is two lane, and 24% is single lane. It means significant congestion and time and fuel wastage.
<i>Railways</i>	Saturated routes and slow average speeds. In a few routes like Delhi–Mumbai and Delhi–Kolkata, the capacity utilisation is over 150%, leading to congestion and slow average speeds.
<i>Ports</i>	Sector is afflicted with inadequate berths, railroad connectivity, and shallow draught.
<i>Airports</i>	Inadequate capacity of runways, aircraft handling, and terminal buildings.
<i>Power</i>	Peaking power deficit: 3.2% Energy shortage: 2.3% Aggregate technical and commercial losses (AT&C) losses: 25% Transmission and distribution losses: 21%
<i>Telecom</i>	Delayed clearances and approvals. Significant number of compliances required. Sector is capital-intensive, hence making available adequate financing for R&D, incubation centres, incentives for creation of infrastructure/manufacturing facilities, etc. is critical for clearing roadblocks.

Source: (Kumar V Pratap & Rajesh Chakrabarti, 2017)); (TRAI, 2022) (compiled by authors).

Regulatory and Institutional Development

Recognising the importance of meeting the growing demands of infrastructure service provision to the people, the central government, since independence, has been evolving newer legislations to establish institutions, set standards and enable improved standards for each sector from time to time. Rather than deeply analysing the entire gamut of the legislative process in the infrastructure sectors, the ecosystem of a few of the applicable legislations and their main objectives are set out in Table 4.

Table 4: Evolution of Key Sectoral Legislations

Year	Legislation	Main objectives
1908	The Indian Ports Act	To consolidate enactments relating to ports and port charges
1956	The National Highways Act	Declare certain highways as national highways and matters connected therewith
1963	The Major Port Trusts Act	Constitution of port authorities for certain major ports and vesting its administration, control, and management of such ports
1988	The National Highways Authority of India Act	Constitution of NHAI to develop, maintain, and manage the national highways
1989	The Railways Act	Provisions related to railway zones, construction, and maintenance of works, and passenger and employee services
1994	The Airports Authority of India Act	Constitution of Airport Authority of India for airport development, planning, construction, etc.

1997	The Telecom Regulatory Authority of India Act	To regulate telecommunication services, adjudicate disputes, dispose appeals, and protect the interest of service providers and consumers
2001	The Energy Conservation Act	For efficient use of energy and its conservation
2003	Electricity Act	To consolidate laws relating to generation, transmission, distribution, trading, and use of electricity
2008	The Airports Economic Regulatory Authority of India Act	To determine tariff for aeronautical services, determine development fee, monitor performance standards, etc.

Source: (NIC) (compiled by authors).

In 1994, the central government set up an expert group on Commercialisation of Infrastructure Projects under the chairmanship of Rakesh Mohan. The Committee submitted its report *The India infrastructure report: Policy imperatives for growth and welfare* in the year 1996. The Committee undertook a detailed study of several sectors, including power, telecommunications, roads, and ports. Amongst other aspects, the Committee provided policy directions to activate the long-term debt market for infrastructure investments. Infrastructure Development Finance Company Ltd. (IDFC) was established in the year 1997 with the objective to build the nation (IDFC Ltd, n.d.). In 2006, the India Infrastructure Finance Company Ltd. (IIFCL) was set up by Government of India with an intention to increase private sector participation in the development of infrastructure projects.

Conclusion and Recommendations

There is a need to increase public investment on the one side with the allocation of increased budgetary resources for

infrastructure, importantly in sectors such as transportation and renewable energy. It is crucial to create an environment with an adequate incentive mechanism for increased private sector investments and PPPs. This could be achieved through extending tax benefits, viability gap funding, and compensating the private sector to address unexpected risks in a project. On the one side, governments need to speed up the preparation of a shelf of projects and keep building a robust project pipeline, and, on the other, steps may be taken to encourage innovative financing mechanism such as infrastructure bonds, Green Fund, Blue Fund, REITs (real estate investment trusts), InvITs (infrastructure investment trusts), etc. The Government should continue to leverage funding from institutions such as the World Bank, Asian Development Bank (ADB), Asian Infrastructure Investment Bank (AIIB), etc. Innovative means of construction and advanced technologies by using smart tools and digital tools will be important in the future as this will enhance efficiency and reduce costs. An integrated approach to infrastructure planning that considers the inter-dependencies between sectors such as highways, rail, airports, ports, and waterways is essential for the seamless movement of goods and people. It is necessary to design infrastructure to be resilient to climate impacts such as extreme weather events, flooding, forest fires, rising sea levels etc. Active stakeholder engagement and ensuring inclusive development is critical in the future. The other aspects are considering adopting best practices by studying the successful models of implemented projects and taking up new pilots to test new approaches and technologies before they are scaled up. Conducting audits and evaluations of the projects that are implemented will also help in learning from mistakes. To protect project assets from cyberthreats, it is important in the future to prepare adequate policies and regulations for the upgradation and maintenance of software and hardware in a programmatic way. It is also necessary to adequately train the project personnel to keep them updated on the technological advancements in AI, blockchain,

and machine learning so as to prevent cyberthreats to the built assets.

In summation, the Government of India and state governments have, over the years since independence, been making extensive efforts to bridge the infrastructure gap through the development of policies, regulations, strengthening of institutional structures, as well as establishing newer institutions. In the National Highway sector, the rapid pace of development of better-quality roads, increasing the number of lanes, and building expressways etc., have helped facilitate faster movement of passengers and goods in the country. Maintenance of existing assets and de-congestion of heavy traffic roads is a critical factor that requires increased attention in the future. Road safety is another issue that needs to be dealt with appropriately. Greater focus on the development of railways from the early period after independence has helped the sector grow with the expansion of railway lines, moving from steam engines to diesel/electric locomotives, and especially in the last decade with the introduction of dedicated freight corridors and speedier trains like the Vande Bharat. In the future, there is a need to swiftly move towards modernisation of rolling stock, including safety and capacity expansion, to meet the growing demand. The focus of the central government on improving port facilities at the 12 major ports, increased hinterland connectivity, and the states' enhanced attention to the development of more than 200 minor ports with specific programmes like the Sagarmala has increased the effectiveness of port facilities in the country. However, much needs to be done to address the capacity constraints at ports, increasing draught to allow larger vessels to enter the ports, and improve connectivity to important trading centres within the country. In the airport sector, the maintenance of existing infrastructure and the building of newer airports for increased trade and economic growth become critical. Skill development of pilots, engineers for repairs and maintenance, cargo handling, and others concerned is important for the enhanced growth of the sector. Similarly, in the energy

sector, India needs to increase its generation capacity, improve distribution networks, and promote renewable energy sources. Access to electricity, especially in rural areas, remains a challenge. Timely financing of identified projects is another important factor which would ameliorate delays in construction and cost overruns. Lastly, streamlining clearances and approvals for the projects by reducing bureaucratic hurdles is an essential element to be considered for the future.

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Chapter 8. Digital Public Infrastructure as Digital Public Good

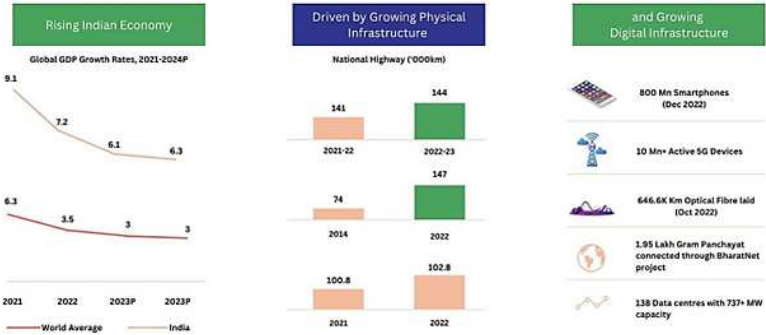
Alkesh Kumar Sharma

Introduction: Digital Transformation—Catalysing Economic Development

India's digital transformation journey has been a cornerstone of its economic development plan. The government's investment in digital infrastructure and governance reforms has yielded substantial savings, estimated at 1.1% of GDP (Gross Domestic Product) by March 2021 (Zhabska et al., 2023). Such progress not only enhances productivity but also augments potential growth, with studies by the United Nations Development Programme suggesting a 1 to 1.4 percentage point increase in GDP growth by 2030 (considering only two channels: financial inclusion and lower leakages from social programmes) in low- and middle-income countries due to digital public infrastructure (DPI) initiatives (Zhabska et al., 2023).

Notably, mature DPIs (like Aadhaar, UPI, GSTIN) with successful mass adoption and larger economic impact, and budding DPIs (like CoWIN, DigiLocker, DIKSHA) with successful proofs of concept and readiness for mass adoption, are forecasted to propel India towards its US\$8 trillion digital economy goal, potentially contributing 2.9% to 4.2% of GDP by 2030 (ET Government, 2024; NASSCOM and Arthur D Little, 2024, p. 52).

Figure 1: Growth in India's Economy



Source: Report on India's digital public infrastructure by NASSCOM and Arthur D Little (2024).

India's journey toward a digital-first economy has been nothing short of transformative. It all began in 2006 with the ambitious National e-Governance Plan (NeGP). This was not just about digitising paperwork; it was about reimagining how citizens interacted with their government, making services more accessible, transparent, and efficient. Imagine a student accessing academic records online, a patient retrieving medical history electronically, or a citizen filing taxes from the comfort of her home—this was the promise of NeGP. By focusing on 31 Mission Mode Projects across key sectors, NeGP laid a solid foundation for a digitally empowered India.

This initial spark ignited a chain reaction of innovation. The Aadhaar project, a monumental undertaking to provide a unique digital identity to every resident, revolutionised access to services and benefits. This single identification number became a gateway to subsidies, pensions, banking services, and more. By linking Aadhaar with Jan Dhan bank accounts and mobile numbers (the "JAM (Jan Dhan–Aadhar–Mobile" Trinity), the government streamlined the delivery of social welfare programmes, reducing fraud and ensuring that benefits reached the intended recipients directly and efficiently. This proved

particularly crucial during the pandemic, enabling swift and targeted disbursement of financial aid to those most in need.

Subsequently, the Digital India programme painted a bold vision of a digitally empowered society and knowledge economy. This was about more than just internet access; it was about digital literacy, skill development, and ensuring that every citizen, regardless of location or background, could participate in the digital age. Digital India aimed to bridge the digital divide, empower rural communities, and foster a culture of innovation and entrepreneurship. At the heart of this transformation was the strategic management of data. Logical data management, characterised by a systematic, structured approach to handling information, played a pivotal role in enabling governments and businesses to make informed decisions. It ensured that data was not only accessible but also meaningful, regardless of its source or format. Nationwide initiatives such as Aadhaar and CoWIN have benefited greatly from a logical data management approach. After all, national records and identities are systems that need to extract and unify information from myriad sources, regardless of formats and data types.

But with great digital power comes great responsibility. The rapid digitisation of services and the vast amounts of data generated have raised concerns about privacy and security. Recognising the need to safeguard citizens' information, India enacted the Digital Personal Data Protection Act 2023. This landmark legislation goes beyond mere compliance with global standards. It empowers individuals with greater control over their personal data, mandates transparency in data collection and processing, and holds organisations accountable for data breaches. This not only builds trust in the digital ecosystem but also fosters a culture of responsible data practices—a cornerstone of any sustainable digital infrastructure.

India's digital ambitions do not stop at its borders, nor are they restricted to only the present day. The nation recognises the transformative potential of artificial intelligence (AI) and is actively engaged in the global AI arena. Through initiatives like

the India AI Mission, a comprehensive programme to build a robust AI ecosystem, India is not merely keeping pace with global trends but actively shaping them. The India AI Mission, with its substantial investment of over ₹10,000 crores, is focused on developing practical AI solutions for critical sectors like healthcare, agriculture, education, and governance.

Beyond its national initiatives, India is also playing a significant role on the international stage. As a leading member of the Global Partnership on Artificial Intelligence (GPAI), India is collaborating with other nations to guide the responsible development and use of AI. GPAI focuses on four key themes: Responsible AI, Data Governance, Future of Work, and Innovation and Commercialisation. By investing in AI research, development, and deployment both domestically and internationally, India is paving the way for a future where AI-powered DPIs are not just a theoretical concept but a practical reality, driving tangible improvements in efficiency, inclusivity, and overall quality of life. This remarkable journey has paved the way for India's unique approach to Digital Public Infrastructure (DPI). These DPIs are more than just tools; they are transformative platforms built on trust, innovation, and inclusivity. By empowering individuals, businesses, and the government, they are propelling India towards a digital future filled with opportunity. While challenges remain, the progress made so far is undeniable, and the potential for further impact is immense. India's DPIs could be a testament to what can be achieved through thoughtful planning, collaboration, and a commitment to technological advancement for the benefit of all.

Lessons from the Pandemic: Reinforcing the Imperative of Digital Infrastructure

The COVID-19 pandemic was a crucible for governments worldwide, exposing the limitations of traditional systems in the face of unprecedented challenges. Suddenly, the challenges were not just about healthcare; they spanned every aspect of life, from tracing the virus's spread to adapting education systems for a virtual world. The crisis, however, became a catalyst, opening a “window of opportunity” (Kingdon, 1984) for emerging technologies to prove their worth and reshape public services in ways previously unimaginable (Li et al., 2022). In India, this opportunity was not missed. The nation's robust digital infrastructure, built on years of strategic investment, rose to the challenge. Aadhaar, the cornerstone of this infrastructure, became a lifeline for millions facing economic hardship due to the pandemic. The government leveraged Aadhaar to swiftly and accurately deliver financial aid to those who needed it most, showcasing the power of digital identity in times of crisis. Meanwhile, the Unified Payments Interface (UPI) became the backbone of contactless transactions, keeping the economy moving while promoting social distancing. Education, too, found its digital footing. DIKSHA, the Digital Infrastructure for Knowledge Sharing, became a beacon for remote learning. Its modular design was not limited to primary education; it extended to skilling initiatives and even hosted COVID-19 training modules for healthcare workers, facilitating the completion of over 1.7 million training sessions between April and June 2020 (Zhabska et al., 2023).

The Public Financial Management System (PFMS) emerged as a critical player in India's pandemic response. This integrated platform, already in place for managing government funds, proved invaluable for distributing aid under the Pradhan Mantri Garib Kalyan Yojana (PMGKY), a massive relief package

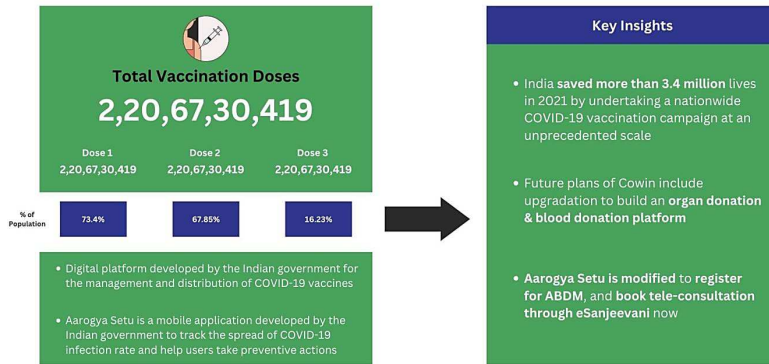
launched in March 2020 (Table 1). Thanks to its ability to seamlessly connect with existing beneficiary databases and leverage digital banking systems, PFMS facilitated the rapid transfer of funds to nearly 500 million individuals within a mere two weeks (Jain et al., 2021). This unprecedented speed and scale of aid delivery underscored the power of digital infrastructure to streamline and accelerate support during a crisis, ensuring that those most affected received timely assistance (Griffin et al., 2023).

Table 1: Coverage of Households Under the PMGKY Scheme (% Share of All Households) Source: Zhabska et al. (2023).

	All	Rural	Urban	Poor	Non-Poor
Food Only	40	38	43	42	39
Cash Only	6	7	4	6	6
Food and Cash	34	40	22	40	32
Atleast one benefit (Food & Cash)	80	85	69	87	76

Perhaps the most visible symbols of India’s digital prowess during the pandemic were the Aarogya Setu app and the CoWIN platform. These home-grown solutions became instrumental in the fight against COVID-19. Aarogya Setu, with its contact tracing capabilities, helped track the virus’s spread, while CoWIN orchestrated a nationwide vaccination campaign of unprecedented scale (Figure 2). By integrating existing digital platforms like DigiLocker and eVIN (Electronic Vaccine Intelligence Network), CoWIN managed everything from vaccine appointments and inventory tracking to adverse event monitoring, proving that technology could be a powerful ally in public health.

Figure 2: Impact of CoWIN, Aarogya Setu, and Rapid Vaccination Drive. Source: Report on India's digital infrastructure by NASSCOM and Arthur D Little (2024).



The Global South and the Necessity of Digital Transformation

The digital revolution is more than just a technological shift—it is a global force with the potential to reshape economies and societies. For the Global South, this revolution offers an unprecedented chance to leapfrog traditional development barriers and forge a path toward a brighter future. However, as the recent United Nations Economic and Financial Committee meeting highlighted, the path to digital transformation is fraught with challenges. Representatives from developing nations voiced the urgent need to integrate digital tools into the fight against poverty, gender inequality, and climate change. The digital divide, they warned, threatens to widen existing inequalities and leave less connected nations further behind (UN Press, 2023).

Digital Public Infrastructure (DPI) emerges as a critical solution to these challenges. By providing essential digital services and platforms, DPIs can accelerate progress towards the Sustainable Development Goals (SDGs) (Figure 3). Through initiatives like India Stack, which provides an open interface

applicable across various countries, these nations can leapfrog traditional barriers. Moreover, by investing in digital public infrastructure, particularly through collaborative efforts like those emphasised during India's presidency of the Group of 20 (G20), these countries can unlock significant opportunities for inclusive growth and development (UN Press, 2023).

Figure 3: Performance of DPIs with Reference to SDGs

1 No Poverty	By establishing systems to identify vulnerable communities (informal workers, women) and roll out public services	1.27 billion residents are enrolled on Aadhaar, India's digital identity infrastructure
3 Good Health and Well-being	By introducing systems to enroll, schedule, and track doctor visits, medicines, and vaccinations to support existing health infrastructure	2 days to develop a COVID-19 tracking platform post disease outbreak on Sri Lanka's COVID-19 interface
10 Reduced Inequalities	By instituting systems to identify vulnerable populations with low financial literacy and enable fast, efficient, and accessible social transfers	40 million individuals made their first-ever financial transfer through Pix, Brazil's payment ecosystem
13 Climate Action	By instituting systems to manage carbon offsets and trading, forest preservation, weather information and monitoring , thus reducing response times to climate events	91% reduction in greenhouse gas emissions estimated in Namibia the first African country to implement a Carbon Trading DPI
2 Zero Hunger	By introducing open ecosystems and data exchanges , thus going beyond agriculture to support the management of market linkages, water and waste	3.5 million Ethiopian farmers benefited through data exchanges combining their information with non-personal datasets (soil, weather, market prices) to improve agricultural practices
4 Quality Education	By investing in learning management systems to support education delivery digitally and improve access to digital resources at larger scales	290 thousand e-contents in 30 languages available for teachers on Diksha, India's digital learning ecosystem , which has facilitated 5 billion learning sessions











Source: The DPI approach: A playbook (United Nations Development Programme, 2023).

Yet, as illustrated in Figure 4, the journey towards robust DPI development is not without its challenges.

While these challenges are not unique to the Global South, they often require tailored solutions that take into account the specific context and needs of developing nations. India's journey in digital transformation serves as a compelling blueprint for countries in the Global South. Prime Minister Narendra Modi's vision of "Sabka Saath Sabka Vikas" (leaving no one behind) has guided India's Digital India initiative. Despite initial challenges, particularly limited internet access in rural areas, India has made significant progress. Through initiatives like BharatNet, which has woven a vast digital network across rural India, and the

widespread adoption of affordable smartphones, the nation has made remarkable strides in bridging the digital divide. Furthermore, India enjoys some of the cheapest mobile data plans globally. The average cost of 1 GB of mobile data sits at a mere ₹13.98 (as of 2023) (Das, 2023). This affordability has been instrumental in propelling mobile internet adoption across the country. The result? Millions of Indians are now connected, empowered, and able to participate fully in the digital economy.

Figure 4: Challenges Associated with the Development/Deployment of DPIs

 <p>Inadequate infrastructure Countries with inadequate infrastructure face challenges in providing reliable connectivity, high-speed internet access, and power supply for IT implementation. Globally, in 2018, there were 83 active mobile broadband subscriptions per 100 inhabitants, and the number was lower in developing countries and the least developed countries at 75 and 33, respectively.</p>	 <p>Digital governance and policy Creating frameworks for data governance, digital identity management, and open data initiatives can be complex tasks for countries. Out of 166 countries, 24 percent government organisations were classified as digitally advanced, delivering against transformation-focused digital initiatives.</p>
 <p>Affordability and digital inclusion High costs associated with IT hardware, software, and internet services can limit digital advancement. In Argentina, Colombia, Ghana, Guatemala, Paraguay, Peru and Rwanda, more than half the households limit their internet use due to its costs.</p>	 <p>Scalability and sustainability Digital technologies are responsible for 3.7 percent of global Green House Gas emissions. Implementing IT solutions at a national or large-scale level requires careful planning for scalability and long-term sustainability.</p>
 <p>Digital skills gap Countries often face a shortage of skilled IT professionals who can drive technology initiatives and effectively manage IT systems. The percentage of the population with basic computer skills is 46 percent in developing countries and 65 percent in developed countries.</p>	 <p>Privacy and data protection As digital technologies collect and process vast amounts of personal data, ensuring privacy and data protection becomes crucial. Only 137 out of 194 countries had implemented legislation to secure data and privacy.</p>
 <p>Cybersecurity As countries embrace digital technologies, the risk of cyber threats increases. North America is the most impacted region, experiencing 33.5 percent of the total cyber issues reported, followed by Asia-Pacific at 23.5 percent, and Europe at 20 percent.</p>	 <p>Vendor lock-in and dependency Over-reliance on a single technology vendor or proprietary solutions can limit flexibility, competition, and hinder innovation. Over 80 percent enterprises expressed notable levels of apprehension regarding being locked to a single public cloud platform.</p>
 <p>Interoperability and standardisation The presence of restricted interoperability, such as a closed API, can act as a significant obstacle to entry into a market. In this scenario, a company would typically be required to provide users with a comprehensive range of services offered by the dominant player to effectively compete with their closed system.</p>	 <p>Integration of emerging technologies The adoption of emerging technologies, such as AI, blockchain, Internet of Things (IoT), and cloud computing presents both opportunities and challenges. Approximately 89 percent companies, are facing significant obstacles in integrating new technologies and solutions, which is impeding their efforts towards digital transformation.</p>

Source: The DPI approach: A playbook (United Nations Development Programme, 2023).

To optimise the benefits of DPIs, countries could emulate India's multifaceted approach. This includes not only investing in robust digital public infrastructure but also promoting digital literacy, attracting private investments, ensuring affordability and accessibility of digital services, fostering R&D initiatives, and prioritising workforce upskilling. Such comprehensive efforts, intertwined with resilience and innovation, serve as a roadmap for nations in the Global South, showcasing the boundless possibilities of digital transformation in bridging societal gaps and uplifting communities.

Role of DPI and DPG in Digital Transformation

Definition and Conceptual Framework

At its core, DPI, as defined by the Centre for Digital Public Infrastructure, is a set of interoperable technology building blocks.¹²⁷ These blocks function under a framework of open standards and specifications. This open and transparent approach fosters innovation, inclusion, and competition at scale. Governments establish enabling rules to guide the development and utilisation of DPI.

The G20 Summit in Delhi (September 2023) further emphasised DPI as...a set of shared digital systems that should be secure and interoperable and can be built on open standards and specifications to deliver and provide equitable access to public and/or private services at societal scale and are governed by applicable legal frameworks and enabling rules to drive development, inclusion, innovation, trust, and competition and respect human rights and fundamental freedoms. The G20 acknowledges the evolving nature of DPI, recognising that specific country contexts might require tailored approaches and terminology. While a regular digitalisation effort may adhere to one or more of the following principles, it must fulfil all five in order to be considered DPI—interoperability, modularity and extensibility, scalability, federation, and security and privacy

¹²⁷ As defined by UNDP, these are reusable components—software code, platforms, and applications, which help scale basic digital services. They connect multiple digital services and enable large-scale interoperability. The GovStack Initiative reviews digital solutions to certify them as building-block compliant and develops technical specifications for building blocks. The multiple digital systems of a country's DPI can be connected via common protocols, standards, and applications to achieve unification and streamline access. Building blocks help to achieve this as they are reusable components, making services accessible on a decentralized, population-scale network.

(UNDP, 2023). India's India Stack serves as a real-world example of DPI in action. This interoperable digital building block utilises open standards and specifications. Institutions and organisations leverage the India Stack to offer various services. The Stack's three interconnected layers provide a digital identity for every Indian citizen and facilitate easy, cost-free, mobile-first digital transactions.

Defining Digital Public Goods

The UN Secretary-General's Roadmap for Digital Cooperation defines Digital Public Goods (DPGs) as:

Open-source software, open data, open artificial intelligence models, open standards and open content that adhere to privacy and other applicable international and domestic laws, standards and best practices and do no harm. They should be aligned with achieving the United Nations' 2030 Sustainable Development Goals (SDGs).

Table 2: Indicators that Determine the Qualification as a DPG

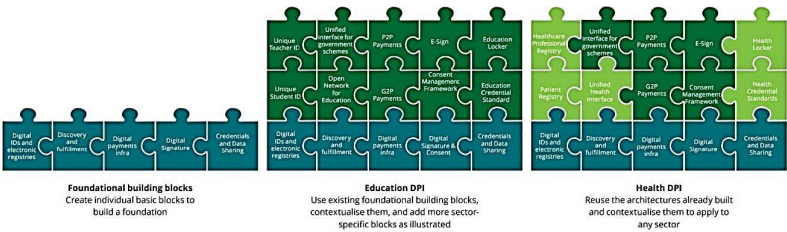
Indicators that Determine the Qualification as a DPG	
1. Relevance to Sustainable Development Goals	7. Adherence to Privacy and Applicable Laws
2. Use of Approved Open Licenses	8. Adherence to Standards & Best Practices
3. Clear Ownership	9. Do No Harm by Design
4. Platform Independence	9.a) Data Privacy & Security
5. Documentation	9.b) Inappropriate & Illegal Content
6. Mechanism for Extracting Data	9.c) Protection from Harassment

Source: UN Secretary-General's Roadmap for Digital Cooperation.

The UN Secretary-General's Roadmap for Digital Cooperation outlines nine indicators and requirements to determine if software, data, AI systems, or content collections qualify as digital public goods. DPGs adhere to the principles of accessibility,

affordability, and adaptability, serving as essential components in the development and deployment of DPI. There are two main approaches to constructing a Digital Public Infrastructure (DPI) layer. The first involves using or building proprietary components. This method, however, can be expensive due to high initial costs and ongoing maintenance fees. Additionally, it can lead to vendor lock-in, where dependence on a single supplier limits flexibility and potentially increases costs in the long run. This approach can hinder the long-term sustainability of the DPI layer.

Figure 5: Approach to Build DPIs



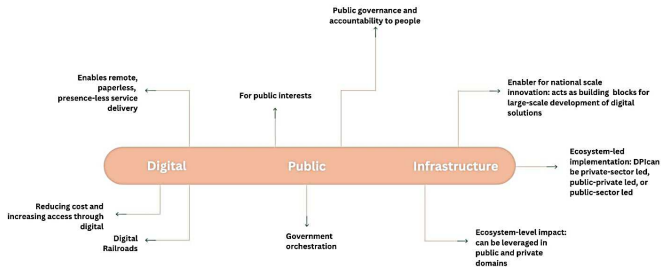
Source: DPI playbook for nations (Deloitte India, 2023).

An alternative approach focuses on leveraging Digital Public Goods (DPGs) or open-source solutions. These readily available resources encompass software, protocols, standards, and specifications. By utilising these resources to build the DPI layer, several challenges are addressed. Security concerns are mitigated as open-source solutions are often rigorously vetted by the community. Scalability is enhanced due to the inherent flexibility of open-source tools. Furthermore, this approach promotes cost-effectiveness by reducing dependence on expensive proprietary solutions and vendor licencing fees. Ultimately, leveraging DPGs and open-source solutions fosters the long-term sustainability of the DPI layer by minimising reliance on external factors and vendors (Deloitte India, 2023).

Unbundling DPI: Digital, Public, Infrastructure

The “digital” component of DPI encapsulates the technological aspect of this infrastructure, emphasising the digitisation of services and systems to enable seamless access and interaction in the digital realm. By harnessing digital innovations such as cloud computing, artificial intelligence, and blockchain, DPI transforms traditional service delivery models into agile, user-centric platforms capable of addressing diverse needs. The digital nature of DPI ensures that services are accessible anytime, anywhere, empowering individuals and organisations to engage in a digitally connected ecosystem.

Figure 6: Significance of Digital, Public, and Infrastructure



Source: The DPI approach: A playbook (UNDP, 2023).

Public

When we talk about Digital Public Infrastructure (DPI), we are not just talking about any digital system. Take Google and Facebook, for example. They are undeniably part of our daily lives, connecting us with information, friends, and family. But are they truly “public”? Defining “public” in the context of DPI is tricky. It is not enough for a platform to be widely used or technologically advanced—it needs to serve the public good. Google, with its vast search engine and wealth of information, provides access to knowledge and empowers individuals to learn and explore. Yet, concerns about data privacy and targeted advertising raise questions about whose interests are truly being

served. Similarly, Facebook connects billions of people worldwide, fostering community and enabling global conversations. But the issues of misinformation and its opaque algorithms have led to criticism and calls for greater transparency. So, while these platforms do provide undeniable benefits, their status as true DPIs is up for debate. Therefore, perhaps DPIs should be those platforms that are created truly and solely for the good of the public, without other interests coming into play.

Public value creation is not just about measuring the benefits to society; it is about how those benefits are achieved. Who controls the platform? Who sets the rules? Who ensures that the system works for everyone, not just the platform's owners or advertisers? Traditionally, we have framed the debate as a battle between the public and private sectors (Mazzucato and Ryan-Collins, 2022). But the reality is far more nuanced. Public value is not created in a vacuum; it is a collaborative effort (Mazzucato, 2016). Governments, businesses, and civil society organisations all play a role in shaping the digital landscape. To truly maximise public value, we need to move beyond a competitive mindset and embrace a collaborative one. This means bringing together diverse perspectives, expertise, and resources to design, implement, and manage DPIs that serve the common good (Mazzucato and Kattel, 2019).

While the debate over what makes digital infrastructure truly “public” continues, two main approaches have emerged (Buhr, 2003; Frischmann, 2012). One focuses on the technical attributes of DPI, emphasising things like open standards and reusable components. This perspective sees DPI as a system to drive innovation, efficiency, and scalability. The other takes a more functional view, focusing on the societal purposes DPI serves, like empowering citizens, entrepreneurs, and consumers to fully participate in the digital age. This view prioritises the social and economic value that DPI can create, along with its potential to enhance human capabilities and protect fundamental rights. However, both approaches have a blind spot. They tend to overlook the crucial role of governance and the state in

maximising public value. It is not just about the technology itself; it is about how it is managed and whom it serves. To truly harness the potential of DPI, we need clear governance structures and an active role from the state to ensure that the infrastructure benefits everyone, not just a select few.

Figure 7: Framework to Understand Publicness in DPI

	Framings for publicness	Implicit normative values	Mechanisms for value creation
Attributes	Be interoperable through open standards	Dynamic efficiency and scale	Open and interoperable standards prevent lock-in, and thus improve and increase and shape competition
	Be built using reusable building blocks	Dynamic efficiency and scale	The more digital infrastructure can be reusable, the higher network effects and combinatorial innovation
	Be built using open-source licenses (or be unlicensed and in the public domain)	Efficiency and scale	Digital infrastructure with open-source licenses or in the public domain generates positive externalities through adoptability, adaptability and prevention of lock-in
Functions	Foster community and social relationships	Social value	DPI resources in the context of social infrastructure can foster inter- and intra-communal relationships
	Foster economic activity	Economic value	DPI can improve financial inclusion and mobilise the potentialities of economic agents
	Guarantee essential capabilities	Capabilities and human rights	DPI can create the capabilities for individuals, businesses and agents of society to participate and thrive in all dimensions of their lives
	Guarantee better quality of life	Essential Needs and Human Rights	DPI can guarantee the essential needs for human life, enhancing the overall well-being and happiness of the population, including considerations such as healthcare, education, and cultural enrichment.

Source: Eaves et al. (2024).

This is where the conversation gets interesting. It is not just about building the digital equivalent of roads and bridges; it is about creating a digital landscape that reflects our values, priorities, and aspirations as a society. It is about using technology to empower individuals, strengthen communities, and create a more equitable and sustainable future for all.

Infrastructure

Digital Public Infrastructure (DPI) builds upon the legacy of traditional infrastructure systems like transportation networks, electrical grids, and telecommunications. These established systems have played a pivotal role in economic, social, and political progress by enabling the creation and delivery of a vast array of public and private goods.

Brett Frischmann defines infrastructure as “shared means to many ends” (Frischmann, 2012). This provides a valuable starting point for understanding DPI. This concept goes beyond just physical infrastructure like roads and bridges; it encompasses the entire ecosystem of shared resources, including social, institutional, and—crucially—digital elements. Furthermore, it highlights two key aspects of infrastructure: (a) the communal use of infrastructure (“shared means”) and (b) its diverse range of potential applications (“to many ends”).

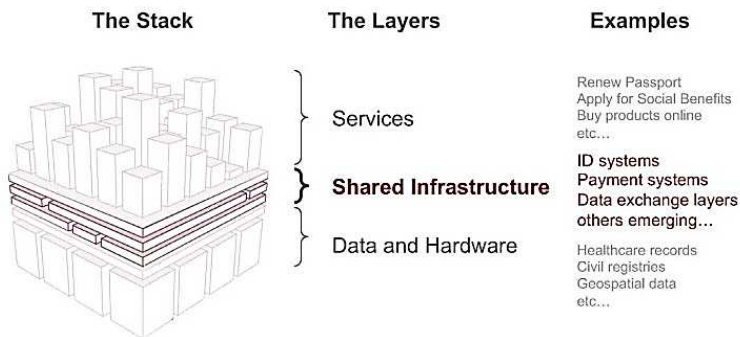
Frischmann proposes three criteria for infrastructure:

1. **Non-rivalrous Consumption:** The resource can be consumed by multiple users without diminishing its availability for others, within a reasonable demand range. For example, roads are non-rivalrous up to a point, but with excessive traffic, congestion can limit everyone’s ability to use them effectively. Similarly, digital infrastructure with limited storage or processing power becomes non-rivalrous only to a certain extent.
2. **Input for Downstream Activities:** Infrastructure serves as a “means” in economic terms, acting as an input for various productive activities.
3. **Versatility:** Infrastructure has a general purpose, meaning it can be used for a broad range of goods and services, including private, public, and social goods.

When discussing digital infrastructure, there are diverse perceptions. Some associate it solely with physical components like internet cables and data centres while others include software and protocols like those enabling internet connectivity. The

internet exemplifies digital infrastructure’s transformative power, offering universal access for a multitude of activities ranging from communication to commerce. While the governance of this infrastructure is both contested and evolving, there is a broad consensus that both the pipes and protocols of the internet are a form of infrastructure. Understanding infrastructure as a digital stack, where each layer builds upon and interacts with others, is crucial.

Figure 8: The Digital Stack and Its Layers



Source: Eaves et al. (2024).

Essentially, this concept illustrates that each layer within the stack is intricately linked to those above and below it, with upper layers capitalising on the resources generated by lower layers. The infrastructure layer has the shared resources that connect the data and hardware layers to the diverse services and applications that emerge at the top. This layer ensures seamless data flow and efficient hardware utilisation for public services. For example, a core component of the DPI stack might be a national digital identity system. This system (infrastructure layer) acts as a shared resource, allowing citizens to securely access various public services (upper layers) like healthcare portals, online tax filing, or social security benefits—all built upon the foundation provided by the digital identity system. By functioning as a layered stack, DPI facilitates the development of

a wide range of public services that cater to the needs of all citizens. Each layer builds upon the previous one, fostering innovation and expanding the possibilities for digital public services.

Design Principles of DPI

Digital Public Infrastructure (DPI) can take on various forms, but all successful implementations share a core set of design principles. These principles ensure that DPI fosters trust, safety, inclusivity, and accessibility for all citizens.

Technology Design

DPI adopts an infrastructure-like approach, serving as a foundational layer to support a diverse array of digital services and applications. Within this approach, the following principles play a key role:

1. **Foundational:** DPI operates on the principle that it should serve as a foundational layer upon which a multitude of digital services can be built and accessed by anyone without permission. This foundational aspect enables the creation of interoperable building blocks, comprising software code, platforms, and applications that offer basic digital services at scale and can be reused across various contexts and use cases. These building blocks are designed to be autonomous, generic, and interoperable, allowing for continuous improvement while being utilised as part of broader solutions.
2. **Interoperability:** A fundamental characteristic of DPI is interoperability, enabling different digital systems and software to effectively communicate, exchange data, and utilise shared information. Interoperability fosters seamless integration and collaboration among diverse digital platforms, enhancing the overall efficiency and accessibility of DPI.
3. **Scalability:** DPI prioritises scalability, ensuring that digital

systems can efficiently handle high volumes of transactions and interactions without compromising performance, reliability, or security. Scalability is essential for accommodating extensive usage and the evolving needs of users over time.

Governance

Effective governance is the linchpin that holds the entire Digital Public Infrastructure (DPI) ecosystem together. It is the framework of rules, policies, and practices that ensure these powerful digital systems are used responsibly, ethically, and for the greater good. Without strong governance, even the most well-intentioned DPI can go astray, exacerbating existing inequalities or falling prey to misuse.

The stakes are high. Consider India's Aadhaar system. While a marvel of technological innovation, its use has raised concerns about privacy, exclusion, and the potential for misuse. In Kenya, similar issues have arisen, with instances where identification errors have prevented migrants and refugees from receiving social security benefits. This highlights the need for vigilant oversight and proactive measures to protect the rights and interests of all citizens.

So, what does good governance look like in the digital age? Effective governance of digital infrastructures requires setting appropriate guardrails to prevent misuse while ensuring that these systems contribute positively to public welfare. Here are key considerations for strong DPI governance:

1. **Alignment with Democratic Principles:** The governance framework should be aligned with democratic principles and incorporate institutionalised mechanisms for public involvement. In simpler terms, good governance implies that DPI is overseen by democratic institutions, with clear guidelines and regulations.
2. **Inclusivity:** A core principle of DPI is ensuring user-friendly,

widely available, and inclusive platforms and systems. This ensures that all citizens, irrespective of their digital literacy levels, can benefit from these services.

3. **Enabling Rules and Frameworks:** The implementation and operation of DPI are governed by enabling rules and frameworks encompassing policies, regulations, standards, and guidelines. These mechanisms govern various aspects of DPI, including usage, security, privacy, and ethics, ensuring adherence to established principles and promoting the responsible deployment of digital infrastructure.

Community Accountability

Public oversight is essential to guarantee that Digital Public Infrastructure (DPI) remains inclusive, interoperable, and serves the public good. Effective governance models for DPI prioritise a “whole-of-society” approach (Neto, 2024) by actively involving diverse stakeholders. This includes citizens, civil society organisations, national and local leaders, businesses, digital innovators, and government agencies. This collaborative approach fosters both accountability and transparency within DPI development and implementation. Governments responsible for DPI oversight must establish mechanisms—through ownership structures, regulations, policies, or laws—to enforce accountability and safeguard the public interest in digital infrastructure.

When technologies are designed and deployed through open consultations with both directly and indirectly impacted stakeholders, and with a focus on empowering vulnerable populations, the outcomes are demonstrably better. This approach ensures that the technology is:

1. **Context-Appropriate:** The technology aligns with the specific needs and circumstances of the community it serves.
2. **Locally Sustainable:** Local stakeholders gain the skills and knowledge to manage the technology effectively, ensuring its

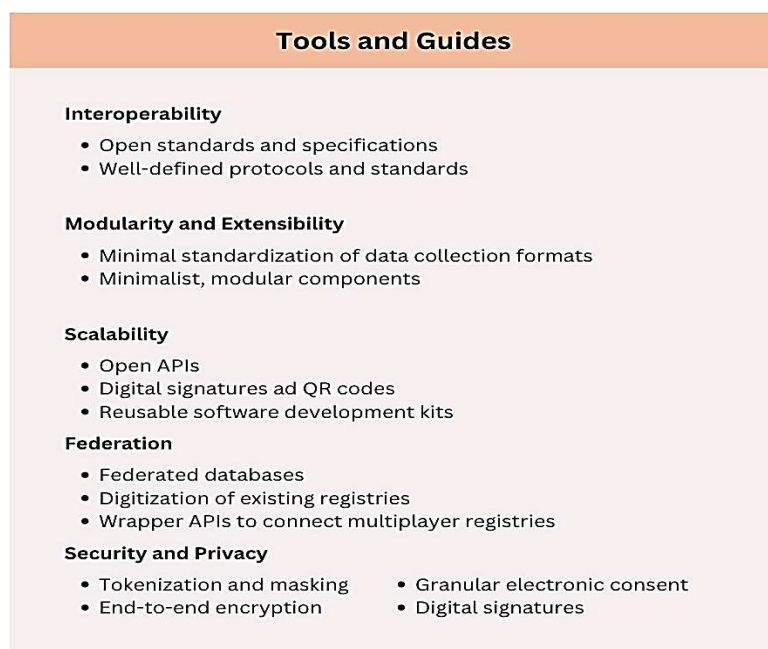
long-term viability.

3. Empowering: The technology promotes a more equitable distribution of power within the community.

By prioritising stakeholder engagement and focusing on inclusivity and empowerment, DPI governance can ensure that digital infrastructure serves the public good and does not exacerbate existing inequalities.

Figure 9: Tools for Operationalising the Design Principles of DPI.

Source: DPI playbook for nations (Deloitte India, 2023).



Foundational DPIs

For countries to achieve seamless, user-friendly, and secure digital interactions, they need a strong foundation of interconnected digital systems (The World Bank, 2022). These systems, working together, should promote secure

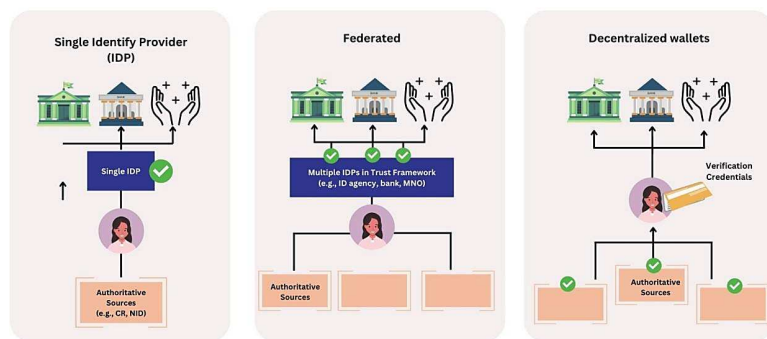
authentication (both online and offline) of identities and data, enable rapid and secure payment flows, and facilitate responsible data exchange between different systems and databases. While the specific design and architecture of these systems will vary depending on each country's context, this section provides a brief overview of the core components—the Foundational DPIs—that underpin the essential functionalities and benefits of DPI.

Digital Identity

Digital identity serves as the cornerstone of DPI, enabling the validation of credentials and establishing trust in transactions (e.g., Aadhaar in India). In today's globalised and digital era, inclusive and user-friendly digital ID systems are essential for individuals to securely prove their identity both in-person and remotely. Such systems streamline processes like bank account opening, loan applications, and social protection programmes, while also enhancing the management of health and education records. India's Aadhaar system, which provides digital identity to over 1.3 billion people, exemplifies the deployment of identity systems at a population scale, ensuring widespread access and trust.

Figure 10: Different Digital Architecture.

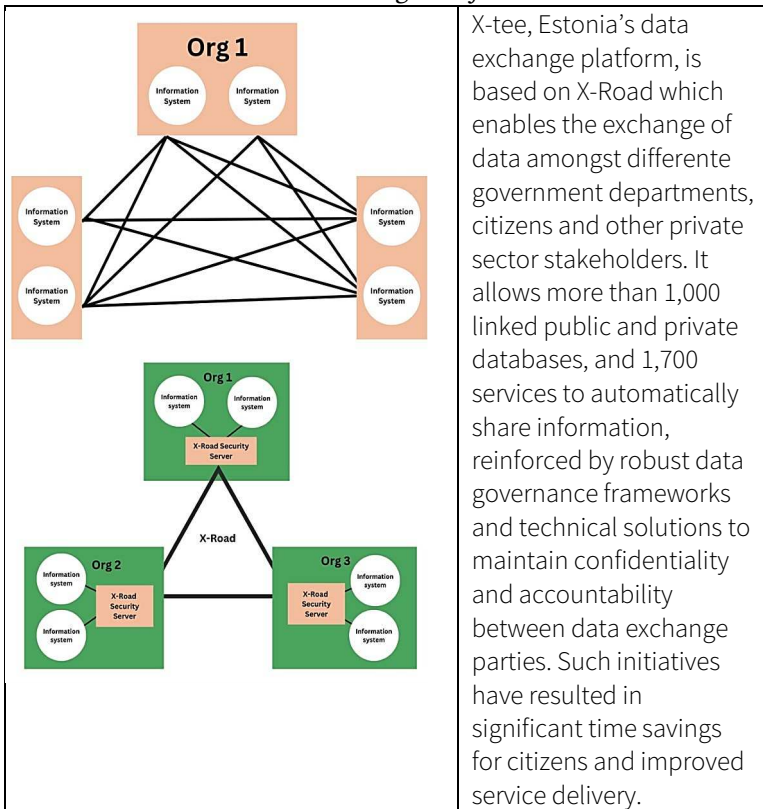
Source: The World Bank (2022).



Digital Payments

Digital payments are a critical component of Digital Public Infrastructure (DPI), facilitating seamless and secure transactions that empower individuals and businesses. By transitioning from paper cash to digital transactions, various benefits emerge, such as improved accessibility, convenience, and efficiency in making payments. One of the transformative impacts of digital payments is evident in the realm of remittances, where migrants can now send funds to their families instantly, overcoming barriers associated with traditional banking hours or geographical limitations. Furthermore, digital payments play a crucial role in government-to-person (G2P) payments, including social assistance programmes, wages, and pensions, enhancing financial inclusion and efficiency in disbursing funds. However, for digital payments to thrive within DPI, robust physical and financial infrastructures are necessary. This includes investments in IT and communications infrastructure, as well as specialised financial infrastructures like settlement services and clearinghouses. Fast payment systems that enable real-time transactions are also integral to supporting seamless financial transactions. While the adoption of digital payments has seen significant progress, challenges remain, such as limited access to financial accounts and the need for enhanced account and payment instrument design. Ensuring readily available access points and expanding interoperable financial services are essential steps toward deepening financial inclusion and maximising the benefits of digital payments within DPI.

Box 1: Estonia's X-tee Data Exchange Platform



Data Exchange

Trusted data exchange is a critical aspect of Digital Public Infrastructure (DPI) that facilitates efficient, secure, and seamless interactions within digital ecosystems. It involves the secure sharing and federating of information among various databases, systems, and devices, both within organisations and across different entities. This data exchange layer enables governments, businesses, and individuals to exchange data and queries effectively, contributing to improved governance, better-informed policy-making, and inclusive decision-making.

processes. The technology behind trusted data exchange includes various elements such as Application Programming Interfaces (APIs), web services, service buses, cloud services, and wired connections. These components work together to ensure that different systems and services can interoperate and exchange data seamlessly. Effective data exchange is not just about technology; it also encompasses standards, processes, regulations, and institutional arrangements that promote interoperability while maintaining security and accountability.

DPI is dynamic in nature; more categories may evolve as technologies mature and become core systems, such as “Discovery and Fulfillment” and “Geospatial DPI.”

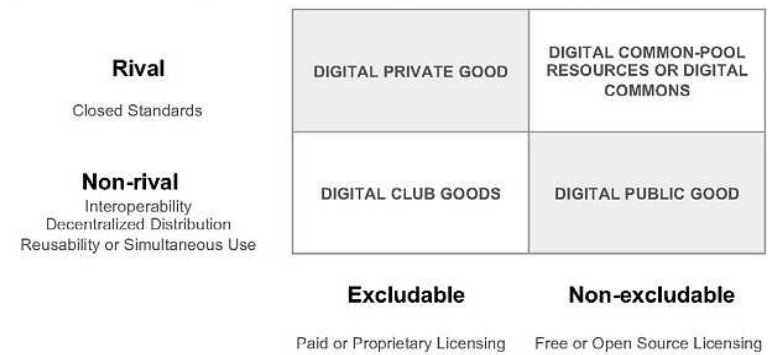
Foundational DPIs as DPGs

In the realm of digital infrastructure, a significant transformation is underway as DPIs can be seen evolving into DPGs. An exemplary illustration of this evolution is India’s Aadhaar digital identity system, initially conceived as a DPI but now reimagined into the Modular Open-Source Identity Platform (MOSIP) as a robust DPG. MOSIP inherits the foundational capabilities of Aadhaar while embracing open-source principles, making it adaptable and customisable for various countries and contexts. This flexibility is evident in its adoption for national digital ID programmes like Ethiopia’s National ID and the Philippines’ ePhilID.

Furthermore, examining DPIs and DPGs from an economic standpoint sheds light on their potential as public goods. Public goods are characterised by attributes like non-excludability and non-rivalry. In the digital realm, a good becomes a public good (an impure one) when it is universally accessible, built with interoperable standards, and uses open-source software. However, it is important to remember that open source alone is not a magic bullet. Factors like code quality, documentation, and

governance models also play a crucial role in ensuring the long-term success and wider adoption of DPGs.

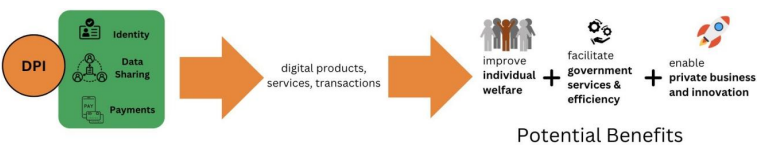
Figure 11: The Four Types of Economic Goods in the Digital Space



Source: Eaves et al. (2024).

Benefits of Digital Public Infrastructure

Figure 12: Potential Benefits from the Usage of DPIs



Source: Clark and Marin (2023). DPI workshop: Why this matters.

Enhancing Service Delivery

Millions of individuals worldwide face challenges accessing their rights and essential services, while governments and businesses struggle with efficient service delivery and secure operations, especially in an increasingly digitalised environment. One of the key contributing factors to these

challenges is the lack of inclusive, trusted, and digital systems for identity verification, data sharing, and payments.

For example, a significant portion of the global population lacks access to digital identification or bank accounts, leading to difficulties in accessing services and economic opportunities. Moreover, existing personal records and data are often insufficient or inaccurate, resulting in time-consuming and insecure methods for verifying identities and personal information. This situation is further exacerbated by poor data protection measures and a high incidence of identity theft, adding to operational costs due to reliance on in-person, cash-based processes. Digital Public Infrastructure (DPI) has emerged as a game-changer in addressing these challenges by empowering governments to deliver essential services efficiently and securely while reducing errors and fraud. A notable example is Estonia's X-Road digital infrastructure, which has enabled the government to provide 99% of public services online. This streamlined approach includes processes like tax filing in under five minutes and business registration in just three hours.

Similarly, in India, the adoption of Direct Benefit Transfer (DBT) mechanisms has led to significant improvements in service delivery and reduced leakages and corruption in social safety net programmes. It consolidates and controls data from multiple sources for 310 different government schemes managed by 53 ministries. Through DBT, government benefits are directly transferred to bank accounts, leveraging features linked to Aadhaar for secure and transparent transactions. The Government of India estimated that up to March 2021, the government saved about 1.1% of GDP due to the DBT and other governance reforms. Most of the savings are attributed to the elimination of duplicate, non-existent, and ineligible beneficiaries.

Table 3: Estimated Savings from DBT and Related Reforms (up to March 2021).

Ministry/Department	Scheme	Savings (in billion Rs.)	Savings (in percent of GDP)
Department of Fertilizers	Fertilizer	100	0.05
Department of Rural Development	MGNREGS	335	0.17
Department of Rural Development	NSAP	5	0.00
Ministry of Women and Child Development	Others	15	0.01
Ministry of Petroleum and Natural Gas	PAHAL	729	0.37
Department of Food and Public Distribution	PDS	1016	0.52
Ministry of Minority Affairs	Scholarship scheme	14	0.01
Department of Social Justice and Empowerment	Scholarship scheme	3	0.00
Others	Others	12	0.01
Total		2230	1.14

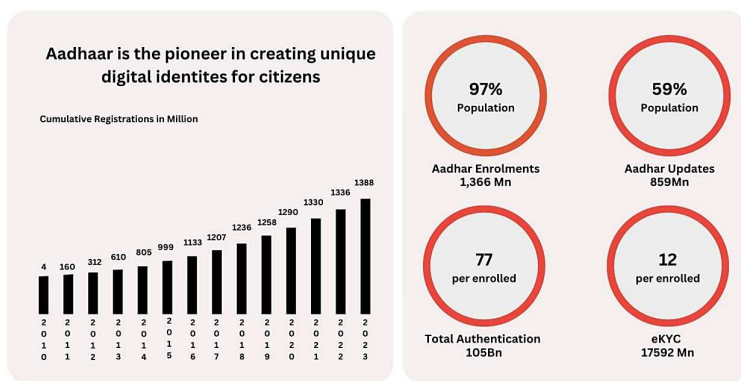
Source: The World Bank (2022).

Ministry of Finance data indicates that 54% of DBT payments are now channelled through Aadhaar-linked accounts, ensuring greater accountability and efficiency in welfare distribution. DBT is also used for transfers of benefits in kind (e.g., the PDS); in this instance, Aadhaar authentication is used to access subsidised grains.

Promoting Inclusive Growth

DPI fosters sustainable and inclusive economic growth by democratising access to digital services and financial resources. In India, the adoption of DPI components, such as digital identity systems and payment platforms, has led to a significant increase in bank account ownership among adults, particularly women. According to recent data from the World Bank, the percentage of adults with bank accounts in India more than doubled, from 35% to 78%, within a little over 10 years after launching its digital identity system. Much of that growth occurred between 2014 and 2017 as a result of a government programme that began in 2014 and provided unbanked adults with a financial account leveraging an official government identification document.

Figure 13: Trends in Aadhaar Penetration in India.



Source: *The DPI approach: A playbook* (UNDP, 2023).

Notably, women's account ownership grew even faster, soaring from 26% to an impressive 78% during the same period. This substantial increase in financial inclusion reflects the transformative impact of DPI on narrowing the gender gap and extending financial services to previously under-served populations.

Fostering Innovation and Entrepreneurship

DPI acts as a catalyst for innovation and entrepreneurship. Businesses of all sizes benefit from a level playing field where they can compete and reach new customers. Start-ups can leverage DPI to build innovative applications and launch thriving ventures. According to the Bill and Melinda Gates Foundation, DPI could unlock access to capital for 16 to 19 million micro and small businesses globally, propelling sustained growth.

Figure 14: Private Players and Start-Ups Creating Solutions for Unique Problems Using DPIs



Source: Report on India’s digital public infrastructure by NASSCOM and Arthur D Little (2024).

India’s robust DPI ecosystem, often referred to as “India Stack,” has fostered numerous successful businesses. Digital-only stockbrokers utilise the identity and payment layers of the India Stack to provide seamless onboarding experiences, attracting a new generation of investors. The potential for innovation multiplies as the number of DPIs increases. Imagine combining e-signatures, digital KYC (Know Your Customer), and secure document storage platforms like DigiLocker. This opens doors for new insurance companies to offer streamlined services without physical interaction with customers. Additionally, the Bhashini platform, a national language translation DPI, addresses communication barriers for India’s diverse population. This fosters greater access to digital tools for underserved communities.

Box 2: France's Health Data Hub

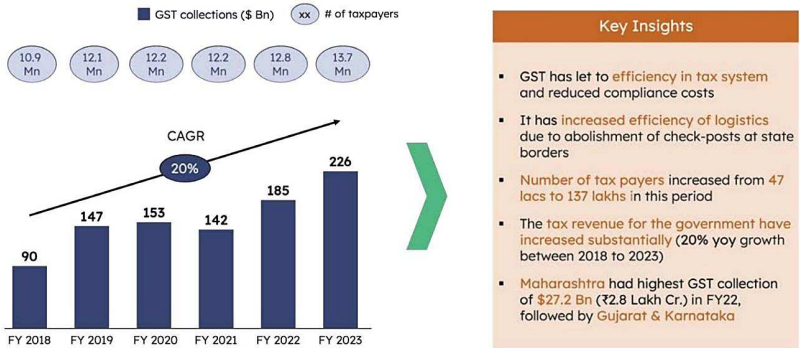
France's Health Data Hub exemplifies a Digital Public Infrastructure (DPI) in the health-care sector. This centralised platform consolidates administrative health data from diverse sources, including hospitals, insurance providers, and research institutions. With over 1,600 projects supported to date, the hub has proven its value in fostering health-care innovation and improvement. The Health Data Hub's strength lies in its commitment to interoperability, achieved through the use of international standards. This enables seamless integration with external databases, expanding the scope and potential applications of the data. While secure authorisation is required for certain sensitive datasets, a significant portion of the data, including information on medication usage and health insurance expenditures, is openly accessible through APIs (Application Programming Interfaces). This open access approach promotes transparency and encourages collaboration among researchers, health-care providers, and policymakers. Furthermore, the Health Data Hub actively supports a vibrant community of open-source developers who create tools for analysing and utilising the platform's data. This collaborative environment fosters innovation and ensures that the data is leveraged to its fullest potential.

Strengthening Governance and Accountability

In India, initiatives like Aadhaar and the Goods and Services Tax Network (GSTN) have revolutionised tax administration and compliance activities, enabling seamless registration, filing, and payment processes. Aadhaar's biometric authentication and PAN linkage have significantly reduced tax and financial fraud, while the GSTN has streamlined tax collection across states, reduced corruption, and improved transparency through open APIs and invoice-level data sharing. Furthermore, DPI facilitates real-time monitoring and public scrutiny of government initiatives, as demonstrated by the Biometric Attendance System, which enables citizens to track government employee attendance and

pension disbursements in real time, fostering accountability and trust in public institutions.

Figure 15: Impact of Deployment of GSTN on the Economy



Source: The DPI Approach – A Handbook, UNDP 2023

Box 3: mWater: An Open Source Software Platform

mWater, an open-source software platform, is a vital tool for tracking real-time water data, including crucial information on water quality, supply, and sanitation. As one of the most widely adopted platforms in its sector, with over 100,000 accounts in 184 countries, mWater is already making waves in water management.

By fostering data-driven decision-making, mWater acts as a Digital Public Infrastructure (DPI) that addresses various water and sanitation challenges. For example, in Haiti, over 60,000 water points have been mapped using mWater, promoting improved water governance and enabling targeted community- level interventions.

To fully realise its potential as a DPI, mWater is enhancing interoperability by linking with other digital tools and technologies, allowing for seamless data sharing and collaboration. Additionally, mWater is focused on rapid scaling, ensuring its solutions can reach even more communities in need.

Challenges for DPI

Digital Divide and Accessibility

Despite the exponential growth in UPI-based payments, only 57% of individuals aged 15 and over have participated in digital transactions (PwC India, 2022). This discrepancy underscores the concentration of digital solution usage within specific demographic segments. According to data from the National Sample Survey in 2017–2018, only 38% of Indian households have at least one digitally literate member (Malotiya et al., 2023). The digital divide persists along gender, geographic, and income lines. For instance, digital literacy rates are over twice as high in urban areas (61%) compared to rural areas (25%) (Sabre India, 2024). Additionally, while 43.5% of urban men are proficient in internet usage, only 30.1% of urban women and 8.5% of rural women possess similar skills. The disparity is further exacerbated among older and lower-income individuals.

Data Privacy and Security Concerns

In 2021 alone, over 80 million Indian users were affected by data breaches (Business Today, 2021). These incidents, involving companies like Air India, Facebook, and Upstox, exposed sensitive personal information like phone numbers, bank details, and even Aadhaar data (Internet Freedom Foundation, 2021). The average cost of a data breach in India in 2021 amounted to US\$2.2 million, as estimated by IBM, highlighting the substantial financial implications of cyber risks. Such breaches not only erode trust but also discourage potential users from embracing digital solutions. Almost 50% of retail financial fraud arises from UPI. The ease of offering financial services such as loans has also led to predatory lending to vulnerable people.

Funding and Sustainability

Governments play a crucial role in supporting Digital Public Infrastructure (DPI) projects throughout their lifecycle due to the substantial benefits they offer to residents and organisations across various sectors. However, despite this investment, scaling solutions beyond their own jurisdiction can be challenging for governments. They may encounter obstacles such as inflexible procurement processes, limited financial resources, wavering political will, and concerns regarding socio-political dynamics and data privacy risks. Adding to that, there are several challenges that hinder the sustainable implementation of DPIs, such as mentioned as follows:

1. **High Initial Investment:** The development of robust DPI necessitates substantial upfront investments in infrastructure, technology, and human resources. This poses a considerable barrier for developing countries with limited financial resources.
2. **Long-Term Maintenance Costs:** Ongoing financial commitments are essential for maintaining and upgrading DPI components. This includes addressing security vulnerabilities, adapting to technological advancements, and ensuring uninterrupted system functionality.
3. **Uncertain Return on Investment (ROI):** Quantifying the ROI of DPI projects can be complex due to indirect benefits such as improved governance and economic growth. This uncertainty makes it challenging to secure long-term funding for DPI initiatives.

Figure 16: Potential Instruments for Financing DPIs

Financial Instrument	Merits	Challenges
Public budgets are sums of money allocated for public expenditure by a state entity	<ul style="list-style-type: none"> • backed by state policy • Steady flow and stable value • Subject to public security 	<ul style="list-style-type: none"> • Influenced by changes in national priorities • Dependent on political buy-in
Grants are sums of money that are commitment based or philanthropic in nature	<ul style="list-style-type: none"> • Aligns DPI with welfare goals • Ideal for funding the R&D aspects of DPI • Often large amounts of money, with limited control over usage 	<ul style="list-style-type: none"> • Unreliable for long-term financing as most grants are provided for a fixed period of the time with uncertain terms of renewal • Limited public accountability
Private Capital is a sum of money invested in an entity or infrastructure in exchange for ownership rights	<ul style="list-style-type: none"> • Possibility to raise more capital • Forges strategic partnerships with investors • Ideal for funding the R&D aspects of DPI 	<ul style="list-style-type: none"> • Typically focused on short-term goals • Could create the micro-economic issue of principal-agent conflict
Debt is a sum of money borrowed for a fixed period of time, with accompanying interest payments	<ul style="list-style-type: none"> • Lowest risk for funder • Ownership rights remain with the entity/country 	<ul style="list-style-type: none"> • Interest payments can cause fiscal burden • Restrictive terms of operation







Source: DPI playbook for nations (Deloitte India, 2023).

Figure 17: Merits and Challenges of Financial Instruments for DPIs

Non - Financial Instrument	Merits	Challenges
Capacity refers to the specific skills, insights or abilities that are supplied towards a goals/entity	<ul style="list-style-type: none"> • Enable projects to benefit from the leadership of long term 	<ul style="list-style-type: none"> • Lack of monetary incentive makes it challenging to engage experts in the long-term
Shared resources refer to element to technology/DPG resource that are provided for mutual gains	<ul style="list-style-type: none"> • Promote greater societal gains and richer innovation 	<ul style="list-style-type: none"> • Nature of partnership between private players and state uncertain
Volunteering refers to technical, pro-bono support provided by communities or collectives with subject matter expertise	<ul style="list-style-type: none"> • Promote contribution towards nation-building • Builds partnership and community value between technology developers and DPI thinkers 	<ul style="list-style-type: none"> • Absence of funding relationship may generate conflict of interest • Lack of monetary incentive makes long-term engagement difficult

Source: DPI playbook for nations (Deloitte India, 2023).

Figure 18: Merits and Challenges of Non-financial Instruments for DPIs

INSTRUMENT	EXAMPLE
FINANCIAL	<p>Public budgets</p>  India's National Health Authority was allocated US\$41 million from the national budget in 2023-24 for the Ayushman Bharat Digital Mission. Within ten months of its nationwide launch, 20 government platforms and 32 private health applications were integrated and contributing to scaling the network.
	<p>Grants</p>  In response to a shift in geopolitical conditions in 2022, USAID contributed US\$25 million to further develop Ukraine's e-governance app, Dila. With support from the TAPAS project, Dila has been in development since 2019, and its first version was developed by EPAM, a private software firm. It has also seen varying contributions from UNDP Sweden, Swiss-funded EGAP, EU4Digital, and others over the years.
	<p>Private capital</p>  As of June 2023, 65 banks were shareholders of the NPCI, an umbrella organization that operates the Unified Payments Interface in India. There are currently 22 third-party applications developed by private sector firms for end-users to avail UPI for digital payments.
	<p>Debt</p>  The World Bank approved a US\$250 million loan to strengthen population and civil registration while increasing the usage of digital identification for service delivery in Indonesia.
NON-FINANCIAL	<p>Capacity</p>  The Pix Forum (for Brazil's digital payment system) comprises 200 participating institutions that serve as a permanent advisory committee, with representation from market players to Banco Central do Brasil, which is responsible for the management and operation of the payments ecosystem.
	<p>Shared resources</p>  GovTech, Singapore's implementing agency for its Smart Nation and Digital Government Office, is co-creating solutions with people by using their inputs at various stages of technology development. The Singapore government is estimated to spend US\$3.3 billion.
	<p>Volunteering</p>  In 2022, the Unique Identification Authority of India published a call for volunteers with expertise in technology and public administration to develop the Aadhaar ecosystem further. ISPIRT, a not-for-profit think tank also provides pro-bono support for service providers looking to make use of business opportunities provided by Aadhaar.

Source: *DPI playbook for nations (Deloitte India, 2023).*

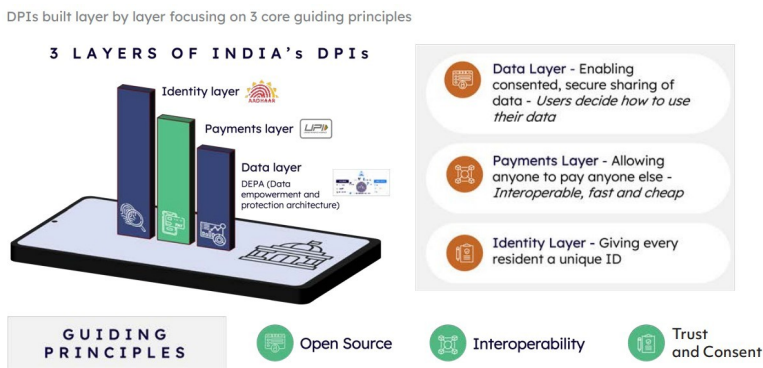
India’s Digital Public Infrastructure

Central to India’s digital transformative journey is the India Stack, a robust Digital Public Infrastructure aimed at empowering both citizens and businesses. This infrastructure is built on key components such as the Aadhaar digital ID system, Unified Payments Interface (UPI), Data Empowerment and Protection Architecture (DEPA), e-Sign, and DigiLocker. These interconnected layers allow seamless interactions between the public and private sectors, enabling them to develop services efficiently.

The India Stack has played a pivotal role in enhancing the delivery of public services and has brought about a significant transformation in the financial services domain. One of the key strengths of the India Stack is its ability to enable the creation of specialised sectoral frameworks.

India Stack represents a cohesive digital ecosystem that has not only streamlined processes but has also fostered a culture of innovation and collaboration across different sectors, driving India’s progress towards a more digitally inclusive future.

Figure 19: India’s DPI Layers



Source: Report on India's digital public infrastructure by NASSCOM and Arthur D Little (2024).

Aadhar: The Identity Layer

The Unique Identification Authority of India (UIDAI) was established with the objective of issuing a Unique Identification Number, known as Aadhaar, to all residents of India. This initiative, launched in 2009, has been a significant milestone in India's digital transformation. Aadhaar not only provides a digital ID but also allows online verification based on a combination of demographic and biometric data.

Prior to Aadhaar, obtaining formal identification documents like Proof of Identity (PoI) and Proof of Address (PoA) was a hurdle for many citizens, restricting access to essential financial products, mobile phone services, and government programmes. Traditionally, physical documents were the only verification method. Thankfully, Aadhaar now acts as a valid PoI and PoA across various sectors like banking, telecom, and government services.

Figure 20: The Value Proposition of Aadhaar

For Sunita (and citizens like her)	For government	For regulated entities (banks, private companies)
<ul style="list-style-type: none"> • Need for multiple IDs for authentication removed. • Get a bank account opened quickly. • Receive benefits transfers directly to the Aadhar-linked account. 	<ul style="list-style-type: none"> • Universal identity for all citizens. • A secure ID that uses cutting-edge technology. • Improved service delivery. • Creation of innovative programs using Aadhar. 	<ul style="list-style-type: none"> • Cost of onboarding customers dramatically reduces by 99.5%. • Aadhar is more secure with the use of biometrics than earlier IDs. • One ID to identify them all!

Source: eTrade for All. India's digital transformation could be a game-changer for economic development.

This unique biometric ID system empowers millions by simplifying access to government services and fostering

participation in private sector innovations. The versatility of Aadhaar extends beyond basic identification. Developers can leverage its functionalities to build secure identity workflows for various applications. For instance, a platform could restrict signup to women users only based on Aadhaar data, while another app could verify a user's address through e-authentication without revealing other personal details.

Box 4: The JAM Trinity

The widespread adoption of Aadhaar played a critical role in opening over 450 million bank accounts by 2022, many of them with a zero balance. This surge in financial inclusion was fuelled by Aadhaar's ability to streamline Know Your Customer (KYC) processes, making them faster and cheaper. Furthermore, Aadhaar facilitated the efficient transfer of more than US\$310 billion in direct benefit transfers to targeted recipients, minimising leakage and ensuring intended beneficiaries received the assistance.

This success story can be attributed in large part to a powerful collaboration known as the JAM trinity—Jan Dhan, Aadhaar, and Mobile. This innovative framework addressed the challenges of identification and delivery mechanisms for social welfare programmes built on DPI initiatives.

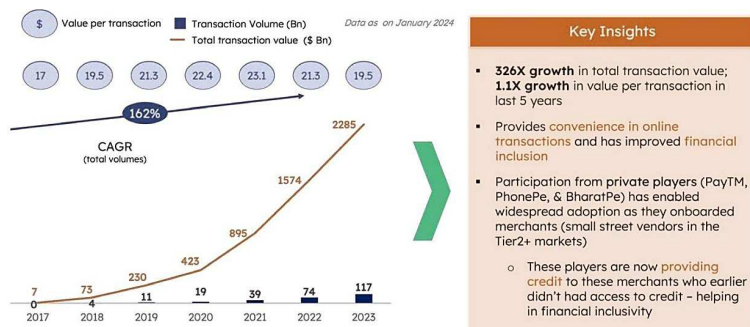
- Jan Dhan: The first pillar, Jan Dhan, is a financial inclusion initiative that broadens access to bank accounts and essential financial services for a wider population segment.
- Aadhaar: The second pillar, Aadhaar, provides a unique digital identification system. This enables efficient beneficiary identification and eliminates the risk of duplicate entries in social welfare programmes. Aadhaar plays a key role by linking bank accounts to unique ID numbers (Aadhaar Enabled Bank Accounts), forming the backbone for electronic channelling of government benefits.
- Mobile: The final pillar, Mobile, represents the vast network of over 960 million mobile phones in India. This robust network serves as a powerful platform for information exchange, particularly in rural areas. It also empowers households to utilise mobile apps for accessing their banking information and managing their finances conveniently.

Unified Payments Interface (UPI): The Payment Layer

Unified Payments Interface (UPI), introduced in 2016, is the most popular peer-to-merchant retail payment system in India. Developed collaboratively by the National Payments Corporation of India (NPCI) and various stakeholders, UPI democratised digital payments, transcending socio-economic barriers. It enabled inter-bank transactions through an instant process without requiring customers to enter recipient account details each time.

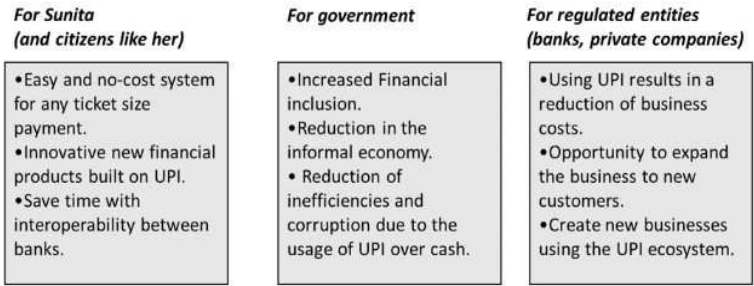
Unlike closed payment systems, UPI's open API architecture fostered innovation and interoperability, democratising access to digital transactions. Its mobile-first approach, coupled with the proliferation of smartphones and affordable internet, fuelled exponential growth in transaction volumes. In 2024, UPI processed a staggering 12.20 billion transactions worth ₹18.41 trillion, underlining its pivotal role in enhancing efficiency, financial inclusion, and formalisation of the economy.

Figure 21: Adoption Trends of UPI in India



Source: Report on India's digital public infrastructure by NASSCOM and Arthur D Little (2024).

Figure 22: The Value Proposition of UPI

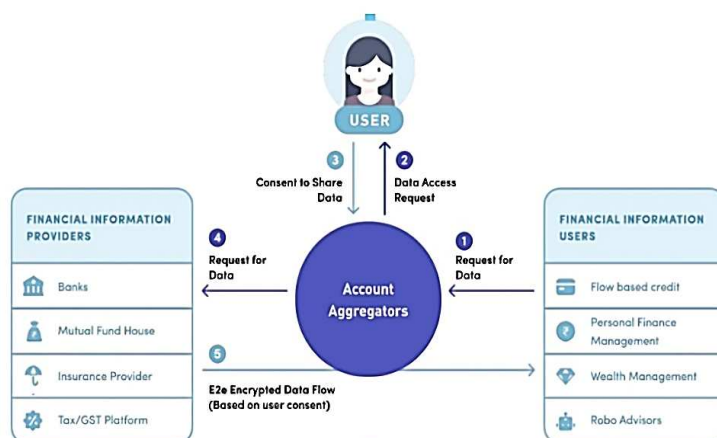


Source: eTrade for All. India’s digital transformation could be a game-changer for economic development.

Data Empowerment and Protection Architecture (DEPA): The Data Exchange Layer

India’s approach to data protection and empowerment diverges from conventional models, emphasising individual control over personal data. The Data Empowerment and Protection Architecture (DEPA) constitutes the third layer of India Stack, heralding a paradigm shift in data governance. DEPA introduces consent managers, known as Account Aggregators (AAs), tasked with facilitating secure and standardised data sharing across institutions. AAs empower individuals to control the flow of their data, catalysing innovation and trust in the digital ecosystem.

Figure 23: Structure of DEPA.



Source: NITI Aayog. (2020). *Data empowerment and protection architecture (DEPA)*.


































With over 200 financial institutions integrated into the AA ecosystem, disbursing US\$750 million in FY2023, DEPA's impact on financial inclusion and credit accessibility is palpable. By democratising access to financial data and streamlining document sharing, DEPA paves the way for inclusive growth and innovation in India's digital economy.

Figure 24: Value Proposition of Account Aggregator for Different Stakeholders

For Sunita (and citizens like her)	For government	For regulated entities (banks, private companies)
<ul style="list-style-type: none">• Easy and no-cost system for any ticket size payment.• Innovative new financial products built on UPI.• Save time with interoperability between banks.	<ul style="list-style-type: none">• Increased Financial inclusion.• Reduction in the informal economy.• Reduction of inefficiencies and corruption due to the usage of UPI over cash.	<ul style="list-style-type: none">• Using UPI results in a reduction of business costs.• Opportunity to expand the business to new customers.• Create new businesses using the UPI ecosystem.

Source: eTrade for All. India’s digital transformation could be a game-changer for economic development.

Figure 25: Overview of How DPGs and DPIs Have Been Deployed in India in Private and Public Sectors

Solutions	<div>Education</div> <div></div> <div><div>Logistics</div><div></div></div> <div><div>Agriculture</div><div></div></div> <div><div>Others</div><div></div></div>
Platforms	<div><div>Agriculture</div><div></div></div> <div><div>Education</div><div></div></div> <div><div>Healthcare</div><div></div></div> <div><div>Financial services</div><div></div></div>
Digital Public Infrastructure (DPI)	<div></div>
Digital Public Goods (DPG)	<div></div>

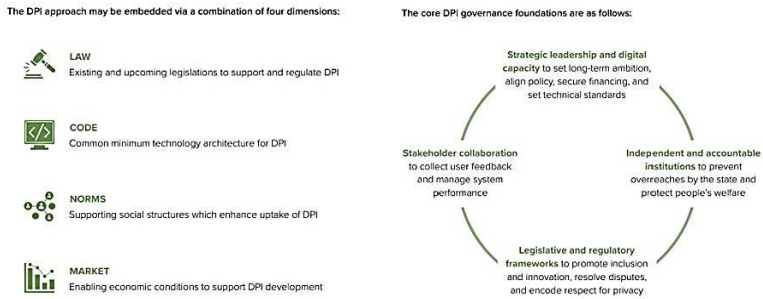
Source: Report on India’s digital public infrastructure by NASSCOM and Arthur D Little (2024).

Governance Models for Digital Public Infrastructure

The potential of DPIs to transform societies is undeniable. However, to ensure this transformation benefits everyone and does not exacerbate existing inequalities, robust governance models are essential. These models act as a critical layer, ensuring all DPIs deliver on their promise and that the digital

transformation is inclusive, respectful of rights, and protective of vulnerable populations.

Figure 26: Core DPI Governance Foundations



Source: *DPI playbook for nations* (Deloitte India, 2023).

Therefore, strong governance frameworks are needed to prevent DPIs from simply amplifying existing power structures and inequalities. These frameworks will guide the development, implementation, and use of DPIs to ensure they promote equitable access and participation in the digital world.

Government-Based Model

A compelling argument for a more proactive government role lies in fostering sovereignty—the ability to deliver public value and promote the common good. When governments outsource essential functions, they risk losing institutional memory and their long-term implementation capacity. Without state involvement in building DPIs, essential societal functions could become the exclusive domain of private corporations, potentially foreign-owned. This loss of control weakens a state's ability to safeguard the principles of the common good.

Figure 27: Principles of the Common Good



Source: Eaves et al. (2024).

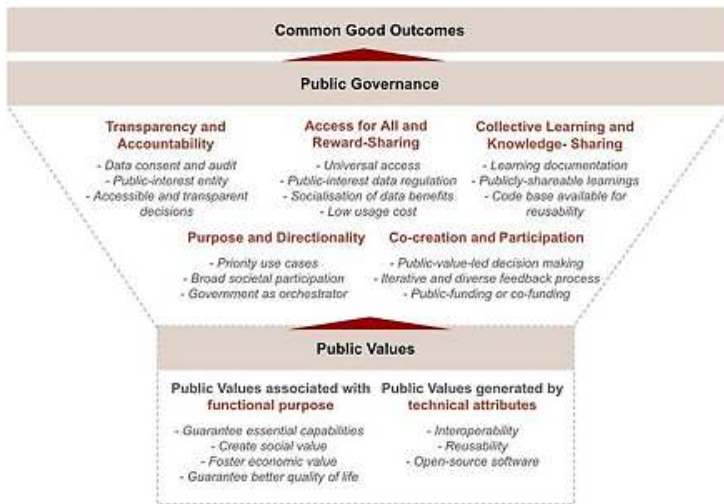
This vision does not advocate for complete government control of DPIs. However, maintaining a minimum level of internal capacity is crucial for effective regulation. Governments also play a critical role in setting the overall direction and fostering collaboration among diverse stakeholders (Eaves et al., 2024).

Eaves et al. (2024) emphasises that creating public value through DPIs is a collective endeavour. To achieve this, strong public governance structures are needed, focusing on five key pillars:

1. Purpose and Directionality: Setting ambitious goals for policies, public-private partnerships, and citizen engagement.
2. Co-creation and Participation: Establishing clear rules and mechanisms for diverse stakeholders to co-invest, collaborate, and coordinate effectively.
3. Collective Learning and Knowledge-Sharing: Encouraging institutional practices that promote shared learning and build long-term capabilities.
4. Access for All and Reward-Sharing: Ensuring equitable distribution of the benefits of DPIs (inclusive growth).
5. Transparency and Accountability: Building trust by demonstrating a commitment to transparency and

accountability through clear progress-tracking mechanisms.

Figure 28: Framework for Governing DPI for the Common Good.



Source: Eaves et al. (2024).

These pillars are interconnected. Maximising public value requires well-defined public values embedded within DPIs, translating these pillars into concrete governance practices and aligning them with clear societal goals (see Figure 28 for a visual representation).

A government-driven governance model, when implemented effectively, can ensure DPIs deliver on their promise. It necessitates a shift in perspective—from the state as a passive regulator to an active shaper of the digital landscape, working collaboratively with all stakeholders to create and share public value. This collaborative approach, guided by strong governance frameworks, will pave the way for an inclusive digital future that benefits all.

Community-Based Governance

As Digital Public Infrastructure (DPI) becomes increasingly integrated into everyday life, it is essential to consider governance models that place communities at the centre. This approach recognises DPIs as a common, shared resource managed by the citizens who rely on it. Imagine DPIs not as government-imposed systems, but rather as digital utilities co-created and governed by the people they serve.

Local governance structures for common resources provide valuable insights. Examples include community forest rights, water governance initiatives, and even recent calls to govern the internet as a common. These models share core principles like accountability, transparency, autonomy, and decentralised decision-making. Technologies governed by such structures empower citizens, fostering participation as opposed to the top-down control often associated with security concerns. Similarly, a citizen-centric approach holds immense potential for DPIs. While DPIs often champion principles like open-source access and privacy-by-design, these alone may not prevent unintended harm or unequal outcomes. A critical missing piece is robust public accountability—not just for a DPI's impact, but also for its conceptualisation and design. Formalised mechanisms are essential to ensure public participation in defining a DPI's purpose and validating assumptions about its effectiveness in achieving stated goals. Additionally, accessible and well-defined accountability mechanisms must be in place to address potential violations. Legislation mandating a representative body to highlight such issues and ensure transparent disclosure and resolution is crucial. Without strong accountability structures, DPIs risk harming marginalised groups and weakening the citizen–state interface, ultimately undermining democratic principles (Seth et al., 2023).

The following could be the key elements for a community-based DPI governance framework as stated by Seth et al. (2023):

1. **Democratic Purpose Identification:** The purpose of a DPI should be established through a democratic consensus among citizens. This requires gathering needs and observations through established participatory mechanisms like community forums. Research studies and multi-stakeholder consultations can further refine these needs into concrete DPI proposals. This ensures that genuine citizen needs take precedence over misguided or profit-driven agendas.
2. **Participatory and Evaluative Design:** Once the purpose is clear, a participatory design process involving communities is crucial. Accessibility, fault diagnosis, process integration, grievance redressal mechanisms, transparency, and accountability should all be built into the design from the outset. Similar to the concept of privacy-by-design, principles of “accountability-by-design” and “power-based equality by design” should guide technology and process development. Extensive piloting in diverse settings, followed by rigorous monitoring, learning, and evaluation processes with publicly available reports, allows for further design refinement based on real-world experience.
3. **Federated Management:** Even with comprehensive design, unforeseen issues can arise during deployment. A federated management approach can empower local stakeholders to responsibly manage DPIs and address challenges while upholding accountability and power-based equality principles. Local governance institutions, starting with village-level bodies, can act as nodal points for identifying and addressing emerging issues. Citizen interest groups can also play a vital role in this process. However, this may not always be possible, keeping in mind administrative challenges and on-ground constraints.
4. **Regulatory Body:** Effective governance across all stages—conceptualisation, design, and ongoing management—necessitates a regulatory body. This body would oversee multi-level (local, state, central) coordination. Existing frameworks like India’s Right to Information (RTI) Act and

Anti-Corruption (Lokayukta) Act provide a useful model, with ombudsmen and nodal officers facilitating implementation across various levels. A similar DPI regulatory body with representatives from government, domain experts, civil society organisations, and citizen representatives could oversee DPI operations at state and central levels. By embracing a community-centric governance model, DPIs can evolve from top-down directives to tools that empower citizens and foster a more inclusive digital landscape. This collaborative approach, built on strong accountability mechanisms, paves the way for a future where DPIs truly serve the needs of the people they were designed to empower.

Public–Private Partnerships Governance Model

The private sector, through both established companies and philanthropic infrastructure, can bring more than financial muscle to the table. They can contribute technological innovation, expertise, and strategic partnerships. More importantly, public–private partnerships (PPPs) allow them to unlock vital capital, making public projects more efficient and innovative (Bandura et al. (2024). Companies, as frontline operators, possess a deep understanding of consumer needs and market dynamics, with a keen eye for opportunities and challenges. They can play a critical role in the development and expansion of Digital Public Services to citizens. Through collaboration, PPPs leverage the private sector's market insights and financial resources alongside the government's policy priorities, creating optimal outcomes for everyone involved. Their expertise in managing complex projects and implementing cutting-edge technologies leads to the creation of more sustainable DPI systems. In low- and middle-income countries (LMICs) particularly, where governments may struggle to keep

pace with technological advancements, collaboration with private entities is essential.

Negotiating the Regulatory Landscape

Inconsistent and evolving regulations can pose significant challenges for DPI deployment. Data privacy, cross-border data flows, and digital transactions are subject to widely varying regulations across countries, creating roadblocks to implementation. This is an area where governments can collaborate effectively with private firms, considering their needs and facilitating smooth operations within the technology sector.

Financing Innovation and Tailoring Solutions

Digital transformation and DPI development require significant resources. Identifying new and innovative financing models, along with fostering new types of partnerships where each player contributes unique value, is crucial. PPPs can play a leading role in achieving this. These partnerships, including those utilising blended finance approaches, can attract diverse investors and bridge the financing gap, particularly in developing countries. Keeping in mind the local government's current and future needs, PPPs can localise development in a manner that benefits all stakeholders, making them more accessible.

International Cooperation

The growing recognition of Digital Public Infrastructure's (DPI) role in fostering inclusive digital economies is driving a wave of international cooperation. Unlocking DPI's full potential requires a robust global governance model that fosters collaboration, knowledge sharing, and responsible development.

Recent international cooperation efforts demonstrate the promising path towards achieving this goal.

In May 2023, the EU-India Trade and Technology Council recognised DPI's potential for fostering open and inclusive economies. This was followed by the Quad Leaders' Statement, which highlighted DPI's transformative power for sustainable development. Additionally, the support from the Shanghai Cooperation Organisation for India's proposal to assist member states with India Stack adoption reflects this global shift.

G20 Summit 2023

Under India's leadership, the 2023 G20 summit saw a landmark shift in the global conversation on digital transformation. For the first time, nations came together to forge a unified vision for Digital Public Infrastructure (DPI)—the digital backbone that underpins essential services like identity verification, payments, and data exchange. This was not just about technology; it was about building a more equitable and inclusive digital future for all. The G20 recognised that DPI is not a one-size-fits-all solution; it is a flexible framework that can be tailored to each country's unique needs and priorities. But to truly unlock its potential, nations need to share knowledge, collaborate, and learn from each other's successes and challenges. A key highlight of the summit was the launch of two groundbreaking initiatives championed by India. The Global Digital Public Infrastructure Repository (GDPIR) serves as a virtual library, providing a wealth of information, tools, and resources for countries looking to develop or enhance their DPI. With over 50 DPI examples from 16 countries already on display, the GDPIR is a testament to the diversity and potential of these systems. Equally significant was the creation of the Social Impact Fund (SIF), a multi-stakeholder initiative designed to provide much-needed financial and technical assistance to countries in the Global South. This fund, with an initial commitment of US\$25 million from India, will help

accelerate DPI implementation in regions where the digital divide remains a significant barrier to progress.

The impact of India's leadership at the G20 was far-reaching. For the first time, a global consensus on DPI was achieved, resulting in the adoption of a comprehensive framework and the establishment of the GDPIR. These outcomes represent a major step forward in international cooperation on digital governance. They also highlight the growing recognition of DPI's potential to drive inclusive growth, enhance service delivery, and empower individuals. An effective global DPI governance model requires the active participation of all stakeholders. The G20's engagement groups, particularly Civil20 (for civil society), Labour20 (for trade unions), and Think20 (for think tanks), provide a crucial platform for these organisations to raise concerns, advocate for human rights, and ensure that the digital agenda reflects the needs of all citizens. By amplifying diverse voices and perspectives, C20, L20, and T20 strengthen the legitimacy and inclusivity of the global DPI governance model. The international community is actively supporting DPI development in low- and middle-income countries (LMICs). India's One Future Alliance (OFA) exemplifies this commitment. This voluntary initiative aims to build capacity, provide technical assistance, and offer funding to support LMICs in implementing DPI solutions.

Way Forward

The path forward for India's Digital Public Infrastructure (DPI) is paved with both promise and challenges. To truly unlock its transformative potential, several key areas require careful consideration and strategic action.

Safeguarding the Digital Realm

The very nature of DPI, dealing with vast amounts of sensitive personal and financial data, makes it a prime target for malicious

actors. As the G20 outcome document warns, inadequate safeguards can lead to devastating consequences, from data breaches and privacy violations to intellectual property theft. This necessitates a multi-pronged approach. Robust security measures must be embedded into the very fabric of DPI systems, utilising encryption, multi-factor authentication, and regular security audits. A strong legal framework, like India's Digital Personal Data Protection Act 2023, must be in place to protect individuals' rights and hold organisations accountable for data misuse. Additionally, continuous international collaboration and knowledge sharing are crucial to stay ahead of evolving threats.

Expanding Reach and Usability

While India's DPI has made significant strides in reaching millions, the journey towards true digital inclusion is far from over. Language barriers, lack of real-time data integration, and a focus primarily on government services are some of the roadblocks hindering wider adoption. To overcome these challenges, DPI initiatives must prioritise user-centric design. This means developing intuitive interfaces, offering support in multiple languages, and ensuring that DPIs are accessible even in areas with limited connectivity. Furthermore, integrating real-time data can unlock a wealth of possibilities, from personalised service delivery to predictive analytics that can inform policy decisions.

Maintaining the "Public" in DPI

The rise of UPI as a dominant player in India's digital payments landscape is a testament to the power of open and interoperable systems. However, the increasing concentration of the UPI market in the hands of a few foreign-owned companies raises concerns about the long-term publicness of this critical infrastructure. To safeguard the inclusive nature of DPI,

polymakers must foster a competitive landscape that encourages innovation and prevents monopolisation. This could involve measures such as promoting open APIs, encouraging the development of alternative payment solutions, and ensuring fair access to the UPI platform for all players, big and small.

Harnessing the Power of AI

Artificial intelligence (AI) has the potential to revolutionise DPI, making it more efficient, adaptive, and responsive to user needs. Imagine AI-powered chatbots providing instant customer support, predictive algorithms optimising service delivery, and data analytics tools uncovering hidden patterns and insights. India's experimentation with Confidential Clean Rooms, which allow for secure data sharing and collaboration while preserving privacy, is a promising step in this direction. However, the integration of AI into DPI must be guided by ethical principles and robust safeguards to ensure fairness, transparency, and accountability.

A Roadmap for the Future

The rapid pace of technological change necessitates a proactive approach to DPI development. Robust frameworks for self-assessment and evaluation can help countries gauge their progress, identify areas for improvement, and make informed decisions about future investments. These frameworks should not be limited to technical aspects but should also encompass governance, inclusivity, and the overall impact of DPI on society. By incorporating feedback from citizens, businesses, and other stakeholders, DPI initiatives can be continuously refined and adapted to meet evolving needs. India's journey towards a digitally empowered society is far from over. While challenges remain, the progress made so far is undeniable. The foundation has been laid for a vibrant digital ecosystem that can drive

innovation, economic growth, and social progress. By prioritising security, inclusivity, openness, and responsible AI integration, India can continue to lead the way in harnessing the power of digital technology for the benefit of all its citizens. This is not just about building a digital infrastructure; it is about building a more equitable, inclusive, and prosperous future for all.

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Chapter 9. The Medium Is “More” than the Message

Sanjeev Chopra

In an age where the “medium is more than the message,”¹²⁸ the obsession with trying to understand anything and everything in terms of “easy-to-understand categories” with easily identifiable performance parameters has its pros and cons: classification makes it easier to understand complex realities, but the counterfactual is equally significant—the context and perspective are often lost. Thus, we grade nations, or regions within nations on multiple parameters like GDP,¹²⁹ GNP,¹³⁰ GHI,¹³¹ EoL,¹³² transparency, human rights, calorific count to meet nutrition

¹²⁸ “The medium is the message” is a phrase coined by the Canadian communication theorist Marshall McLuhan and the name of the first chapter in his book *Understanding media: The extensions of man*, published in 1964. Joseph Nye popularised the concept of “soft power” in the late 1980s by postulating that “Power is the ability to influence the behaviour of others to get the outcomes.”

¹²⁹ Gross Domestic Product (GDP) is now a commonly accepted measure to capture the economic development of a country. Some economists prefer to look at GDP per capita, rather than the overall GDP.

¹³⁰ Gross National Product (GNP) refers to the total value of all the goods and services produced by the residents and businesses of a country, irrespective of the location of production. GNP takes into account the investments made by the businesses and residents of the country, living both inside and outside the country.

¹³¹ “Gross National Happiness” is a term coined by His Majesty the Fourth King of Bhutan, Jigme Singye Wangchuk, in the 1970s. The concept implies that economic indices are not the only measure to understand whether people are “happy” or not. It has now been adopted by the UN.

¹³² “Ease of Living” refers to the overall quality of life that individuals and communities experience, encompassing economic, social, environmental, and cultural variables. It is a term that is frequently used to assess the liveability of a city or country.

parameters, access to justice, preparedness for disaster, health, education, and so on. At the end of the year, we offer bouquets to those who have improved their ranking, and the helmsmen of those who lose out receive brickbats. Having said this, some categories are more amenable to measurement while others are more nebulous. Thus, while it is possible to measure financial inclusion or internet penetration or calorific intake or the number of fighter aircraft, the ability to understand the impact of civilisational values in the context of a nation's cultural influence in its immediate, extended, and global spheres with terms like soft or smart power is fraught with epistemological issues because civilisational values predate the conceptual category of soft power.

What Is Soft Power?

The Oxford English Dictionary defines “soft power” as “power (of a nation state or alliance, etc.) deriving from economic and cultural influence, rather than coercion or military strength.” Joseph Nye popularised the concept of “soft power” in the late 1980s by postulating that “Power is the ability to influence the behaviour of others to get the outcomes you want.”¹³³ There are several ways to achieve this: one can coerce others with threats; one can induce them with payments; or one can attract and co-opt them to want what one wants. This soft power¹³⁴—getting others to want the outcomes one wants—co-opts people rather than coerces them. Soft power contrasts with “hard power”—the

¹³³ Nye, Joseph, Jr. (1990). *Bound to lead: The changing nature of American power*. Basic Books

¹³⁴ A country may obtain the outcomes it wants in world politics because other countries—admiring its values, emulating its example, aspiring to its level of prosperity and openness—want to follow it. In this sense, it is also important to set the agenda and attract others in world politics, and not only to force them to change by threatening military force or economic sanctions. This soft power—getting others to want the outcomes that you want—co-opts people rather than coerces them.

use of coercion and payment. Soft power can be wielded not just by states but also by all actors in international politics, such as NGOs or international institutions. It is also considered by some an example of the “second face of power,” which indirectly allows one to obtain the outcomes one wants. A country’s soft power, according to Nye, rests on three resources: “its culture (in places where it is attractive to others), its political values (when it lives up to them at home and abroad), and its foreign policies (when others see them as legitimate and having moral authority).”¹³⁵

Soft power resources are the assets that produce attraction, which often leads to acquiescence. Nye asserts that “seduction is always more effective than coercion, and many values like democracy, human rights, and individual opportunities are deeply seductive.”¹³⁶

The Civilisational Values of Bharat Predate the Nation-State of India

However, for any discussion on India’s soft power in the contemporary setting, we have to look at the civilisational values of Bharat. As mentioned earlier, Joseph Nye came up with the definition only in 1990. A hundred years before that, Swami Vivekananda’s stirring address at the World Parliament of Religions in Chicago in 1893¹³⁷ created a sense of deep respect, wonderment, and adoration for India even when it was under the

¹³⁵ Nye, Joseph, Jr. (2009). *Soft power: The means to success in world politics*. Hachette.

¹³⁶ Nye, *supra*.

¹³⁷ The World Parliament of Religions (WPR) was held in Chicago in September 11–27, 1893, as part of the World’s Columbian Exposition. The WPR is considered the first organised interfaith gathering and the birthplace of the modern interfaith movement. The event brought together representatives of 10 religions, including Hinduism, Buddhism, Jainism, Zoroastrianism, Taoism, Confucianism, Shintoism, Judaism, Christianity, and Islam, to find common ground.

rule of the British. Gurudev's *Geetanjali*¹³⁸ received the Nobel Prize in Literature in 1913, and the Mahatma¹³⁹ became an icon of peace, non-violence and "truth" well before India became a republic. Even before this, Max Mueller¹⁴⁰ and Herman Hesse,¹⁴¹ among others, had made the wisdom of the Upanishads and of Gautama Buddha known to the world at large. India's civilisational values, from dance forms and epics like the *Ramayana* and the *Mahabharata* to traditions in music, healing, martial arts, and governance principles from the *Shanti Parva* and Kautilya's *Arthashastra*, influenced regions far beyond its modern political boundaries. These cultural and philosophical contributions were prevalent well before the Republic of India was defined by Article 1 and the First Schedule of its Constitution.

Public Diplomacy in Democratic Polity

Another proposition needs to be articulated at this juncture. Gone are the days and times when the relations between countries were based solely on the personal whims and fancies of the sovereign and the ruling elites. These days the larger public, as well as civil society and markets, also play an equally important role in determining the relationships between sovereign nations.

¹³⁸ Internationally, *Gitanjali* (in Bengali) is Tagore's best-known collection of poetry, for which he was awarded the Nobel Prize in Literature in 1913. Tagore was the first non-European to receive a Nobel Prize in Literature and the second non-European to receive a Nobel Prize, after Theodore Roosevelt.

¹³⁹ The title of "Mahatma" was given to Mohandas Karamchand Gandhi by Rabindranath Tagore, the Bengali poet, author, and philosopher. Tagore first used the title in a letter to Gandhi in 1915, writing, "To the one whom India's millions call Mahatma—to him my grateful homage."

¹⁴⁰ Friedrich Max Müller was a British philologist and Orientalist of German origin. He was one of the founders of the Western academic disciplines of Indology and religious studies. Müller wrote both scholarly and popular works on the subject of Indology.

¹⁴¹ Hermann Karl Hesse was a German-Swiss poet, novelist, and painter. *Siddhartha: An Indian novel* is a 1922 novel by Hermann Hesse that deals with the spiritual journey of self-discovery of a man named Siddhartha during the time of the Gautama Buddha.

Nations make conscious efforts to make themselves and their way of life more acceptable to those they are interacting with. The English or the American way of life thus becomes an attraction. This is where public diplomacy—a set of mechanisms through which a country's foreign policy positions are transmitted to its target audiences—becomes a salient factor. This involves looking at outreach in the near to short, medium, and long term. According to Joseph Nye, public diplomacy “is neither mere propaganda nor a public-relations campaign. It involves building long-term relationships that create an enabling environment for government policies.” The first and most immediate dimension is daily communications, which involves explaining the context of domestic and foreign policy decisions. This dimension also involves preparation for dealing with crises. The second dimension is strategic communication, which develops a set of simple themes, much as a political or advertising campaign does. While the first dimension is measured in hours and days, the second occurs over weeks, months, and even years. The third dimension of public diplomacy is the development of lasting relationships with key individuals over many years or even decades, through scholarships, exchanges, training, seminars, conferences, and access to media channels. India has done well in the first two dimensions, but more work needs to be done with respect to the third. We are getting there, but it will require a holistic and coordinated strategy for the same.

In the near to short run, Prime Minister Modi¹⁴² has made the best possible use of his social media handles in communicating India's priorities and expectations—through and beyond Covid, during the G20 presidency,¹⁴³ during his foreign travels and whenever heads of state and government have visited India. He has also shared his thoughts on an entire range of subjects—from the preservation of the

¹⁴² The only Prime Minister (after Nehru) to have been elected for a third consecutive term in 2024. Earlier, he was the Chief Minister of Gujarat state from 2001 to 2014.

¹⁴³ The G20 Summit is held annually with a rotating presidency, and in 2023, India held the presidency. The group does not have a permanent secretariat and is supported by the previous, current, and future holders of the presidency, known as the troika. Brazil is the current chair and hosting the 2024 summit.

environment to the promotion of Yoga and Sanskrit. The current External Affairs Minister S. Jaishankar and his predecessor Sushma Swaraj¹⁴⁴ were equally adept at using the Twitter (now X) handle, not just to communicate, but also to respond to issues raised by citizens. The way India has been able to evacuate her expats during difficult situations—whether in Kuwait or Ukraine—has added to India’s soft power because a nation which can exercise its power and influence well beyond the confines of its own geography also builds respect for itself in the comity of nations.

Looking Beyond Borders: History, Geography, and Capability

The reference to geography is important, for the prime determinant of a nation-state is its “defined territory.” Ambassador Viswanathan¹⁴⁵ states that the three main factors which determine the foreign policy of a country include its geography, history and capabilities. “Geography is a given.” As they say, a country cannot choose its neighbours, and engagements and conflicts are always more pronounced with neighbours. This also fits well with the Mandala theory expounded in Kautilya’s *Arthashastra*. Securing a nation’s border and having a full granary are the hallmarks of a successful sovereign. For Kautilya, power is threefold: MANTRANA SHAKTI (power of counsel and diplomacy) being the most important, followed by PRABHU SHAKTI (power of treasury and army), and finally UTSAH SHAKTI (power of valour). While military and economic power is important, the

¹⁴⁴ Sushma Swaraj served as the Minister of External Affairs of India in the first Narendra Modi government from 2014 to 2019. After Jawaharlal Nehru, she was the second person to complete a five-year term as the Minister of External Affairs.

¹⁴⁵ Distinguished Fellow at Observer Research Foundation (ORF) and a member of the Indian Foreign Service for 34 years, Viswanathan has a long and diverse experience in international relations and diplomacy. His foreign assignments include Belgium, Zaire, Czechoslovakia, Germany, China, Italy, Côte d’Ivoire, the USA, and Nigeria.

decision to use the right foreign policy instrument based on the context is critical for success. This is reminiscent of Joseph Nye's conceptualisation of "hard," "soft," and "smart" power. He emphasises the need for smart strategies that combine the full spectrum of soft and hard power through what he calls "contextual intelligence"—the intuitive diagnostic skill that helps policymakers align tactics with objectives to create smart strategies. The geography of a land has an intimate connection with its history. The external borders and internal boundaries of a nation are never frozen in time, and neither the highest mountains nor the deepest blue waters have prevented the movement of people, ideas, trade, and commerce. As history determines mind sets, outlooks, and vision, the construction of the historical narrative¹⁴⁶ is of paramount importance and can be well illustrated by the way history is taught in India, Pakistan, and Bangladesh with different myths, heroes, and villains. Thus, for several decades, Pakistan refused to acknowledge its "Indian heritage," and preferred to identify itself with those who crossed over to India in military campaigns across Sindh and Afghanistan. For a while, they identified themselves as the successor state to Medina¹⁴⁷ with a unique pan-Islamic identity. However, with the break-up of Pakistan in 1971,¹⁴⁸ the Islamic myth was shattered. India, on the other hand, has been constructing its civilisational narrative on the cultural geography from the kingdoms and principalities outlined in the *Mahabharata* and the *Ramayana*—extending from Gandhar (the modern-day Kandahar in Afghanistan) to the Mansarovar Lake in Tibet, the thousand islands (Lakshadweep, visible from the shores of Dwarka, and extending right up to the Maldives), and the lands under the princes of Kamrup

¹⁴⁶ For an understanding of how historical narratives are constructed, see the Prologue to my book *We the people of the states of Bharat*.

¹⁴⁷ The first Islamic State, or the State of Medina, was the political entity established by Muhammad in Medina in 622 C.E. under the Constitution of Medina. It represented the political unity of the Muslim Ummah (nation).

¹⁴⁸ East Pakistan broke away from West Pakistan after the 1971 War of Liberation which was led by the Mukti Bahini. The latter received support from the Border Security Force and the Indian Army.

and Pragjyotisha beyond the Brahmaputra.¹⁴⁹ When Buddhism received royal patronage, missionaries were sent out not just to the neighbouring Sri Lanka, but also to Tibet, China, Korea, Thailand, Champa (Vietnam), Laos, and Kampuchea¹⁵⁰ (now Cambodia).

For Bangladesh, the “knight-in-the-shining armour” is Murshid Quli Khan,¹⁵¹ the founder of Murshidabad, who while owing his notional allegiance to the Mughal Emperor had virtually declared his autonomy. In their narrative, Bengal lost her “sovereign status” after the Battle of Plassey.¹⁵² Many Bangladeshis regard the last Nawab of Bengal, Siraj ud-Daula as the forebear of their nation: proud to be Bengali, proud to be Muslim, but independent of any authority from Delhi. Bangladesh has adopted Gurudev’s *Amar sonar Bangla*¹⁵³ as the national anthem. However, far more important than history and geography is the “current capability” of a nation, and this is subject to what a nation acquires over a period of time. These could be in the military, economic, or technological domains. With new capabilities, the foreign policy approaches of a country are always “work in

¹⁴⁹ In ancient Sanskrit literature both the names “Pragjyotisha” and “Kamrupa” were used as designation for ancient Assam. Its antiquity can be established from the fact that it has been mentioned in the two great epics—the *Mahabharata* and the *Ramayana*—and also in the Puranas.

¹⁵⁰ Kampuchea derives from the Sanskrit name *Kambojadeśa*, composed of *Deśa* (“land of” or “country of”) and *Kamboja*, referring to the descendants of Kambo (a legendary Indian sage from the ancient Indian kingdom of Kamboja).

¹⁵¹ Murshid Quli Khan (ca. 1660–June 30, 1727), also known as Mohammad Hadi and born as Surya Narayan Mishra, was the first Nawab of Bengal, serving from 1717 to 1727. Ten years after the death of Aurangzeb in 1707, the Mughal throne was not in a position to assert any real authority, and though the Nawabs of Bengal accepted Aurangzeb’s successors as their de jure sovereigns, for all practical purposes, Bengal was an independent entity. It was also India’s most prosperous region, excelling in agriculture, trade, commerce, and manufacturing.

¹⁵² The Battle of Plassey was a decisive victory for the British East India Company, under the leadership of Robert Clive, over the Nawab of Bengal, Siraj ud-Daula, and his French allies on June 23, 1757. This marked the beginning of British rule over India, starting with the revenue administration of Bengal.

¹⁵³ *Amar sonar Bangla* is the national anthem of Bangladesh. “An ode to mother Bengal” was written by Bengali polymath Rabindranath Tagore in 1905, while the melody of the hymn was adopted from the Baul singer Gagan Harkara’s song “Ami kothay pabo tare” set to Dadra Tala.

progress.” New interests outside the country’s neighbourhood develop. Phrases like “extended neighbourhood” and “strategic interests” have become common parlance in discussions on international relations. But it is clear that the triad of the three—history, geography, and capability—together determine the contours of soft power. In the interesting twists and turns of history, what may have initially been posited as an instrument of domination and control may, over time, play a role in the reverse: the English could have never imagined that Macaulay’s *Minute on Education*¹⁵⁴ would give India the world’s largest reserve of English language competency skills, both within the country and in the larger diaspora.

The Role of the Diaspora

While the origins of the 20 million strong Indian diaspora¹⁵⁵ can be traced to the route of indentured labour patronised by the Empire, their next generation overcame the initial handicap; picked up linguistic, mercantile, entrepreneurial, and political skills; and began to shape the destiny of their adopted homelands. Post-independence, while the first wave of migration was that of blue-collar workers, the next set of people who left the shores to seek fortunes in Europe, the United States (hereafter USA), Canada, and Australia were qualified professionals who became part of the intellectual, corporate, media, legal, and political elite.¹⁵⁶ Thus began their informal role

¹⁵⁴ Macaulay’s *Minute on Education* in 1835 was the seminal tract in which he set out to explain his proposal for promoting English education in India at the expense of Arabic, Persian, and Sanskrit, which were being taught in colonial schools.

¹⁵⁵ They are spread across all continents and have become prosperous, famous, and influential over the last two decades. They not only help in disseminating our culture but also have, on occasions, contributed to promoting our foreign policy goals.

¹⁵⁶ They became aware of the extraordinary power and influence exercised by Israel through expat Jews on the foreign policy and security regime of the USA. Likewise, the very strong bond between the UK, USA, Australia and Canada can be traced to the Anglo-Saxon Protestant work ethic.

and influence in projecting India's soft power.¹⁵⁷ The Indian diaspora is becoming a real asset as more and more of them achieve success in their respective fields in different countries. As early as 1989, the Global Organization of People of Indian Origin¹⁵⁸ was established in the USA, and it started organising conventions and conferences. The editor of *Think India* and Rajya Sabha member D. P. Tripathi¹⁵⁹ then proposed that the responsibility should be entrusted to the Ministry of External Affairs (MEA), or a new ministry tasked with this job. He was also critical of the in-built "elitist" bias of the MEA, in which the workers found it difficult to access the embassy. This is how the Ministry of Overseas Indian Affairs¹⁶⁰ was constituted from 2004 to 2016, but was later merged with the MEA.

The first Pravasi Bharatiya Divas (PBD) was organised on January 9, 2003, by the MEA to mark the return of Mahatma Gandhi to India from South Africa. The PBD provides a platform for the overseas Indian community to engage with the Indian government and the people of the land of their ancestors for mutually beneficial activities. This day marks the contribution and achievements of overseas Indians in various fields, fostering a strong connection between the homeland and its diasporic communities. It serves as a reminder that regardless of their

¹⁵⁷ Viswanathan, H. H. S. (2019, September 4). India's soft power diplomacy. IIM, Tiruchirappalli (MEA website).

¹⁵⁸

https://en.wikipedia.org/wiki/Global_Organization_for_People_of_Indian_Origin

¹⁵⁹ https://en.wikipedia.org/wiki/D._P._Tripathi

¹⁶⁰ Established in May 2004 as the Ministry of Non-Resident Indians' Affairs, it was renamed as the Ministry of Overseas Indian Affairs (MOIA) in September 2004. Positioned as a "Services" Ministry, it provided information, partnerships, and facilitation for all matters related to Overseas Indian Origin. It was merged with the Ministry of External Affairs on January 7, 2016. <https://www.hindustantimes.com/india/govt-to-merge-overseas-ministry-with-ministry-of-external-affairs/story-X8AHueLYqoKucSd3jODmL.html>; [https://pib.gov.in/newsite/PrintRelease.aspx?relid=137567-:::text=The Ministry of Overseas Indian, Indian Diaspora closer to India](https://pib.gov.in/newsite/PrintRelease.aspx?relid=137567-:::text=The%20Ministry%20of%20Overseas%20Indian%20Diaspora%20closer%20to%20India)

geographical location, Indians remain connected to their cultural and historical roots. From 2004 to 2016, the Ministry of Overseas Indian Affairs was tasked with the responsibility of connecting with the diaspora and organising the PBD. It was later merged with the MEA.

This connection with the political, economic, and cultural leadership paid rich dividends. Former diplomat, and currently a parliamentarian, Shashi Tharoor points out that the best example of this was during the negotiations of the Indo-US Nuclear Deal in the early years of the first decade of this century. Many influential Indians in the USA did remarkable work in lobbying Congressmen and Senators and bringing them to our point of view. As Indian-origin voters begin to play an important role in the electoral politics of their adoptive countries, the policy pronouncements of their leaders have to take the sensibilities of these voters into account. Even when they are not voters, but are key stakeholders in economic decision-making, the change has become visible—literally and metaphorically. Thus, the lighting up of the Burj Khalifa¹⁶¹ in colours of the Indian tricolour and the establishment of a temple in UAE¹⁶² in 2024 are clear indicators of the growing strength of India's diaspora.

The Many Shades of Power: Hard, Soft, Smart, and Sharp

Let us examine the term “power” in all its manifestations. Power comes from the Latin word *potere*, which means “to be able.” It means “possession of the qualities or attributes required to do

¹⁶¹ The Burj Khalifa, the world's tallest skyscraper, in Dubai lit up with India's Tricolour to commemorate India's 77th Independence Day. The official Instagram handle of Burj Khalifa shared a clip showing the skyscraper lit up in the colours of India's Tricolour—saffron, white, and green.

¹⁶² The BAPS Hindu Mandir, Abu Dhabi, in the UAE, is a traditional Hindu temple built by the BAPS Swaminarayan Sanstha. Inspired by Pramukh Swami Maharaj (1921–2016) and consecrated by Mahant Swami Maharaj on February 14, 2024, this is the first traditional Hindu temple in Abu Dhabi.

something, or get someone else to do something.” It is different from consensus because, in consensus, there is an implicit willingness. Power is the ability to enforce the diktat—irrespective of the willingness of the other person or institution. The ultimate epitome of power—the ability to enforce its mandate—is the nation-state, both within its boundaries (through police, attorneys, and courts) and beyond its borders (through its defence forces). It may be mentioned here that power is exercised in families, communities, and societies as well, but this power is “informal” and usually based on custom, adage, and past precedent. This has its limitations, and whenever there is a clash between the two strands of power, the possibility of formal systems carrying the day is brighter.

Scholars have also pointed out that in the absence of hard power—military strength and economic power—soft power by itself does not carry much weight, especially during critical times. India realised, much to its chagrin in the 1962 war with China, that even though India had been a member of two very powerful organisations—the NAM¹⁶³ and the Commonwealth¹⁶⁴—support for our position was lukewarm. Likewise, much to Pakistan’s disappointment, the OIC’s¹⁶⁵ support for its position in its wars against us has not been overwhelming. In fact, thanks to India’s outreach, India was invited to the OIC with Observer

¹⁶³ The Non-Aligned Movement is a forum of 120 countries that are not formally aligned with or against any major power bloc. It was founded with the view to advancing the interests of developing countries in the context of Cold War confrontation. After the United Nations, it is the largest grouping of states worldwide.

¹⁶⁴ The Commonwealth of Nations, often simply referred to as the Commonwealth, is an international association of 56 member states, the vast majority of which are former territories of the British Empire from which it developed. They are connected through their use of the English language and historical-cultural ties.

¹⁶⁵ The Organisation of Islamic Cooperation, formerly the Organisation of the Islamic Conference, is an intergovernmental organisation founded in 1969. It consists of 57 member states, 48 of which are Muslim-majority. In 2019, India made its maiden appearance at the OIC Foreign Ministers’ meeting as a “guest of honour.” 2019 was the 50th anniversary of OIC.

status. As such, before any nation can talk of soft power, the world at large has to acknowledge its military might, economic muscle, and political stability. The intervention of India in the creation of Bangladesh in 1971, followed by the assertion of our nuclear ability Pokhran-I in 1974, the economic reforms in 1991, Pokhran-II in 1998, the Kargil victory in 1999, the refusal to accept China's position on the contested border with Bhutan and India in the last decade, coupled with the competence to move into space through our Lunar and Mars Missions (Chandrayaan¹⁶⁶ and Mangalyaan¹⁶⁷), and the presence of our own frigates and naval aircraft carriers in blue waters have slowly, but surely, moved India many notches higher in global perception. Here is a nation whose economic juggernaut is gaining strength, whose defence preparedness into theatre commands makes her a formidable power in the region, and is now ready for showcasing her soft power through her vibrant and diverse culture, vibrant arts, spiritually edifying yoga, books, civilisational heritage, multiple and affordable cuisines, cultural markers from Bollywood, and the successful conduct of general elections—the great festival of democracy in India.

Soft Power Today: Default or Design

But it is also important to acknowledge that that until very recently, India's soft power was more by default rather than by design, and it is only in the last two decades that India has made a conscious effort at extending the outreach of its public diplomacy through a multi-pronged approach—principally

¹⁶⁶ The Chandrayaan programme, also known as the Indian Lunar Exploration Programme, is an ongoing series of outer space missions by the Indian Space Research Organisation for the exploration of the Moon. The programme incorporates a lunar orbiter, an impactor, a soft lander, and a rover spacecraft.

¹⁶⁷ India's Mars Orbiter Mission, or MOM, was the country's first mission to the Red Planet. The mission tested key technologies for interplanetary exploration and studied the Martian surface and atmosphere from orbit for eight years, far exceeding its projected lifespan.

through the Indian Council of Cultural Relations (ICCR), but also through other agencies and knowledge institutions—from the International Solar Alliance¹⁶⁸ to the National Centre for Good Governance (NCGG),¹⁶⁹ through scientific and research organisations, and participation in the UN and its allied agencies, including the Peace Keeping Force.

The entire domain of Public Diplomacy came up for discussion in the meetings of the Standing Committee on External Affairs in December 2022. Chaired by parliamentarian P. P. Choudhari, it gave some suggestions to enhance the effectiveness of the outreach of public and cultural diplomacy. These included the restructuring and strengthening of ICCR, institutionalising the coordination mechanism between the MEA and functional ministries, enhanced budgets for outreach and resolving the manpower constraints in carrying out even the required number of programmes—whether it be for Yoga or Indian classical music, or the teaching of Sanskrit and Hindi. One must realise that ICCR has to play a role similar to that of the British Council of the United Kingdom (hereafter UK), the Pro Helvetia of Switzerland, and the United States Equestrian Federation (USEF) of the USA with its network of libraries and fellowships. Other successful examples include Germany, Spain, Italy and Portugal which have institutes named for Goethe, Cervantes, Dante Alighieri, and Camoes, respectively. One has to reckon with the fact that Beijing has set up nearly 500 Confucius Centres to teach Mandarin and present Chinese culture to

¹⁶⁸ The International Solar Alliance is an alliance of more than 120 signatory countries, most being sunshine countries, which lie either completely or partly between the Tropic of Cancer and the Tropic of Capricorn.

¹⁶⁹ The National Centre for Good Governance (NCGG) is an autonomous institute under the aegis of the Department of Administrative Reforms and Public Grievances, Government of India. Its mandate includes bringing about governance reforms through studies, training, knowledge sharing and promotion of good ideas. It seeks to carry out policy-relevant research and prepare case studies; curate training courses for civil servants from India and other developing countries; provide a platform for the sharing of existing knowledge and pro-actively seek out and develop ideas for their implementation in the government, both at national and international Level.

international audiences. In contrast, India has only 35 Indian Cultural Centres in different parts of the world. As strategic affairs expert Raja Mohan¹⁷⁰ pointed out, by the middle of the last decade, China's external propaganda budget was close to US\$10 billion, nearly 15 times larger than the US State Department's "public diplomacy."

The MEA submitted that the budgetary allocation for the ICCR was inadequate. The Committee observed that the ICCR would require at least ₹500 crore to accommodate the current demand from embassies and cultural centres. More than that, we also need to strengthen not just the numbers of the diplomatic corps, but also our representation in trade missions as well as global bodies like the FAO, IFAD, WFP, UNESCO, and UNICEF. While India is the leading producer of agricultural commodities, and is an important player in international agriculture development, and contributing substantially to food and nutrition security, there is just one representative of the Ministry of Agriculture accredited to all three agencies in Rome. We should have a much larger delegation comprising officers not just from the Agriculture Ministry, but also from the Indian Council of Agricultural Research (ICAR); Rural Development; Food and Public Distribution; and Environment, Forest and Climate Change Ministries.

The Power of the Broadcaster

The ICCR and the MEA must also connect with the Information and Broadcasting Ministry, as well as the India-based electronic media, including the lead broadcasters in the corporate space. The duration of several language programmes of All India Radio (AIR) has been curtailed—both due to financial constraints and limited listenership—but the challenge is to

¹⁷⁰ C. Raja Mohan is Visiting Research Professor at the Institute of South Asian Studies, National University of Singapore, and a contributing editor on international affairs for *The Indian Express*.

revisit the programme structure of the AIR broadcasts by shifting the focus from news to human-interest stories with greater emphasis on Bollywood, regional films and popular music. If K-Pop¹⁷¹ is ruling the roost, the challenge is to bring in contemporary numbers from A. R. Rahman¹⁷² and Diljit Dosanjh.¹⁷³ Tie-ups with local FM stations, which will also share tips on weather and traffic conditions, have to be incorporated if we want the drivers in Lhasa to tune into the Tibetan service of the AIR.¹⁷⁴ Currently, the foreign-language broadcasts are in Arabic, Baluchi, Burmese, Chinese, Dari, French, Indonesian, Persian, Pushto, Russian, Sinhala, Swahili, Thai, Tibetan, and English (General Overseas Service). The Indian languages are Bengali, Gujarati, Marathi, Konkani, Kashmiri, Hindi, Kannada, Malayalam, Nepali, Punjabi, Saraiki, Sindhi, Tamil, Telugu, and Urdu, but these also need to be carried forward to the geographies where our diaspora is concentrated. Not having the national broadcaster Doordarshan, or for that matter any other India-based channel, in the major international capitals and the two seats of the UN—New York and Geneva—also limits our ability to understand and comment on global events as they are happening. Visiting journalists, however perceptive, cannot be a

¹⁷¹ A form of popular music originating in South Korea as part of South Korean culture. It includes styles and genres from around the world, such as pop, hip hop, R&B, rock, jazz, gospel, reggae, electronic dance, folk, country, disco, and classical, on top of its traditional Korean music roots.

¹⁷² An Indian music composer, record producer, singer, songwriter, musician, multi-instrumentalist, and philanthropist, A. R. Rahman is popular for his works in Indian cinema, predominantly in Tamil and Hindi films, with occasional forays in international cinema. In 2010, the Indian government conferred him with the Padma Bhushan, the nation's third-highest civilian award.

¹⁷³ Diljit Dosanjh is an Indian singer, actor, film producer, and television personality. He works in Punjabi music and subsequently in Punjabi and Hindi cinema.

¹⁷⁴ In terms of the number of languages transmitted, the range of socio-economic variety it serves, and the size of its broadcasting organisation, Akashvani, is the largest radio network in the world. AIR's home service comprises 420 stations located across the country, reaching nearly 92% of the country's area and 99.19% of the total population, and has programming in 23 languages and 179 dialects.

substitute for resident correspondents (like Mark Tully¹⁷⁵ of BBC in India). It is now seen that while the UK, USA, China, Russia, France, and the Qatar-backed Al-Jazeera¹⁷⁶ have their correspondents in New Delhi, India needs to do the same.

Leverage All Resources

The Standing Committee on External Affairs noted that both the MEA and the Ministry of Culture are engaged in the promotion of India's cultural diplomacy but often do not leverage each other's resources. While the Ministry of Culture formulates policy and evolves projects for the propagation of culture, the ICCR is the executing arm in the external domain responsible for the preservation of cultural heritage within and outside India. The Committee recommended the formation of a working group between the MEA and the Ministry of Culture to coordinate and plan cultural diplomatic activities. The Education Ministry and the National Book Trust¹⁷⁷ must also play an important role by organising book fairs across the world. A Yoga Certification Board, and a Yoga resources portal giving information about all the yoga festivals in the country will also help in the promotion of inbound tourism. While it is true that the number of tourists is growing, the country can earn precious foreign exchange by sharing information about the different fairs and festivals across

¹⁷⁵ Sir William Mark Tully, KBE, is a British journalist and the former Bureau Chief of the BBC in New Delhi, a position he held for 20 years. He worked with the BBC for a total of 30 years before resigning in July 1994. The recipient of several awards, Tully has authored nine books.

¹⁷⁶ Al Jazeera English is a 24-hour English-language news channel operating under Al Jazeera Media Network, which is partially funded by the government of Qatar. In a bid to broaden its reach, Al Jazeera introduced an English-language division in 2006.

¹⁷⁷ National Book Trust (NBT) is an Indian publishing house, which was founded in 1957 as an autonomous body under the Ministry of Education of the Government of India. The activities of the Trust include publishing, promotion of books and reading, promotion of Indian books abroad, assistance to authors and publishers, and promotion of children's literature.

the length and breadth of the country. The tourism departments of states can also play an important role in this.

Another point that needs to be discussed is leveraging the connection of state governments with non-resident Indians (NRIs) from their region. Punjab, Gujarat, Karnataka, Tamil Nadu, Andhra Pradesh, Goa, Uttarakhand, Uttar Pradesh, and Telangana are some of the states which have a dedicated cell to look after their NRIs. Many also organise internship programmes for the youth and students from their region, especially with regard to language learning, culture, and heritage. It may be a good idea to associate the state governments with the promotion of language, tourism, heritage, and culture with the relevant stakeholders. The assistance can extend to support for organising marriage ceremonies and other religious programmes which the community may want. Many states like Tamil Nadu, Maharashtra, Gujarat, and Punjab have been organising or supporting the organisation of global meets for the official languages of their respective states. This too would be a strong instrument of soft power. Individuals and institutions have also endowed chairs in Ivy League universities—for example, the Tamil Chair at Harvard.

A Question Mark on the Ranking Criterion of Soft Power

One final point. The current measures of ranking the soft power of nations leave much to be desired. Unlike the transparent and publicly verifiable indices used by multilateral institutions like the World Bank, International Monetary Fund (IMF), United Nations Development Programme (UNDP), or well-established bodies like the World Economic Forum for Ease of Doing Business (EoDB), the criteria employed by agencies leave much to be desired. This is reinforced when China—a country with such a poor track record of transparency in business, where all economic data is released only by government sources

without any independent verification—is placed third, above France, Germany, Japan, Korea, and Switzerland. There are two ways of looking at this conundrum. The first is to ignore it, but the other is to offer another methodology and a more acceptable platform. India should make a strong case that this task be entrusted to UNESCO¹⁷⁸—the UN body tasked with the promotion of education, science, culture, arts, museums, and heritage sites. Newer norms should also include issues such as the willingness, or otherwise, of nations to meet their global commitments to reduce carbon emissions and address the growing concerns regarding ecology and the environment.

The Olympics of 2036 and a Seat on the UN High Table

There are two significant milestones that India is now aspiring for, and both of these will go a long way in strengthening India's soft power status. These are accomplishments which have already been achieved by China. While Chinese opposition to India's Olympics bid for 2036¹⁷⁹ may not be so direct, as it is a one-off event, they may offer their support to the competing bids from Indonesia, Türkiye, and Chile. Indonesia has offered its proposed new capital of Nusantara as a possible venue, while both Türkiye and Chile have proposed their respective capitals of Istanbul and Santiago. Saudi Arabia and Qatar have also offered to host the games. In 2021, backed by both the Government of India and the Indian Olympics Association, the Government of Gujarat and the Ahmedabad Urban Development Authority

¹⁷⁸ The United Nations Educational, Scientific and Cultural Organization (UNESCO) is a specialised agency of the United Nations with the aim of promoting world peace and security through international cooperation in education, arts, sciences, and culture.

¹⁷⁹ Encouraged by the International Olympic Committee (IOC) head Thomas Bach, India would be bidding for the 2036 Games hosting rights but will face competition from strong contenders like Türkiye, Chile Saudi Arabia, Indonesia and Qatar, among others.

(AUDA) hired PwC as its consultant, which identified 22 sites in Ahmedabad and Gandhinagar with the potential to host the Olympics in 2036. A new, state-of-the-art sports complex named the Sardar Vallabhbhai Patel Sports Enclave (SVPSE) is being built in Ahmedabad for multi-sport venues. The cost of the enclave is estimated to be around ₹4,600 crore (US\$551 million). However, when a nation (and a city) hosts a sporting event on this scale, the soft power index is bound to go up—for in addition to sportspersons, sport administrators, commentators, and media personalities, there is an unprecedented potential to attract tourists as well.

And then, of course, there is the milestone of getting to the High Table on the United Nations Security Council (UNSC).¹⁸⁰ While resistance to the expansion of the UNSC can be expected from China, other permanent members like the UK, France, and USA whose GDP, unlike India's, is not on the ascendant—are not keen to change the status quo. For the last few decades, and especially after Prime Minister Modi became India's helmsman, the country has been advocating for UNSC reforms.¹⁸¹ India contends that as the world's largest democracy and a significant global player, its inclusion would better represent the interests of developing nations and align with the contemporary geopolitical landscape. Furthermore, India emphasises its substantial contributions to UN peacekeeping missions as a justification for permanent membership, underlining its role in upholding international peace and security. Additionally, India asserts that its expanding economy and political influence merit a permanent

¹⁸⁰ The Security Council consists of 15 members, of which five are permanent: China, France, Russia, the UK and the USA. These were the great powers that were the victors of the Second World War (or their recognised successor states). Permanent members can veto (block) any substantive Security Council resolution, including those on the admission of new member states to the United Nations or nominees for the office of Secretary-General.

¹⁸¹ <https://timesofindia.indiatimes.com/blogs/ashoks-statecraft/indias-quest-for-un-security-council-permanent-membership-a-holy-grail-of-its-foreign-policy/>; <https://www.orfonline.org/research/india-s-pursuit-of-united-nations-security-council-reforms>

seat, enabling effective decision-making on global security matters and fostering regional stability by addressing conflicts and promoting dialogue among neighbouring countries. Moreover, India advocates for a more inclusive UNSC to fortify multilateralism and ensure diverse representation in decision-making processes, underscoring its historical commitment to the UN Charter's principles. This is what is drawing countries in Africa, Latin America, and Central Asia in support of India's position. This has also been supported by the President of the 78th Session of the UN General Assembly, Dennis Francis. He has expressed optimism about India's potential to secure a permanent seat on the UNSC during his visit to India in January 2024.¹⁸²

Responding to a question on the absence of the largest democracy from the Security Council, he said, "*India is a mature, highly respected member of the United Nations. It is a leader in many ways. And I'm sure that that fact is not lost on the members of the General Assembly. So, I wish the government and people of India every success in their quest to assume membership of the council on a permanent basis.*"

India is strategically positioning herself as a key player on the global stage, taking a lead role in multilateral forums like BRICS, SCO, BIMSTEC, and IBSA, while actively engaging with platforms such as the OECD, G7, and WEF. Her contributions to reshaping global food and energy security, driving climate change discourse, advocating equitable trade, and championing Africa ensure that her three components of power—*mantrana shakti* (strategic influence), *prabhu shakti* (sovereign authority), and *utsah shakti* (dynamic energy)—extend far beyond her immediate neighbourhood to encompass the seven seas and five oceans.

¹⁸² <https://www.livemint.com/news/world/unga-president-expresses-optimism-on-indias-unscc-permanent-seat-bid-says-india-is-a-mature-un-member-11706101715154.html>

Chapter 10. Problems and Prospects in the Health Sector in India: Learning from the Past Going Forward

Dr. Amarjit Singh

Evolution of the Health Sector: A Historical Perspective

In colonial India during the period 1891–1921, despite the high birth rate, of around 48 to 51 per 1,000 population, the average decadal growth rate of the population was only 0.3%. This was a consequence of a very high death rate due to frequent epidemics. Cholera accounted for 22 million deaths between 1887 and 1954, and malaria took 20 million lives. In 1907, deaths from plague across India were estimated to be 1.3 million. The two successive waves of the influenza epidemic during 1918–1920 took a toll of 12 to 17 million people in a period of 3 to 4 months, accounting for the decimation of 5% of the total population of the country.

The situation was further compounded by recurrent famines in the latter part of the 19th century and the early half of 20th century, due to erratic rains, the absence of irrigation, and, above all, laissez-faire response of the colonial government, resulting in severe food shortages and huge mortality. In a short span of 30 years between 1870 and 1900, India experienced several localised droughts and three major famines: 1876–1878, 1896–1897, and 1899–1900. The famine during 1876–1878, due to the failure of rains over large parts of south India, affected 58 million lives, or

a quarter of India's population. While 90% of the rural population was starving, the colonial government continued to export grains from India to Britain. Food prices shot up, and the poor succumbed to starvation. There was no respite even after the rains resumed, and the death rate remained high as cholera, diarrhoeal diseases, and malaria took a heavy toll on the malnourished population. Life expectancy at birth was below 25 years, as against 45 years for men and 49 years for women in Britain (Visaria & Visaria 1983).

The high death rate was also a reflection of limited human resources in health and medical facilities, which primarily catered only to the elite in the civil lines and the British Indian Army. In the early part of the 20th century, in British India with a population of 300 million, there were only 17,654 medical graduates, 29,870 licentiate doctors (with fewer than 3 years of training), 7,000 nurses, 750 health visitors, 5,000 midwives, 75 pharmacists, and about 1,000 dentists. The glaring shortages of health professionals had a devastating effect on the well-being of the population, which in turn hurt the economy badly (Priya 2023).

Year 1921 was the year of the "Great Divide." Due to the absence of major famines and the availability of medical treatment over large areas, improved sanitation, mass vaccination, and treatment of malaria with quinine between 1921 and 1951, the death rate steadily declined from 41 to 25 per 1,000 population by 1951. India's population grew from 251 to 361 million, recording a decadal growth rate of around 1.3%. Life expectancy at birth increased to 33 years between 1921 and 1951 (Visaria & Visaria 1983).

Response of Independent India

The British government had set up the Health Survey and Development Committee, popularly known as the Bhore Committee (BC) after its chairman (Bhore Committee Report

1946). The BC prepared an elaborate blueprint of how Health Systems Development (HSD) must be undertaken as a state responsibility. The BC blueprint was adopted as the policy by the government of independent India and as the planning frame for HSD until 1983, when the first National Health Policy was enunciated. The BC not only had a comprehensive public health perspective on preventive interventions, but a medicalised perspective for health services development. It laid out in great detail the elements of the health service system in which the centre point was to be the tiller of the soil, as 90% of Indians were living in rural areas. An integrated three-tier institutional structure administered at the district level was envisaged, with medical graduates and specialists as the providers of health care, assisted by a number of clinical and preventive care support personnel. The BC estimated that about 15% of the government's budget would be required to implement its recommended blueprint. However, during the colonial government's rule, health allocation was only about 4%. It continued to remain around that level even after independence. The BC had envisaged a social physician for society at large, but what we have is a system where the institutional culture is not, by and large, patient-centred and service-oriented but livelihood- and profit-oriented (Priya 2023).

The Mudaliar Committee, which was set up in 1962 to assess the implementation of the recommendations of the BC, called for the creation of less expensive models of medical colleges. This sage advice was, however, ignored, and the constrained fund allocations were prioritised to build and run more medical colleges of the older model. The vast network of primary and secondary services recommended by the BC did not get priority. While the people were deprived of health services, the medical graduates were forced to go into the private sector due to a lack of openings for doctors in public facilities. The private sector got a further fillip in the 1980s and 1990s when the policies of globalisation, liberalisation, and privatisation were adopted. By this time, the people's income, at least in urban areas, had

increased. Yet, the government provisions for health and medical services were very limited. Government hospitals and health centres were congested and provided poor care, forcing the middle class to go to the private sector for better care. This gave a great boost to the private health sector, leading to its explosive growth in urban areas.

Influenced by the Alma Ata Declaration (World Health Organisation 2024) of 1978, the first National Health Policy (NHP) of 1983 refocused attention on primary health care (Ministry of Health and Family Welfare 1983). It was realised that the establishment of curative centres based on the Western model was inappropriate and irrelevant to the real needs of our people and the socio-economic conditions prevailing in the country. The emphasis on curative care only benefited the elite, neglecting the preventive, promotive, public health, and rehabilitative aspects of health care. The various health programmes, by and large, had failed to involve individuals and families in establishing a self-reliant community (Ministry of Health and Family Welfare 1983). This realisation led to a focus on Community Health Volunteers (CHVs) and voluntary organisations as had been tried out by Dr. Mabelle Arole and Dr. Rajnikant Arole in Jamkhed (Arole & Arole 1994; Henry et al. 2019) and the barefoot doctors of China, to fill the gaps in primary care. Simultaneously, the private sector was encouraged to set up super-speciality services, which the middle class could afford, though they were too expensive an investment for the government.

Keeping in view the fact that only 20% of the outpatient care and 45% of the inpatient admissions were taking place in the public sector, and only 17% of the total health expenditure in the country was coming from the government, the second NHP of 2002 encouraged a more proactive role for the private sector. Although it acknowledged that the quality of private health-care services was highly variable, it therefore recommended special statutory regulatory mechanisms. Recognising the important role of civil society in advocacy, disease control, and implementation of national health programmes, it proposed

greater reliance on them. To reduce the high inequity in the quantity and quality of health-care services across the country, it recommended increasing the central government share from 15% to 25%. It further prescribed 55% of the total health allocations for the expansion of primary-level services to reduce inequities in access to health care and improve the quality of existing facilities (Ministry of Health and Family Welfare 2002)

A major initiative of the UPA (United Progressive Alliance) government was the launch of the National Rural Health Mission (NRHM; National Rural Health Mission, 2005) in 2005–2006 to provide accessible, affordable, and quality health care to the vulnerable rural population. The key features of the NRHM included enhancing the effectiveness of the public health delivery system and making it accountable to the community, human resource management, community involvement, decentralisation, rigorous monitoring and evaluation against Indian Public Health Standards (IPHS), convergence of health and related programmes, and flexible financing to facilitate innovations to improve the overall health indicators. It ensured faster and assured financial flows to the state and district levels and provided flexible funding mechanisms to enhance local autonomy. Rashtriya Bima Suraksha Yojna (RSBY) was launched in 2008 to enhance equity for secondary and tertiary services and prevent catastrophic health expenditure. There were robust monitoring mechanisms to plug leakages and ensure effective use of funds. With all these initiatives, by 2014, the share of the government in health expenditure increased to 30% from the existing 17%.

Governmental Response Under NDA

The NDA (National Democratic Alliance) government released the third NHP in 2017, whose major thrust was surveillance, diagnosis, and treatment of non-communicable diseases (NCDs); primary-level services through government provisioning in

turban areas; and for secondary and tertiary care through public and private hospitals paid for through insurance systems, with the government paying the premium for 40% of the poorest Indian population. The NHP 2017 also recommended the strengthening of the existing medical education system for a quantum jump in the provision of doctors and nurses (Ministry of Health and Family Welfare, 2002). Free drug and diagnostic services are mandated to be provided at 169,000 Ayushman Arogya Mandirs (AAMs, Health and Wellness Centres); the subcentres of AAMs are to provide 105 medicines and 14 diagnostic tests free; and the PHC (primary health care)-AAMs are expected to provide as many as 172 medicines and 63 diagnostic tests free. In addition to free ambulance services in many parts of India, 2.59 crore dialysis sessions have been held since 2016 under the Pradhan Mantri National Dialysis Programme. It is expected that early screening and treatment of NCDs will prolong healthy life and avert catastrophic expenditure on the treatment of their future serious life-threatening consequences (Paul 2024).

Drugs and diagnostics are a major driver of out-of-pocket expenditure (OOPE). To meet this challenge, 10,000 Jan Aushadi Kendras (JAKs) have been operationalised. The sale of 1,900 quality generic medicines and 300 surgical items through these JAKs has resulted in an annual saving of ₹28,000 crores. Likewise, the price regulation of coronary stents, knee implants, cancer drugs, and other essential medicines has resulted in an annual saving of ₹27,000 crores. In another important trend, the expenditure on government-financed insurance Ayushman Bharat Jan Arogya Yojana (AB-PMJAY) has increased manifold. As a result, many of the beneficiaries do not have to borrow or sell assets to access treatment (Paul 2024).

With all these initiatives and investments, the National Sample Survey 2017–2018 data have shown that the utilisation of government services for inpatient care and institutional deliveries has gone up. The government health expenditure (GHE) has risen from 1.13% of GDP in 2014–2015 to 1.84% in 2021–

2022. In per capita terms, GHE increased from ₹1,108 in 2014–2015 to ₹3,156 in 2020–2021. This has further been supplemented by the expenditure on AB-PMJAY (Ministry of Health and Family Welfare 2024). In turn, this has resulted in a consistent decline in the OOPE. It has come down from 62.6% in 2014–2015 to 39.4% in 2021–2022. Interestingly, the OOPE continued to decline even in the face of the raging virus during the COVID-19 pandemic (Paul 2024).

These assertions need to be assessed and verified by researchers at the field level. Even if they are accepted at face value, the promised allocations are less than half of the estimated requirement for the health sector; that is, 5%–6% of the GDP. The investments in the health sector would require a further thrust, and their effective utilisation will have to be ensured to make uniform health coverage a reality.

Human Resource Challenges in the Sector

At the heart of every health system, the workforce is central to advancing health. There is ample evidence that worker numbers and quality are positively associated with immunisation coverage, outreach of primary care, and infant, child, and maternal survival. The quality of doctors and the density of their distribution have been shown to correlate with positive outcomes in cardiovascular diseases. Conversely, child malnutrition has worsened with staff cutbacks during health sector reform. Cutting-edge quality improvements in health care are also best initiated by workers themselves because they are in a unique position to identify opportunities for innovation. In health systems, workers function as gatekeepers and navigators for the effective, or wasteful, application of all other resources such as drugs, vaccines, and supplies. In view of their significant contribution to the sector, the World Health Organization (WHO) has recommended a threshold of 44.5 health workers per 10,000

population.¹³ The density of the skilled workforce—doctors and nurses/midwives—at the national level in India currently is around 7.4 and 17.7, respectively. With the inclusion of Ayush practitioners as part of the skilled health workforce, the density is estimated to be 29.3 (Table 1). However, when adjustment is made for adequate qualifications, the total active health workforce (doctors, nurses/midwives, and Ayush) density is reduced to 12.9 per 10,000 population.¹⁴ What is more, there is a huge mismatch in the estimated nurse-to-doctor ratio: after adjusting for the right qualifications, it is as low as 1.2:1, as against the norm of 3:1. This results in sub-optimal utilisation of doctors: a doctor is in place where a skilled nurse could do!

Table 1: Size and Composition of the Health Workforce in India

S. no.	Health workforce	Total reported (in million)	Adequately qualified (in million)	Density per 10,000 population
1	Allopathic doctor	1.01	0.68	7.4
2	Nurse/ midwife	2.41	0.82	17.7
3	Pharmacist	1.2	0.22	8.8
4	Dentist	0.22	0.18	1.6
5	Traditional medicine/ Ayush	0.57	0.26	4.2
6	Health associates/ allied	0.75	0.41	5.5
7	All	6.18	4	

Source: Karal et al. 2023)

The recent COVID-19 pandemic significantly exposed the gap globally as well as in India. With approximately 44 million COVID-19 infections and a mortality of 5.31 lakh in India as of April 2023, one of the most important lessons learned is the

requirement for improved availability and accessibility of a skilled workforce. In addition to the overall shortage, the rural–urban mismatch in the availability of human resources needs to be addressed. While 66% of the population lives in rural areas, only around 30% of the human resources are in the rural areas. As a result, the rural areas are hugely underserved.

Similarly, while the public sector is responsible for the overall health of the country, only 37.4% of the health workers and 35.4% of the doctors are in the public sector. This means we must find mechanisms to utilise human resources in the private sector for public health goals. There is a need to:

8. Considerably expand the supply side of the health workforce, particularly of doctors and nurses/midwives;
9. Give priority attention to training more nurses to improve the nurse/midwife-to-doctor ratio;
10. Ensure increased participation of trained personnel in the health workforce;
11. Scale up upskilling programmes for less qualified care providers; and
12. Strengthen the health workforce information system.

Supply of Doctors

The Government has taken up a drive to increase the number of medical colleges, as can be seen in Table 2, while the number of government medical colleges has gone up in 2023–2024 by 115% over 2014, the number of private medical colleges has gone up by 53% over the same period.

Table 2: Increase in Medical Colleges and Undergraduate (UG) Seats

Year	Medical colleges		Total UG seats
	Government	Private	
2013–14	181	206	51,348
2014–15	189	215	54,348
2015–16	200	222	57,138
2016–17	228	238	65,183
2017–18	237	243	67,523
2018–19	253	248	70,433
2019–20	279	260	80,312
2020–21	289	269	83,275
2021–22	322	290	91,927
2022–23	355	293	96,077
2023–24*	390	316	1,08,990
Increase over 2014	115%	53%	111%

* *Provisional figures.*

Likewise, as can be seen in the Table 3, the Diplomat of National Board (DNB) and Fellow of National Board (FNB) seats have gone up by 165%, and the diploma programme College of Physicians and Surgeons (CPS) by 29%. In all, the total number of postgraduate (PG) medical seats has gone up by 123%, from 31,185 in 2013–2014 to 69,694 in 2023–2024.

Table 3: Increase in PG Seats

Year	Number of PG seats			Other PG seats		Total
	Govt	Private	Total	DNB/FNB	CPS	
2013–14	–	–	24,931	4,995	1,259	31,185
2014–15	–	–	25,346	4,845	1,254	31,445
2015–16	–	–	25,850	4,586	1,097	31,533
2016–17	–	–	26,450	6,621	1,251	34,322
2017–18	–	–	31,415	6,848	1,320	39,583
2018–19	–	–	33,180	7,267	2,060	42,507
2019–20	22,567	12,565	35,132	9,796	2,199	47,127
2020–21	26,711	16,009	42,720	10,676	2,099	55,495
2021–22	28,260	17,858	46,118	12,246	1,838	60,202
2022–23	30,211	19,362	49,790	12,648	1,621	64,059
2023–24*	33,416	21,411	54,827	13,246	1,621	69,694

* *Provisional figures.*

Ayushman Bharat Jan Arogya Yojana (AB-PMJAY)

The AB-PMJAY was launched to address the gaps in the availability of health services due to non-availability of human resources in remote rural areas. Under AB-PMJAY 345 million Ayushman cards have been issued, and 29,914 hospitals have been empanelled. Sixty-five million authorised hospital admissions have taken place under the scheme (Ministry of Health and Family Welfare 2024)

The admissions have mainly been in the following specialities (Table 4):

Table 4: AB-PMJAY Admissions

<i>Speciality</i>	<i>Total</i>
General Medicine	11,084,346
Infectious Diseases	4,317,412
General Surgery	3,074,041
Medical Oncology	2,500,826
Ophthalmology	1,818,648
Orthopaedics	1,448,509
Obstetrics Gynaecology	1,397,296
Obstetrics and Gynaecology	1,361,468
Urology	992,620
Cardiology	785,625

Table 5 shows the main procedures have been carried out under AB-PMJAY.

Table 5: Main Procedures Under AB-PMJAY

<i>Procedure</i>	<i>Total</i>
Haemodialysis	64,04,863
Screening test for COVID-19 infection	40,75,957
Multiple packages	18,90,280
Acute febrile illness	6,31,419
Phacoemulsification with foldable hydrophobic acrylic intraocular lens	5,56,293
Acute gastroenteritis with moderate dehydration	5,21,624
Enteric fever	4,85,419
Caesarean delivery	4,28,969
Unlisted Regimen Palliative CT-Max 6 cycles (per cycle)	4,14,683
Severe anaemia	4,14,167

The largest number of Ayushman cards has been created in Uttar Pradesh, followed by Madhya Pradesh and Bihar. The largest number of hospitals has been empanelled in Uttar

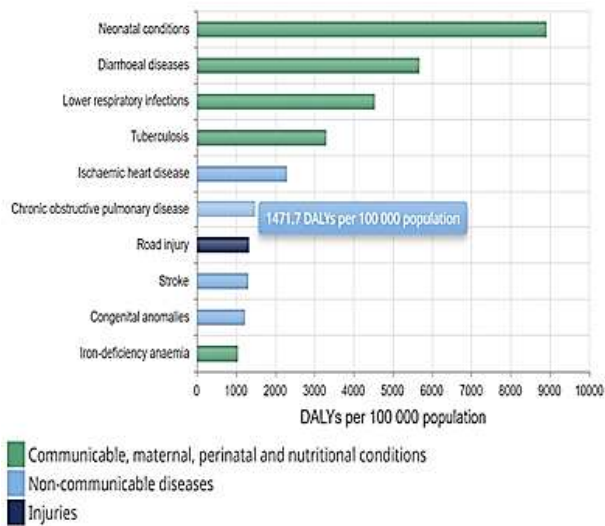
Pradesh, followed by Karnataka and Gujarat. Most empanelled hospitals are small, with fewer than 50 beds. Interestingly, except for Rajasthan, the better-off states Tamil Nadu, Karnataka, and Kerala, all ruled by opposition parties, with better functioning public health systems, have made the best use of the scheme. Together, they account for 35% of the authorised hospital admissions under AB-PMJAY.

The expenditure on government-financed insurance AB-PMJAY has increased manifold from ₹4,757 crore in 2013–2014 to ₹81,979 crore in 2023–2024 – which is a 17-fold rise in 11 years. This reflects rising investments in the AB-PMJAY. The expenditure on state health assurance/insurance schemes is additional (Ministry of Health and Family Welfare 2024).

Burden of Diseases in India: Selected Priority Problems

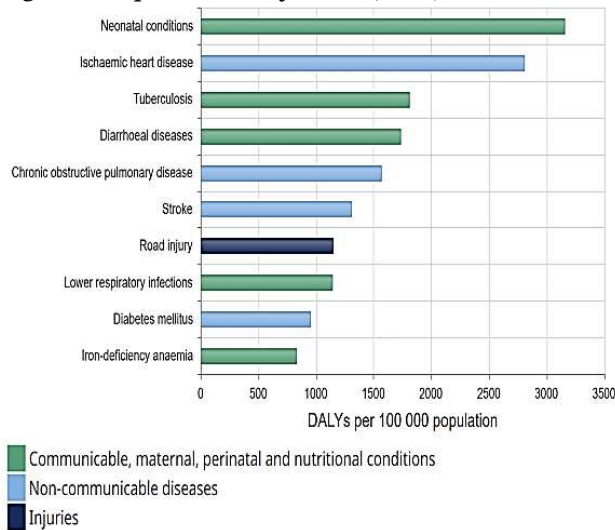
The requirement for the human resources and their skill sets should be determined by the burden of diseases, which in turn is calculated using disability-adjusted life years (DALYs). One DALY represents the loss of the equivalent of 1 year of full health. DALYs for a disease or health condition are the sum of years of life lost due to premature mortality (YLLs) and years of healthy life lost due to disability (YLDs) because of prevalent cases of the disease or health condition in a population. The Global Health Estimates of leading causes of death and disability in India, prepared by WHO (World Health Organisation 2020), reveals the following changes in DALYs in 2019 compared to 2010.

Figure 1: Top 10 Causes of DALY (2010)



Source: World Health Organisation 2020

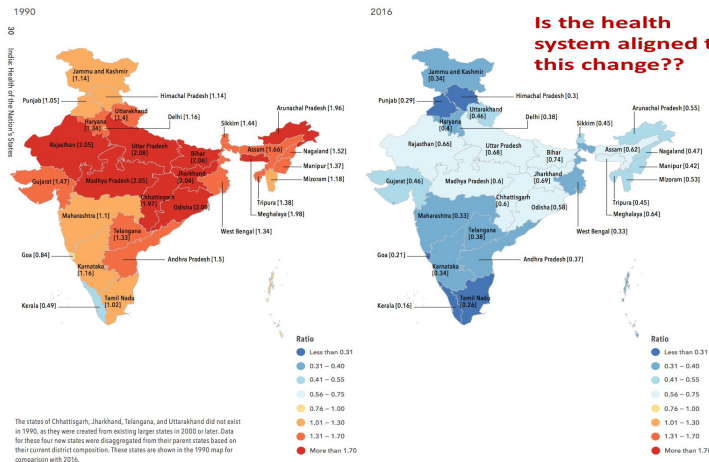
Figure 2: Top 10 Causes of DALY (2019)



Source: World Health Organisation 2020

The states in India, according to the National Family Health Survey 2019–2021 (NFHS-5) are, however, at different levels of epidemiological transition. In the states of the south, such as Kerala and Tamil Nadu, the ratio between communicable and NCDs ranges is at a low of 0.16–0.26, whereas the states in central India—primarily the Hindi-speaking states—have a huge burden of communicable diseases. For example, ratio between communicable and NCDs ranges between 0.66 in Rajasthan to 0.74 in Bihar (National Family Health Survey India 2024).

Figure 3: States at Different Stages of Epidemiological Transition



Source: National Family Health Survey in India (2024)

Therefore, while the central Indian states must tackle the double burden of disease, dealing with the communicable, maternal, neonatal, and nutritional disease burden along with the NCDs, the states in the south, Punjab, Haryana, and Himachal must focus on the NCDs and align their health systems to the emerging requirements. However, the health department's structure and functioning, as well as budgets and programmes, do not reflect the disease burden. It is critical to understand the

DALYs lost due to various diseases to be able to plan and provide for human resources for health in different states.

Communicable, Maternal, Neonatal, and Nutritional Diseases

Neonatal Mortality

High levels of neonatal mortality and lack of access to neonatal health care are widespread problems in developing countries. In the category of children younger than 5 years, 4.9 million died globally in 2022, with 2.3 million of these in the first month of life. In addition, almost 1.9 million babies were stillborn in 2021 (UNICEF 2024).

Creative ways have been found to deal with high neonatal mortality. According to a field trial in rural Gadchiroli by Dr. Bang and his associates (Bang 2005, Rasaily et al. 2020), population attributable risks—that is, the proportion of neonatal deaths in a population which can be attributed to a cause and, hence, will be averted if that cause is removed—for the major morbidities were the following:

1. Preterm birth: 0.74
2. Intra-uterine growth restriction (IUGR): 0.55
3. Sepsis: 0.55
4. Birth asphyxia: 0.35
5. Hypothermia: 0.08
6. Feeding problems: 0.04

Since these causes overlap, the attributable risks of death also overlap. Although pre-term birth was present in 63% of deaths, Intra-Uterine Growth Restriction (IUGR) in 28% of deaths, and low birth weight (LBW, defined as birth weight less than 2,500 grams) in 90% of deaths, these alone, in the absence of other comorbidities, were present in only 10% of the deaths. The per cent case fatality (CF) steeply increased with the mean number of co-

morbidities per neonate. Most of the deaths (83%) occurred in neonates with at least two or more morbidities. Thus, deaths occurred due to morbidity combinations. The most common morbidity combinations and the proportion of deaths caused by these overlapping combinations were:

1. Preterm + sepsis: 35%
2. IUGR + sepsis: 22.5%
3. Preterm + asphyxia: 20%
4. Preterm + hypothermia: 15%
5. Preterm + feeding problems: 12.5%

The CF in LBW alone or in suspected sepsis alone was low, but when these two occurred together, the CF increased by 6 to 18 times. Estimated excess deaths caused by sepsis, over and above LBW, were 44% of the total deaths. It was estimated that prevention and/or management of infections would reduce neonatal mortality by 40% to 50%.

Another cluster-randomised community-based trial conducted at five sites across India by Rasaily et al. (2020) also confirms that the Home Based Newborn Care (HNBC) package is feasible to deliver and is effective in reducing neonatal mortality particularly when delivered by a dedicated worker devoted to only maternal/neonatal care. The intervention package was effective even in settings with high rates of institutional births.

HNBC guidelines on these lines issued by the Government of India (GoI) are available on the website of National Health Systems Resource Centre (NHSRC; Government of India, 2021). Their implementation would, however, require significant capacity building of the Auxiliary Nurse Midwives (ANMs) and Accredited Social Health Activists (ASHAs). In addition, they would require considerable support from neonatologists and well-trained PHC medical officers. These experts may not be available in the public sector in the required numbers in many of the states. Gujarat's experience in this regard, of enrolling private paediatricians/neo-natologists under the Bal Sakha Yojana shows the way forward. The private paediatricians enrolled under the

scheme and paid for by the government provided treatment to children aged up to 1 month free of cost, including incubator care if needed for low birth weight and premature babies (for details, see section “Outcomes” below).

Tuberculosis: The World’s Top Infectious Killer

Every year, 10 million people fall ill globally with tuberculosis (TB). Despite being a preventable and curable disease, 1.5 million people die from TB each year making it the world’s top infectious killer. Although TB is present all over the world, most of the people who fall ill with TB live in low- and middle-income countries (WHO 2021).

India has the world’s highest TB burden, with two deaths occurring every 3 minutes from TB. An estimated 26 lakh people contract the disease every year, and approximately 4 lakh people die from the disease. The actual data may not be accurate due to a lack of proper identification and reporting. There is a gross underestimation of the disease due to poor surveillance. However, using the actual consumption of antitubercular (ATT) drugs in India as a marker, there is a much larger burden of the disease (two to three times higher) than the reported one. TB is also the leading cause of death among people with HIV and a major contributor to antimicrobial resistance. The economic burden of TB in terms of loss of lives, income, and workdays is humongous (MOH & FW 2022).

TB control faces the following daunting challenges in India:

1. Decades of unrestrained transmission have left hundreds of millions of Indians with latent TB infection, which may reactivate at any time. A significant proportion of the population is undernourished (35% of adults and almost half of the children in India), which weakens immunity and drives TB reactivation. A considerable number suffer from risk factors for tuberculosis, including malnutrition, diabetes, indoor air

- pollution from *chulhas* (earthen stoves), or smoking.
2. For tens of millions with previously, inadequately treated TB, the disease may recur at any time, particularly among patients seeking care from private providers who are ill-equipped to sustain their patients on prolonged, appropriate, and adequate treatment. Patients seeking TB care in the public sector have a better chance of treatment, but here also one-third are lost to follow-up between care-seeking and successful cure.
 3. The overpopulated, congested urban conditions play an important role in facilitating the transmission of the disease. The infectious TB cases spread the disease to their family and community, thereby maintaining the transmission cycle.

Despite all these difficulties, many countries have consistently shown that TB can be controlled if it is diagnosed early and treated properly, thereby interrupting the transmission cycle. The overwhelming challenge facing TB control in India remains delayed diagnosis, either due to a lack of quality rapid diagnostic services or due to a lack of necessary expertise. India also has a large burden of multi-drug-resistant TB (MDR-TB) and extensively drug-resistant TB (XDR-TB). Most of these patients are undetected and continue to transmit the disease. Even those who are detected endure long, toxic, and costly treatments only to have poor odds of success in treatment, along with a high number of lost-to-follow-up cases.

The Revised National Tuberculosis Control Programme (RNTCP), based on the internationally recommended Directly Observed Treatment Short-Course (DOTS) strategy, was launched in India in 1997 and expanded across the country by 2006. In 2007, GoI introduced the Programmatic Management of Drug-Resistant TB (PMDT) to combat the threat of drug resistance and subsequently achieved full geographical coverage by 2013. The Ministry of Health and Family Welfare (MoHFW) has developed the National Strategic Plan (NSP) to End TB in India (2017–2025) which builds on the success and lessons learnt from the last NSP

and encapsulates the bold and innovative steps required to eliminate TB in India by 2025, 5 years ahead of the global targets.

It was clear, however, by 2020 that the NSP 2017–2025 would not be able to meet these objectives. Hence, a new NSP India 2025 was launched in 2020. The recommended actions included mounting a TB elimination campaign inspired by lessons gained from the eradication of polio, reinforcing the existing workforce, and scaling up private provider engagement. The MoHFW, along with various development partners of the Health Ministry, launched the Pradhan Mantri TB Mukht Bharat Abhiyaan in 2021 under the NSP India 2020–2025 for TB Elimination as a major mission activity for ending the epidemic of TB by 2025. It is a multidimensional approach, which aims to detect all TB patients and emphasises reaching patients who are seeking TB care from private practitioners and undiagnosed TB in high-risk populations.

To achieve the goal of a TB Mukht Bharat (TB-free India), WHO India is also preparing to implement project GATIMAN to enhance technical assistance in the areas of public–private partnership (PPP), TB surveillance, knowledge management, implementation research, drug-resistant TB, laboratories, TB infection management, and advocacy and communications across states and union territories (UTs). In addition, WHO India has also identified and adopted 100 difficult-to-reach and neglected districts for ending TB in India.

In addition, treatment adherence initiatives, incentives, and enablers have been put in place: incentives of ₹1,000 are given after the completion of treatment. Additionally, for every drug-resistant TB case, an amount of ₹5,000 is being given to all treatment supporters during the treatment course. For private providers, every support provider is being given ₹1,000 for every notified case of tuberculosis. In tribal areas, ₹750 as travel support is given to all TB patients. The MoHFW has also announced the Nikshay Poshan Yojana scheme for incentives for nutritional support to all notified TB patients. Under this scheme, a financial incentive of ₹500 per month is given as a direct benefit

transfer for each notified TB patient for the duration for which the patient is on anti-TB treatment. An innovative software, NIKSHAY, has been launched for use by health functionaries at various levels across the country, both in the public and private sectors, to register cases under their care, order various types of tests from labs across the country, record treatment details, monitor treatment adherence, and transfer cases between care providers (Khanna et al. 2024).

Nutritional Issues

Nutrition has traditionally been ignored despite the daunting challenges; nearly one in every three children is stunted, and every other woman is anaemic. Taking into account the multiple determinants of malnutrition, the Prime Minister's Overarching Scheme for Holistic Nourishment or POSHAN Abhiyaan or National Nutrition Mission has been launched. It is an umbrella scheme that brings together a comprehensive package of interventions and services focused on the vital 1,000 days of the child's life, delivered by multiple ministries through an appropriate governance structure that fosters sectoral convergence. POSHAN Abhiyaan ideates a Jan Andolan, pushing through the involvement of local communities to drive social and behavioural change to convince families to avail themselves of the nutrition services. The allied Pradhan Mantri Matru Vandana Yojana (PMMVY) is a conditional cash transfer scheme for pregnant mothers and lactating women. The beneficiary cost norms under the Integrated Child Development Services (ICDS) have been revised substantially upwards and indexed to inflation so that entitlement in real terms remains impactful. Mission Indradhanush ensures that there is full immunisation coverage in the lowest quintile of 201 districts.

On the social front, under the Jal Jeevan Mission, around 76% of the households have a tap connection, up from 17% in 2019. According to the WHO, once tap connections are provided to all

households, it will save 4 lakh lives over a period of 5 years. Likewise, WHO has estimated that the Swachh Bharat Mission (SBM) Grameen, which has resulted in an open defaecation-free rural India, would have averted more than 3 lakh deaths due to diarrhoea and protein-energy malnutrition between 2014 and October 2019 (Paul 2024).

Non-communicable Diseases (NCDs)

NCDs kill 41 million people globally each year. Of these deaths, more than 15 million are between the ages of 30 and 69 years, and the vast majority of these “premature” deaths occur in low- and middle-income countries (LMICs). It is estimated that by 2030, the share of NCDs in global total mortality will be 69%—an increase of 10% over 59% in 2002. Although the burden of NCDs continues to increase globally, it disproportionately affects poorer regions, with almost 80% of NCD-related deaths occurring in LMICs. This shift is largely driven by demographic and epidemiological transitions, coupled with rapid urbanisation and nutritional transitions in LMICs. With approximately 6 million annual deaths from NCDs, effective efforts for the control of NCDs are critical for India.

A population-based initiative for prevention, control, and screening for common NCDs has been rolled out in the country under the National Health Mission and also as a part of Comprehensive Primary Health Care. Under the initiative, persons more than 30 years of age are targeted for screening for NCDs, as an integral part of service delivery under Ayushman Bharat—Health and Wellness Centres (Karan et al. 2024).

Hypertension

The *Global report on hypertension: Race against a silent killer*, released by the WHO in 2023, revealed that high blood pressure (BP) is the single most important risk factor for early deaths,

leading to an estimated 10.8 million deaths every year globally. It causes more deaths than other leading risk factors such as tobacco and high blood sugar. The number of adults with hypertension nearly doubled in the last three decades since 1990 to reach 1.3 billion globally. An estimated 46% of adults are unaware that they have the condition, hence the epithet silent killer. Forty-two per cent with hypertension are diagnosed and treated, and only one in five adults (21%) with hypertension has it under control.²⁶ In India according to the Indian Council of Medical Research (ICMR) estimates, 311 million people, or one in every three adults, have hypertension in the country, and adults with hypertension are threefold the estimated 101 million people living with diabetes.

High BP forces the heart to work harder to pump blood to the rest of the body. This causes the lower-left heart chamber, called the left ventricle, to thicken and enlarge. A thickened and enlarged left ventricle raises the risk of heart attack and heart failure. Hypertension is consistently related to the development of ischaemic heart disease, heart failure, stroke, and chronic kidney disease. An estimated 57% and 24% of stroke and coronary artery disease-related deaths, respectively, are due to hypertension (Flavio et al. 2020). Monitoring high BP and, if it is elevated, treating it is probably the biggest difference people can make to their vascular health.

It has been estimated that 76 million cardiovascular deaths (CVD) and 450 million disability-adjusted life years could be avoided if countries mobilise to achieve the goal of hypertension control of 50% of the population by 2050. In India, 4.6 million deaths can be prevented by 2040 if half the hypertensive population has its high BP under control by 2040.

A major reason for high BP is that Indian adults consume, on average, 8–11 grams of salt per day, which is approximately twice the WHO-recommended salt intake. Studies have shown that by reducing salt intake, cardiovascular disease risk can be reduced by 30% and mortality by 20%. The India Hypertension Control Initiative (IHCI), a collaborative project of the ICMR, MoHFW,

DGHS, and WHO India, was initiated in November 2017 in 25 districts in five states of India. Currently operational in over 140 districts, it follows five simple and scalable strategies. These measures include intensifying efforts to reduce salt intake; a multi-sectoral plan for the control of NCDs; stronger enforcement of food regulation—food packages need to have better labelling of food items in terms of low, medium, and high salt content; and food items with high salt content such as pickles, *namkeen*, and *papads* should attract higher taxation. Finally, the states could also scale up evidence-based public health interventions to prevent and control other lifestyle diseases such as chronic kidney diseases (Lahariya & Bhargava 2024).

Cancer

The worldwide cancer burden is likely to approach 27 million new cancer cases by 2040, up from 18.1 million cancer cases estimated in 2018, with a significant contribution from countries with low and medium Human Development Index (HDI) (Wild et al. 2020). In 2020, India accounted for 1,324,413 new cases and 851,678 deaths attributed to cancer. Breast, oral cavity, and cervix-uteri are the first, second, and third most common sites of cancers among both sexes and all ages, contributing to about 438,197 cases in India (National Health Mission).

It is well known that spotting signs of cancer at an early stage significantly increases the possibilities of surviving the disease. Accordingly, the National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS) gives special emphasis to checking—before symptoms appear—for cervical, oral, and breast cancers, as they constitute a third of all cases of the disease in the country. Yet, successive National Family Health Surveys reveal that a very small percentage of people in the vulnerable age group—those over 30 years—get screened for the malignancy. Turning the

government-run 1.5 lakh health and wellness centres (HWCs) into nodal points for cancer detection under the AB-PMJAY could have been a game changer, so as to reduce accessibility-related problems for screening to a great extent. A NITI Aayog report, however, shows huge gaps in the performance of these HWCs.³¹ Less than 10% of these centres had completed one round of screening for NCDs, including cancer.

The trust enjoyed by grassroots workers is a big positive when it comes to screening people for diseases like cancer, which may not show any symptoms. However, the orientation of the ASHAs about cancer prevention protocols and their training to use the screening techniques leave much to be desired. ASHA workers need to be sensitised to risk factors, symptoms, and the need for screening itself. Moreover, the working conditions of these low-paid and overworked workers need to be improved to motivate them for this national programme.

Diabetes

As per the 10th edition of the International Diabetes Federation (IDF) Atlas, 2021, India has 74.2 million people with diabetes who are between the ages of 20 and 79 years. The MoHFW provides technical and financial support to the states/UTs under the NPCDCS, as part of the National Health Mission (NHM), based on the proposals received from the states/UTs and subject to the resource envelope. The programme focuses on strengthening infrastructure, human resource development, health promotion, and awareness generation for prevention of non-communicable diseases (NCDs), early diagnosis, management, and referral to an appropriate level of health-care facility for treatment (National Health Mission).

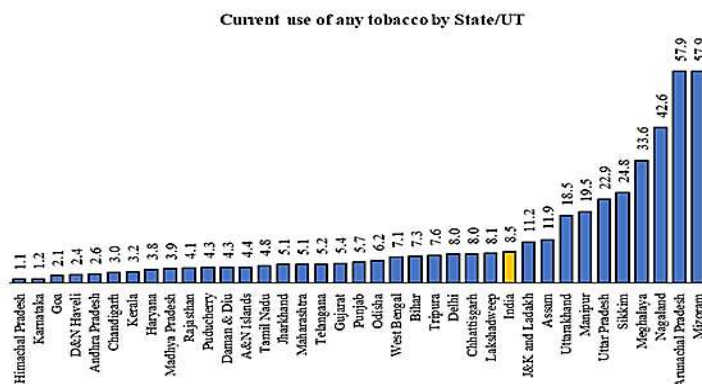
Under the Free Drugs Service Initiative of NHM, financial support is provided to states/UTs for the provision of free essential medicines, including insulin for poor and needy people. Furthermore, quality generic medicines, including insulin, are

made available at affordable prices to all under Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP) in collaboration with the state governments. The treatment in government hospitals is either free or highly subsidised for the poor and needy. The treatment for inpatient care is also available under AB-PMJAY for 10.74 crore families eligible as per the Socio Economic Caste Census (SECC) database 2011.

National Tobacco Control Programme (NTCP)

Tobacco use is associated with adverse health effects and is the prime cause of more than 7 million deaths annually (NITI). India is home to a substantial number of tobacco users, frequently characterised by people who are consuming smoke and smokeless tobacco, the synergistic effect of which accounts for 1.3 million preventable deaths every year. Tobacco use in any form is a serious health hazard; it depletes and deprives families, communities, and the nation of valuable financial and environmental resources (WHO 2023).

The current use of any kind of tobacco shows a very high prevalence in the states of the northeast, Uttarakhand, Uttar Pradesh, and Jammu and Kashmir (National Tobacco Control Programme, 2022). Of the estimated 28.6% tobacco use in India, only 10.7% is in the form of cigarettes and bidis, whereas 21.4% is used in the form of smokeless tobacco products such as *pan gutka/pan masala* and *mishri* used as toothpaste for scouring gums. Tobacco consumption patterns are influenced by the demographic area, socio-cultural and economic status, as well as religious influences (Lazarous et al 2020).

Figure 3: Current Use of Any Kind of Tobacco in the States of India

The Government of India has implemented many landmark policies and programmatic measures towards robust tobacco control action. The Cigarettes and Other Tobacco Products Act (COTPA), enacted in 2003, has provided the legal framework to put in place strong policies to protect citizens from tobacco addiction. The National Tobacco Control Programme (NTCP), launched in 2007–2008, has been instrumental in capacity building of key stakeholders, rolling out health promotion campaigns, including school health programmes, monitoring tobacco control laws, and scaling up tobacco cessation activities (National Tobacco Control Programme 2022). According to the Global Adult Tobacco Survey (GATS), these efforts have resulted in a 17% reduction in tobacco use from 2009–2010 to 2016–2017. Similarly, the current tobacco use (2019) among adolescents aged 13–15 years is 42% less than in 2010. However, tobacco use is still widespread among middle-aged adults, less educated individuals, and people living in rural and tobacco-cultivating areas of India (WHO, 2016–2017).

Lack of awareness among people belonging to the poor socio-economic strata of society, societal influence, and poor implementation of anti-tobacco laws could be the possible reasons for its widespread incidence. Hence, more rigorous, coordinated, multi-sectoral, and multi-stakeholder anti-tobacco

campaigns and widespread implementation of anti-tobacco regulations are the need of the hour.

Injury Prevention and Control: A Public Health Approach

Injuries constitute nearly 10% of all deaths in India each year. More so, they take the lives of the young and productive population. Injuries result from road traffic crashes, falls, drowning, burns, poisoning, and acts of violence, among other causes. Road traffic accidents alone are responsible for over 1.5 lakh deaths annually in India and account for millions of severe injuries, hospitalisations, and residual disabilities. Tens of millions of people suffer non-fatal injuries each year, which lead to emergency department and acute care visits, hospitalisations, or treatment by general practitioners, and often result in temporary or permanent disability and the need for long-term physical and mental health care and rehabilitation (WHO 2024). Injuries place a massive burden on the national economy, accounting for about 2%–3% of GDP each year in health care, lost productivity, and societal costs for the care and rehabilitation of the injured. Preventing injuries will facilitate achievement of several Sustainable Development Goal (SDG) targets (Ministry of Road Transport & Highways 2021).

Injuries and violence can be predictable, and there is compelling scientific evidence for what works to prevent injuries and violence and to treat their consequences in various settings (WHO 2004). The following strategies for primary prevention of road traffic injuries have been shown to be effective (Joshi et al. 2003):

1. Controlling over speeding;
2. Prevention of driving under the influence of alcohol and other psychoactive substances;
3. Enforcing and promoting the use of motorcycle helmets, seatbelts, and child restraints;

4. Prevention of distracted driving (use of mobile phones);
5. Improving road infrastructure, lighting, and deployment of traffic calming measures;
6. Ensuring safe vehicles through implementing manufacturing and production standards;
7. Enforcing road safety rules and traffic laws with steep penalties.

These strategies, however, require involvement from multiple sectors such as transport, police, health, and education, as well as the private sector and civil society organisations. They require actions that address the safety of roads, vehicles, and all road users. At the same time, improving post-crash care is important for minimising the impact of injuries. Delays in detecting and providing care for those involved in a road traffic crash increase the severity of injuries. Care of injuries after a crash has occurred is extremely time-sensitive; delays of minutes can make the difference between life and death. Improving post-crash care requires ensuring access to timely pre-hospital care and improving the quality of both pre-hospital and hospital care, such as through specialist training programmes for basic and advanced trauma care. Designation of trauma centres is important to offer optimum quality care to the injured in a timely manner. For all injuries and violence, providing quality emergency care for victims can prevent fatalities, reduce the amount of short- and long-term disabilities, and help those affected cope physically, emotionally, financially, and legally with the impact of the injury or violence on their lives.

As such, improving the organisation, planning, and access to trauma care systems, including telecommunications, transport to hospital, prehospital, and hospital-based care, are important strategies to minimise fatalities and disabilities from injury and violence. Providing rehabilitation for people with disabilities, ensuring they have access to assistive products such as wheelchairs, and removing barriers to social and economic participation are key strategies to ensure that people who

experience disability as the result of an injury or violence may continue a full and productive life (WHO 2004, Joshipura et al 2003). Similar guidance is available for preventive approaches for burns, drowning, falls, poisoning, and industrial accidents.

Mental Health

Mental health (MH) is a state of wellbeing in which an individual can realise his or her own potential, cope with the normal stresses of daily life, work productively, and contribute to the community. The problem arises when mental health is so severely impaired by a range of different factors that an individual suffers from mental illness.

A large population-based survey of MH disorders in adults in India, conducted by the GOI in 2016, showed that of the sample population of 30,000, 10% currently experienced a significant mental disorder. This means that of the adult population of 800 million, roughly 80 million adults currently experience a significant MH disorder and need some form of MH support or care. If children are added, this figure goes up to 100 million (Gururaj et al. 2016).

Figure 4 Proportions of global DALYs associated with mental disorders

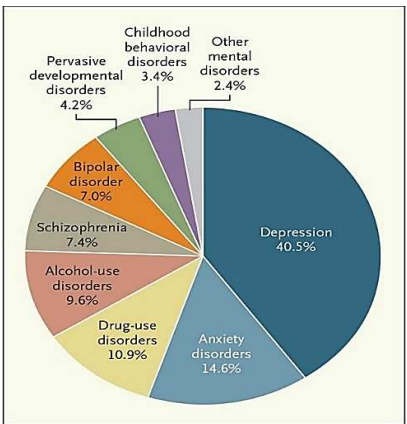


Figure 4 shows the proportions of global DALYs associated with mental disorders accounted for by various types of disorders. From the earliest years of life they manifest as intellectual disability, autism, and ADHD (attention deficit hyperactivity disorder); to adolescence and young adulthood as depression, anxiety, self-harm, and substance abuse; to later years in life as psychotic conditions, bipolar disorders, and schizophrenia; and ultimately in late life as dementia, a neuro-degenerative condition. Therefore, it is important not to think of mental illness as a single category; there are significant differences in the needs of populations affected by different conditions, as well as how stigma affects various conditions (Patel et al. 2014). The most common MH disorders are mood and anxiety problems, referred to in psychiatry as depressive disorders and the full range of anxiety disorders. These are more common in girls and women. These are followed by substance abuse problems, particularly alcohol, opiates, and other drugs. These are more often seen in boys and men. The most devastating of the MH conditions, although infrequent, is schizophrenia, which is the most disabling and stigmatising of all human health conditions. There is a vicious cycle between economic disadvantage and MH issues. The conditions of disadvantage and poverty amongst those growing up increase the risk of developing MH disorders and vice versa; those living with MH disorders are more likely to experience economic disadvantage.

Only 10% of the affected individuals have either access health care or received some health care. In other words, 90 million people have neither sought nor received any health care for their MH condition. Those who do receive care receive a very narrow biomedical psychiatric model of care from a highly trained psychiatrist. Scientists believe that holistic, evidence-based care that addresses the psychological and social needs in addition to the clinical symptoms of people with MH problems is available to only 1% of the affected population. The lack of care and support leads to

disastrous consequences in some cases. Over the last two decades, India has become one of the epicentres of suicide mortality in the world. India has around 12% of the global population, but it accounts for 20%–25% of the global suicide mortality. These suicides are concentrated in young adults, unlike in the West, where the older cohort is more susceptible. One of the reasons for this is that young people in India are increasingly aspirational. As they are educated, they begin to live in a globalised world, where they have unfettered access to social media and the internet, and they see the opportunities and freedom that their education and social media bring to them. Their dreams are shattered when they are confronted with a very harsh and real picture, particularly the regressive attitude on sexuality and relationships (Patel et al. 2012).

In the nineties, the mentally ill would be taken to a mental hospital to live a life worse than that of criminal prisoners. Currently, there is a massive change in the attitudes of the people, and the GOI too is championing mental health. There are more resources for MH programmes. This has happened to an extent due to the move away from the very narrow, psychiatric hospital-based model of mental care to a more community-based psycho-social model that embraces more diverse perspectives on how mental health is shaped, what creates mental illness, and the quality of life when people are affected by a mental illness.

Although the environment is facilitative for taking up different ways of addressing MH problems, more interventions are required that help to alter the social environments of children and young people most at risk of developing MH problems. Interventions are required to support parents in providing nurturing care where their children face adversities. These are interventions that do not need a super-specialised psychiatrist but can be provided by ASHAs and other frontline workers. Early intervention when a person is developing distress by focusing on their

psychological capabilities and altering the environment in which that social distress is occurring goes a long way rather than waiting for them to have an acute episode. For example, a woman who is living with a violent partner typically gets a prescription from a psychiatrist and must go back to the same environment. The violence goes on for years, and she does not get any help until she is forced to attempt suicide. She lands in an emergency room, yet again she gets a prescription and is asked to go back to the same environment. This is a deeply inadequate answer to a complex problem. Clearly, there is a need for early intervention in such cases to provide the social and psychological mechanisms to help the affected individual recover. A library of different scalable interventions could be built on the science of what works for the use of frontline workers. Professionals should review what the frontline workers are doing, the science behind it, and the impact of what they are doing. Using transparent reporting mechanisms, only those interventions that work should be scaled up, using a suite of digital tools and technologies, to facilitate the work of frontline workers (The Lancet Global Mental Health Group 2007).

Finally, the profound abuse of human rights of people with mental illness in mental hospitals must be stopped, and such people must be enabled to live life with dignity. This involves engaging people with lived experience in every aspect of how MH systems should be designed, how they should be delivered, and how MH systems should be held accountable. Health research needs to be sensitive to their needs. People living with MH issues must become advocates for their own cause. Policymakers, practitioners, and communities need to embrace the paradigm shift in MH care more widely, and the government needs to resource such innovative programmes adequately to be scaled up to reach the last mile (The Lancet Global Mental Health Group 2007).

Need for a Public Health Cadre

MOHFW released a guidance document in April 2022 on the setting up of a “public health and management cadre” (PHMC) as well as a revised edition of the Indian Public Health Standards (IPHS). This was a follow-up to the recommendations made in India’s National Health Policy 2017 for ensuring quality health care in government facilities. At present, most Indian states (with exceptions such as Tamil Nadu and Odisha) have a teaching cadre (of medical college faculty members) and a specialist cadre of doctors involved in clinical services. This structure does not provide similar career progression opportunities for professionals trained in public health. It is one of the reasons for the limited interest by health-care professionals to opt for public health as a career choice.

This was perhaps due to the limited understanding amongst the policymakers of the roles and functions of public health specialists and the relevance of such cadres at the district and sub-district levels. At the very best, epidemiologists were equated with public health specialists, failing to recognise that the latter is a much broader and inclusive group of specialists. The avian flu in 2005–2006, the swine flu pandemic in 2009–2010, and the increasing risk of regular emergence and re-emergence of new viruses and diseases in animals and humans (Zika, Ebola) resulted in increased attention on public health. The COVID-19 pandemic gave the idea a big push. Effective handling of the pandemic required specialised skills in a broad range of subjects such as epidemiology, biostatistics, health management, and disease modelling. It was a grim reminder that clinicians and highly experienced administrators could not fulfil the role of a public health specialist. A trained Public Health Cadre ensures that the citizens receive holistic care and the government system does not drift towards a medical care system (Lahariya 2022).

The effective part of implementation is the interplay of policy formulation, financial allocation, and the availability of a trained workforce. The 15th Finance Commission grant for the 5-year period 2021–2026 and the PM-Ayushman Bharat Health Infrastructure Mission (PM-ABHIM) allocations could be used for implementing PHMC and revised IPHS. The setting up of the Public Health Foundation of India with its branches in New Delhi, Gandhinagar, and Bhubaneswar, as well as the Indian Institute of Health Management and Research in Jaipur and Delhi, could provide the initial trained manpower for the purpose. This has assumed critical importance in light of the recent COVID experience where India has been rated rather poorly in the Global Health Security (GHS) Index (Centre for Disease Control 2021).

Some Innovations

Use of Telemedicine to Alleviate India's Health-Care Problems

Telemedicine has great potential in India because of a severe shortage of doctors, especially in rural areas. The potential of telemedicine is great due to the very high patient volumes, the widespread availability of mobile networks, the rapid growth in the availability of low-power, hand-held medical monitoring devices, and the shift away from the proprietary, local area network-based medical image archiving and communications systems to a networked tele-enabled system. Innovations in telemedicine are likely to accelerate in India, where access and cost are critical issues. Asia is the fastest-growing region for the telemedicine market, with India and China leading the growth (Phillips 2021).

Estimates suggest that the telemedicine market is at least for 800 million Indians. Even if half of these 800 million need to consult a specialist once a year, that still amounts to 400

million specialist consultations per year. Even if 10% of these are enabled through telemedicine, we are talking about 40 million consultations per year from rural India alone. The market potential for telemedicine is obviously enormous. While the numbers may vary, what is undisputed is the potential that telemedicine holds. India has a billion phone connections, and the recent COVID experience shows that the network is no longer an issue. It is now about finding the right linkages. ASHAs can be trained to aid the doctors. This will help spread the network. The potential of telemedicine in India is still under-realised because of a lack of awareness among the masses and a lack of a business model that caters to all the stakeholders. Telemedicine will never reach the critical mass for take-off until doctors are excited about it and unless people demand it as a cost-effective method. We need PPPs to drive telemedicine in India (Ranganathan 2023).

In the largest global survey, responses from 3,000 health-care leaders across 14 countries analysed health care in India and identified three key trends that are shaping the future of health care:

1. The pandemic has driven the focus of Indian health-care leaders towards a shift to virtual or remote care. Seventy-five per cent of health-care leaders say that facilitating a shift to remote or virtual care is currently among their primary priorities.
2. Health-care leaders in India are currently investing in telehealth technologies at rates that exceed those in many other countries surveyed.
3. Difficulties with data management and a lack of interoperability are more frequently cited as challenges by leaders for the adoption of digital health technologies. Table 6 shows the challenges faced by India in comparison with the average of 14 countries included in the survey.

Table 6: Challenges Faced by India in Digitisation in Comparison with an Average of 14 Countries

<i>Challenges</i>	<i>India</i>	<i>Average of 14 countries</i>
Difficulties with data management	65	44
Lack of interoperability across technological systems and platforms	55	37
Concerns related to data privacy or security	28	25
Reimbursement model limitations	25	24
Financial or budgetary constraints	19	21
Lack of training to fully utilise digital technologies	19	32

We need to address the challenges and adopt telemedicine for sustainable, adaptable and, above all, resilient health-care systems.

Chiranjeevi: An Innovative public–private partnership in Gujarat to Reduce Maternal Mortality Rate

India saw 788,000 maternal deaths, stillbirths, and neonatal deaths in 2020. The country also accounts for 17% of global live births which could be a factor for the large number of maternal deaths, stillbirths, and neonatal deaths.

The Chiranjeevi Yojana (CY) was launched by the Government of Gujarat in 2005 to reduce maternal mortality, specifically by increasing emergency obstetric care to reach rural areas. Through a series of consultations, the state government's health department initiated CY, a PPP scheme to contract private sector obstetricians to provide delivery care to the poor in rural areas (Singh 2020).

Under the CY scheme, the government enters into a contract with a private provider to deliver services for both normal and complicated births, including caesarean sections. To develop the costing of the services, the government carried out consultations with SEWA Rural (a non-governmental organisation providing health services), IIM Ahmedabad professors working on health management, individual specialists, and representatives of the state chapter of the Federation of Obstetric and Gynaecological Societies of India (FOGSI) to seek guidance on a uniform fee that could be charged for normal, complicated, and C-section cases in order to design a package of services under CY.

In 2005–2006, CY was initially launched as a 1-year pilot project in the five most vulnerable districts in Gujarat (Banaskantha, Dahod, Kutch, Panchmahals, and Sabarkantha), covering below poverty line (BPL) families. The success led to the state-wide scale-up of the project. BPL and tribal women (whosoever choose to deliver in Chiranjeevi Hospital) are identified during their antenatal care and are given an application form for registration by the ANM. In the absence of a BPL card and tribal certificate, authorisation by a locally recognised authority is also considered. The field workers also explain to the pregnant mothers the benefits/services available through the scheme. At the time of delivery, the women go to previously identified providers and are not charged for services.

Outcomes

As compared to some six obstetricians/gynaecologists (OBGYNs) available in government Community Health Centres and hospitals at the sub-district level in the whole of rural Gujarat, a total of more than 800 private OBGYNs joined this programme to provide free care to poor and tribal women, on a fixed per capita payment basis. This itself was a big success in increasing access to Comprehensive Emergency Obstetric Care (CEmOC) for the poor (Iyer et al. 2020).

Under the CY programme, more than 1 million deliveries were carried out. The CY programme, contributed to an increase in institutional deliveries in Gujarat between 2005/2006 and 2013, from 63% to 96%. The CY scheme contributed to increasing immediate access to CEmOC in rural and remote areas. It provided women with a choice of several private providers in addition to available public providers. The CY programme contributed to a significant decline in maternal and newborn mortality in Gujarat, as can be seen from Table 7.

*Table 7: Maternal Mortality Rate (MMR) in Different States**

<i>States</i>	<i>MMR in 2016–2018</i>	<i>MMR in 2018–2020</i>
Kerala	43	45
Andhra Pradesh and Telangana	65	43
Gujarat	75	57
Karnataka	92	69
Tamil Nadu	60	54
Punjab	129	105
Haryana	91	110
India	113	97

**Special Sample Registration System (SRS) bulletin on MMR (2018–2020) in India.*

Even though most eligible women received substantial benefits under the scheme, some eligible women reported not receiving free services as some CY private partners still required an upfront cash deposit and proof of socio-economic status before admission. Such women who paid the deposit did get reimbursed the money as per the scheme. Some poor women were unable to meet the cash deposit requirements insisted upon by some providers and, as a result, did not receive care under the CY programme. Nevertheless, in most cases, a significant reduction in the costs of delivery care for those beneficiaries was evident.

Non-beneficiary women who delivered in a private facility paid 6.5 times more for a vaginal birth and three times more for a caesarean section than CY beneficiaries. Thus, despite some glitches, over all the CY programme provided substantial financial benefit to poor women (Sidney et al. 2016). In contexts where there is a large private sector and a lack of public sector specialists, PPPs are an important mechanism for improving the universal coverage of sexual and reproductive health and rights (SRHR) services. This is relevant as the learnings from this scheme can be applied not only to the reduction of maternal mortality rate (MMR) in other Indian states and LMICs. India still falls far short of the UN target for the Sustainable Development Goal (SDG) of MMR at 70 per 100,000 live births by 2030, to which it is committed. Schemes like CY could help bridge this gap in the states with high MMR (Table 8).

Table 8: States that need substantial improvement in MMR – SRS 2018-2020

<i>States needing improvement in MMR</i>		<i>States/countries where MMR has worsened</i>	
Assam	205 (215)	Bengal	109 (98)
Uttar Pradesh	167 (197)	Haryana	96 (91)
Madhya Pradesh	163 (173)	Uttarakhand	101 (99)
Rajasthan	141 (164)		
Chhattisgarh	160 (159)	Bangladesh	173
Bihar	130 (149)	Nepal	186
India	113 (122)	Afghanistan	620

**Special Sample Registration System (SRS) bulletin on MMR (2018–2020) in India. Figures in brackets indicate MMR as per SRS, 2016–2018.*

As an extension of the CY, the Bal Sakha Yojana was launched, where private paediatricians enrolled and paid for by the government, provided treatment to children aged up to 1 month free of cost, including incubator care if needed for low birth weight and premature babies.

Sickle Cell Anaemia (SCA) Control Programme

Sickle cell disease (SCD) is a condition in which red blood cells are not shaped as they should be. Due to abnormalities in haemoglobin, the protein inside red blood cells that carry oxygen become sickle-shaped, unlike the normal round discs. These sickle-shaped cells get stuck together and block small blood vessels. This stops blood from moving as it should, causing pain and organ damage.

SCD is a genetic condition. People who have it inherited certain haemoglobin genes from their parents. Someone who inherits a sickle cell gene from each parent has SCD. Others who inherit a sickle cell gene from one parent and a normal haemoglobin gene from the other have a sickle cell trait, rather than SCD. Most people with sickle cell trait do not have symptoms but can pass the gene to their children. Someone who inherits a sickle cell gene from one parent and another kind of abnormal gene from the other parent may have a different form of SCD, such as sickle beta thalassemia. The tribal population is most susceptible to this disease. At 7.46% prevalence, there are at least 90 lakh sickle cell trait carriers and 3.58 lakh SCD patients in India (based on Gujarat estimates). Every year, there are 1.57 lakh new sickle cell trait births and around 6.5 thousand SCD births. It is said our sicklers are born with pain, live with pain, and die with pain, but they hardly complain. To relieve this misery of our tribal population, in 2006 Gujarat became the first state in the country to launch the first SCA control programme to prevent SCD, deaths from SCA, and improve the health status and quality of life of SCD patients. The programme included a major information, education, and communication campaign and capacity building of doctors and health staff in tribal areas to deal with SCA. In a mass sickle cell screening, 9.7 million tribals were screened; 0.73 million (7.46%) were found with sickle cell trait; and 29.5 thousand (0.003%) were found with SCD. Simultaneously, 150 thousand antenatal

mothers were screened, and 1.69% were found to have sickle cell trait and 0.11% with SCD.

There is greater awareness about the disease and prevention of marriages between SCD individuals. All services at the Comprehensive Sickle Cell Clinic (CSCC) are provided free of cost to tribal and rural patients. The services include primary screening, marriage counselling, counselling of diseased patients, treatment, routine follow-up, clinical evaluation by medical officers, and high-end management of sickle cell crisis and chronic complications. In addition, there are referral services for prenatal diagnosis and newborn screening by expert doctors, and arrangements for free blood transfusion. Annual medical camps are organised for SCD patients, where the services of haematologists are made available.

Based on the Gujarat experience, the National Sickle Cell Anaemia Elimination Mission was launched in 2016 to eliminate SCD as a public health problem in India before 2047. The mission components include increasing awareness about the disease in the community; implementing mass screening activities for early identification; building a strong network of diagnosis and linkages; implementing a robust monitoring system; strengthening the existing primary health-care mechanism to incorporate SCD-related strategies; capacity building of primary, secondary, and tertiary health-care teams; and building cost-effective intensive interventions at higher-care facilities.

Way Forward

1. Increasing health-care spending to 2.5% of the GDP is imperative. Of the total health budget allocation, at least 80% of the funds should be earmarked for disease prevention, health promotion, and improving the quality of health services at the primary care level. This could be facilitated by

a greater focus on overcoming existing workforce shortages and investing in their skill building. The health budget should always be protected; creative and cost-effective solutions need to be found for health problems to ensure optimal utilisation of available funds and to guarantee the right of the citizens to good health.

2. Addressing air and water pollution on a priority basis is crucial. Air pollution is a major and pressing public health threat. The WHO estimates that around 7 million people die every year from exposure to fine particles in polluted air that lead to diseases such as stroke, heart disease, lung cancer, chronic obstructive pulmonary diseases, and respiratory infections including pneumonia. Pollutants include particulate matter, carbon monoxide, ozone, nitrogen dioxide, and sulphur dioxide. Both ambient (outdoor) and household (indoor) air pollution are harmful to health. Industry, transportation, coal power plants, and household solid fuel usage are major contributors to air pollution. Key interventions include informing policymakers and the public on permissible exposure levels and the health impact of poor air quality, as well as strengthening intersectoral coordination to improve air quality. The Government of India has framed policies like the National Clean Air Programme for ambient air pollution to address the issue comprehensively. In addition, it has implemented programmes like the Pradhan Mantri Ujjwala Yojana to improve access to clean energy options like LPG at the household level for marginalised sections. Similarly, water safety and quality are fundamental to human development and well-being. Water pollution (or aquatic pollution) is the contamination of water bodies, with a negative impact on their uses. Water pollution results when contaminants such as sewage discharges, industrial activities, agricultural activities, and urban runoff, including storm water, mix with the water bodies. This form of pollution, inter alia, results in water-borne diseases when people use polluted water for drinking or irrigation. Apart from the economic

cost, lack of water, sanitation, and hygiene results in the loss of 400,000 lives per year in India. Providing access to safe water is, therefore, one of the most effective instruments in promoting health and reducing poverty.

3. The access of the poor and disadvantaged sections of society to government health services needs to be improved to achieve better health outcomes. The functioning of the existing government health infrastructure needs to be rejuvenated by involving the community, assessing the existing public health system, finding innovative solutions to address the gaps, and monitoring the outputs and outcomes to fix accountability.
4. There is a need to focus on evidence, excellence, and equity. Evidence-based policymaking requires data on disease burden and the associated determinants. Focus should be on strengthening a research and innovation culture and generating home-grown data, obtained through surveillance, research, and monitoring and evaluation (M&E), so that these data can be used for policy and strategy development, priority setting, and evaluating the impact.
5. Addressing equity is fundamental because the purpose of public health should be the welfare of the weakest and most vulnerable sections of society. In this regard, priority should be given to understanding the barriers to equitable access, integrating equity goals in policy and programmes, and targeting resources and efforts to reach the poor and vulnerable sections of society with the needed services.
6. Modern technology has great potential in bringing efficiency in service delivery and enhancing the reach of health services by connecting patients in villages with doctors in hospitals in urban areas through audio or video conferencing. The government is already establishing a network of telemedicine services, including a mother and child tracking system of weekly voice messages to pregnant women and new mothers, a web-based TB registration scheme called NIKSHAY, and planning a mobile app for the training of ASHA workers.

Remote areas could connect to national centres of excellence through satellite technology.

7. Mobile technology was used to great effect during the recent pandemic. It showed great promise due to its pervasive nature. With more than 1 billion mobile users in the country, mobile phones offer tremendous opportunities in efficient health service delivery which include: (1) ensuring treatment adherence by sending SMS text messages to patients with diabetes or HIV/AIDS, reminding them to take their treatment, (2) quick reporting of cases during outbreaks or epidemics, (3) alerting the next level of health services regarding emergency situations such as difficult or complicated labour in a remote rural area, and (4) informing populations and creating awareness about emerging health issues or health programmes. Internet connectivity is presently being used to enhance e-governance and make patient consultations with experts possible, such as tele-ophthalmology in Tripura and tele-radiology in Assam. Similarly, the use of point-of-care diagnostic methods, such as a lab in a suitcase for diagnosis in areas where such facilities do not exist, can be of great help. These examples show that technology already available can enhance the quality and efficiency of the services, and this should be expanded and scaled up rapidly to make health services available and accessible for the people living in geographically remote areas.
8. The private sector needs to be incentivised to establish tertiary care facilities in Tier 2 and 3 cities, promoting the indigenisation of medical equipment and accelerating the national digital health mission, all of which are imperative for achieving the goal of universal health coverage. The private sector can also support health promotion and disease prevention activities under PPPs and through corporate social responsibility initiatives. Engaging them in a creative and positive manner as partners for health action coordinated by the government can go a long way in addressing health

challenges in the next decade and beyond. Recent examples in India are the Chiranjeevi Scheme to reduce MMR in Gujarat and coronavirus testing in private laboratories during the recent pandemic. India can establish itself as a global health-care leader by focusing on its potential as a medical tourism destination. It will also boost revenue for private hospitals. A greater role for the private sector in rural areas could be facilitated by providing infrastructure status for the private sector investment, facilitating low-cost funding, and incentivising specialists to serve in remote areas. The health and wellness centres (HWCs) could be operationalised and further strengthened through PPPs. These initiatives along with expanded health insurance coverage would be vital for universal health coverage. Embedding sustainability should be a core principle in the planning and execution of key government initiatives, as well as programmes driven through PPPs. Moving sustainability from a risk protocol to a strategic opportunity is the need of the hour.

9. For efficient and effective delivery of services, an efficient public health workforce is key. The Human Resources for Health (HRH) ratios need to be benchmarked on an ongoing basis, using the best available data from the government and other sources, to match the global norms.
10. Currently, most doctors and hospital beds are concentrated in the private sector and urban areas, catering to only 20%–30% of India's population. These imbalances need to be addressed. There is a need for clear and appropriate staffing norms to ensure equity in HRH distribution. Public health planners should make all efforts to fill vacant posts in remote rural areas through efficient recruitment and capacity building of the existing staff. The staff working in remote rural areas needs to be incentivised through better pay and perks, facilities to stay in rural areas, as well as priority in PG admissions, as is done in Tamil Nadu. Contractual staff under NHM could be deployed to overcome distributional imbalances and overcome skill mix gaps. Halving the current

levels of disparity in health worker distribution between urban and rural areas would not only reduce inequity, it would also contribute to a reduction in the out-of-pocket expenditure of the poor who spend most of it to travel to health facilities located in urban areas. To enhance skill training activities, health can leverage and benefit from the national skill development mission launched by the Prime Minister in August 2015. The National Medical Commission and Nursing Council of India should have a live registry of HRH to document a comprehensive list of health professionals ordered by their specialisation. This should provide an up-to-date view as to whether a professional is in a public or private facility, in a rural or urban area, and report emigration, death, and retirement of health professionals, as well as those who are registered but inactive. A national-level HRH body should be set up as an independent institute within MoHFW to undertake HRH research, guide policy development, and support capacity building in HRH (Zodpey et al. 2021)

11. Finally, empowering health leadership and governance is crucial. It is now clear that most of the risk factors for ill health lie outside of the health sector. Action to combat these risk factors requires an intersectoral and interdisciplinary approach. This entails promoting preventive health measures focusing on sanitation, clean drinking water, and nutrition alongside the rapid implementation of wellness centres for preventive health education and screening. Moreover, for a country that has a vibrant civil society and private health sector as well as an advanced pharmaceutical and biotechnological research capacity, these attributes should be leveraged for the benefit of public health. Uniquely, the role of the government is to formulate policies, plan services, and coordinate activities. It also has mobilising and facilitating roles. It should reach out to sectors other than the health sector to develop a consensus on national policies and to build partnerships between different sectors for better service

delivery based on the comparative advantages of each—that is, the private medical sector (to follow national policies and treatment protocols); corporate hospitals (to provide subsidised care to the poor); non-governmental organisations, particularly those based in the community (for advocacy and service provision); academia and medical colleges; and research organisations (in research and innovation). Self-help groups and cooperative societies, such as Amul, are also contributing to health care through innovative approaches. It is crucial that these programmes have inbuilt mechanisms to ensure transparency and fix accountability.

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Chapter 11. Climate Change and the Environment: With Special Sections on Energy and Water

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Introduction

Climate change is a global phenomenon accelerating rapidly and causing environmental as well as socioeconomic consequences, leading to water and energy insecurity all over the world (Maas et al., 2012). In recent times, most continents have been facing water scarcity; it is predicted that by 2030, nearly half of the world's population will experience severe water stress conditions, likely impacting energy security (Halstead et al., 2014). Unfortunately, while climate change will continue to significantly impact the water and energy sectors, most of our communities have little or no resilience to climate change implications.

Climate extreme events are made worse by the fact that the average global surface temperature has already risen by about 1.1 degree Celsius (°C) from the pre-industrial period of 1850–1900. Extreme weather events such as heat waves, wildfires, droughts, flooding, and severe storms are expected to increase in frequency and cause climate-related disasters if the global mean temperature rises by 4°C over the next century (IPCC reports 2007, 2014, 2019, 2021; Bernstein et al., 2008; Sharma and Rabindranath, 2019; Legg, 2021). According to recent studies, global warming is predicted to reach 4°C to 6°C by 2100 if greenhouse gas (GHG) emissions continue on their current

projected trajectory. This is an unprecedented shift with a high likelihood of larger and irreversible natural environmental changes and damages that have not been seen in millions of years and that threaten to destroy the natural ecosystem that currently exists. Although 189 countries have already pledged to cut GHG emissions by 2030, global CO₂ emissions still continue to increase. In 2021, 36.3 billion metric tons were recorded in the atmosphere, the highest level in history. Climate change will affect the developmental progress and growth made over the past decades. It will also increase migrations on a large scale which will lead to unstable conditions, civil social unrest, and further degradation of the environment. To limit global warming to 1.5°C above pre-industrial levels, emissions must be reduced by almost half by 2030, which is just 6 years away to reach the targets. It requires a paradigm shift towards climate-resilient progress while outlining a clear path to achieve the target of net-zero emissions. For a sustainable future, preventive actions and workable solutions are urgently required to avert disastrous outcomes.

Environmental Extremes and Climate Change

1. *Severe Heat Events*: With the current rise of 1.2°C, the likelihood of extreme heat waves occurring is almost five times higher. The frequency will increase to 14 times if global warming hits 2°C. Heat waves are becoming more intense; if the world temperature rises by 2°C, the hottest temperatures will rise by over 3°C above those of earlier heat waves, making matters worse. The climate of India is already warming, with temperatures rising in certain areas. It is predicted that hot weather will become more frequent and unexpected in the years to come. If temperatures increase by 4°C beyond their current levels, the west coast and southern India are expected to move into new, high-temperature climatic clusters in the

coming days.

2. *Sea Level Increase*: As sea levels rise, high tide floods become more severe, and storm surges occur all across the world. Even if global warming stays below 2°C, sea levels are expected to increase by 2 to 3 metres by 2300 and by 5 to 7 metres with accelerated global warming. Expecting that global warming stays below 2°C, by 2100, catastrophic coastal floods will occur once every 100 years, leading to the inundation of more than half of the world's coastlines at least once a year. Sea level rise may be substantially higher in the Indian subcontinent than in higher latitudes because of its closeness to the equator. Saltwater intrusion in coastal areas due to rising sea levels and frequent storm surges will impact agriculture and other sectors and degrade groundwater quality, all of which will ultimately negatively impact human survival.
3. *Widespread Flooding*: The likelihood of both floods and droughts occurring is increasing due to climate change. Warmer air can result in extreme rains, but more intensive evaporation will cause more droughts. The frequency of intense downpours has started to rise by roughly 30% on average. India is experiencing unexpected droughts and floods in several places.
4. *Changing Rainfall Patterns*: In recent years, there has also been an increase in the frequency of periods of high rainfall. If the average global temperature rises by 2°C, the summer monsoons in our country will become considerably more unpredictable. By the end of this century, a 4°C increase in temperature might make an extraordinarily rainy monsoon, which usually happens only once every 100 years, possible every 10 years.
5. *Severe Droughts*: Severe droughts will occur two to three times more frequently than they do now if global temperatures rise by 2°C above the preindustrial norm. Certain regions, including Jharkhand, Orissa, Chhattisgarh, and Northwest India, are more likely to experience droughts. By the 2040s,

excessive heat is predicted to cause crop yields to drop dramatically, which might impact the country's economy and generate food insecurity.

6. *Weather Whiplash*: In addition to making extreme weather events more severe and frequent, climate change is also disrupting natural phenomena and causing “weather whiplash”—wild fluctuations between destructive floods in 1 year and severe droughts in another year caused by dry and wet extremes (IPCC, 2021).
7. *Ground Water*: Rain-fed agriculture accounts for more than 60% of India's agricultural output, and groundwater is crucial to many areas of the country. Even in the absence of climate change, 15% of India's groundwater supplies are often overexploited. The implications of climate change are making the issue worse. Climate change is estimated to have a significant impact on groundwater supplies.
8. *Glacier Melt*: The stability of the Himalayas is predicted to be jeopardised by a warming of 2.5°C, which will cause the glaciers to melt. Additionally, the snow cover and dependability of northern India's rivers, which are predominantly fed by glaciers, especially the Indus and the Brahmaputra, will be lost. It is anticipated that after the snow melts in the spring, the rivers will have higher flows, which will then decline in the late spring and summer. Rivers swell as a result of the abrupt snowmelt. Millions of people's lives and the food produced in the basins could be significantly impacted by the shifting flows of the Indus, Ganges, and Brahmaputra rivers, which could also have a significant impact on irrigation and hydropower supplies. These changes will harm the agriculture sector.
9. *Agriculture and Food Security*: The yields of staple crops like wheat and rice are severely impacted by high temperatures above 34°C in northern and southern India. Seasonal water scarcity, salt intrusion, rising temperatures, and seawater intrusion are risks to the nation's food security.
10. *Water and Climate Change*: There is an inseparable connection

between water and climate change. Water is essential for the delivery of energy, and vice versa. In the coming years, the interdependency between energy and water will grow, with important implications for the security of both. Water around the world is impacted by climate change in several intricate ways. Climate change affects rainfall and tampers with the hydrological cycle, resulting in erratic patterns of precipitation, glacier melting, sea level rise, floods, and droughts (UN Water). Due to the disruption of precipitation patterns and the water cycle caused by rising temperatures, climate change is having a significant impact on the availability of water and causing water-related risks such as floods and droughts (UNICEF).

11. *Energy Security*: Climate-related effects are having an impact on India's thermal and hydropower output as both require sufficient water resources to develop and operate efficiently. Unpredictable river flows can pose serious challenges for hydropower facilities, while thermal power plants need a consistent supply of cool, fresh water to maintain optimal cooling system efficiency. The production of thermal power will be severely hampered by the lack of water and temperature increases. Recently, in October 2023, a glacial lake outburst flood (GLOF) in Sikkim state led to the collapse of the Teesta Hydroelectric Dam and the power plant, besides causing death of more than 100 people and affecting thousands of others. The commercial, residential, industrial, and other sectors will all be disrupted by the energy sector's instability.
12. *Health*: Since climate change has an impact on the agriculture industry, the main health effects linked to it include malnutrition and illnesses like stunting in children. Communities that are less fortunate are probably going to be most negatively impacted. As a result of the heavy rains, consequent flooding, and water stagnation, vector-borne illnesses would spread. Child mortality is seriously threatened by diarrhoeal infections, malaria, and other vector-borne

illnesses. High temperatures and heat waves are predicted to cause a high death rate as well as other illnesses in the coming years.

13. *Migration and Conflict*: In quest of food and a means of subsistence, people migrate from degraded or disaster-affected areas to other countries and regions in South Asia. These migrations in large numbers lead to a significant impact on agriculture and livelihoods due to the increased number of climate refugees and civil unrest.

Organisations and Policies

To prevent and stabilise the GHG concentrations in the atmosphere, it was decided to adopt the United Nations Framework Convention on Climate Change (UNFCCC). Over the past 20 years, GHG emission concentrations have reached historic highs and are still far from levelling down. The atmospheric concentration of carbon dioxide (CO₂), the main GHG, increased from 358 parts per million (ppm) in 1994 to 412 ppm in 2018 and 424 ppm in 2023. The global mean temperature has likewise gradually increased, rising from 0.25°C above the pre-industrial era in the early 1990s to 1.1°C in 2018. The temperature is expected to increase by 1.5°C over the next few years. As a precaution against the catastrophic consequences of climate change, the Intergovernmental Panel on Climate Change (IPCC) has released a declaration.

Almost every country in the world, including wealthy ones that have pledged to reduce emissions, is seeing an increase in emissions. It is evident from the IPCC's special report on the 1.5°C temperature rise that the Paris Agreement cannot accept warming to even 2°C. Between 2030 and 2052, the GHG effect is predicted to reach 1.5°C. To achieve net zero by 2050, limiting global warming to 1.5°C is crucial, and to do so, CO₂ emissions must be cut by 45% from 2010 levels by 2030.

UNFCCC Enhanced Implementation

India had a strong desire to cooperate internationally under the United Nations Framework Convention on Climate Change (UNFCCC). In general, future global climate change collaborations will focus on the following goals:

1. Implementation of appropriate adaptation and mitigation strategies to reduce the adverse effects of climate change.
2. Make sure that all activities and measures are equitable and fair.
3. Make sure that technology is accessible on reasonable terms.
4. Creation of a worldwide framework for climate change action, based on the Paris Agreement.

To combat climate change, the developed countries that are responsible for the major emissions of GHGs must take the lead in climate actions and also extend support to developing countries by providing financial, technological, and capacity-building support on topics such as mitigation and adaptation measures in accordance with the Paris Agreement. Development priorities like the eradication of poverty, food security, energy access, etc. are being suggested in the multilateral framework post-2020.

With climate change being recognised as a global challenge, India will continue to engage actively in multilateral negotiations in the UNFCCC and also focus on climate resilience at the same time.

Sustainable Development Goals

Despite the global adoption of the 17 UN Sustainable Development Goals (SDGs) and 169 associated targets, each country is liberal in framing indicators that are appropriate for sustainable development based on the country's needs. The NITI Aayog has been delegated the role of supervising the

implementation of SDGs at the central level and has carried out a detailed mapping of the 17 goals with nodal Central Ministries under the Government of India for the implementation of SDGs. The Ministry of Statistics and Programme Implementation (MoSPI), Government of India, is developing the related national indicators.

UN SDG 13: Climate Action

The main objective of Goal 13 of the SDGs are:

1. Strengthening each country's capacity to adapt and be resilient to natural catastrophes and climate-related risks is essential.
2. Climate change measures should be incorporated into national planning, policies, and programmes.
3. Improvements should be made in education, awareness-building, and institutional and human capacity for early warning, adaptation, mitigation, and impact reduction.
4. The commitment made by wealthy countries to pool US\$100 billion annually by 2020 from all sources to address the needs of developing countries and operationalise the Green Climate Fund through its capitalisation will be implemented by the UNFCCC.
5. Developing the ability to support improved planning and control of climate change for developing nations, with a focus on underserved communities.

Figure1: UN SDG 13: Climate Action



Andhra Pradesh State Action Plan on Climate Change

The aim of inclusiveness and sustainable state development is to shield society's most vulnerable groups from the negative consequences of climate change. The main goals are as follows:

1. Enhanced environmental sustainability;
2. Establish a framework for taking steps that will mitigate and adapt to climate change while promoting growth and development;
3. Determine funding sources and give the state's adaptation and mitigation strategies top priority;
4. Engineering new and innovative policies and mechanisms to promote sustainable development.

Effects of Climate Change on Water Resources

Climate change has substantial consequences on the global hydrological cycle, influencing patterns of precipitation, evaporation, and water storage. These changes have cascading effects on ecosystems, agriculture, water management, human health, energy sector, and ultimately the economy on a large scale.

1. *Changes in Precipitation Patterns:* One of the most significant implications of climate change is the regional variations in rainfall patterns, causing extreme weather events, like storms, cyclones, and heavy rainfall, to become common across the country. These calamities lead to flooding, including urban flooding, soil erosion, and damage to ecosystems and human settlements. For example, in mid-latitude regions, high precipitation can lead to more frequent, recurring, and severe flooding, while subtropical areas may experience prolonged dry spells and droughts, accelerating water scarcity.
2. *Increased Evaporation Rates:* Rising global temperatures lead to higher evaporation rates from water bodies and soil. This increase in evaporation reduces water availability, particularly in regions already experiencing water stress, leading to decreased crop yields and food security concerns. High temperatures also lead to the accumulation of more water vapour in the atmosphere, which can enhance the greenhouse effect, causing a feedback loop that further increases global mean temperatures.
3. *Changes in River Flows and Freshwater Availability:* Climate change causes variations in rainfall and snowmelt patterns that can lead to major changes in river flows. These changes affect existing ecosystems, water usage, and agricultural practices. Over-extraction of groundwater can deplete aquifers, resulting in severe long-term implications. Sometimes this over-exploitation of the groundwater table

leads to salinity intrusion. This over-reliance on groundwater can intensify water scarcity, particularly in areas where surface water supplies are becoming more unpredictable and scarce.

4. *Impacts on Water Quality:* Climate change has adverse effects on water quality. Increased runoff from heavy rains can carry pollutants into rivers, lakes, and other water bodies, degrading water quality and disrupting aquatic ecosystems. Higher temperatures can favour algal bloom formation, which can produce toxins which are harmful to aquatic life and humans.
5. *Ecosystem Changes:* Ecosystems are particularly vulnerable to changes in the water and weather cycles. The wetlands, which are vital for biodiversity, water purification, and flood control, can be severely impacted by changes in water availability. Reduced water flow can degrade these habitats and ecological niches, causing loss of biodiversity and hindering ecosystem services, which causes disturbance in ecosystem dynamics and equilibrium.

Effects of Climate Change on Energy Resources

1. *Coal and Lignite:* India has the richest deposits of coal in the world. The total estimated reserves of coal as of April 1, 2022, were 361.41 billion tonnes. The top two states with the highest coal reserves in India are Odisha and Jharkhand, having approximately 69% of the total coal reserves in the country. Lignite reserves, primarily found in Tamil Nadu, stood at 46.20 billion tonnes as of April 2022. The extraction and use of lignite may be significantly influenced by changes in weather patterns, affecting both the supply chain and the efficiency of lignite-based power generation.
2. *Natural Gas and Crude Oil:* In 2022, India's projected crude oil

reserves were 651.77 million tonnes. The western offshore has the largest percentage of crude oil reserves (33%), followed by Assam (23%). In 2022, natural gas reserves were predicted to be 1,138.67 billion cubic metres. The western offshore had the largest natural gas reserves (29.6%), followed by the eastern offshore (23.6%). Climate change can badly affect offshore drilling operations through increased storm frequency and severity, potentially disrupting supply chains and increasing operational risks.

3. *Solar and Wind Power*: India's vast solar potential, estimated at 748,990 MW, could be affected by increased temperatures reducing the efficiency of solar panels. However, areas with increased sunlight due to climate change might benefit from enhanced solar energy generation.
4. *Wind Power*: With a potential of 695,509 MW at a 120 m hub height, wind power in India could be influenced by changing wind patterns. Regions may experience variations in wind speeds, affecting the reliability and feasibility of wind farm operations.
5. *Small-Hydro, Biomass, and Waste-to-Energy*: Small hydro power is estimated with a potential of 21,134 MW; however, small hydro projects can face challenges from changes in river flows and an increased frequency of droughts.
6. *Biomass Power*: With a potential of 17,538 MW, biomass energy depends on agricultural residues, which could be impacted by changes in crop yields due to climate variations. Livestock is also affected by climate extremities.
7. *Waste-to-Energy*: This sector, with a potential of 2,556 MW, may see fluctuations in waste generation patterns due to demographics and lifestyle changes induced by climate change (Ministry of Statistics and Programme Implementation, Energy Statistics, 2023).

Renewable Energy Situation

More than 150 GW of renewable energy sources have been established, and as of May 2024, the total installed capacity of renewable energy sources, including major hydropower, is 193.57 GW. The installed capacity for renewables is as follows:

1. Solar power: 84.27 GW;
2. Large hydro: 46.92 GW;
3. Wind power: 46.42 GW;
4. Biomass and co-generation: 10.35 GW;
5. Small hydro power: 5 GW;
6. Waste to energy: 0.59 GW.

By 2030, India envisions producing 5 million tons of renewable hydrogen. This will be made possible by 125 GW of renewable energy capacity. Fifty solar farms with a combined capacity of 37.49 GW have been approved in India. Likewise, India is targeting to produce 30 GW of offshore wind energy, and possible locations have been found for this.

Union Budget Highlights

2023–2024 Highlights

1. One of the thematic areas of the Saptarishi (seven priorities) is green growth;
2. An additional US\$36 million has been budgeted for the National Hydrogen Mission, which has been allocated US\$2.4 billion to generate 5 MMT by 2030;
3. The viability gap funding for 4 GWh battery energy storage systems;
4. Support for interstate transmission system infrastructure for 13 GW renewable energy for Ladakh.

2024–2025 Highlights

1. Climate finance given priority in the union budget for 2024–2025;
2. The PM-Surya Ghar Muft Bijli Yojana project, which was introduced in February 2024 with an expenditure of ₹75,000 crores, has been allotted ₹6,250 crores, while the union government-sponsored solar power (grid) scheme has been given precedence with an allocation of ₹10,000 crores.

Effects of Climate Change on Energy Management

Climate change has major impacts on energy resources, affecting both the demand and supply of energy. These effects vary by region and type of energy source.

Effects on Energy Demand

Increased need for energy is one of the most direct impacts of climate change implications. One of the most direct impacts of climate change on energy demand is the increased need for cooling, especially in urban areas. As global temperatures continue to rise, the demand for air conditioning and other cooling systems increases proportionally, mainly during the hotter summer months. This surge in electricity consumption can exert stress on existing power grids, particularly in urban centres, where the phenomenon of urban heat islands is predominant and causes cities to be significantly warmer than their rural surroundings. This localised warming and microclimatic changes intensify the requirement for cooling, leading to high energy demand.

Effects on Energy Supply

1. *Hydropower*: Changes in precipitation patterns, glacial melt, and the frequency of droughts increasingly affect hydropower generation. Regions may experience either reduced or increased water flow, causing unstable and interrupted energy generation.
2. *Wind Power*: Shifting wind patterns can affect the reliability and geographical suitability of wind farms. Some areas may benefit from increased wind speeds, while others might see a decline, complicating the planning and development of wind energy projects.
3. *Thermal Power Plants*: Thermal power plants, including those powered by coal, natural gas, and nuclear energy, face severe problems in demand and supply, causing interruptions in supply chain management.
4. *Cooling Water Shortages*: These plants require large amounts of water for cooling purposes. Reduced water availability and higher water temperatures can affect plant operations, particularly during low water availability and peak temperatures.
5. *Bioenergy*: Variations in temperature, rainfall patterns, and the incidence of extreme weather events can impact the availability and cost of biomass feed stocks. Droughts and floods can devastate crops and livestock, while shifts in growing seasons can affect yields, posing challenges for bioenergy production and eventually affecting GHG emissions.

Infrastructure and Reliability

1. *Extreme Weather Events*: This can cause damage to Infrastructure and urban municipal services. Storms, cyclones, and flooding can damage critical energy infrastructure, such as power lines, substations, and

pipelines, leading to power outages and higher maintenance costs. These disruptions obstruct the civilian's day to day life causing economic and human loss.

2. *Resilience Challenges*: Building resilience in energy systems is important to withstand extreme weather events. This involves high investments in infrastructure hardening and other adaptation measures to ensure energy reliability even during climate related events.
3. *Sea Level Rise*: Rising sea levels can cause a substantial threat to coastal energy facilities, which are essential components of the energy supply chain. The Power plants, refineries, and liquefied natural gas (LNG) terminals located in coastal areas are at severe risk of flooding and erosion due to rising sea levels and severe storm surges. Protecting these facilities requires robust planning and investments in adaptive and mitigation measures are very needful, because already climate change implications are clearly visible in some regions.

Economic and Policy Implications

Energy Prices and Availability

Climate change introduces unpredictability in energy markets, affecting both prices and availability.

1. *Volatility*: Climate change-induced disruptions in energy supply and shifts in demand patterns can lead to increased volatility in energy prices. This volatility can result in an unstable economy and affect the affordability of energy for consumers.
2. *Investment Needs*: Adapting energy systems to climate change demands substantial investments in infrastructure, technology, and resilience measures to ensure a reliable

energy supply at a large scale.

Policy and Regulation

Strategic policies and regulatory frameworks are vital for addressing the impacts of climate change on energy resources, and some proactive measures are also needed in policymaking and regulations.

1. *Climate Policies:* Governments may implement policies aimed at reducing GHG emissions, such as carbon pricing, carbon credits, subsidies for renewable energy, and regulations on fossil fuel use. Climate finance can also be emphasised. These policies affect energy markets and influence investment decisions towards more sustainable options. These policies should address climate resilience.
2. *Adaptation Strategies:* Developing and implementing adaptation strategies is the need of the hour for enriching the strength of the existing energy systems. Focus can be given on “Green Energy.” This includes diversifying energy sources, strengthening grid resilience, and capitalising on renewable energy technologies to mitigate the impacts of climate change. Strengthening and capacitating communities at grassroots levels are also important.

Attempts to Address Climate Change

In accordance with the Paris Agreement, India made its Nationally Determined Contribution (NDC) on a “best effort basis,” accounting for the country’s growth-related climate needs. By 2030, India aims to generate 40% of its installed electric power capacity from non-fossil fuels, reduce its GDP emission intensity by 33% to 35% below 2005 levels, and add a carbon sink of 2.5 to 3 billion tonnes of carbon dioxide equivalent through

increased forest and tree cover, according to its NDC. India has made progress towards achieving the Sustainable Development Goals for environmental protection by funding a number of projects in line with its NDC, including the Swachh Bharat Mission, National Smart Grid Mission, and Atal Mission for Rejuvenation and Urban Transformation (AMRUT). Notwithstanding economic constraints, India has placed a high priority on energy-efficiency improvements, resilient urban infrastructure—both green and blue—and clean and efficient energy systems (OSOWOG and floating solar panels), even to endure climate-related disasters.

1. *One Sun, One World, One Grid*: India highlighted the phrase “One Sun, One World, One Grid” (OSOWOG) to unite the world to gather solar power around the clock, and at the United Nations Climate Change Conference in Glasgow (COP 26) in 2021, the country committed to becoming net zero emitters of carbon by 2070 (MNRE, 2020). India is prepared to use this page to establish an ecosystem of linked renewable energy sources, a programme that is simple to spread for the good of all and long-term sustainability at all levels. Connecting solar energy sources globally, especially distributed systems like solar rooftop systems, is the main objective of this endeavour (IPCC report 2022 and ISA report 2021; Sharma and Rabindranath, 2019; Legg, 2021).
2. *Mission LiFE (Life Style for Environment) campaign*: It is a campaign initiated by the Ministry of Environment, Forest and Climate Change (MoEFCC), Government of India, in 2021, with the objective to promote and encourage a sustainable and environmentally friendly way of living. This mission emphasises that people should embrace conservative and sustainable lifestyles. At COP 27, India highlighted concept of Mission “LiFE” and discussed the best practices for climate action. At COP 28, India launched the Green Credit Initiative with the aim of creating a participatory global exchange platform for innovative environmental programmes and instruments for climate action, concentrating mostly on

reforestation and water conservation.

3. *Decarbonising and the Built Environment*: This is a novel idea that is crucial for the globe to improve natural carbon sinks and lower GHG emissions in order to slow the rise in global temperatures (IPCC report 2018; Ghosh and Chawla, 2021; Pathak et al., 2022). A 2018 survey found that 40% of global GHG emissions are caused by the built environment (International Energy Agency and UN Environment Programme, 2018). By 2050, if nothing is done, 40%–50% of global GHG emissions will result in an intensified greenhouse effect. Buildings are essential to reaching the climate goals of the Paris Agreement and the shift to a low-carbon energy system. Nature-based solutions are given priority to handle the issue. “Green Building” is a new emerging concept in urban planning which helps in energy and water conservation, ultimately mitigating climate change impacts.
4. *The Oceans as Carbon Sink*: The IPCC estimates that 89% of global CO₂ emissions are caused by industries and fossil fuels. The world’s seas operate as significant buffers and sinks against the effects of these CO₂ emissions in the atmosphere. They are sinks of atmospheric CO₂, which take up a substantial quantity of atmospheric carbon dioxide (Ibáñez et al., 2016). A carbon sink is an artificial or natural reservoir that absorbs and stores carbon from the atmosphere through biological and physical processes (Roobaert et al., 2019). When carbon dioxide is removed from ocean surface waters by photosynthesis, calcium carbonate is produced and precipitated, changing the balance between carbon dioxide, bicarbonate, and carbonate and thus creating an artificial carbon dioxide sink.

Future Prospects

To attain sustainable development in the mitigation of fossil fuel usage for a clean and green environment, one has to focus on

three broad categories of action: (a) reducing emissions, (b) adapting to climate change impacts, and (c) financing advanced research and development. Inventing or discovering workable options for climate-smart agriculture, promoting innovative technologies for the generation of green hydrogen, and determining to reduce the usage of fossil fuels are essential. Nature-based solutions (NBS) can be encouraged while addressing climate actions. However, without state-of-the-art scientific and technical advancements and solutions, achieving these transformative consequences will be difficult in order to enhance adaptability and mitigation.

Understanding how scientific capacity may be used to combat climate change and improve cooperation amongst innovation groups in order to streamline industry and research in both developed and developing countries is crucial (Metz, 2001).

Research Needs

There is an immediate need to increase in-depth research efforts on the following:

1. The actions proposed in light of the IPCC assessments, the Kyoto Protocol, and the UN sustainable objectives are: (i) increasing energy efficiency; (ii) increasing renewable energy; (iii) preserving and improving carbon capture sinks; and (iv) encouraging sustainable agricultural practices.
2. Transitioning to a low-carbon energy system and buildings is necessary to meet the climate targets outlined in the Paris Agreement. Under the 1.5°C scenario, they are still insufficient to achieve the decarbonisation goals, nevertheless. Significant carbon reductions within the anticipated range of the 2°C scenario are the outcome of decarbonisation scenarios.
3. Determine the extent of climate change vulnerability of locally accessible water resources, and then prioritise adaptation strategies tailored to the local context by

identifying the primary risks and vulnerabilities.

4. Evaluate the efficacy and efficiency of various coping strategies or adaptation techniques that may reduce the vulnerability of local natural resources.

Green Initiatives

1. *National Action Plan on Climate Change (NAPCC)*: To combat the implications of climate change, the Government of India has been taking proactive measures and initiatives for climate action. The NAPCC, which was launched in June 2008, consists of eight national missions: National Mission for Enhanced Energy Efficiency, National Water Mission, Jawaharlal Nehru National Solar Mission, Himalayan Ecosystem's Sustainability, Sustainable Habitat Mission, Sustainable Agriculture Mission, National Mission for a Green India, and Strategic Knowledge for Climate Change Mission. Every mission functions under a ministry, which has a leader in charge of execution, manages budgetary allotments, and sets priorities that are both actionable and implementable.
2. *National Green Corridor Programme*: The Green Energy Corridor Project is designed with the objective of harmonising the power produced from renewable sources, like solar and wind, with conventional power stations in the grid. The National Green Corridor Programme (NGCP) was launched by the Government of India to leverage the fluctuations and variability in the renewable power supply. This will improve the intra-state transmission infrastructure. This scheme is to be funded by 20% from state government equity, 40% from the National Clean Energy and Environment Fund (NCEEF), and 40% from soft loan.
3. *R&D for Clean Coal Technologies*: In 2016, the Cabinet Committee on Economic Affairs has approved the R&D project for the development of advanced ultra-supercritical (USC) an innovative and advanced technology for thermal

power plants on a mission mode, with an estimated cost of US\$15.54 billion.

4. *National Green Highways Mission*: To develop green corridors along national highways for a sustainable environment and inclusive growth, in 2015 the Ministry of Road Transport and Highways (MoRTH) initiated the Green Highways (Plantations, Beautification, and Maintenance) Policy. Under this initiative, the development of green corridors like avenue and median plantations has been proposed along developed and upcoming national highways.
5. *Accelerated Hybrid and Electric Vehicle Manufacturing and Adoption (FAME India)*: The government launched this programme in 2017 to incentivise people to buy eco-friendly cars. Up to US\$0.14 million for cars and up to US\$29,000 for bikes were offered. The programme was in pilot mode until February 2017. The Department of Heavy Industry has extended demand incentives of US\$1.278 billion for the purchase of 111,897 electric/hybrid vehicles as part of the National Electric Mobility Mission Plan for 2020.
6. *National Clean Energy and Environment Fund (NCEEF)*: The purpose of the National Clean Energy and Environment Fund (NCEEF) is to support and fund renewable energy research and projects. The Finance Bill 2010–2011 established the National Clean Energy Fund (NCEF), which was renamed the National Clean Energy and Environment Fund (NCEEF) in 2017. In this context, the “polluter pays” principle was emphasised. The coal cess, collected at US\$50 per tonne of coal from June 22, 2010, was raised to US\$400 per tonne in the union budget for 2016–2017 and changed its name to “Clean Environment Cess.”
7. *National Mission for Sustainable Agriculture*: Agriculture is crucial for India's economy and the livelihoods of the people, accounting for 21% of the national GDP, 11% of all exports, employing 56.4% of the labour population, and providing direct or indirect assistance to 600 million people. Four sectors essential to agriculture and related fields will be the

focus of the proposed national mission: climate change adaptation, specifically risk management, dryland agriculture, access to information, and use of biotechnology for advancements to handle the challenges.

The Earth's climate is changing remarkably which has become a matter of concern, and it has emerged as one of the most complex issues at the global level. Carbon dioxide (CO₂) is the major pollutant that traps heat and remains in the atmosphere for thousands of years, leading to global warming. The three main approaches to address this issue are mitigation, adaptation, and resilience:

1. *Mitigation*: An intervention made by humans in order to reduce the GHG-emitting sources or enhance the sinks to absorb GHGs (Metz, 2001).
2. *Adaptation*: An adjustment made in natural or human systems to climate change or its effects, which decreases harm and explores advantageous opportunities (Metz, 2001).
3. *Resilience*: Mitigation and adaptation together refer to resilience. Community resilience is highly required in this current scenario.

Climate Change Adaptation (CCA) Actions

Adaptation to climate change is the most important and possible solution for the nation. Prioritising this, the Government of India placed prime importance on adaptation. Under the National Adaptation Fund, a central scheme worth US\$3.50 billion for the years 2015–2016 and 2016–2017 was created. The adaptation activities that are not covered under any government schemes are given concrete support. The main objective of the fund is to reduce the adverse impact of climate change on sectors, states, and communities.

Surya Ghar Scheme: In order to increase the proportion of solar rooftop capacity and enable homes to produce their own electricity, the Indian government introduced the PM Surya Ghar: Muft Bijli Yojana on February 29, 2024. The outlay of the scheme is ₹75,021 crore and is going to be implemented for FY 2026–2027, expecting to provide benefits to over 1 crore (10 million) households in India. Moreover, 300 units of free power will be provided to households each month as part of the union government's plan. Additionally, the recipient will get financial support in the form of a subsidy to fit solar panels on their rooftops.

Conclusion

The natural phenomenon of climate change is being induced by human activities, causing a substantial threat to life on planet Earth at various levels. Increased GHG emissions have led to extreme weather patterns and rising sea levels, causing global warming to reach 1.5°C above pre-industrial levels which requires a reduction in emissions by almost half by 2030.

The effects of climate change are expected to rise in several regions of the country. Changes in precipitation will affect water resources planning and management in several ways, including the design of hydrological structures, flood and drought management, and urban planning and development. India's agrarian economy, which depends heavily on the monsoon and available water for agricultural production, is particularly vulnerable to the projected climate changes. India's agriculture and food security are at risk due to rising temperatures and lower rainfall. Climate-related impacts on water resources can badly affect hydropower and thermal power generation, leading to water stress and increased water scarcity. Climate change is expected to pose major health impacts in India, especially on vulnerable communities, leading to an increase in malnutrition and other health disorders.

Therefore, it is essential to improve the assessment of climate change effects and to adapt technologies and proactive measures considering future scenarios. Existing water resource systems have major data collection gaps, including monitoring, processing, communication, dissemination, and storage networks, that are unable to meet the pressing challenges of a rapidly changing climate. Measures must be taken to ensure water resource and food security for future generations and also reduce the usage of fossil fuels, securing energy supply as well. Technology transfer can accelerate the modernisation process, and additional funds can assist the government in energy conservation. The concept of climate finance can be outlined in three layers of governance. At the same time, policies and frameworks for poverty alleviation must be given priority, considering the socio-economic aspects. The marginalised and vulnerable communities should be given priority as they are the worst sufferers of climate change.

Strategically designed climate change policies should be given utmost importance in sustainable development. A sustainable development path can reduce GHG emissions and reduce vulnerability to climate change. Hence, global mitigation efforts can facilitate sustainable development prospects in part by reducing the risk of adverse impacts on climate change. Mitigation can also provide co-benefits, such as improved health outcomes. Mainstreaming climate change mitigation is a key integral part of sustainable development. Socioeconomic development is given priority while considering climate actions.

The SDG 7 is to ensure access to affordable, reliable, sustainable, and modern energy for all around the globe. Priority is given to securing energy access because it is interconnected with various other socio-economic aspects such as poverty alleviation, health, industrialisation, education, provision of communication infrastructure, and overall development of any nation.

India has declared her goal to achieve net zero emissions by 2070, with a target to transition to a net zero economy, balancing

GHG emissions with their removal in a green and sustainable way for a better and more prosperous future.

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Chapter 12. The Evolution of the Constitution of India

Dr. Devender Singh Aswal

Introduction

Breaking the adamantine shackles of slavery, India attained independence on August 15, 1947, and became a sovereign democratic republic on January 26, 1950, with the coming into force of independent India's Constitution. The Constitution was passed, adopted, and enacted by the Constituent Assembly and given to ourselves—"We, the people of India"—on November 26, 1949. The Constitution is the supreme *lex* (law) of the land and the fount of all laws. The organs of the State—the Legislature, the Executive, and the Judiciary—owe their origin to the Constitution, derive their authority from the Constitution, and have to discharge their functions within the framework of the Constitution. However, as "all constitutions are heirs of the past as well as the testators of the future," it would be worthwhile to recall the great republican heritage of India before taking up the evolution of the Indian Constitution.

Republican Traditions in Ancient India

The origin of republics and republican traditions can be traced to the Vedic times, beginning with the *Rig Veda* composed before 1000 B.C.E. Ancient India was "dotted with republics, and even where there were monarchies, they were either elected or

limited. They were never absolute.”¹⁸³ The Buddhist bhikshu sanghas—the monastic communities of Buddhists—had rules of parliamentary procedure regarding motions, resolutions, quorum, whip, counting of votes, voting by ballot, censure motion, regularisation, referendum, etc. Many of these rules of parliamentary procedure must have been borrowed from the contemporary assemblies. By 600 B.C.E., many *maha-janpadas*, or republics, dotted India.¹⁸⁴

Election of the Vedic King

It appears from many writings that kingship was originally elective. The earliest reference to the election of a ruler is found in the Coronation Hymn of the *Atharva Veda*: “The people elect you to rulership. Be seated on this high point in the body of the State and from there vigorously distribute the natural wealth and material prosperity to the people.”¹⁸⁵ In post-Vedic times, “Sovereignty (kingship) was dissolved, and democratic government set up.” There are references that some countries were under kings and some were under the *ganas* (republics).¹⁸⁶ Later, it became hereditary due to the evolved rule of primogeniture.¹⁸⁷ The king was “the first social servant and ultimately dependent on the suffrage of his subjects.”¹⁸⁸ The *Chandogya Upanishad* implores, “Open the door to thy people and let us see thee for the obtaining of the sovereignty.”¹⁸⁹ The king was not an absolute monarch, and “the ideal king was a paragon of energetic beneficence.”¹⁹⁰

¹⁸³ Constituent Assembly Debate (CAD). (1948, November 25). Vol. XI. Lok Sabha Secretariat. Also see Jaiswal, K. P. (2023). *Hindu polity: A constitutional history of India*. Jyoti Enterprises, pp. 86–97.

¹⁸⁴ Jaiswal, supra, pp. 21–23.

¹⁸⁵ *Atharva Veda*, III. 4.2. Also see Jaiswal, supra, pp. 186–187.

¹⁸⁶ Jaiswal, supra, p. 26.

¹⁸⁷ Nehru, Jawaharlal. (2004). *Discovery of India*. Penguin Books, p. 111.

¹⁸⁸ Basham, A. L. (2004). *The wonder that was India*. Picador India, pp. 34, 82.

¹⁸⁹ *Chandogya Upanishad*, 2/24/8. Probably composed in fifth century B.C.E.

¹⁹⁰ Basham, supra, p. 89. “*Ranjeti iti rajah*” means, one who pleases (the subject) is the king.

Sabha and Samiti

The *Rig Veda* and the *Atharva Veda* contain references to *sabha* and *samiti*. The *samiti* was the general assembly or the house of the people, and the *sabha* was the house of elders, which may be said to have “contained the rudiments of modern Parliament.”¹⁹¹ The members of the *sabha* were called *sabhasad*. The Speaker, entrusted with the responsibility of maintaining order and regulating business of the *sabha*, was called *sabhapati* or *sabhadhyaksha*, and the Marshall was called *sabhpal*. The *Rig Veda* describes the attributes of the Speaker as well-versed in the matters of the State, experienced, astute, impartial, righteous, and mature in age and learning.¹⁹² The Vedic *sabha* and *samiti* provided a well-structured forum for discussion and were to aid concurrently in decision-making. Like the prime minister, a true Rig Vedic king “attended the Samiti.”¹⁹³ The voice of the *samiti* was not to be disregarded or violated. In the *Mahabharata*, the gathering of common people is called *jan sadan*, which was an earlier variant of Parliament or Assembly. Megasthenes chronicles that “sovereignty (Kingship) was dissolved, and democratic governments set up in various places.”¹⁹⁴ The *Ashtadhyayi* of Panini and the *Arthashastra* of Kautilya refer to the role of *sanghas* and *ganas* at length.¹⁹⁵ The members of the assembly and its president were venerable, as the *Yajur Veda* says, “Salutations to the Assembled and salutations to the Sabhapati” (the presiding officer).¹⁹⁶

191 Kashyap, Subhash C. (2015). *Constitutional law of India*. Universal Law Publishing, p. 9.

192 Kashyap, supra, p. 9. Also see Altekar, A. S. (1949). *State and government in ancient India*.

Motilal Banarasidass, pp. 95–98.

193 *Rig Veda*, IX. 92.6. See Jaiswal, *Hindu polity*, supra, pp. 13–14.

194 Epitome of Megasthenes. As quoted by Jaiswal, supra, p. 21.

195 Basham, supra, pp. 84, 97. Also see Jayaswal, supra, pp. 21–27, 40–48.

196 *Yajur Veda*, XVI. 24 (Namah sabhabhyah sabhapatibhyascha).

Centrality of Deliberations

Democracy is “government by deliberations.” The *Rig Veda* and the Upanishads reflect the long argumentative tradition of India. A hymn of the *Rig Veda* exhorts the assembled to “talk together, walk together so that there is unity and harmony” among them.¹⁹⁷ A hymn in the *Atharva Veda*—“May the adversary not win the debate and render me superior in the debate”—shows the importance attached to debates.¹⁹⁸ Women such as Gargi, Maitreyi, and Bharati participated in scholarly debates.¹⁹⁹ In the Santi Parva in *Mahabharata*, Bheeshma tells King Yudhishtira about the importance of deliberations: “When the members or the ‘gana’ cease to discuss among them on account of uncalled for anger, on account of natural avarice, there is the symptom of discomfiture.”²⁰⁰ *Sabhas* and *samitis* were to meet periodically and make decisions after discussion and consensus. There were many *gana rajyas*, or republics. *Gana* means the multitude or the people. A *gana rajya* denotes government by the people who meet in assembly.

Council of Ministers

The king was to listen to the counsel of his ministers—the *mantri parishad*—who were to speak freely and openly, and the king was to give full consideration to their advice. Often, the *mantri parishad* exerted great influence and could make decisions in the absence of the king.²⁰¹ Public opinion was considered more

¹⁹⁷ *Rig Veda*, X-192-2. Also see Sen, Amartya. (2005). *The argumentative Indian*. Allen Lane.

¹⁹⁸ Jaiswal, *supra*, p. 14.

¹⁹⁹ Gargi was a great Vedic scholar in the court of King Janaka. She famously engaged in a philosophical debate with sage Yajnavalkya. Maitreyi was another scholar of Advaita philosophy, a contemporary of Gargi in 800 B.C.E. Bharati was wife of Mandan Mishra who challenged Shankaracharya in debate after her husband was defeated by Shankaracharya in 10th century C.E.

²⁰⁰ *Mahabharata*, Shanti Parva, CVII: 6–32.

²⁰¹ Basham, *supra*, p. 100.

powerful than the king, as the rope made of many fibres is strong enough to drag a lion. The king was enjoined to keep a finger on the public pulse and never to offend it too blatantly. The function of this council was to give advice to the king, not to govern, but it was not a mere rubber-stamping body. Texts proscribed arbitrariness and tyranny, and the ruler was urged to execute his duties in accordance with the *dandaniti*; that is, the penal code.²⁰²

Emphasis on Righteous Conduct

Raj dharma, or the righteous conduct of the ruler, was greatly emphasised in the discharge of duty and the conduct of proceedings of the *sabhas*. *Dharma* denotes not religion, but righteous order and conduct. *Raj dharma* is akin to modern constitutional morality or the moral obligation of the ruler. Inside the old Lok Sabha chamber overlooking the Speaker's Chair, the words inscribed are "Dharma Chakra Pravartana", which means "for the rotation of the wheel of righteousness." At the main entrance of the Supreme Court of India, there is an inscription "Yato Dharma Tato Jaya"; that is, where dharma is, there will be victory. According to the *Mahabharata*, "When Raj dharma becomes lifeless, the very basis of civilisation sinks. When the traditional State ethics is departed from, the very basis of civilisation decays."²⁰³ The sacred injunction was, "One must either not enter an Assembly Hall, or he must speak there with

²⁰² Basham, *supra*, pp. 114–115. Also see Jaiswal, K. P., *supra*, pp. 310–318. In the *Mahabharata*, there is a story of a king, Venu, who was killed because of his wickedness and tyranny, and, Prithu, his son was made the king. He took the oath, "I will constantly protect the earth in thought, words and deed. I will carry out the established laws in accordance with Dandaniti. I will never act arbitrarily." The Jataka stories give instances of kings deposed by mass revolt.

²⁰³ *Mahabharata*, Shanti Parva, LXIII: 18, 29.

all the righteousness. For one who does not speak or who speaks falsely, does himself in the equal sin involve.”²⁰⁴

Nourishing Taxation

Taxes were to be collected by a king like the honeybee, “without plucking the flower.” Just as one plucks ripe fruits from the garden, likewise, revenue was to be collected when due. Collecting tax when not due was prohibited because that would make the people angry and spoil the very source of revenue. The *Mahabharata* says, “as the calf suckles the udders of her mother giving pleasure to the mother and nourishment to the suckling calf, so should the taxation be doubly beneficial.”²⁰⁵ Double taxation, tax without forewarning, and repressive taxation were forbidden lest there be a flight of capital.

Raj Dharma and Dandaniti

The ruler was enjoined by the texts to uphold the *raj dharma*, his sacred obligation. The king assumed the title of “Dharmaraja” (righteous ruler) which is also the name of Yama—the mythological god of death. The king carried *danda* or sceptre, a symbol of coercion and punishment, but the *danda* was to be wielded according to the *dandaniti*; that is, according to the penal code of the realm. Justice was to be dispensed according to the established laws and the *dandaniti*, and without delay. The king was administered an oath of loyalty to the law and the Constitution of the realm and to hold the State for achieving the

²⁰⁴ “That is not an assembly where there are no elders / Those are not elders, who do not speak with righteousness / That’s no righteousness, where there is no truth / That’s not the truth that leads to deceit.” *Mahabharata*, Shanti Parva, V: 35, 58.

²⁰⁵ *Mahabharata*, Shanti Parva, XII: 88.4. Also see Jaiswal, *supra*, pp 319–326; and Kautilya, *Arthashastra*, translated by L. N. Rangarajan, Penguin Books, 1992, pp. 222–250.

welfare of his people, both material and moral. If the oath proved false at any stage, the title to remain on the throne would stand forfeited—an ancient variant of recalling the chosen one.²⁰⁶

Appointment of Magistrates

There was a system for the appointment of magistrates for the dispensation of justice. The *Jatakas*—the Buddhist tales—speak about a bench of five magistrates. The *Arthashastra* advises a court for every 10 villages and higher courts for *janpadas* and provinces. There were judicial standards set for the judges. They were to be learned, righteous in conduct, devoid of anger, and as impartial as humanly possible. The honesty of the judges was to be tested periodically by agent provocateurs. The *Vishnu Smriti* prescribes banishment and forfeiture of all property for a judge found guilty of corruption or injustice. There were distinct rules of evidence for civil and criminal cases.²⁰⁷

State as Benefactor of the Weak

The ancient texts lay great emphasis on *yogakshema* or the well-being and happiness of the people—the true basis of a king's happiness.²⁰⁸ The *Mahabharata* says, “The State was created to protect the weak, the poor, the exploited, the helpless, and the oppressed from the strong. That large class of the weak only survives because of the power of the King (the State) and this is

²⁰⁶ *Mahabharata*, Shanti Parva, LIX: 106, 107; Anusasan Parva, LXI: 32, 33. Also see Jaiswal, *supra*, pp. 216, 220. Sen, Amartya. (2010). *The idea of justice*. Penguin, pp. 20–21.

²⁰⁷ Basham, *supra*, p. 117. Also see Sukranitisara, IV.5.6. Quoted by Jaiswal, *supra*, pp. 312, 318.

²⁰⁸ Kautilya, *Arthashastra*, Bk. 1: 19, 16, 27. *Mahabharata*, Shanti Parva: LXIII: 29. Kautilya, *Arthashastra*, Bk.1: 19, 16. It says, “In the happiness of the subjects lies the happiness of the king and in their welfare, his welfare. A king has no personal likes but the likes of the subjects.” Jaiswal, *supra*, pp. 337–341.

an important aspect of Raja dharma.”²⁰⁹ A well-governed State is one where there is adequate growth in assets and services, where assets are well distributed and protected, and all citizens get their fair share.²¹⁰ These lofty ideals resonate through the Preamble and the Directive Principles of the Indian Constitution.

Panchayats or Local Self-Governments

The unbroken tradition of the Panchayat system as grassroots democracy—“the best guarantee of democracy”—is a unique contribution of ancient India. “Panchayat” means the council of five chosen people who performed administrative and judicial functions at the village level. The Panchayat system has been further strengthened by the 73rd and 74th Constitution Amendments, underscoring that a bottom-up democracy is quintessential democracy and always preferable to top-down democracy.²¹¹

Legal and Constitutional History of India

The British came to India as a trading company—the East India Company, incorporated in December 1600—and it soon spread a wide network of military and administrative systems. By the Charter of 1677, the British Sovereign empowered the Company to issue its coins, and the Charter of 1683 granted it full power to make peace and war with any of the “heathen nations.” The Charter of 1726 vested the Governors and the Councils of the Presidencies of Bombay, Madras, and Calcutta with the power to

²⁰⁹ Joshi, Murli Manohar. (2018, February). How rulers must conduct: Lessons from ancient India. *Power Politics*.

²¹⁰ Thirukkural. On kingly excellence, Asian Educational Services, p. 79.

²¹¹ Singh, Devender. (2021, January 14). J&K: Old demographic fault lines. *India Legal*.

make laws. With the disintegration of the Mughal Empire, the Charters of 1757 and 1758 gave the Company more powers, laying the foundation of British rule in India. The Company acted under the authority of the British Crown and was granted certain legislative and judicial authority.²¹²

Developments Between 1773 and 1857

The Regulating Act of 1773 marks the beginning of control over the government of the Company by the British Parliament. The rules and regulations made by the Governor-General and the Council were not to be repugnant to the laws of England. The Acts of the British Parliament of 1781, 1797, and 1813 further enlarged the powers of the Governor-General and the Governors of the Presidencies. The Charter Act of 1833 provided for a Governor-General who was known as the Government of India and his Council as the Indian Council. The Charter Act of 1853 set up a 12-member Legislative Council, presided over by the Governor-General. It differentiated the legislative and executive functions of the State.²¹³

The Indian Councils Act, 1861

The First War of Independence in 1857 compelled the British to associate Indians and decentralise authority in their own long-term imperial interest. The Indian Councils Act of 1861 expanded the Executive Council and introduced the element of Cabinet Government. Under this Act, the representation of Indians began

²¹² Rao, B. Shiva. (2021). *The framing of India's constitution* (six volumes). Also see Kashyap, Subhash C. (2015). *Constitutional law of India*. Universal Law Publication, p. 19.

²¹³ Singh, Devender. (2015). *Parliamentary questions, glorious beginning to an uncertain future*. Orange Books International. Questions could be asked, and the policy discussed in the Legislative Council. Legislative business was conducted in public instead of in camera, and reports of the proceedings were officially published.

in the Legislative Councils in the three Presidencies of Bombay, Madras, and Bengal as well as some other provinces.²¹⁴ The Council was forbidden to transact any business other than through consideration and enactment of legislative measures. The Legislative Council established at the Centre and in the Presidencies and Provinces under the Act of 1861 continued until 1892. The Act caused popular disaffection as it failed to meet the rising aspirations of the people of India. The Indian Councils Act of 1892 reconstituted the Central and Provincial Legislative Councils of India and increased the number of non-official members, but the majority of official members was maintained. The Act of 1892 conceded to the Council the privilege to discuss the budget and ask questions under certain conditions.²¹⁵

Developments Between 1909 and 1919

The Indian Councils Act of 1909 enlarged the Legislative Council and introduced the principle of election and representation. The Act allowed the election of 27 Indians out of a total of 68 members of the Legislative Council and laid the firmer basis for a parliamentary system in India. Since the Act also provided for communal representation, it set the political mood on the issue of nationalism. This led to the Montagu-Chelmsford Reforms and the enactment of the Government of India Act, 1919. The Preamble to the Act declared that the objective of the British Government was the gradual introduction of responsible government in India. The Act established a bicameral legislature at the Centre consisting of the Governor-General and the two Houses, the Council of States and the Legislative Assembly. The Council of States comprised 60

²¹⁴ Three Indians, namely, the Raja of Banaras, the Maharaja of Patiala, and Sir Dinakar Rao were nominated to the Legislative Council in 1862. See Singh, Devender. (2016). *Indian parliament*. LexisNexis, p. 6.

²¹⁵ The first question was asked in the Legislative Council on February 16, 1893, by the Raja of Bhinga. See Singh, Devender, *Parliamentary questions*, supra.

members, of which 34 were elected. The Legislative Assembly had 145 members, of which 104 were elected and 41 were nominated which included 26 officials. Both chambers had equal power, except that the Legislative Assembly had the power to grant supplies. Courts had no power to invalidate the laws passed by the legislature. The Governor-General was the keystone of the whole constitutional edifice which was unitary.

The first Central Assembly constituted under the 1919 Act came into being on February 3, 1921. The Assembly was presided over by the President.²¹⁶ The Central Legislative Assembly was reconstituted in the years 1924, 1927, 1931, 1935, and 1945. The new legislatures had greater political powers, which were increased gradually, though reluctantly, with the mounting struggle for independence. The Act of 1919 introduced diarchy in the Governors' provinces, which means rule by two authorities—one accountable and the other not. The Act provided for two lists of subjects—the Central and Provincial. The Provincial list was further divided into the "Reserved" and the "Transferred" subjects. The Reserved subjects were kept under the control of the Governor and his Executive Council. The Transferred subjects were administered by the Ministers appointed by the Governor from among the elected members of the Legislative Council. The system of diarchy worked in the provinces from 1921 to 1937.

Government of India Act, 1935

The rising tide of the Nationalist Movement led to the enactment of the Government of India Act, 1935, which envisaged federal autonomy. The Act came into force with regard to provinces in April 1937, but the Government of India continued to operate according to the provisions of the Government of India Act, 1919, except for the executive and legislative powers assigned to it under the Constitution Act of

²¹⁶ The nomenclature of the President was changed to Speaker after independence in 1947.

1935. The old diarchic system was abolished, and the distinction between Transferred and Reserved Subjects was eliminated, but the Constitution of the Central Government in India remained as it was under the Act of 1919. The Legislative Assembly and the Council of States under the Act of 1919 functioned until 1947.

Developments After 1935

The formation of Congress governments in the provinces under the Government of India Act, 1935, increased communal tension as the Muslim League could not get representation proportionate to their numerical strength. The Muslim League, at their Lahore session, passed a resolution on March 23, 1940, for the formation of an independent state of Pakistan. The Quit India Movement of 1942 shook the foundation of the British Empire. With the Labour Party coming to power in England, Prime Minister Clement Richard Attlee declared in the House of Commons on March 15, 1946, that India should have the freedom to decide her own destiny and the form of government. The British government announced on February 19, 1946, that a mission of three Cabinet Ministers would be sent to India to settle the matter. On March 24, 1946, the Cabinet Mission arrived in Delhi with the proposal for setting up a Constituent Assembly, which was to decide the future of India.²¹⁷ However, differences arose between the Congress and the Muslim League. Finally, the Congress formed an interim government in September 1946.

Indian Independence Act, 1947

The Muslim League, unyielding in its demand for a separate nation of Pakistan, achieved its objective with the passing of the Indian Independence Act, 1947, which provided for the partition of the country. The Legislative Assembly and the Council of

²¹⁷ Sections 1 and 9 of the Indian Independence Act, 1947.

States ceased to exist at midnight on August 14, 1947, after India attained independence. The legislative functions of the Central Legislature were taken over by the Constituent Assembly (Legislative).²¹⁸

Framing of the Constitution

Demand for Home Rule, Dominion, and Constituent Assembly

The demand for self-rule kick-started after the First War of Independence in 1857. At the Bombay session of the Indian National Congress in 1889, a resolution was passed for the Home Rule Scheme.²¹⁹ This was followed by the drafting of the Constitution of India Bill, 1895, under the inspiration of Lokmanya Bal Gangadhar Tilak, as part of the British Empire.²²⁰ After the outbreak of the First World War, Gopal Krishna Gokhale made a draft scheme in 1914 for a self-governing dominion of India, followed by the passing of a resolution by the Indian National Congress in 1918 for the application of the self-determination principle by India. In 1922, Mahatma Gandhi declared, "Swaraj will not be a free gift of the British Parliament but a declaration of India's full self-expression through her freely chosen representatives."²²¹ There were inexorable developments as the struggle for freedom gathered momentum. In 1936, Pandit Jawaharlal Nehru made a demand for a Constituent Assembly elected on the basis of adult suffrage, followed by a demand for the withdrawal of the Government of India Act, 1935, and the

²¹⁸ The Cabinet Mission, headed by Lord Pethick Lawrence, came to India in March 1946 to discuss the transfer of power from the British Government to Indians.

²¹⁹ Rao, B. Shiva, *supra*, pp. 33–34.

²²⁰ Rao, *supra*, pp. 5–14.

²²¹ Rao, *supra*, pp. 33–34.

formation of a Constituent Assembly elected by adult franchise.²²² Raising the demand for freedom, Satyamurti thundered in the Central Assembly in 1937: “Mr. President, when once a great people make up their mind to obtain their freedom, there is no power on earth, not even Great Britain, which can stand in her way.”²²³ M. N. Roy made a draft Constitution in 1944 articulating a constitutional vision for free India. The Sapru Committee Report prepared a detailed draft Constitution in 1945. A *Gandhian constitution for free India* was prepared by Shriman Narayan Agarwal, a Gandhian economist, in 1946, with a foreword by Gandhi.

Formation of the Constituent Assembly

Labour Prime Minister Clement Attlee declared in the House of Commons on March 15, 1946, that India should have freedom, but “what form of government is to replace the present regime is for India to decide.”²²⁴ The Cabinet Mission, which visited India in March 1946, recommended that the most satisfactory method to form a Constituent Assembly would be by an election based on adult franchise. To avoid delay in conducting elections, it was decided to utilise the recently elected Provincial Legislative Assemblies as electing bodies for the formulation of the Constituent Assembly.²²⁵ It was agreed that the strength of the Constitution-making body would be 389. The elections for the 296 seats assigned to British-Indian provinces were completed by July–August 1946. Out of 296 seats, Congress won 208 seats and the Muslim League 73 seats. As the Muslim League, despite having won 73 seats, boycotted the Constituent Assembly, the Congress was apprehensive that the British might dissolve the

²²² Rao, *supra*, p. 34.

²²³ Rao, *supra*, p. 37.

²²⁴ Parliamentary Debates. (1946). *House of Commons: Official report*. Hansard, p. 1415–1423.

²²⁵ Rao, *supra*, pp. 208–218.

Assembly. So, the Constituent Assembly made it clear that it could dissolve itself only by passing a resolution “assented to by at least two-thirds of the whole number of members.”²²⁶ After the partition, the strength of the Constituent Assembly was reduced to 299, and it was dominated by the Indian National Congress. In order to make it representative, the Congress ensured that members with expertise and talent in administration, law, and constitutional law were made members of the Constituent Assembly. Among them were A. K. Ayyar, H. N. Kunzru, N. G. Ayyangar, Dr. B. R. Ambedkar, K. Santhanam, M. R. Jayakar, Sacchidanand Sinha, K. M. Munshi, and Shyama Prasad Mookerjee.²²⁷

Objective Resolution of the Constituent Assembly

The Constituent Assembly first met on 9 December 1946, attended by 210 members. On December 13, 1946, Pt. Jawaharlal Nehru moved the Objective Resolution, declaring its firm resolve to proclaim India as an independent sovereign republic and to draw up for her future governance a Constitution “wherein shall be guaranteed and secured to all the people of India justice, social economic and political, equality of status, of opportunity, and before the law; freedom of thought, expression, belief, faith, worship, vocation, association and action, subject to law and public morality” among others.²²⁸ The Resolution was unanimously adopted by the Constituent Assembly on January 22, 1947.

²²⁶ Austin, Granville. (2023). *The Indian constitution, cornerstone of a nation*. Oxford University Press, p. 9.

²²⁷ Austin, *supra*, p. 3.

²²⁸ CAD. (1946, December 13). Vol. I.

Freedom at Midnight

The Indian Independence Act of 1947 provided for division of India into two dominions, to be known as India and Pakistan, from the appointed date of August 15, 1947.²²⁹ The Constituent Assembly became a sovereign and representative body on August 15, 1947, as most of the states were represented in the Assembly. The first session of the sovereign Constituent Assembly was held on the night of August 14 and the morning of August 15 when Pt. Nehru made his much-acclaimed “A tryst with destiny” speech and recalled the ambition of Mahatma Gandhi, “the greatest man of our generation” who wanted “to wipe every tear from every eye.” Conscious of the formidable task, Nehru hastened to add, “that may be beyond us but as long as there are tears and sufferings, so long our work will not be over.”²³⁰

Committees of the Constituent Assembly

The making of the Constitution was a prodigious task. The Constituent Assembly, therefore, set up as many as 17 committees, of which eight major committees were chaired either by Nehru, Sardar Patel, or Dr. Rajendra Prasad. The committee members worked behind the scenes, fostering consensus and unity, and arrived at decisions after extensive deliberations. The Drafting Committee was chaired by Dr. Ambedkar.²³¹

²²⁹ The GOI Act, 1947, was passed by the British Parliament on July 5, 1947. The Act received royal assent on July 18, 1947. It abolished the title of the “Emperor of India” and provided for a Governor-General to be appointed by His Majesty, the King of England under Section 5 of the Act.

²³⁰ CAD. (1947, August 15). Vol. V.

²³¹ Singh, Devender. (2016). *The Indian parliament*. LexisNexis, pp. 15, 16.

Drafting of the Constitution

On August 29, 1947, the Drafting Committee was formed to scrutinise and consider the draft Constitution prepared by the Office of the Assembly. The Drafting Committee, chaired by Dr. Ambedkar, first met on August 30, 1947, and had, in all, 141 sittings. The Draft Constitution, as settled by the Drafting Committee, was submitted to the President of the Constituent Assembly on February 21, 1948, who caused it to be published and circulated. The suggestions, comments, and criticisms of the members and of the provincial governments, legislators, and all stakeholders including the public were considered by the Drafting Committee at their sittings held on March 23, 24, and 27 and October 18, 1948. The Draft Constitution, as finalised by the Drafting Committee, was introduced in the Constituent Assembly on November 4, 1948. Commending the Draft Constitution to the Constituent Assembly, Dr. Ambedkar said: "...all Constitutions in their main provisions must look similar. The only new things, if there can be any, in a constitution framed so late in the day are the variations made to remove the faults and to accommodate it to the needs of the country."²³²

The Draft Constitution contained 315 Articles and eight Schedules. It was debated in the Constituent Assembly and underwent three readings and many amendments between November 4, 1948, when it was introduced, and November 26, 1949, when it was finally passed.²³³ The Draft Constitution was considered in the sessions of the Constituent Assembly over 114 days. A total of 7,365 amendments were tabled, but only 2,473 amendments were actually moved and carried.²³⁴ The Draft Constitution had provisions under which the Princely States were

²³² Rau, B. N. *India's constitution in the making*, p. 32. The Drafting Committee comprised of Alladi Krishnaswami Ayyar, Shri M. Gopalaswami Ayyangar, K. M. Munshi, Mohd. Saadulla, B. L. Mitter, and D. P. Khaitan as members. Sir B. N. Rau, the Constitutional Adviser to the Constituent Assembly, played an important role in the framing of the Constitution as Constitutional Adviser.

²³³ CAD. (1949, November 25). Vol. XI. Quoted by Dr. Ambedkar in his speech.

²³⁴ CAD, *supra*.

“free to create their own Constituent Assemblies and to frame their own Constitutions.”²³⁵ However, these provisions did not find a place in the final Constitution.

Adoption of the Constitution

The Constitution of India was adopted on November 26, 1949. The last session was held on January 24, 1950, the day when the *Jana gana mana* was made the National Anthem, and the song *Vande mataram* was conferred an equal honour as it had “played a historic part in the struggle for Indian freedom.” Thereafter, members signed three copies of the Constitution: one in English, completely handwritten and illuminated by artists; the second copy also in English but printed; and the third copy handwritten in Hindi.²³⁶

The provisions relating to citizenship, elections, Provisional Parliament, and temporary and transitional provisions were given immediate effect on November 26, 1949, the day the Constitution was adopted. The remaining provisions came into force on January 26, 1950, which is the date of commencement of the Constitution. The Constituent Assembly had 167 sittings over a period of 2 years, 11 months, and 9 days.

Criticism and Adulation

There were members who criticised the Constitution. It was said that “the glamour of our present leaders has dimmed the vision of our experts”;²³⁷ “we wanted the music of veena or sitar

²³⁵ CAD. (1948, November 4). Vol. VII. The suggestions on the Draft Constitution, acceptable to the Drafting Committee, were conveyed by Dr. B. R. Ambedkar to the President of the Assembly through a letter dated October 26, 1948.

²³⁶ CAD. (1950, January 24). Vol. XII. Also see Lok Sabha Secretariat. (2016). *Making of the constitution*. Lok Sabha Secretariat, p. 255.

²³⁷ CAD. (1949, November 21). Vol. XI, pp. 749–753. Quoted by Sardar Hukum Singh in his speech.

but here we have the music of an English band”;²³⁸ the Preamble to the Constitution contains moral virtues which are impossible to achieve; the Directive Principles were mere pious platitudes; the Constitution, being bulky, may be a haven for lawyers; the freedom contained in Article 19 has been hedged around with exceptions and reservations;²³⁹ and the provision of equality of status is an empty boaster. There were forebodings that the Governors may misuse Article 356. Some members described it as a blend of idealism and reality. Dr. Ambedkar was hailed as “the main artist.”²⁴⁰ It was also said that “we wholeheartedly bequeath it to posterity in the hope that they will forgive our shortcomings, if any, and make up these shortcomings with their wisdom.”²⁴¹

Legislative Assembly and Provisional Parliament

The Constituent Assembly took on the additional work of legislation for the country as the Legislative Assembly of Independent India in the late evening of August 14, 1947. It functioned as the Constituent Assembly where clauses pertaining to the Constitution were discussed, and it transformed itself into the Legislative Assembly to conduct legislative business. The Constituent Assembly of India (Legislative) became the Provisional Parliament immediately before the commencement of the Constitution on January 26, 1950, and it ceased to exist

²³⁸ CAD, *supra*, p. 616. Quoted by K. Hanumanthaiah in his speech.

²³⁹ CAD, *supra*.

²⁴⁰ CAD. (1949, November 25). Vol. XI, pp. 963, 964. Quoted by Mahavir Tyagi in his speech.

²⁴¹ CAD, *supra*.

under Article 379 of the Constitution of India when both Houses of Parliament were constituted on April 17, 1952.²⁴²

Outstanding Features of the Constitution

A Comprehensive Document

The Indian Constitution is the longest constitution of the world. Sir Ivor Jennings criticised it as “too long, rigid and prolix” and “a truly oriental display of occidental constitutional devices.”²⁴³ “Long” it is but “too rigid” certainly not in view of the amendments it has undergone. Dr. Ambedkar justified the inclusion of details to prevent possible perversion of the Constitution.²⁴⁴ The framers, apart from laying down the fundamental principles of governance, also provided a detailed constitutional architecture for the federal and state governments, local self-governments, the Union and State Legislatures, and an independent three-tier judiciary. The legislative, financial, and administrative powers between the Union and the States have been distributed exhaustively.²⁴⁵ There are elaborate provisions governing the imposition, collection, and distribution of taxes

²⁴² The Constituent Assembly (CA) met in the Constitution Hall, famously known as the Central Hall of old Parliament building and was presided over by Dr. Rajendra Prasad. As CA (Legislative), it met in the Legislative Assembly Hall (now the old Lok Sabha Chamber) to transact legislative business, and it was presided over by P. V. Mavalankar. The CA (Legislative) met from November 17, 1947, to December 24, 1949, and had six sessions. The Constituent Assembly of India (Legislative) became the Provisional Parliament immediately before the commencement of the Constitution on January 26, 1950. The Provisional Parliament ceased to exist under Article 379 of the Constitution of India when both the Houses of Parliament were constituted on April 17, 1952. The Provisional Parliament first met on January 28, 1950, and had last sitting on March 5, 1952. It had five sessions from January 28, 1950, to March 5, 1952.

²⁴³ Nariman, Fali S. (2023). *You must know your constitution*. Hay House, pp. 9, 10.

²⁴⁴ CAD. (1949, November 25). Vol. VII, p. 38.

²⁴⁵ Articles 245–255, read with the 7th Schedule of the Constitution.

between the Union and the States,²⁴⁶ for dispensing equal justice to, and welfare of, the historically marginalised sections like Scheduled Castes, Scheduled Tribes, and Backward Classes.²⁴⁷ The Constitution also provides for the language of the Union, regional languages, and the language of the Supreme Court and the High Courts.²⁴⁸ The provisions relating to the Comptroller and Auditor General of India,²⁴⁹ the Election Commission of India,²⁵⁰ the Union Public Service Commission of India,²⁵¹ Commissions for Scheduled Castes and Scheduled Tribes,²⁵² Special Officer for Linguistic Minorities,²⁵³ and the Finance Commission,²⁵⁴ all aim to nurture institutional democracy.

A Rainbow of Constitutional Ideals

Like the Vedic seers who proclaimed, “Let noble thoughts come to us from all directions”, the makers of the Constitution were receptive to constitutional ideals. They adopted the parliamentary form of government and the concept of single citizenship from the Westminster system of Britain; the Judiciary and the Fundamental rights from the American Constitution; the Federal System with a strong central authority, residual powers, Centre–State relations, and advisory jurisdiction of the Supreme Court from the Canadian Constitution; procedure established by law from the Japanese Constitution; and the Directive Principles of State Policy and the election of the President of India from the Irish Constitution. The ideals of “Liberty, Equality, and Fraternity,” the war cry of the French Revolution, were taken

²⁴⁶ Articles 264–300, Constitution of India.

²⁴⁷ Articles 330–342, *supra*.

²⁴⁸ Articles 343–351, *supra*.

²⁴⁹ Articles 148–151, *supra*.

²⁵⁰ Articles 324–329, *supra*.

²⁵¹ Articles 315–323, *supra*.

²⁵² Articles 338–342, *supra*.

²⁵³ Articles 350B, *supra*.

²⁵⁴ Articles 280, 281, *supra*.

from the French Constitution. The provisions relating to freedom of trade and intercourse within the territory of the country were taken from the Australian Constitution; the three lists containing the demarcation of legislative powers between the Union and the States and the office of Governor from the Government of India Act, 1935; the Emergency provisions from the Weimar Constitution; impeachment of the President, Vice President, and the judges of the Supreme Court and the High Court from the US Constitution; and the procedure for amendment of the Constitution from the erstwhile South African Constitution.

Dr. Ambedkar responded to the accusation of plagiarism by stating that all constitutions in their main provisions must look similar and that “no body holds any patent rights in the fundamental ideas of a constitution.” It was not a slavish imitation. In fact, the Constituent Assembly “played the alchemist, turning foreign metals into Indian coin.”²⁵⁵ The Constitution was drafted according to India’s needs and aspirations, taking note of the facts and realities of history.²⁵⁶

Parliamentary Democratic Republic

The Constituent Assembly settled on a parliamentary form of government as the country had become familiar with it due to India’s legal and constitutional history and administrative set up. A parliamentary form of government provides effective leadership in emergencies as it enjoys parliamentary support.

²⁵⁵ CAD. (1948, November 4). Vol. VII. Granville Austin says, “The CA successfully played the alchemist, turning foreign metals into Indian coin.” See Austin, Granville. (1966). *The Indian constitution: The cornerstone of a nation*. Oxford University Press, p. 401.

²⁵⁶ CAD. (1949, November 26). Vol. XI. After a review of the provisions of the Constitution of India and the Government of India Act, 1935, Seervai says, “Little could the framers of that Act have dreamt that in the Constitution of free India they would find the greatest monument to their drafting skills and constitutional insight.” See Seervai, H. M. (2008). *Constitutional law of India* (Vol. I). Universal Law Publishing, p. 171.

The political executive is drawn from the legislature and is accountable to the legislature collectively and individually.²⁵⁷ In the US presidential system, due to the strict separation of powers, it is said that the President and the Congress run on two different clocks. In contrast, under the parliamentary system, the Council of Ministers is, in the words of Walter Bagehot, “a hyphen which joins a buckle which fastens the legislative part of the state with the executive part.” Furthermore, there is a daily assessment of the accountability of the executive by the legislators and periodic accountability by the electorate.²⁵⁸

Balance of Powers

The Constitution of India does not envisage an absolute separation of powers between the organs of the State, as enshrined in the US Constitution. However, it does enshrine the principles about which Alexander Hamilton wrote in the Federalist Papers in 1778: “Parliament maketh the laws and therefore holds the power of the purse, the Executive holds the sword which executes the laws and the Judiciary which hath judgement.”²⁵⁹ Under the Indian Constitution, the executive power vests in the President. The President is an integral part of Parliament, without whose assent any legislation passed by Parliament cannot become law. The Council of Ministers, drawn from the legislature, is accountable to the legislature and its survival is contingent upon parliamentary support.²⁶⁰ This, in the words of Woodrow Wilson, enables “the ministers to lead the Houses without dictating to them and the ministers themselves be controlled without being misunderstood.” Lord Hailsham

²⁵⁷ CAD. (1948, November 4). Vol. VII. Quoted by Dr. Ambedkar in his speech.

²⁵⁸ CAD. (1948, November 4). Vol. VII.

²⁵⁹ Alexander Hamilton, a founding father of the USA, helped draft US Constitution and was one of the key authors of the Federalist Papers with James Madison and John Jay. These essays were written under the pseudonym “Publius” in order to get the new American Constitution ratified by the States.

²⁶⁰ Article 75, Constitution of India.

described the British Parliament as “Executature”—a legislative body under the control of the executive. When legislations are pushed through in any parliament by a majoritarian government, the description does not appear to be a hyperbole.²⁶¹ However, in the context of the judiciary, the separation of powers is an integral part of the basic structure of the Constitution.²⁶²

A Federal State with Stronger Union

India is a Union of States. However, unlike the United States of America, the constituent States of India can be merged or amalgamated by Parliament through law.²⁶³ So, while the Union is indestructible, the States can be merged, amalgamated, or reorganised. Professor Wheare held the view that Indian Constitution “is quasi-federal ... a unitary State with subsidiary Federal features”²⁶⁴ The Constitution envisages a distinct concept of federalism or dual polity, with single citizenship and a single constituent authority which vests in Parliament alone.²⁶⁵ In times of war, other national emergencies, or a failure of constitutional machinery in States, there are distinct provisions which make it unitary.²⁶⁶ It is designed as a model of cooperative federalism, with well demarcated legislative, financial, and administrative powers between the Union and the States. Additionally, the establishment of a single judiciary, uniformity in fundamental laws, a uniform accounting system, and common All India Services, all aim to foster administrative and legislative unity.

²⁶¹ He was Lord Chancellor of Great Britain from 1974 to 1974. See Nariman, *supra*, pp. 420, 421.

²⁶² *State of Bihar v. Bal Mukund Sah*, (200) 4SCC; AIR 2000 SC.

²⁶³ Articles 2, 3, and 4, Constitution of India. A law for merger or amalgamation of a State or States shall not be deemed as amendments to the Constitution.

²⁶⁴ Wheare, K. C. (1952). *Federal government*, p. 28. Also see Basu, Durga Das. (2018). *Introduction to the constitution of India*, p. 64.

²⁶⁵ Articles 5–10 and 368 of the Constitution of India.

²⁶⁶ Articles 352 to 360.

Rigid yet Organic

An enduring Constitution must provide the machinery for amendments to suit the changing needs of future generations. According to Jefferson, “We may consider each generation as a distinct nation, with a right, by the will of the majority to bind themselves, but none to bind the succeeding generation, more than the inhabitants of another country”²⁶⁷. Article 368 sets out the machinery for constitutional amendments. To quote Dr. Ambedkar, “those dissatisfied with the Constitution have only to obtain a two third majority and if they cannot obtain even a two third majority in the Parliament” their dissatisfaction cannot be deemed to be of the general public.²⁶⁸ The amendments are subject to judicial review and must not disturb the basic structure of the Constitution.²⁶⁹ The Constitution has been amended 106 times up until 2024—that is, up to the tenure of the 17th Lok Sabha—whereas the US Constitution has undergone 27 amendments so far since it came into force in 1789.²⁷⁰

Independent Judiciary and the Power of Judicial Review

The Supreme Court can declare any law or amendment to the Constitution *ultra vires* if it affects or alters any part of the basic

²⁶⁷ CAD. (1949, November 25). Vol. XI. Quoted by Dr. Ambedkar in his speech.

²⁶⁸ CAD, *supra*.

²⁶⁹ *Keshavananda Bharati v. State of Kerala*, SC, AIR (1973); *Indira Nehru Gandhi v. Raj Narain*, SC, AIR (1975); *Minerva Mills Ltd. v. Union of India*, SC, AIR (1980); *S.P. Gupta v. Union of India*, SC, AIR (1981); *Supreme Court Advocates-on-Record Assn. v. Union of India*, SC (2016).

²⁷⁰ The Constitution (106th Amendment) Act, 2023, passed at the special session of Parliament—by the Lok Sabha on September 20, 2023, and by Rajya Sabha on September 21, 2023—and assented to by the President on September 28, 2023. The Act seeks to provide 33% reservation for women in the directly elected houses; that is, the Lok Sabha and the State Legislative Assemblies. It will come into force on a future date.

structure of the Constitution.²⁷¹ The basic structure test, propounded in the *Keshavananda Bharati* case, has been reiterated by the apex court in *Indira Gandhi v. Raj Narain*, *Minerva Mills*, *Waman Rao*, and *Coelho* cases. In the *Supreme Court Advocates-on-Record v. Union of India* in 2016, the Supreme Court declared the 99th Constitution Amendment as unconstitutional on the ground that it affected the independence of the judiciary. Conspicuously, the judiciary has not interfered with or obstructed socio-economic reforms, as though the Court were partners with the framers of the Constitution.²⁷² In the *Waman Rao* case, the apex court held that the First Amendment, which inserted the Ninth Schedule, strengthened the basic structure because it “made the constitutional ideal of equal justice a living truth.”²⁷³ But, constitutional amendments which impinged upon the power of judicial review have been declared null and void as unconstitutional by the Supreme Court.²⁷⁴ Some jurists have thus described the “Supreme Court of India as the most powerful constitutional court in the world, exercising wide powers of judicial review.”²⁷⁵

²⁷¹ *Keshavananda Bharati v. State of Kerala*, SC, AIR, 1973; *Indira Nehru Gandhi v. Raj Narain*, SC, AIR 1975; *Minerva Mills Ltd. v. Union of India*, SC, AIR, 1980; *S.P. Gupta v. Union of India*, SC, AIR, 1981; *Supreme Court Advocates-on-Record Assn. v. Union of India*, SC, 2016.

²⁷² Dworkin, Ronald. (1986). *Law's empire*. Harvard Law University Press, pp. 61–63. As referred by Fali S. Nariman in his autobiography, *Before memory fades*. Hay House, p. 367.

²⁷³ *Waman Rao v. Union of India*, 1981, SC. Also see *Indra Sahney v. Union of India*, 2000, SC.

²⁷⁴ *S.P. Gupta v. Union of India*, SC, AIR, 1981; *Supreme Court Advocates-on-Record Assn. v. Union of India*, SC, 2016; *S.P. Sampath Kumar v. Union of India*, SC, AIR, 1987; *Chandra Kumar v. Union of India*, SC, 1997; *I.R. Coelho v. State of T.N.*, SC, AIR, 1999; *Waman Rao case*, SC, 2007; *Supreme Court Advocates-on-Record Assn. v. Union of India*, SC, 2016. Also see De, Rohit. A people's constitution, p. 3; Singh, Devender. (2023, February 10). The Collegium system needs improvement. *The Pioneer*.

²⁷⁵ De, Rohit. (2018). *A people's constitution*. Princeton University Press, p. 3.

Guaranteed Fundamental Rights

The Constitution guarantees the fundamental rights, or the Bill of Rights, to citizens and certain fundamental rights even to non-citizens.²⁷⁶ The guarantees include the right to equality; the freedom of speech and expression; to practise any profession; protection against *ex post facto* criminal legislation and against double jeopardy; the right to life or personal liberty; and freedom of worship, as well as cultural and educational rights. The right to freedom of speech is subject to certain reasonable restrictions. The onus is upon the State to prove to the satisfaction of the court that the restriction is reasonable.²⁷⁷ The restriction imposed, or the procedure established by law, “must not be arbitrary, unfair or unreasonable.”²⁷⁸ In fact, through a catena of judgments, the Supreme Court has expanded the horizon of life and liberty and the fundamental freedoms.

The guarantees of Fundamental Rights are not an abstract declaration but are backed by the power to move the apex court to enforce their observance. Article 13 declares that the State shall not make any law which takes away or abridges Fundamental Rights and that, to the extent of such inconsistency, such laws shall be void. Under Article 32, the Supreme Court can declare any executive or legislative action violative of the Constitution if it takes away or abridges Fundamental Rights. In *Association for Democratic Reforms & Another v. Union of India*, the apex court held the Electoral Bond Scheme as violative of Article 19(1)(a) and Article 14 of the Constitution.²⁷⁹ The Supreme Court, as the guardian of Fundamental Rights, can issue appropriate prerogative writs, namely, Habeas Corpus, Mandamus,

²⁷⁶ Part III, Articles 12–35.

²⁷⁷ *Dwarka Prasad Laxmi Narain v. State of U.P.*, SC, AIR, 1954; *Khyerbari Tea Co. Ltd. v. State of Assam*, SC, AIR, 1964; *Nawabkhan Abhaskhan v. State of Gujarat*, SC, AIR, 1974; *Modern Dental College & Research Centre v. State of M.P.*, SC, 2016, SCC 353.

²⁷⁸ *Maneka v. UOI*, SC, AIR, 1978. Justice Krishna Iyer Said, “No Passport Officer shall be a mini-Caesar nor a minister an incarnate Caesar.”

²⁷⁹ *Supreme Court Advocates-on-Record Assn. v. Union of India*, SC, 2016.

Prohibition, Certiorari, Quo Warranto, or any appropriate order or direction on a prayer by the aggrieved person, *suo motu*, or on a PIL. Under Article 226, wide powers have been conferred on the High Courts not only for the enforcement of Fundamental Rights but also for the redressal of any injury or illegality.

Directive Principles of State Policy

The Directive Principles, though not justiciable, contain instruments of instructions for law-making to attain the constitutional goals of justice—social, economic, and political.²⁸⁰ The legislature, through various enactments, and the judiciary, by giving harmonious interpretation, have added a new thrust and momentum to the Directive Principles of State Policy. The Directive Principles are a reminder that “The State was created to protect the weak, the poor, the exploited, the helpless, and the oppressed from the strong.”²⁸¹ There can be no well-governed State without the fundamental principles of governance. The Fundamental Rights and the Directive Principles of State Policy are “the conscience of the Constitution.”²⁸²

Fundamental Duties

As a correlative of the Fundamental Rights the Fundamental Duties enjoin that citizens should abide by the Constitution and respect its ideals and institutions, and develop scientific temper, spirit of humanism, enquiry, and reform, among others. The Fundamental Duties were inserted by the 42nd Amendment via

²⁸⁰ Articles 36–51 of the Constitution of India.

²⁸¹ Joshi, Murli Manohar. (2018, February). How rulers must conduct: Lessons from ancient India. *Power politics*.

²⁸² Austin, Granville, *supra*, p. 63. Austin further says, “It is very doubtful, however, if in any other constitution the expression of positive and negative rights has provided so much impetus towards changing and building society for the common good” (Austin, *supra*, p. 144).

Article 51A. The Fundamental Duties cannot be enforced by writs, but the courts may consider them while interpreting equivocal statutes.²⁸³ In appropriate cases, if the non-observance of duty by one citizen can be established as a violation of the rights of another, an appropriate remedy may be provided by the Court.²⁸⁴

Basic Structure Unalterable

In *Keshavananda Bharati v. State of Kerala* (1973), the Supreme Court declared that Parliament cannot alter the basic structure or framework of the Constitution.²⁸⁵ The basic structure doctrine was reiterated in *Indira Gandhi v. Raj Narain* (1975) by declaring the 39th Amendment unconstitutional insofar as it placed the election of the President, Vice President, Prime Minister, and the Speaker of the Lok Sabha beyond the jurisdiction of the courts. Article 31C, inserted by 25th Amendment and further amended by 42nd Amendment, was quashed by the apex court in *Minerva Mills v. Union of India* (1980) for being violative of the basic structure. In *Waman Rao v. Union of India* (1981),²⁸⁶ *Coelho v. State of Tamil Nadu* (2007),²⁸⁷ and also in the *Fourth Judges Case* (2015),²⁸⁸ the Supreme Court has reiterated that the basic structure test did

²⁸³ Bakshi, P. M. *The constitution of India* (8th ed.). Universal Law Publication, pp. 92–93.

²⁸⁴ *Vishakha v. State of Rajasthan*, SC, AIR, 1987. P. V. Kane, the author of *History of dharmashastra*, was critical of the Constitution being devoid of duties of citizens while guaranteeing Fundamental Rights. On the contrary, after inclusion of Fundamental Duties, Trimbak Krishna Tope wondered whether it is the revival of Hindu jurisprudence. See Shukla, V. N., *Constitution of India* (13th ed). pp. A45, 392–393.

²⁸⁵ *Keshavananda Bharati v. State of Kerala*, SC, AIR, 1973. By a majority judgment, the Supreme Court overruled the *Golaknath v. State of Punjab*, 1967.

²⁸⁶ *Waman Rao case*, SC, 2007.

²⁸⁷ I.R. Coelho v. State of T.N., SC, AIR, 1999.

²⁸⁸ Supreme Court Advocates-on-Record Assn. v. Union of India, SC, 2016; 2017, pp. 37–64.

not exclude a consideration of the fundamental rights, “the immutable heart of the Constitution.”²⁸⁹

There are other outstanding features of the Constitution, such as provisions for affirmative action by the State to achieve the constitutional ideals of equality, the rule of law, and the supremacy of the Constitution over all organs of the State.

The Working of the Constitution

The Armour of the Republic

There was scepticism about the success of the Constitution as early as 1951 when Sir Ivor Jennings termed it as “Too long, too rigid, too prolix.”²⁹⁰ While the Constitution of Sri Lanka, drafted by Jennings, lasted barely 14 years, India has witnessed 18 general elections leading to the willing surrender or sharing of power according to the popular mandate.²⁹¹ The true import of the Constitution was thus described by Justice Vivian Bose in 1954: “We have upon us the whole armour of the Constitution”²⁹² The Constitution is the breast plate not only of the judges but also of the citizens, as evident from the constitutional narrative forged by the ordinary people.

A People’s Constitution

The Constitution, which enfranchised the people of India without any discrimination based on caste, gender, or religion, has instilled in ordinary citizens an abiding faith in the

²⁸⁹ Mathew, Dr. C. K. (2023). *Reviewing the republic*. Azim Premji University, p. 34; Chandrachud, Chintan. *Balanced constitutionalism*. Oxford University Press.

²⁹⁰ Nariman, Fali S. (2023). *You must know your constitution*. Hay House, pp. 10, 11.

²⁹¹ Nariman, supra, p. 11.

²⁹² Nariman, Fali S. (2018). *Before memory fades*. Hay House, p. 369.

guarantees it provides. The functioning of the Constitution has demonstrated beyond any measure of doubt that it is “not for the exclusive benefit of governments and States. It is not only for lawyers and politicians and officials and those who are highly placed. It also exists for the common man, for the poor and the humble, for those who had businesses at stake, for the butcher, the baker and the candlestick makers” and “the pavement dwellers.”²⁹³ Professor Rohit De, in his painstaking and fascinating study of some of the landmark judgments of the Supreme Court, has documented how constitutional litigation is not limited to elites but is accessible to a cross-section of people, including the marginalised individuals, who have become “virtuous constitutional actors” by taking recourse to the Constitution and seeking constitutional remedies.²⁹⁴

The Lodestar of Democratic Politics

The democratic journey of India since 1950 eloquently demonstrates that the Constitution has effective checks and balances and that it is the lodestar of our democratic politics. It is robust and flexible enough to meet the challenges of both war and peace. No constitution on its own fails or succeeds. Dr. Ambedkar was spot on when he said, “if things go wrong under the new Constitution, the reason will not be that we had a bad Constitution. What we will have to say is, that Man was vile.”²⁹⁵ When things went wrong, or there were aberrations, the wrongs were perpetrated by the perversion of the Constitution by the very people enjoined to uphold it. Yet, it is due to the periodic reaffirmation of the unwavering faith of the people and political parties in the philosophy of the Constitution that India

²⁹³ Justice Vivian Bose in the judgment *Bidi Supply Company v. Union of India*, AIR 2956 SC, and Justice Krishna Iyer in *Moti Ram v. State of M.P.*, AIR1978SC.

²⁹⁴ De, *supra*. In the words of Justice Krishna Iyer, “our Constitution, enacted by ‘We, the people of India,’ is meant for the butcher, the baker and the candlestick maker—shall we add the bonded labourer and the pavement dweller.”

²⁹⁵ CAD. (1948, November 4). Vol. VII. Quoted by Dr. Ambedkar in his speech.

surmounted periodic challenges and aberrations and emerged victorious “as the traditions of the republic lie at the core of India.”²⁹⁶

An Instrument of Empowerment

The Constitution, framed in the spirit of consensus and accommodation, is a charter of national unity and “first and foremost, a social document” and has “worked beneficial changes in Indian society.”²⁹⁷ The Constitution resolves to secure to all citizens: social economic, and political Justice; Liberty of thought, expression, belief, faith, and worship; Equality of status and opportunity; and to promote Fraternity among them all. No popular government can be impervious to the forewarning of Dr. Ambedkar: “Without fraternity, equality and liberty will be no deeper than coats of paint.”²⁹⁸ In fact, an overarching view of competitive democratic politics testifies that India has been constantly striving to attain the constitutional goals. A whole range of transformative legislation or schematic interventions in the areas of land reforms, labour reforms, gender justice, social empowerment and financial inclusion, food safety, minimum wages, right to education, direct benefit transfer, right to information, minimum employment guarantee, health, etc. have been enacted or approved by successive Parliaments. The Judiciary, through interpretive functions, has partnered with the framers of the Constitution by expanding the horizon of life, liberty, and social empowerment.

²⁹⁶ Murmu, Draupadi. Address to both the Houses of Parliament on June 26, 2024.

²⁹⁷ Austin, Granville, *supra*, pp. 386–387.

²⁹⁸ CAD. (1949, November 25). Vol. XI.

Future of Democracy

The Constitution bequeathed by the founding fathers has transformed the lives of generations of citizens in a profound way. Yet there remains some democratic disquiet and dissatisfaction which is inevitable in a liberal democracy. In the words of Francis Fukuyama, “those who are dissatisfied have the potential to restart history. No regime, no socio-economic system, no democracy is able to satisfy all people at a given point of time.”²⁹⁹ Free, fair, and periodic elections, the *sine qua non* of a competitive democracy, bear the promise and potential to transform the lives of those who are dissatisfied. The Indian Constitution has stood clear and firm on its philosophy and upheld the belief and faith of its makers and “We, the People.” The erosion of democracy, argue Levitsky and Ziblatt, can be checkmated only by defending the Constitution through political parties and organised citizens by democratic norms.³⁰⁰ On occasions when India passed through the winter of despair, the people heralded the spring of democracy yet again by exercising their franchise with wisdom and foresight. In the words of American judge Learned Hand, “Liberty lies in the hearts of men and women; when it dies there, no constitution, no law, no court can even do much to help it.”³⁰¹ Deeply ingrained in the popular psyche, the Constitution is a beacon of hope and a gospel of governance. The Constitution has given momentum to the rule of law, civil liberties, and strengthened the democratic ideals it stands for. Any threat to the Constitution, real or perceived, becomes a subject of fierce and wider public debate and electoral

²⁹⁹ Fukuyama, Francis. (2006). *The end of history and the last man*. Free Press, p. 334.

³⁰⁰ See Levitsky, Steven & Ziblatt, Daniel. (2018). *How democracies die*. Penguin, pp. 6–8.

³⁰¹ Learned Hand was one of the greatest federal judges of the United States. The quote is from his “The Spirit of Liberty” speech delivered in 1944. Quoted by Nariman, Fali. S. (2023). *You must know your constitution*. Hay House, p. 450.

campaigns as people rise peaceably to defend and uphold their Constitution.³⁰²

³⁰² Street protesters display and swear by the Constitution, draw inspiration from, and invoke it for redressal of their demands. Leaders caress the Constitution and bow before it to signal that the Constitution is sacrosanct and immutable.

Chapter 13. Urban Development: Rise of the City-State India's Urban Renaissance, Empowering Cities, Transforming the Nation

Durga Shanker Mishra³⁰³

There was a time in our country when urbanisation was considered a big problem. However, I feel differently. We should not consider urbanisation as a problem but as an opportunity. Cities have the strength to digest poverty and provide economic opportunities for the poor from other less developed areas. We must further strengthen the cities to increase their “digestive” ability, making them faster and wider ... economic prosperity will automatically follow.
Prime Minister Narendra Modi³⁰⁴

Introduction

Prime Minister Narendra Modi's 2022 Independence Day address unveiled a transformative vision for Vision India@2047, a developed nation by its centennial year, encompassing economic growth, social progress, environmental sustainability, good

³⁰³ Author is the former Chief Secretary of Uttar Pradesh. He was Secretary of the Ministry of Housing and Urban Affairs, Government of India, from June 2017 to December 2021. The views expressed herein are his own.

³⁰⁴ Prime Minister Shri Narendra Modi's address at the first-anniversary celebration of the Smart Cities Mission and Atal Mission for Rejuvenation and Urban Transformation (AMRUT) in Pune on June 25, 2016.

governance, and an elevated quality of life for all citizens.³⁰⁵ Central to this vision is a call to shed colonial mindsets, embrace India's rich heritage, foster unity, and instil a sense of duty and integrity. Guided by the mantras "Collective Efforts, Inclusive Growth, Trust of All, and Efforts of All" (सबका साथ, सबका विकास, सबका विश्वास और सबका प्रयास) and "Reform, Perform, and Transform," India is forging a path of rapid progress and prosperity to become Viksit Bharat@2047.

This paper delves into the multifaceted strategies and initiatives underpinning India's progress, with a particular focus on urban development. It explores historical context, current policies, and future projections, underscoring the significant role of metropolitan/urban areas in realising the vision of a developed India by its 100th Independence Day.

Cities as Engines of Growth

The collective efforts of the government, citizens, and various stakeholders across all economic sectors have ignited a transformation across India. Urban areas, in particular, have been at the forefront of this development, witnessing comprehensive growth that has improved the quality of life for residents and accelerated economic growth and employment. With a strong foundation laid over the past decade, the relentless pursuit of ViksitNagar@2047 continues, promising a future where cities thrive as vibrant centres of progress and prosperity.

It is universally acknowledged that cities are the engines of economic growth. However, post-independence, the primary focus on rural development has led to the neglect and overlooking of the transformative power of urban centres. A thriving economy is built on planned and sustainable urbanisation, where cities act as vibrant hubs for innovation, manufacturing, and services, fuelled by resources from rural

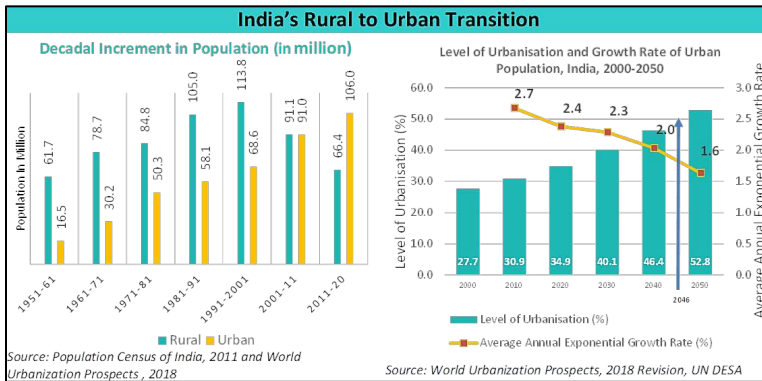
³⁰⁵ Modi, N. (2022). Prime Minister's address to the nation on August 15, 2022.

areas. This symbiotic relationship is the key to enhancing the quality of life for all citizens and unlocking their full potential.

The Rise of the Urban Population

At the time of independence, India was predominantly rural. However, since 2001, urban growth has accelerated significantly. The 2011 Census revealed an urban population exceeding 370 million, representing over 31% of the total population. Projections from the World Urbanization Prospects report (see graphs in Box 1) indicate that this trend will continue, with the urban population expected to surpass 450 million (35%) by the present day, 600 million (40%) by 2030, and a staggering 880 million (52%) by 2051 (United Nations, 2018).³⁰⁶

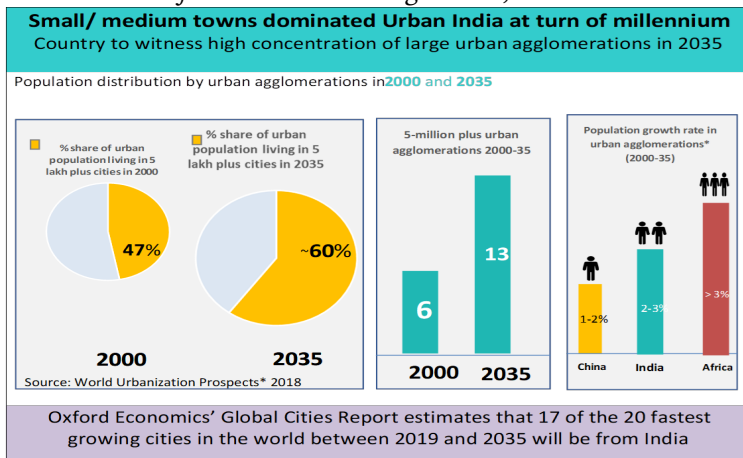
Box 1: India's Rural–Urban Transition



This rapid urbanisation is concentrated in larger cities, with those exceeding 500,000 inhabitants projected to house 60% of the urban population by 2035 (see graph in Box 2). The number of metropolises with a population of over 5 million is projected to rise from 5 to 13 by 2035, and annual growth is likely to be around 2.5%.

³⁰⁶ United Nations. (2018). World urbanization prospects: The 2018 revision.

Box 2: The rate of urbanisation in larger cities, 2000–2035



This growth was fuelled primarily by increased job opportunities in urban areas, which attract youth and a mobile workforce. With a large working-age population, India's demographic dividend today further amplifies this migration trend and contributes to economic growth. It is important to note that India's official definition of "urban" is more conservative than in many other countries. If broader criteria were used, India's urban population would be considerably larger (Box 3).

Box 3: Urban India Through Different Lenses

Our level of Urbanization through different lenses	
How Urban is India? (2011)	
• Administrative definition (STs only)	26 %
• Census Definition (STs +CTs +OGs)	31 %
• 10000+ Population (used by UK, Australia, Greece, Bahrain)	33 %
• 5000+ Population (used by Saudi Arabia, Belgium, Ghana)	47 %
• 2500+ Population (used by France, Mexico & Venezuela)	65 %
• World Bank Agglomeration Index (2010)	55%
• Global Human Settlement Layer (GSHL) database (2015)	77%
• Only Density (400/ sq. km.) criterion	78%
Source : UN- World Urbanization Prospect, 2018 https://www.worldbank.org/en/country/india/brief/leveraging-urbanization-india	
ST-Statutory Towns, CT-Census Towns, DG-Outgrowths	

Addressing the Challenges of Urbanisation

While the formation of Housing and Urban Development Corporation Ltd. (HUDCO) in 1970 marked the beginning of efforts to address urban housing and essential services, these early approaches were ad hoc and lacked a comprehensive vision. The 74th Constitutional Amendment of 1992 aimed to empower urban local bodies (ULBs) by devolving funds, functions, and functionaries, but its implementation fell short nationwide (UN-Habitat, 2022).³⁰⁷ Although the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) in 2005 was a significant step towards improving urban infrastructure, it remained limited in scope and lacked a clear long-term vision. Furthermore, the Union government's centralised implementation control adversely impacted its effectiveness.

As urbanisation gains momentum, it brings many challenges, including inadequate sanitation, drinking water, urban flooding, heat traps, traffic congestion, air pollution, and health hazards. Recognising these challenges, the government has been proactive since 2014, improving city infrastructure and amenities through various missions and in the peri-urban areas through Rurban development. This approach aims to transform these challenges into opportunities for growth ultimately contributing to the vision of Viksit Bharat@2047 (Ministry of Housing and Urban Affairs, Government of India, 2023).³⁰⁸

This transformative period has been a part of my professional journey. As a former Additional Secretary in the Ministry of Urban Development, I assisted in formulating new and innovative Urban Missions to enhance infrastructure, improve living standards, and foster sustainable growth in cities nationwide. Later, as Secretary in the Ministry of Housing and Urban Affairs, I oversaw their rapid implementation nationwide. Until recently, I was Chief Secretary of Uttar Pradesh and was

³⁰⁷ UN-Habitat. (2022). World cities report 2022: Envisaging the future of cities.

³⁰⁸ Ministry of Housing and Urban Affairs. (2023). *Transforming urban landscape 2014–2023*.

overseeing the consolidation of these efforts. Execution on the ground gives birth to new ideas. With its diverse and rapidly growing urban centres, Uttar Pradesh is a microcosm of India's broader urbanisation journey.

This decade-long experience, combined with my earlier roles in urban development at the state and municipal levels, has given me a unique perspective on India's urban transformation. I have seen urban policy evolve from its conceptual stages to tangible improvements as engines of economic growth and epitomes of quality living, innovation, and sustainability.

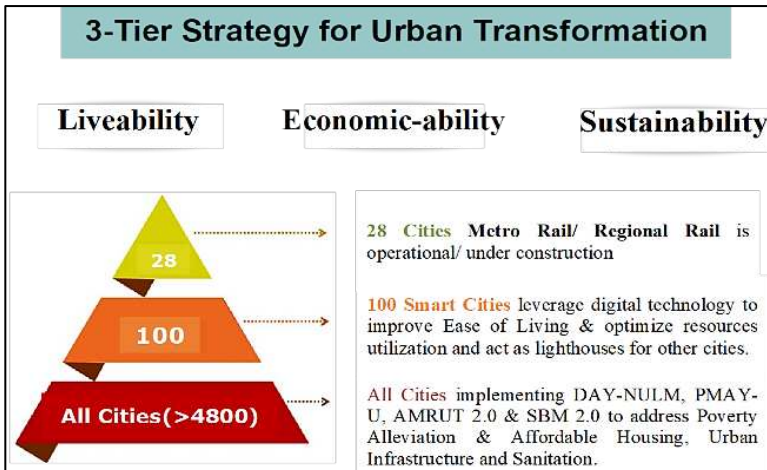
Urban Transformation Strategy

The urban transformation strategy of the past decade has been threefold (Box 4): enhancing liveability, promoting economic viability, and ensuring sustainability (Ministry of Housing and Urban Affairs, 2023).³⁰⁹

1. **Enhancing Liveability:** Elevating the quality of life for urban residents by improving infrastructure, public services, and amenities, ultimately making cities more liveable and enjoyable.
2. **Promoting Economic Ability:** Fostering a conducive environment for businesses to thrive while equipping citizens with the skills and opportunities needed to secure meaningful employment and improve their livelihoods. This is a strategy and a call to action for making this vision a reality.
3. **Ensuring Sustainability:** Integrating economic, social, and environmental considerations to create resilient, resource-efficient, and environmentally friendly cities for future generations.

³⁰⁹ Ministry of Housing and Urban Affairs. (2023). *Annual report 2023*.

Box 4: Three-Tier Strategy for Urban Transformation



Over the last decade, India has made significant strides in urban development, achieving what many considered impossible just 10 years ago. These achievements have laid a strong foundation for the future, paving the way for even more significant progress in the years to come. India has embraced this citizen-centric approach to urban development, actively engaging with communities to understand their needs and involve them in the planning and execution of projects. Under the principle of “Competitive Cooperative Federalism” championed by the Prime Minister, the central government has empowered and supported states and cities to drive their development agenda. The mantras of “Reform, Perform, and Transform” alongside “Skill, Scale, and Speed” have guided this transformative journey, prioritising the well-being and aspirations of urban residents and making them feel empowered and integral to the process. In his seminal work *Cities for people*, renowned urban planner Jan Gehl from Copenhagen emphasises that cities should be designed and developed to serve the needs

and aspirations of their inhabitants rather than those who govern them (Gehl, 2010).³¹⁰

This comprehensive approach aims to create sustainable and prosperous urban centres where residents and businesses can flourish while minimising negative environmental impacts. Cities are now more liveable, sustainable, and thriving than ever before. This progress is a testament to the Indian government's commitment to urban development and its vision for a more urbanised India. Here are some of the critical accomplishments and strategies of the past decade:

1. **Increased Investment in Urban Infrastructure:** The Indian government has significantly increased its investment in urban infrastructure, improving roads, water supply, sanitation, housing, and other essential services. This has made cities more liveable and attractive for residents and businesses alike. The government has invested over US\$180 billion in urban infrastructure over the past decade, compared to US\$17.8 billion in the previous decade.³¹¹ This has significantly improved roads, water supply, sanitation, housing, and other essential services.
2. **Improved Urban Planning and Governance:** The government has enhanced urban planning and management, making cities more efficient and sustainable. This includes initiatives such as the Smart Cities Mission and the Atal Mission for Rejuvenation and Urban Transformation (AMRUT).
3. **Competitive Cooperative Federalism:** The central government encouraged states through a national challenge to plan, compete for, and execute urban development projects/schemes under the Smart Cities Mission, Global Housing Technology Challenge, etc. States were empowered to implement urban missions under the broad framework.
4. **Empowerment of Local Governments:** The local governments were empowered to play a more active role in their

³¹⁰Gehl, J. (2010). *Cities for people*. Island Press.

³¹¹ Ministry of Housing and Urban Affairs. (2023). *Transforming urban landscape 2014–2023*.

development. This has led to incredible innovation and accountability at the ground level.

5. **Focus on Citizen Engagement:** The government has increasingly focused on engaging citizens in the planning and implementation of urban development projects. This has helped ensure that projects are responsive to the needs and aspirations of the people they serve and that the outcomes are sustainable.
6. **Emphasis on Ease of Living:** In all urban transformation missions, the focus is to promote ease of living for the citizens so that they can contribute freely as per their potential to the economy. Be it sanitation, basic infrastructure, housing, skilling, livelihood, transport, or any other, the central theme was the ease of living for all, especially the poor and deprived. The Ministry of Housing and Urban Affairs (MoHUA) introduced an annual survey for the Ease of Living Index to promote healthy competition among cities and achieve better results for citizen.

We see urbanisation as an opportunity and we are committed to making our cities world class urban spaces that further Ease of Living.

Prime Minister Narendra Modi

A decade of urban transformation has fostered a culture of continuous learning and improvement among urban local bodies, state governments, and other stakeholders. This collaborative effort, including unprecedented partnerships with industry and academia, has significantly enhanced the quality and scale of urban development initiatives. The overarching goal is to empower cities to become “AatmaNirbhar” (self-reliant) through national Urban Missions, equipping them to address future challenges and drive sustainable growth independently. This vision of a self-reliant urban India, where cities are the epitome of progress and prosperity, should inspire us all to continue our efforts in urban renaissance.

Policy to Practice to People: Strategic Interventions

Swachh Bharat Mission, a Cleanliness Revolution

Launched in 2014, the Swachh Bharat Mission (SBM), with its 2.0 version in 2021, has revolutionised sanitation and waste management in urban India. The mission has led to the construction of nearly 7.5 million household and community toilets, achieved 100% door-to-door waste collection in 96% of urban wards, and increased waste processing capacity from a mere 18% to almost 80%.³¹²

The SBM has transformed urban landscapes by remediating massive waste dumps and sparked a nationwide public movement for cleanliness, profoundly altering behaviour through citizen engagement and initiatives like the world's largest annual cleanliness survey, Swachh Survekshan.

Further, SBM has spurred entrepreneurship and innovation, fostered numerous start-ups, and created substantial employment opportunities. The Prime Minister's vision of "Wealth from Waste" is becoming a reality, converting municipal waste into valuable resources like CNG, building materials, organic fertilisers, and recycled products.

The mission's commitment to human safety is evident in its "manhole to machine-hole" initiative and Safai Mitra Protocols, ensuring the safety of sanitation workers through mechanised cleaning and strict safety measures. The development and widespread adoption of low-cost, high-impact Faecal Sludge and Septage Management (FSSM) solutions further demonstrate the mission's comprehensive approach to urban sanitation.

³¹² Swachh Bharat Mission, 2014. Ministry of Housing and Urban Affairs (MoHUA), 2015.

The SBM exemplifies a comprehensive approach to urban transformation. It addresses critical sanitation challenges while fostering economic growth, innovation, behavioural change, and public participation.

PMAY-U, Affordable Housing for All

Pradhan Mantri Awas Yojana–Urban (PMAY-U), launched in June 2015, marked a monumental shift in India’s urban housing landscape. Despite daunting challenges such as land scarcity, financial constraints, and skilled labour shortages, PMAY-U has emerged as the world’s most extensive housing programme. With over 12.3 million houses sanctioned and 8 million completed, equipped with essential amenities like toilets, electricity, gas connections, and clean water, the initiative has transformed the lives of countless families, providing them with dignified homes, social recognition, and a pathway to realising their aspirations.³¹³

With the enactment of RERA, we have liberated those middle-class families whose hard-earned money used to be parked unnecessarily for years in some projects by some elements. It has created a new trust among them, and now they find it easy to build their own house.

Prime Minister Narendra Modi

PMAY-U’s commitment to innovation is evident in the Global Housing Technology Challenge (GHTC), which introduced six rapid, resilient, and resource-efficient construction technologies, resulting in over 1,000 affordable housing complexes across India in Chennai, Rajkot, Indore, Lucknow, Ranchi, and Agartala. Furthermore, with two distinct models, the Affordable Rental Housing Complexes (ARHC) initiative has created 96,226 safe and affordable housing units for migrant

³¹³Pradhan Mantri Awas Yojana–Urban (PMAY-U) (2015). MoHUA.

workers and the urban poor, a first-of-its-kind endeavour in the country.

The landmark Model Tenancy Law has revolutionised the rental housing sector by balancing the rights and responsibilities of tenants and landlords, thus fostering a more equitable and transparent rental market. Additionally, implementing the Real Estate (Regulation and Development) Act, 2016 (RERA) has brought much-needed transparency and accountability to the real estate sector, protecting homebuyers from unscrupulous practices and ushering in a new era of consumer confidence. The widespread adoption of RERA has fundamentally transformed the real estate landscape, making 2017 a watershed year in the industry.

AMRUT, Universal Access to Basic Services

In June 2015, the Atal Mission for Rejuvenation and Urban Transformation (AMRUT) was launched to revolutionise basic urban infrastructure in cities with a population of over 100,000 (as per the 2011 Census). Its upgraded version, AMRUT 2.0, further amplified this mission in 2021 to all cities. AMRUT has profoundly impacted over 4,800 cities and towns, focusing on essential services like household water tap connections, sewer lines with sewage treatment plants (STPs), drainage systems, and green spaces.³¹⁴

Smart City Mission, Innovation Is the Key

The Smart Cities Mission was launched in June 2015 to catalyse urban transformation through technology and innovation, optimising resources to serve citizens' needs better. Focusing on 100 cities, the mission employed an area-based

³¹⁴Atal Mission for Rejuvenation and Urban Transformation (AMRUT) (2015). MoHUA.

approach, encompassing retrofitting, redevelopment, green-field development, and at least one pan-city intervention to positively impact all citizens' lives.³¹⁵

A nationwide challenge-based selection process, a first for India, fostered deep citizen engagement in shaping their cities' futures. Integrated Command and Control Centres (ICCCs), acting as the city's brain and nervous system, have been established in all smart cities, streamlining the delivery of essential services like sanitation, water, transport, healthcare, education, and more. Nearly 7,000 innovative projects have been completed, showcasing groundbreaking initiatives like Cycles4Change, Streets4People, and DataSmart Cities.

The mission has sparked a wave of technological innovation, integrating solutions like CCTV surveillance, smart parking, environmental sensors, and adaptive traffic control to improve urban living. It has facilitated public-private partnerships in critical areas like transportation, housing, and renewable energy, fostering economic growth and creating vibrant public spaces.

During the COVID-19 pandemic, Smart City infrastructure proved invaluable in managing the crisis, highlighting the resilience and adaptability of these digitally enabled urban centres. The lessons learned from the Smart Cities Mission have been widely disseminated, inspiring similar innovative development initiatives in other cities and paving the way for a nationwide movement towards ViksitNagar@2047.

Sarvodaya to Antodaya, Leaving No One Behind

The Deendayal Antyodaya Yojana-National Urban Livelihoods Mission (DAY-NULM) has empowered millions in India's urban landscape. By mobilising nearly 10 million women into self-help groups (SHGs) and providing skill training and

³¹⁵Smart Cities Mission (2015). MoHUA.

accessible loans to over 1.7 million individuals, DAY-NULM has fostered economic self-reliance and entrepreneurship at the grassroots level.³¹⁶

Furthermore, the Prime Minister Street Vendor's AatmaNirbhar Nidhi (PM SVANidhi) scheme, launched during the Covid-19 pandemic, has been a lifeline for street vendors, the backbone of India's informal economy. Its innovative digital implementation has enabled the swift disbursement of over 8.9 million loans, with over 45% going to women. Incentives for timely repayment, interest subsidies, and access to higher loan tranches have revived livelihoods and promoted financial inclusion through over 1 billion digital transactions.³¹⁷

Through the SVANidhi Se Samriddhi initiative, the scheme has extended its impact beyond individual vendors, reaching over 6.9 million family members and connecting them with various government scheme benefits. This holistic approach has significantly boosted incomes and improved the overall quality of life for street vendors and their families, reinforcing the government's commitment to uplifting the most vulnerable sections of society.

The pandemic has shown the importance of street vendors. They are part of our journey. We cannot leave them behind.
Prime Minister Narendra Modi

Further, the MoHUA developed Harmonised Guidelines and Space Standards for Universal Accessibility in India, a set of rules and standards that aim to make the physical environment, transportation, information and communication, and other facilities and services accessible to people with different abilities.³¹⁸

³¹⁶ Deendayal Antyodaya Yojana–National Urban Livelihoods Mission, 2013. MoHUA.

³¹⁷ Prime Minister Street Vendor's AatmaNirbhar Nidhi (PM SVANidhi) (2020). MoHUA.

³¹⁸ Harmonised guidelines and standards for universal accessibility in India, 2021. NIUA.

Urban Transport, Paving the Path to a Prosperous Urban Future

Rapid urbanisation has strained urban transportation systems, but India is tackling this challenge head-on. The development of over 945 kilometres of metro and regional rapid transit systems (RRTS) in 20 cities, with an additional 940 kilometres under construction in 28 cities, is revolutionising urban mobility.

Furthering this commitment to sustainable transportation, the MoHUA launched the PM e-Bus Sewa scheme, promoting electric bus adoption through central assistance. In Uttar Pradesh alone, 740 e-buses have already been introduced, with plans for 2,000 more.

In addition to these infrastructure investments, integrating intelligent traffic management systems (ITMS) and improvements in road conditions are easing congestion. However, a paradigm shift towards walkable, cyclable, and transit-oriented cities is crucial. MoHUA has taken a proactive step by advising states to integrate comprehensive city transport plans into the master plans.

Revitalising Urban Spaces, Culture, and Heritage

Building upon the success of the National Heritage City Development and Augmentation Yojana (HRIDAY), which revitalised the cultural landscape of 12 iconic cultural cities, namely Mathura, Varanasi, Ajmer, Puri, Dwarka, Amravati, Badami, Gaya, Velankanni, Warangal, Kanchipuram, and Amritsar, India continues its commitment to preserving heritage and enhancing visitor experiences through the Pilgrimage Rejuvenation and Spiritual Augmentation Drive (PRASAD). Under the Ministry of Tourism, this broader initiative

underscores the nation's dedication to the holistic development of its rich cultural and spiritual legacy.

In parallel, Delhi's Central Vista project is a testament to India's bold vision for urban transformation. This ambitious endeavour seamlessly marries historical preservation with contemporary design, breathing new life into the national capital city's heart. By creating inviting public spaces that prioritise functionality and accessibility, the project promises to become a vibrant hub for cultural events, recreation, and civic engagement. While the project has sparked debate, its potential to revitalise Delhi and establish it as a world-class destination is undeniable. The iconic new Parliament building and rejuvenated beautiful Kartavya Path (erstwhile Rajpath) are complete, and the rest is ongoing.

Digital Connectivity, Building Sustainable Urban Ecosystems

The National Urban Digital Mission has been launched to build the shared digital infrastructure that will strengthen the capacity of the urban ecosystem to solve complex problems at scale and speed. It is built as a public good and provides the ecosystem with foundational digital building blocks, ready-to-use platforms, standards, specifications, and frameworks to enhance the ease of living in our cities and towns.

Urban Reforms, Beyond Infrastructure

AMRUT is a catalyst for comprehensive urban reform. It has spurred the adoption of energy-efficient LED streetlights and appliances, advanced GIS-based urban planning, and the issuance of municipal bonds for improved governance and financial autonomy. The mission has streamlined construction permits, promoted innovative water conservation technologies, and championed sustainable initiatives like 24x7 water supply,

“Drink from Tap” facilities, sponge city planning, and the creation of Amrit Sarovar and city tanks for water security.

Mainstreaming climate into an urban discourse initiated the world’s first-ever climate-smart city assessment framework to evaluate the preparedness of Indian cities to address the impact of climate change. This exercise covers 126 cities, including 100 smart cities across India. The ClimateSmart Cities Assessment Framework consists of indicators across five categories, namely (i) Urban Planning, Green Cover, and Biodiversity, (ii) Energy and Green Buildings, (iii) Mobility and Air Quality, (iv) Water Management, and (v) Waste Management. The “ClimateSmart Cities Assessment Framework” serves as a tool to assess their present situation and provides a roadmap for cities to adopt and implement relevant climate actions.³¹⁹

These transformative efforts have resulted in over 19 million household water tap connections, 15 million sewer connections, and nearly 10 million LED streetlights installed. AMRUT empowers cities to become self-reliant through financial reforms, efficient tax collection, and a competitive spirit among urban centres, setting a new benchmark for urban development in India.

Key Learnings

Economic Specialisation and Diversification

Cities like Mumbai, Bengaluru, Chennai, and Kolkata are carving out niches in finance, technology, manufacturing, and cultural industries. With its central bank and stock exchange, Mumbai solidifies its position as the financial capital, while Bengaluru’s emphasis on information technology has earned it the moniker “Silicon Valley of India.” This specialisation attracts

³¹⁹ ClimateSmart cities assessment framework 3.0. NIUA.

targeted investment and talent, creating globally competitive ecosystems. Encouraging other cities to develop their unique specialisations would further diversify the national economy, mitigating over-reliance on a few urban centres.

Infrastructure as a Growth Catalyst

High-quality infrastructure is paramount for city-states' success. India's Smart Cities Mission, aiming to develop 100 such cities, is a significant stride towards this goal. Improved transportation, robust IT connectivity, and reliable utilities foster self-sufficiency, boost trade and commerce, and bridge the urban-rural divide. Cities with sustainable infrastructure contribute substantially to GDP and become magnets for investors.

Governance and Regulatory Reforms

Efficient governance enables city-states to navigate economic challenges adeptly. Empowering India's urban local bodies with greater autonomy can lead to more responsive governance. Fiscal decentralisation and regulatory reforms would grant cities more control over their finances and regulatory environments, attracting domestic and foreign investment. Cities could then tailor education systems to local industry needs, enact business-friendly labour laws, and implement policies fostering economic growth.

Innovation and Entrepreneurship

Emulating prosperous city-states like Singapore, Indian cities can cultivate innovation ecosystems by fostering collaboration between universities, businesses, and industries. Innovation hubs and incubators attract talent and spur the development of

cutting-edge technologies and companies, vital for economic diversification and job creation. Nurturing a culture of entrepreneurship can transform traditional industries into modern, innovation-driven enterprises.

International Relations and Trade

City-states have flourished historically through international trade. Indian cities can amplify their global economic presence by strengthening trade relations and participating in international forums. Establishing sister-city partnerships with foreign counterparts can further enrich cultural exchange, trade ties, and economic cooperation.

Sustainable Urban Development

Sustainability is essential for modern city-states. This encompasses environmental sustainability, social inclusivity, and economic viability. Planning cities with ample green spaces, energy-efficient buildings, and effective waste management systems enhances the quality of life and attracts businesses seeking sustainable environments.

In conclusion, empowering Indian cities to function as economically autonomous city-states presents a transformative opportunity for the nation's economy. This strategic approach aligns with global trends and establishes India as a sustainable and inclusive urban development leader.

Way Forward

My extensive experience in urban governance has underscored the pivotal role of urban planning in creating high-quality living environments that unlock citizens' full potential.

Recognising this, the central government has prioritised urban planning through initiatives like the High-Level Committee (HLC) on Urban Planning. The HLC's "Pathways to Amrit Kaal" report outlines a vision.

Urban Planning will determine the fate of our cities in Amrit Kaal and it is only well-planned cities that will determine the fate of India.
Prime Minister Narendra Modi

I am emphasising local and regional plans and the development of a skilled workforce for sustainable urban planning in existing and new cities.³²⁰

In Uttar Pradesh, we have embraced this vision, prioritising GIS-based master plans and implementing innovative urban planning concepts to enhance the quality of life for our residents. Our focus on regional planning, encompassing larger areas, aims to foster planned development and accelerate economic growth. The Fifteenth Finance Commission's allocation of substantial funds for developing eight new cities through a national challenge further underscores this commitment. In this spirit, we have envisioned a sustainable, water-secure, smart, and spiritually significant city in New Ayodhya, strategically located near the international airport. This city is participating in the national challenge for securing 10 billion from the 15th Finance Commission Fund.

The ambitious goal of achieving a US\$35 trillion GDP by 2047, outlined in the Viksit Bharat Sankalp Yatra, necessitates a parallel transformation of our urban landscapes. With the urban population projected to reach over 50% by then and the number of cities with over one million inhabitants expected to more than triple, we must invest an estimated US\$5 trillion in urban spaces. This demands robust municipal governance, innovative financing mechanisms, and significant public-private partnerships to create cleaner, greener urban environments, continued investment in urban infrastructure, advocacy for

³²⁰ HLC final first report 2023. MoHUA.

citizen participation, and the promotion of sustainable urban development practices.

The key to this transformation lies in empowering urban local bodies with greater financial autonomy, leveraging technology for efficient tax collection, and institutionalising citizen feedback mechanisms. The learnings from the Smart Cities Mission must be scaled up to create a nationwide movement for innovative and sustainable urban development. We must address the critical issue of slums through redevelopment and the creation of affordable housing ecosystems.

Furthermore, climate-resilient planning and green-field development funds are essential to mitigate the challenges of urban heatwaves and flooding. The past decade's tremendous progress has been to integrate, incentivise, and introduce reforms aligning with infrastructure development to transform the urban ecosystem, laying a solid foundation for India's urban future. India's urban evolution is emerging as influential economic powerhouses, increasingly resembling self-reliant city-states. This model presents a compelling opportunity, and strategically empowering these urban centres could significantly boost national economic growth. By sustaining this momentum and addressing these challenges, we can create thriving, sustainable, clean, green, beautiful, and inclusive cities that drive economic growth and innovation and ultimately contribute to the realisation of Viksit Bharat@2047.

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Chapter 14. Rural Development: The Village in Focus

Dr. Jugal Mohapatra

Introduction: Evolution of the Rural Development Programmes in India

Since the beginning of planned economic development, India has pursued a strategy that promotes equitable growth and social inclusion. During the 1950s and 1960s, the main objective of the strategy of the five-year plans (FYPs)—what is commonly referred to as the “Mahalanobis model”—was to build a diversified industrial economy for “self-sufficiency” and to provide opportunities for the underemployed and surplus labour in the rural agricultural sector, as envisaged in the “dual economy” model of Arthur Lewis. At the same time, the planners also sought to follow Gandhian ideals of village development through programmes designed to revitalise the rural agrarian economy

*My ideal village still exists only in my imagination. After all every human being lives in the world of his own imagination. In this village of my dreams the villager will not be dull – he will be all awareness. He will not live like an animal in filth and darkness. Men and women will live in freedom, prepared to face the whole world. There will be no plague, no cholera and no smallpox. Nobody will be allowed to be idle or to wallow in luxury. Everyone will have to do body labour. Granting all this, I can still envisage a number of things that will have to be organized on a large scale. Perhaps there will even be railways and also post and telegraph offices. I do not know what things there will be or will not be. Nor am I bothered about it. If I can make sure of the essential thing, other things will follow in due course. But if I give up the essential thing, I give up everything.*³²¹

A community development programme was launched to help the rural poor through participatory planning, the establishment and fortification of village institutions, and the provision of extension services. Efforts were also made to institutionalise the three-tier Panchayati Raj Institutions (PRIs), albeit with varying degrees of success across different states. As India faced a severe food crisis in the mid-1960s, the focus shifted towards initiating the “green revolution” through technology transfer and the introduction of high-yielding crop varieties. This required the establishment of a dedicated apparatus of agricultural extension service and a network of cooperative institutions to provide farmers with credit and other essential inputs. However, this strategy to achieve food self-sufficiency was primarily limited to areas with assured irrigation in the northern and southern parts of the country. These areas did experience a structural shift in agricultural growth and productivity. Yet, as expected, the benefits of this agricultural transformation did not reach the rest of the country. Thus, after nearly two decades of planning, it was

³²¹ Letter to Jawaharlal Nehru, October 5, 1945; 81:320, extracted from Gandhiji on Villages: Mani Bhava Gadnhi Sangrahalaya, Mumbai, First Edition, 2002.

realised in the early 1970s that the modest growth rate achieved during that period did not have strong “trickle-down effects.” Consequently, around 55% of the population was estimated to be “poor” as per official estimates (Lakdawala poverty estimates) in 1973–1974. More worryingly, the incidence of poverty was found to be severe in most states, even in some of the more prosperous southern and western regions such as Maharashtra, Gujarat, Kerala, and Karnataka. Moreover, the benefits of growth did not appear to have been evenly distributed among different social groups.

The regional and social aspects of poverty triggered what has been termed a “direct attack on poverty,” and a series of schemes aimed at rapidly alleviating rural poverty were launched to provide employment and livelihood support to households “below the poverty line” (BPL), both through wage employment and self-employment. As a result, the Integrated Rural Development Programme (IRDP) was launched in 1978 as a livelihood-based intervention for profitable self-employment, and the National Rural Employment Programme (NREP) was initiated in 1980 to provide supplemental wage employment to unskilled rural households, primarily small and marginal farmers and agricultural labourers, during the lean season in public works such as village road construction, school building, afforestation, water body construction/renovation, and irrigation works. Subsequently, in 1985, a rural housing scheme, Indira Awas Yojana (IAY), was also introduced (initially as a sub-scheme of Jawahar Rojgar Yojana (JRY), and later as a separate scheme in 1996) to benefit a large section of rural households without safe shelter.

Following the extensive economic liberalisation in 1991, the Government of India (GoI) recognised the need to strengthen social protection to mitigate the adverse impact of the general squeeze on public spending on the poor. Accordingly, the National Social Assistance Programme (NSAP) was initiated in 1995 as a fully funded, centrally sponsored scheme with three components: a pension scheme for destitute senior citizens, an

insurance scheme to benefit a poor family in the event of the death of the primary breadwinner, and a maternity benefit scheme. Throughout the 1980s and 1990s, the portfolio of rural development (RD) schemes was periodically redesigned in terms of scale and scope, with some operational innovations. However, the fundamental approach of assisting the rural poor through wage employment in public works and self-employment by providing subsidised credit and capacity development support characterised the poverty alleviation strategy during this period. At the turn of the century, for the first time, a major rural infrastructure scheme—Pradhan Mantri Gram Sadak Yojana (PMGSY)—was launched to provide all-weather connectivity to unconnected rural habitations above a specified population threshold. This was in recognition of a widely accepted but previously unaddressed gap in the prevailing strategy that the lack of physical connectivity is one of the primary structural causes of rural poverty. The enactment of the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) in 2005 marked another paradigm shift in the rural development strategy as it signalled the endorsement of a “rights-based approach.” The subsequent enactment of the Right to Education Act and the National Food Security Act, following the same approach, further expanded the envelope of legal entitlements for deprived rural households. Thus, both in the pre- and post-liberalisation era, the State has proactively intervened in the sphere of rural development, though the nature of its intervention has varied over time in terms of focus and design.

Although the outlay on RD schemes has increased over the years, a persistent criticism of these schemes has been the alleged scale of “leakages” and the consequent misallocation of public funds. This scepticism persisted ever since a former prime minister conjectured in a public forum that out of every rupee spent on anti-poverty programmes, only 15 paise actually reaches the targeted beneficiaries. However, in recent years, significant efforts have been made to reengineer and streamline the implementation of major RD schemes to improve their

delivery efficiency. The primary motivation of this paper is to analyse and appraise some of the more recent government interventions to transform the rural economy and alleviate rural poverty, in particular, to assess whether these programmes have had a substantive impact in terms of their desired outcomes. The remainder of this paper is organised as follows: the section “Overview of the Changing Landscape of Rural India” provides a broad overview of the changing demographic and economic landscape of rural India. Trends in rural poverty at the macro level from 1951 to 2021 have been discussed in the section “Trends in Rural Poverty (1951–2020).” In the section “How Much Does the Central Government Spend on Rural Development?”, an attempt has been made to present an estimate of the central government’s budgetary expenditure on major rural development programmes over the preceding 10 years. The section “Efficiency and Equity of Rural Development Programmes” contains the case study of a flagship rural development programme launched in 2016, which is widely acknowledged to have contributed significantly towards accelerated reduction in multidimensional poverty in the rural areas during recent years. The last section “Some Concluding Observations and the Way Forward” contains some concluding observations.

Overview of the Changing Landscape of Rural India

Rural Demography

According to the first census conducted after independence, nearly 30 crore people, constituting 82.7% of the total population, lived in rural areas in 1951. The share of the rural population steadily declined to 68.8% in 2011, as shown in Table 1.

Table 1: Rural Population (in Million) 1951–2011

<i>Census</i>	<i>Rural population</i>	<i>Total population</i>	<i>Rural population (% share)</i>
1951	299	361	82.7
1961	360	439	82
1971	439	548	80.1
1981	524	683	76.7
1991	629	846	74.3
2001	743	1029	72.2
2011	833	1210	68.8

Source: Census documents.

Table 1 also shows that while the total population has increased 3.35 times during 1951–2011, the rural population has grown at a slower pace, by 2.78 times only, suggesting a relatively slower pace of growth of the rural population.

Education and Health

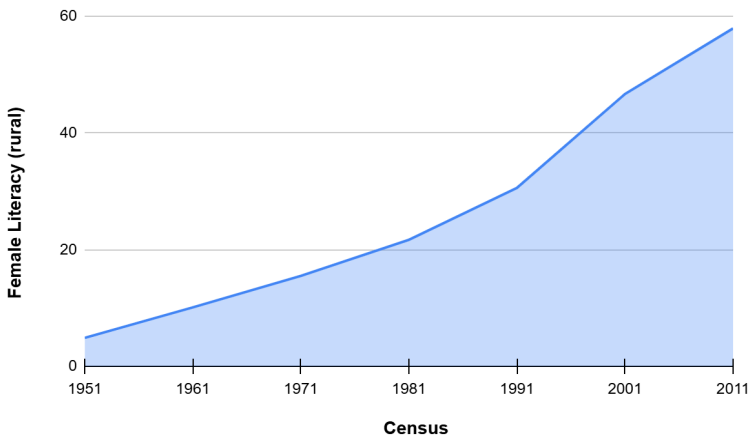
The literacy rate in rural India was barely in double digits in 1951, almost one-third of the urban literacy rate, as shown in Table 2.

The gap in rural–urban literacy widened from 1951 to 1981. During the subsequent three decades, the gap has consistently narrowed, though it still remains significant. Though growth in rural literacy during the six decades has been impressively more than two times higher than urban literacy, concerningly, almost a third of the rural population remained illiterate at the time of the 2011 Census. More worrisome is the gender disparity in rural literacy (Figure 1), as nearly 40% of the female population was illiterate according to the 2011 Census, whereas the corresponding percentage for the urban areas was only 20%. However, on a positive note, the growth of female literacy in rural areas seems to have accelerated from 1991 onwards.

Table 2: Literacy Rate: Rural–Urban Disparity

<i>Census</i>	<i>Literacy rate (rural)</i>	<i>Literacy rate (urban)</i>	<i>Rural–urban gap</i>
1951	12.1	34.6	–22.5
1961	19.1	47	–27.9
1971	23.7	52.4	–28.7
1981	36.1	67.3	–31.2
1991	44.7	73.1	–28.4
2001	58.7	79.9	–21.2
2011	68.9	85	–16.1

Source: Census documents.

Figure 1: Female Literacy in Rural India (1951–2011)

As regards health indicators, the rural–urban gap has shown a consistently declining trend during 1971–2010, noticeably from 1991 onwards (Table 3).

Table 3: Vital Health Indicators: Rural–Urban Gap (1971–2011)

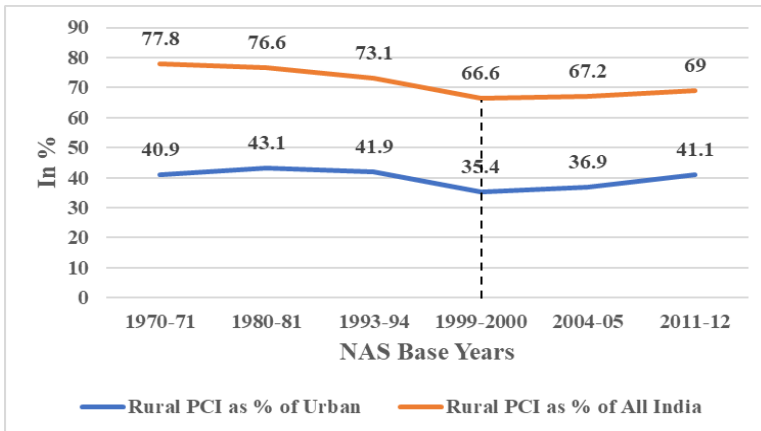
<i>Census</i>	<i>Crude birth rate</i>	<i>Crude death rate</i>	<i>Infant mortality rate</i>	<i>Total fertility rate</i>
1971	8.8	6.7	56	1.3
1981	8.6	5.9	57	1.5
1991	–3.4	3.5	34	1.2
2001	6.8	2.8	30	1.1
2011	5.7	1.9	19	0.8

To sum up, rural India has witnessed fairly significant progress in terms of the social dimensions of development.

Rural Income

According to a press release by the Ministry of Statistics and Programme Implementation (MoSPI), posted on April 3, 2023, the Government of India (GoI) compiles estimates of rural and urban income only in the base years of the Gross Domestic Product (GDP) series, and these estimates for other years are not available. Rural per capita income (PCI) as a percentage of the urban PCI, as well as all India PCI for the base years of the GDP series (National Accounts Statistics [NAS] base years), based on the official estimates, is shown in Figure 2.

Figure 2: Rural Per Capita Income (PCI) as a Percentage of Urban and All India PCI



Source: National Accounts Statistics (1999, 2006, 2009, and 2016).

Rural PCI as a percentage of the economy-wide Net Domestic Product (NDP) declined steadily until 1999–2000, from 77.8% to 66.6%. It has marginally recovered since then to 69% in 2011–2012. The trend in rural–urban PCI is somewhat mixed—it increased during 1970–1994, sharply declined by more than 6 percentage points over the next 5 years, and has increased by a similar magnitude during the succeeding 10 years.

Structural Changes in the Rural Economy

The structure of the rural economy of India has witnessed a significant shift, as reflected in the sectoral composition of its NDP shown in Table 4.

The rural economy has been considerably diversified over the four decades since 1970–1971, with a sharp decline in the share of the agriculture sector in the NDP from 72.4% to 39% in 2011–12. Simultaneously, the share of the industrial sector has increased by more than threefold, from 10.6% to 32.2% during this period. A noteworthy feature of the structural

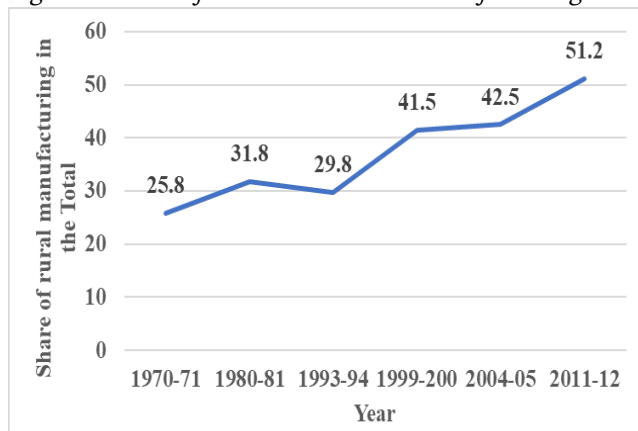
transformation of the rural economy is its emergence as a manufacturing hub, contrary to the popular perception that rural India is primarily agrarian.

Table 4: Sectoral Composition of NDP of Rural India

Year	Agriculture	Industry	Services
1970–71	72.4	10.6	17.1
1980–81	64.4	15	20.6
1993–94	56.1	16	27.9
1999–2000	51.8	19.9	28.3
2004–05	38.3	24.1	37.5
2011–12	39	32.2	28.8

Source: National Accounts Statistics (NAS).

Figure 3: Share of the Rural Area in Manufacturing NDP



Source: National Accounts Statistics (NAS).

In 1970–1971, the share of rural areas in manufacturing NDP was barely a quarter. It constituted more than half of the total manufacturing NDP in 2011–2012, with the sharpest increase observed between 1993–1994 and 1999–2000.

Trends in Rural Poverty (1951–2020)

The genesis of poverty estimation in India goes back to the Working Group set up by the erstwhile Planning Commission in 1962 to recommend a normative minimum level of living for the population. The Working Group had recommended a minimum per capita expenditure of ₹20 and ₹25 per month, respectively, for the rural and urban areas and ₹25 at 1960–1961 prices, excluding public expenditure on health and education. This “poverty line” was extensively used throughout the 1960s and 1970s to estimate the incidence of poverty at the national and state level. However, no official estimate of poverty in India was made available until a Task Force constituted by the Planning Commission in 1977 submitted its report in 1979. The Task Force redefined the “poverty line” in terms of per capita consumption expenditure required for a calorie intake of 2,400 kilocalories (kcal) per day in the rural areas and 2,100 kcal in the urban areas with minimum non-food expenditure. Using these norms, the poverty line for the rural and urban areas was worked out at ₹49.09 and ₹56.64 per capita per month, respectively, for 1973–1974. Accordingly, the first set of official poverty estimates was made available for 1973–1974. Broadly, this methodology was used for official poverty estimation until 2004–2005.³²² Subsequently, based on the report of an Expert Group constituted under the chairmanship of Prof. Suresh Tendulkar, official poverty estimates were made available by the Planning Commission for 2004–2005 and 2011–2012 (though a comparable estimate was also worked out for 1993–1994). The official estimates of rural poverty for the period 1973–1974 to 2011–2012 are shown in Table 5.³²³

³²² The methodology of the Task Force was further refined and improvised by another Expert Group headed by Prof. Lakdawala in 1993 to derive state-specific poverty lines.

³²³ No official estimate of poverty is currently available after 2011–2012.

Table 5: Incidence of Rural Poverty in India (1973–1974 to 2011–2012)

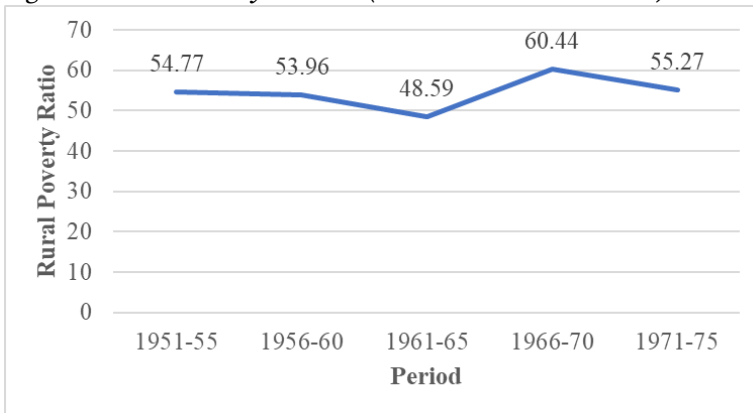
<i>Year</i>	<i>Rural poverty ratio</i>	<i>Rural poor as % of total poor</i>
1973–74	56.4	81.3
1977–78	53.1	80.4
1983	45.6	78
1987–88	39.1	75.5
1993–94	37.3	76.2
1999–2000	27.1	74.3
2004–05*	28.3	73.2
2004–05#	21.8	71.4
<i>Tendulkar methodology</i>		
1993–94	50.1	81.5
2004–05	41.8	80.2
2011–12	25.7	80.4

Notes. *Comparable with 1993–1994 estimates; #Comparable with 1999–2000 estimates.

Source: (Erstwhile) Planning Commission.

As mentioned above, no official estimates of poverty are available for the period prior to 1973–1974. However, Datt (1997) provides a comparable time series of rural poverty estimates for the prior period using the poverty line originally defined by the 1979 Task Force and National Sample Survey (NSS) data on consumer expenditure surveys (3rd to 28th NSS rounds). These estimates for the period 1951–1975 are shown in Figure 4.

Figure 4: Rural Poverty in India (1951–1955 to 1971–1975)



Source: Datt (1997).

From Datt's time series of rural poverty (1951–1955 to 1971–1975) and official estimates for the subsequent period (1973–1974 to 2004–2005), it is evident that throughout the 1950s and 1960s poverty in the rural areas fluctuated in the band of 50–60%. Only from the mid-1970s onwards it fell below the level observed in 1951–1955. It has steadily declined thereafter, though the rate of change varied during different sub-periods. Does this comparable time series of rural poverty from 1951 to 2005 provide robust evidence of the “trickle-down effects” of growth? Or does the observed decline from the mid-1970s onwards reflect the impact of the targeted poverty reduction programmes and redistributive policies?

Decomposition of the effects of growth and redistribution is complex and tricky, even for highly trained and accomplished empirical economists. Unsurprisingly, therefore, there is a lack of consensus on this contentious issue with regard to the observed decline in rural poverty from the mid-1980s onwards. However, the data presented above unequivocally shows that a declining trend in rural poverty was observed from the late 1970s and 1980s. This coincides with the launching of a number of poverty amelioration and pro-poor redistributive programmes by the Government of India. Commenting on this debate, Datt (1998)

has concluded that “favourable redistribution made an important contribution to the decline in the depth and severity of poverty.”

Basu and Mallick (2008) have made an important contribution to the growth versus redistribution debate in relation to the trickle-down effects of growth on rural poverty over the period 1951–1991. Using rigorous econometric analysis, they did not find significant evidence of the trickle-down effects of growth on the rural poverty decline during this period. Rather, they concluded that “the incidence of poverty (rural) that had been declining from the late 1970s and throughout the 1980s must have been the result of the government’s anti-poverty measures.”

Basu and Mallick (2008) also explain why the trickle-down effect did not take place in the Indian context. Analysing the agricultural growth process in rural India in the post-Green Revolution period, they point out that the capital investment that catalysed agricultural growth in that era was largely labour-displacing in nature, accompanied by large-scale mechanisation. Though this strategy of growth was “scale neutral,” it was not “resource neutral.” Consequently, the benefits of this growth accrued mostly to the large and middle-class farmers, leaving out the majority of small and marginal farmers, as well as agricultural labourers.

From the above discussion, it is evident that a high rate of growth by itself might not catalyse faster poverty reduction. The “redistribution bias” of the growth process also complements the impact of the rate of growth in this regard. If the increased incomes resulting from higher growth accrue largely to the groups that are already above the threshold of poverty, its poverty-reducing effects might get substantially neutralised. Thus, for economic growth to make a significant dent in poverty, it has to be “labour-inclusive” in nature.

As regards the post-2011–2012 period, though we do not have official poverty estimates,³²⁴ NITI Aayog has released estimates of rural poverty (headcount ratios) for 2015–2016 and 2019–2021 using the United Nations Development Programme (UNDP)'s multidimensional poverty (MPI) measurement methodology³²⁵ and National Family Health Survey (NFHS) datasets (NFHS-4 and NFHS-5). According to these estimates, rural multidimensional poverty (head count ratio) in India has declined from 32.59% to 19.28% during this period. Based on the projected rural population for 2021, about 120 million people in the rural areas escaped multidimensional poverty between 2015–2016 and 2019–2021.

A recent discussion paper of NITI Aayog has attributed this acceleration in the momentum of poverty eradication to several targeted interventions, such as the provision of subsidised food grains to 75% of the population in rural areas under the National Food Security Act (NFSA), free hot cooked meals to the children in pre-school and elementary school (Classes I to VIII) under the Pradhan Mantri Poshan Shakti Nirman (PM POSHAN) programme, provision of clean cooking fuel to 31 crore individuals under the Ujjwala Yojana, 100% access to electricity under Saubhagya, provision of 14 crore tap water connections under the Jal Jeevan Mission (JJM), and construction of 11.33 crore household latrines in rural areas under the Swachh Bharat

³²⁴ Official estimates of poverty in India are based on periodic Household Consumer Expenditure Surveys (HCES) by the National Sample Survey Organisation (NSSO). The latest report of HCES relating to the year 2022–2023 (NSS report no. 591) has recently been released in June 2024 by the MoSPI. However, the empowered agencies, officially authorised to update or redefine the “poverty line,” have not yet come out with the latest official estimates of rural poverty using the above HCES report. Thus, as of now, no official estimate of rural poverty is available after 2011–2012.

³²⁵ These estimates are officially endorsed by the UNDP and the Oxford Poverty and Human Development Initiative (OPHI) which had conceptualised and developed the MPI methodology. However, it may be noted that while the Global MPI uses 10 indicators (2 for Health, 2 for Education and 6 for Standard of Living), NITI Aayog uses 2 additional indicators for India's National MPI (“Maternal health” for Health and “Bank Account” for Living Standards).

Mission (SBM). School education of children, particularly of girls, has been given a big push under the programmes of universalisation of elementary education, and higher enrolment in secondary education (Samagra Shiksha Abhiyan, SSA) has substantially boosted the proportion of children with at least 10 years of schooling. Fifty crore new bank accounts have been opened under the financial inclusion campaign launched under the banner of the Pradhan Mantri Jan Dhan Yojana (PMJDY) in recent years. For providing structurally safe houses to the rural poor, 25.3 million houses have been sanctioned during 2017–2018 and 2023–2024 under the Pradhan Mantri Awas Yojana–Gramin (PMAY-G), of which 22 million have already been built. As a cumulative result of all these targeted interventions, undertaken at scale on a saturation mode, massive improvement has been accomplished in respect of most of the key socio-economic indicators of rural development, which are constituents of MPI, between 2015–2016 and 2019–2021, as brought out in the reports of NFHS-4 and NFHS-5. For example, antenatal visits by mothers increased by 21%, women with at least 10 years of schooling rose by 23.44%, women with bank accounts increased by 60%, households using toilets increased by 76.84%, and households using clean cooking fuel increased by 80%. Unsurprisingly, improvements accomplished in these dimensions have been reflected in the significant reduction of multidimensional poverty in rural areas over the period 2015–2016 and 2019–2021. Since all these key indicators are also major constituents of MPI, improvements accomplished on these dimensions have been reflected in the significant reduction of multidimensional poverty in rural areas over the period 2015–2016 and 2019–2021.

It may be mentioned in this context that the Ministry of Statistics and Programme Implementation (MoSPI) has released the report of Household Consumer Expenditure Survey (HCES) 2022–2023 in June 2024. According to this report, the average monthly per capita consumption expenditure (MPCE) is estimated to be ₹3,773 in rural India in 2022–2023 as compared to ₹1,430 in 2011–2012. Although the official estimates of poverty

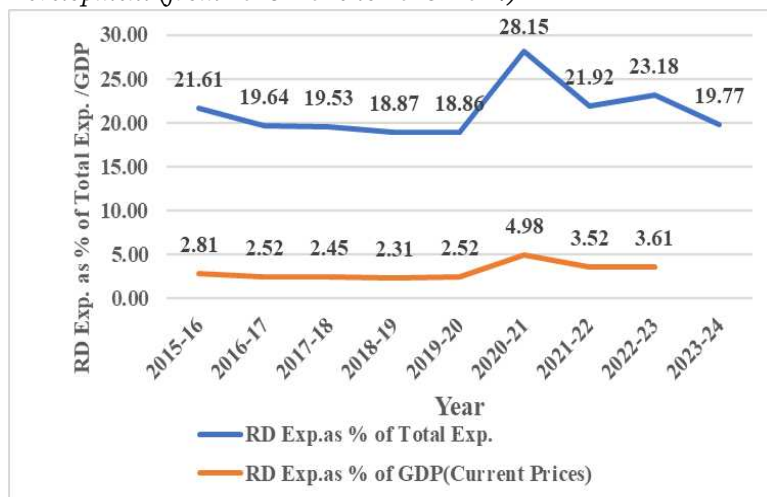
based on this report of MoSPI are still awaited, the Economic Research Department of the State Bank of India (SBI) has published (February 27, 2024) estimates of rural and urban poverty based on data disclosed in the above-mentioned fact sheet. This SBI research report has estimated that rural poverty in 2022–2023 has declined to 7.2% from 25.7% in 2011–2012. However, some economists have raised methodological issues relating to the comparability of HCES 2022–2023 with HCES 2011–2012. As such, we have to wait for the official estimate of rural poverty in 2022–2023 based on the full report of the latest HCES.

How Much Does the Central Government Spend on Rural Development?

Discussion in the preceding section suggests that the government's rural development programmes have significantly contributed to the sizeable decline in rural poverty from the 1970s onwards. In this context, we need to analyse the share of spending on rural development in the aggregate budgetary expenditure of the central government, since most of the flagship interventions for rural development are under central sector and centrally sponsored schemes. For this purpose, it is necessary to look at not just the budgetary spending of the Ministry of Rural Development (MoRD), but also the budget of all other Ministries/Departments which have sizeable allocations for the rural areas. Other than the MoRD, the budget of eight other departments is fully committed to the development of rural areas. The central sector scheme of fertiliser subsidy is also entirely committed to rural India. In addition, there are some large pan-Indian programmes, such as SSA, the Mid-Day Meal Scheme, the National Health Mission (NHM), and the Integrated Child Development Scheme (ICDS), which also have an urban component. In these cases, we need to segregate the rural component of the programme expenditures. Aggregate

expenditures of these departments and programmes provide a rough, if not exact, estimate of the share of the central government's budget on rural development. The profile of GoI's budgetary spending for the development of rural areas over the past 9 years, worked out on this basis, both as a share of total expenditure and GDP, is shown in Table 5.

Figure 5: Central Government's Budgetary Expenditure on Rural Development (from 2015–2016 to 2023–2024)



Note. The numbers for 2023–2024 are based on revised estimates, other numbers are based on actuals.

Source: GoI budget documents (for budgetary expenditures) and NAS (for GDP).

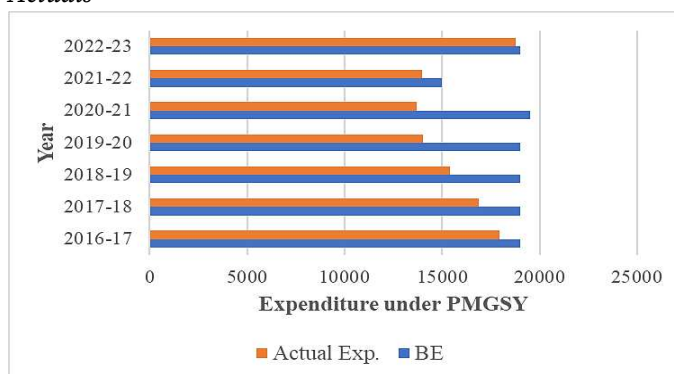
Average spending on rural development during 2015–2016 to 2023–2024 was around 21% of the total budgeted expenditure of the central government and around 3.1% of the GDP. There is, however, a significant hike in the post-Covid-19 pandemic period (2020–2021 to 2023–2024) as compared to the pre-pandemic period (2015–2016 to 2019–2020). During the pre-pandemic years, average expenditure on RD programmes was 19.70% of total expenditure and 2.52% of GDP, which rose in the post-pandemic

period to 23.26% of the total expenditure and 3.78% of GDP. Unsurprisingly, it peaked in the first year of the Covid-19 pandemic (2020–2021) at 28.15% of the total GoI spending and nearly 5% of GDP. With the rising aspirations of rural households for better infrastructure and higher standards of living, the post-pandemic levels of spending on rural development are likely to be maintained or even enhanced over the next decade.

Though adequate budgetary allocation is a necessary condition for the accelerated development of the villages, larger public spending alone cannot be relied upon to achieve the desired programme outcomes. The quality and efficiency of programme expenditure are also critical determinants of the actual outcomes. Many empirical studies in recent years suggest that the estimated “leakage” in some of the flagship rural development programmes, such as MGNREGA and PDS, is as high as 20–30% (Muralidharan et al., 2016, 2024). In this connection, underinvestment in building the “state capacity” has also been flagged as a critical and binding constraint. In fact, Muralidharan (2024) has forcefully argued: “investment in better governance can be *over ten times* more cost effective than increasing spending in government as usual.”

Constrained state capacity is often manifested even in the recurring underutilisation of budgetary allocation of major RD programmes. For instance, in a flagship rural infrastructure programme like PMGSY, the budget allocation (BE) has not been fully spent in any single year from 2016–2017 to 2022–2023, as shown in Figure 6.

Figure 6: Expenditure Under PMGSY: Budget Estimates Versus Actuals



Source: GoI budget documents.

In this perspective, therefore, it would be useful to analyse in some detail a couple of flagship RD programmes, especially specific interventions that might have been made to enhance their delivery efficiency.

Efficiency and Equity of Rural Development Programmes

The sheer number of rural development and welfare schemes, both by the central government and state government, of varying size in terms of financial allocation, geographical coverage, and diversity of scope, makes the task of concurrent, or even periodic, impact evaluation fairly challenging. The central government's budget documents alone provide a list of 740 central sector schemes and more than 65 centrally sponsored schemes. Some of the centrally sponsored schemes such as MGNREGA, PM KISAN, NRLM, PMAY-G, PMGSY, fertiliser subsidy, and PDS (Public Distribution System) with sizeable budget allocations, which are generally referred to as the "flagship schemes," have been extensively studied and evaluated by independent academic and public policy experts, even by

multilateral development institutions. In particular, there is a rich body of empirical literature on MGNREGA. In contrast, some of the newer schemes launched during the last 10 years have not possibly been studied adequately using cross-country evidence already available with the required academic rigour. It is for this reason we have primarily chosen to analyse the programme efficacy and delivery efficiency of one recent scheme—namely, Pradhan Mantri Ujjwala Yojana (PMUY)—as a detailed case study.

There are also some additional persuasive motivations underlying the choice of this scheme. First, Bhругuwar (2023) has meticulously explored 27 selected factors with high potential to significantly impact rural development using multivariate analysis and found that six factors, including household access to LPG for cooking, have maximum impact. Second, this indicator also has a significant contribution to the multidimensional poverty index (MPI score).³²⁶ Third, Muralidharan (2024) has provided a simple, yet powerful 2×2 framework (which he has actually referred to as the foundational framework of his book) to analyse the quality of welfare and development spending. The framework evaluates both the efficiency and equity dimensions of the development interventions. The optimal interventions are those which improve both equity and efficiency. Conceptually, PMUY has the potential to produce a positive impact on both dimensions.

Pradhan Mantri Ujjwala Yojana (PMUY): A Case Study

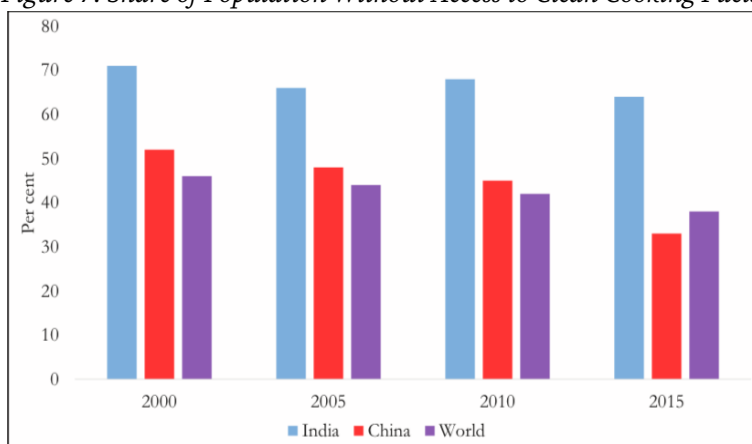
Universal access to clean fuels for cooking by 2030 is one of the sustainable development goals (SDGs), subsumed in SDG 7.1. Achievement of this goal is critical to improving the health and well-being of millions of poor women living in less developed

³²⁶ Among all the seven standards of living indicators used for the computation of the National MPI score for 2019–2021 in the NITI Aayog report, cooking fuel had the highest contribution of 8.82%.

regions. According to an estimate, nearly 4.3 million people lose their lives worldwide owing to indoor air pollution caused by the burning of unhygienic solid fuels for cooking (Watts et al., 2017). Apart from the catastrophic health effects, even the burden of collecting unclean fuels for cooking meals to feed their families entirely falls on women. An estimate cited in the *Economic survey 2017–2018* (Volume 2, Chapter 5) states that women in India spend, on an average, 374 hours in a year just for collection of firewood.

Progress achieved in India with respect to the provision of access to clean cooking fuels until 2015 was unflattering compared to the rest of the world, as shown in Figure 7.

Figure 7: Share of Population Without Access to Clean Cooking Fuels



Source: Economic survey 2017–2018, Volume 2, Chapter 5.

At the beginning of the new millennium, 70% of the population lacked access to clean cooking options, compared to 50% in China and the global average of around 45%. Over the next 15 years, this figure marginally declined to 64% in India. However, China managed to reduce this critical deprivation to 33%. Thus, in a “business as usual scenario,” India would have certainly struggled to meet this SDG commitment by the specified timeline. This possibly was the motivation for the launch of the

“Pradhan Mantri Ujjwala Yojana” (PMUY) in May 2016 to fast-track the removal of this deprivation by providing LPG connections to 80 million “below the poverty line” (BPL) households by 2020 on a “mission mode.”

This new scheme embodied a couple of interesting features in its implementation design which are worth noting. First, it took serious note of large targeting errors (both Type I and Type II errors) which were invariably identified as a major source of leakages in many of the targeted flagship RD schemes, such as the erstwhile Indira Awas Yojana (IAY) and the pre-NFSA PDS. To address this source of leakage, the scheme mandated that the BPL households eligible for this scheme would be identified using the database of the Socio Economic and Caste Census (SECC) 2011. According to a field survey conducted by MicroSave in January 2018 in 25 districts of Uttar Pradesh, Madhya Pradesh, and Chhattisgarh, the methodology used for targeting under PMUY was “laser precise,” and the benefits reached the neediest segments, with almost 90% of the beneficiaries living in *kutcha* houses and around 86% of the surveyed households either being daily wage workers or depending on agriculture and seasonal income (Giri & Aadil, 2018).

The second noteworthy feature of PMUY relates to its somewhat innovative method of financing. The scheme envisaged the provision of ₹1,600 to each of the eligible beneficiaries as a one-time grant to cover the security deposit for the LPG cylinder, pressure regulator, and installation charges. The oil marketing companies (OMCs), who were the implementing agencies, were advised to offer a loan of around ₹1,500 to the beneficiaries, as per their option, to cover the residual cost of a cooking stove and the first refill. The EMI (equated monthly instalment) of the loan amount was to be recovered from the future subsidies payable to the beneficiaries on subsequent refills. Thus, the actual one-time subsidy borne by the Government of India (GoI) under the scheme was roughly of the order of 50%. To finance this one-off budgetary commitment, GoI took recourse to a couple of rather unusual initiatives. Over

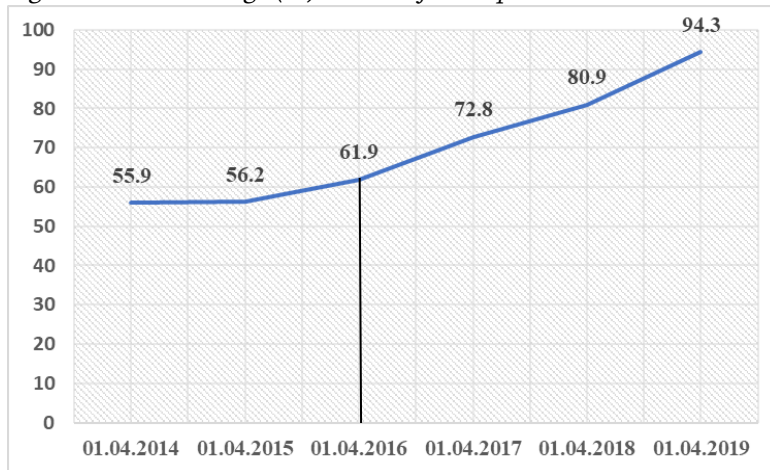
4 years from 2014 to 2018, it launched a “Give-it-Up” campaign which “nudged” more than 10 million economically well-off LPG consumers to voluntarily forgo their fuel subsidy entitlement. GoI also implemented a direct benefit transfer (DBT) in LPG subsidy during this period, which linked the bank accounts of the customers to their Aadhaar numbers, which are unique identification numbers assigned to the citizens. In the process, 38 million “fake” or “ghost” and duplicate LPG connections were reported to have been weeded out. According to a statement made by the then Minister of Petroleum and Natural Gas of the GoI reported in the *Economic Times* on February 8, 2017, the elimination of the ghost/duplicate connections generated savings of ₹21,000 crore of subsidy during 2014–2015 and 2015–2016. Assuming this estimate to be correct, the estimated savings was more than double the amount spent on the first phase of PMUY,³²⁷ which makes it a classic case of redistribution of subsidy from the well-off to provide access to clean cooking fuel to the poor households.

This path-breaking scheme to universalise access to clean cooking fuel has sparked off fairly extensive research interest, particularly among environmental economists and scientists. The Comptroller and Auditor General of India (CAG) has also presented a fairly comprehensive audit report on PMUY in 2019 (report no. 14 of 2019). Most of the studies, including the CAG report, have lauded the “remarkable success” achieved in providing LPG connections to nearly 8 crore poor households over a span of 40 months. According to the CAG report, LPG coverage³²⁸ in India ramped up almost exponentially from 55.9% to 94.3% during FY2014 and FY2018, as shown in Figure 8.

³²⁷ According to the CAG report ₹9,183 crore was spent on PMUY reimbursement to the OMCs as of May 2019.

³²⁸ Defined as the ratio of active domestic customers to the total households estimated based on the growth rate between 2001 and 2011 as per the 2011 Census.

Figure 8: LPG Coverage (%) in India from April 2014 to March 2019



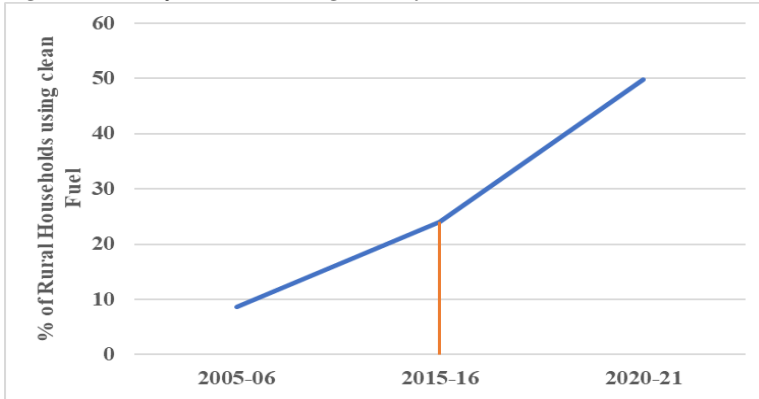
Source: CAG report no.14 of 2019.

Notably, out of the 9.87 crore increase in LPG connections after the launch of PMUY, 7.19 crore new connections (i.e., 73%) were accounted for by PMUY. NFHS-3 (2005–2006), NFHS-4 (2015–2016) and the NSS 78th round multi-indicator survey also substantially validate the big push given by PMUY in accelerating the use of clean cooking fuel by rural households, as shown in Figure 9.

Notwithstanding this well-acknowledged impressive increase in the coverage of the BPL households under the clean fuel scheme, almost every independent study, including the CAG report, has prominently highlighted a fairly low rate of transition of these households from the traditional “unclean fuels” like firewood and cow dung cakes to LPG for cooking, despite being provided with the gas connection. This is evident from the average number of refills by the PMUY consumers during a year which varied between 3 and 4 (14.2 kg cylinder) in comparison with annual refills of 7–8 by the non-PMUY consumers, as depicted in Figure 10. According to the analysis presented in the CAG report, out of 3.18 crore PMUY households who had

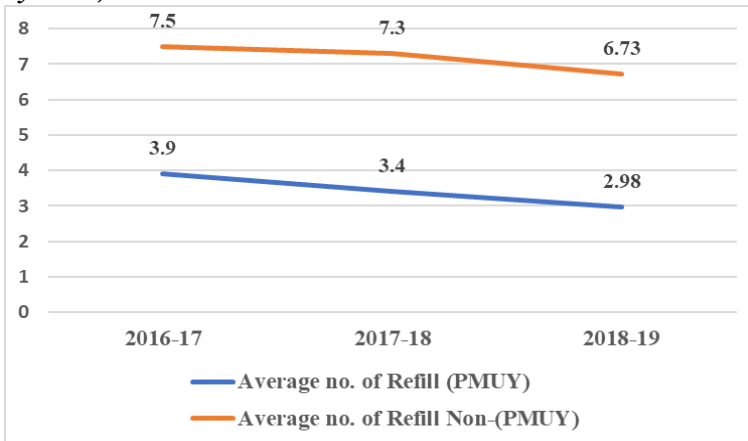
completed a year or more by December 31, 2018, nearly 18% (0.56 crore) failed to come back even for the second refill (the first refill being free and complimentary as per the scheme).

Figure 9: Use of Clean Cooking Fuel by the Rural Households



Source: NFHS-3, NFHS-4, and NSS 78th round survey.

Figure 10: Average Annual Refill Consumption of LPG (14.2 kg Cylinder)



Source: CAG report no.14 of 2019.

Evidence presented by the MicroSave survey referred to earlier shows that 23% of the PMUY beneficiaries surveyed in Madhya Pradesh, Uttar Pradesh and Chhattisgarh did not seek a refill even once, with the highest percentage of defaulters being in Chhattisgarh (40%).

The insufficient impact of the scheme in facilitating the transition of poor households to clean, smoke-free kitchens has also been validated by a structured evaluation study of the PMUY by Ashraf and Tol (2024). Using NFHS datasets and robust econometric methods (propensity score matching and difference-in-difference estimation technique), the study found that the policy intervention produced a fairly modest 2.1 percentage point increase in LPG consumption attributable to PMUY, with a corresponding decrease in the consumption of firewood. The study further revealed that its impact was regionally differentiated, with an increase of 5.6 percentage points in the uptake of LPG due to PMUY in the North Zone and 4.6 and 3.9 percentage points increase in the South Zone and West Zone, respectively. No significant positive impact was found in the relatively poorer regions of the East Zone, Central Zone, and North-Eastern Zone.

The CAG audit exercise carried out a sample survey of 1,662 PMUY beneficiaries to assess the extent of transition to clean cooking fuel as a result of this policy intervention and to identify the critical factors that deterred regular and sustained use of LPG by them. Results of the survey indicated that before PMUY, almost 96.5% of the households covered in the survey were fully dependent on firewood, cow-dung cakes, and even highly polluting low-grade coal. Post-PMUY, 40.33% fully transitioned to LPG, 35.44% “reverted back” to the unclean fuels that they were using before, and 24.13% continued with a mix of LPG and unclean fuels. The survey further highlighted the high cost of refills as the principal constraint underlying the incomplete and inadequate transition to the use of clean cooking fuel by the PMUY beneficiaries.

The MicroSave survey has delved deeper into this issue and further analysed the “barriers to PMUY uptake.” While this survey acknowledges that LPG was indeed the preferred choice of cooking medium by the beneficiaries, the scheme design perhaps did not adequately factor in three key challenges that might hinder regular and sustained use of LPG by them, ensuring a full transition to the “smoke-free kitchens” in the households covered under PMUY.

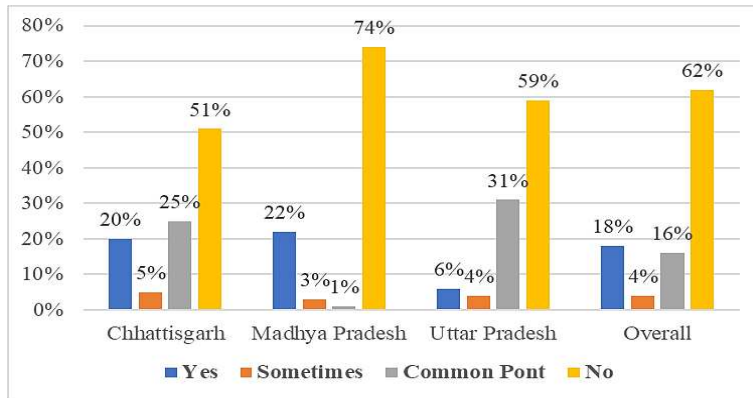
First and foremost is the factor of “affordability.” To obtain a refill from the nearest LPG distributors,³²⁹ the beneficiaries have to invariably forgo wages for a full day (in the absence of any arrangement for ensuring doorstep delivery) besides the transportation costs to and fro. This imposes *additional costs* of at least ₹150–250 on the beneficiaries for obtaining a refill, in addition to the actual refill price of ₹750–850.

Second, under the scheme, the beneficiaries are required to bear the full cost of the refill (around ₹900–1,000, including the opportunity cost of wages foregone and transport costs) upfront, before they can get the subsidy of ₹200 via DBT. Since most of the beneficiaries are largely dependent on seasonal agricultural incomes or irregular daily wage earnings, with average monthly earnings ranging between ₹5,000 and ₹6,000, regularly committing almost 20% of that amount for an LPG cylinder every month is formidably challenging.

Third, even though the LPG distributors were obliged under the “Marketing Discipline Guidelines” to make necessary arrangements for doorstep delivery of the cylinders, this was more observed as an exception rather than as a rule. As the MicroSave survey has brought out, there was no supply constraint at the LPG dealer location as per the response of 96% of the PMUY beneficiaries surveyed. The real constraint was indeed the absence of adequate logistic support for ensuring home delivery. The field situation with regard to home delivery, as captured in the aforesaid survey, is shown in Figure 11.

³²⁹ According to a sample survey of 164 distributors carried out by the CAG audit, their average distance to the villages covered by them was nearly 34 km.

Figure 11: Do LPG Dealers Ensure Home Delivery of Cylinders Under PMUY?



Source: MicroSave survey, August 2018.

Thus, no more than 22% of the beneficiaries admitted to home delivery—18% regularly and 4% sometimes. Had the distributors ramped up this support facility substantially, it would have most probably ensured much higher usage of LPG by the PMUY beneficiaries.

Fourth, as noted in the CAG report, despite the decision of the Ministry of Petroleum and Natural Gas (MoPNG) to promote the use of smaller 5 kg cylinders, in addition to the standard 14.2 kg cylinders, and provide an option to the beneficiaries depending on their household cash-flow situation, OMCs did not really give a big push to this initiative. Had more vigorous attempts been made to ensure higher availability of the smaller cylinders with higher frequency at the doorstep, keeping the overall fuel subsidy element for the beneficiaries intact, possibly the extent of transition to clean cooking fuel would have been substantially higher.

Finally, behaviour change aspects of the intended transition to clean cooking fuel perhaps did not receive the attention they ought to have in the implementation design of PMUY, which is somewhat surprising. In fact, the MicroSave survey observed that many beneficiaries felt that using firewood instead of LPG is

“justified” in view of monetary savings. Some of them also felt that food cooked in traditional mud stoves using firewood “tastes better” as compared to food cooked using an LPG stove. Had a behaviour change campaign, similar in scale and scope to the one mounted during the Swachh Bharat Mission (SBM), been undertaken, possibly the scheme would have accomplished much more impactful outcomes.

The Election Manifesto of the Bharatiya Janata Party (BJP), 2024, has promised further expansion of the PMUY over the next 5 years. In this context, it is imperative that the systemic weaknesses highlighted in the foregoing paragraphs are adequately addressed through appropriate policy and operational tweaks to ensure the sustainable transition to smoke-free kitchens by rural poor households. The convergence of PMUY with the NRLM and the newly announced scheme for the creation of 30 million “lakhpati didis” offers excellent scope to plug many of these deficiencies.

Some Concluding Observations and the Way Forward

As India embarks on its “Viksit Bharat@2047” journey, its focus on the all-round development of the villages, especially the momentum of bridging the rural-urban divide in respect of infrastructure and basic minimum needs, needs to be sustained and may even need to be further bolstered. This would continue to figure right at the top of the agenda of the governments, both at the central and state levels, simply because even in 2047 around 50% of our population would live in the villages, according to the available projections.³³⁰ In this context, a recent article in the *Economist* (July 6, 2024) has aptly commented that

³³⁰ Attributed to a statement by Dr. Ramesh Chand published in *The Hindu Business Line* on November 1, 2023.

<https://www.thehindubusinessline.com/news/by-2047-over-50-of-population-will-still-be-in-rural-areas-says-chand/article67485558.ece>

the so-called “new welfarism”³³¹ has possibly run its course as a strategy for ensuring electoral success for the political parties, as evidenced in the recently held national and state elections in India during April–June 2024. The hypothesis it has offered is that voters have gotten used to receiving welfare benefits in cash and kind as an “entitlement” from the competing political parties. Possibly, going beyond “new welfarism,” voters prefer “better jobs, better health care and better schools for their children.” From this perspective, it is pertinent to mention that youth employment and their skilling, particularly among the educated youth, is perhaps one area that governments, both at the central and the state levels, need to pay much greater attention to over the next two decades.

In this perspective, the following specific areas need more urgent attention. First, PMGSY 1.0 has ensured all-weather connectivity to all the habitations with a population above 250 in the scheduled areas and above 500 in the non-scheduled areas, as per the 2001 Census. Meanwhile, a large number of habitations that meet these eligibility criteria, as per the 2011 Census, need to be covered under a new phase of the programme, PMGSY 2.0, on a mission mode.

Second, unemployment among rural youths with a secondary or higher level of education is as high as 18% in 2023, according to the *India employment report 2024* by the International Labour Organization (ILO). The corresponding number for those with a graduate degree or higher level of education is even more concerning at 28.4%. Another data point relating to rural youths (15–29 years) reported to be “not in education, employment” at 33%, according to the NSS 78th round (NSS report no. 589), also points to the job crisis in rural India. In this connection, it needs to be stressed that rural youths, even those with secondary or higher levels of education, suffer from a formidable handicap in terms of their “computer illiteracy,” which is an essential

³³¹ “New welfarism” refers to subsidised or free public provision of essential private goods and services, such as housing, water supply, toilets, cooking gas, or even untied cash grants.

competency required these days for both private and public sector jobs. As the Report of the NSS 78th round shows, there is a huge rural–urban divide in respect of ICT (information and communication technology) skills. While only 18.1% of youths (15 years and above) were found to be “computer literate” in 2020–2021, the corresponding percentage was more than double—39.6%—for urban areas. Hence, governments must work towards ensuring universal digital literacy, particularly among the educated rural youth, to provide them with a “level playing field” in the job market.

Third, governments, both at the central and state levels, must prioritise and focus on the creation of “decent work opportunities” in labour-intensive manufacturing and services for the rural educated youth, which in turn necessitates a massive uplift in the access and quality of publicly funded school/college education as well as the public provision of high-quality primary/secondary health care.

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Chapter 15. Development in Public Administration and Governance

Dr. Anita Chaudhary

On India's 75th Independence Day, Prime Minister Narendra Modi introduced the concept of *Amrit Kaal* or "The Era of Elixir" to the entire nation. Amrit Kaal is the Prime Minister's vision for a "New India" in the year 2047, when a new dawn for the country will bring with it the chance to fulfil the nation's aspirations. Expanding on the vision, the Finance Minister,³³² in her budget speech, cited the "saptarishi" priorities as: inclusive development, reaching the last mile, infrastructure and investment, unleashing the potential, green growth, youth power, and the financial sector. Laudable targets indeed. The scale of growth and change being envisaged has already made India the fifth-largest economy in the world, and it is racing to become the third in the near future. The stepping stones for such growth have already been laid. We are the most populous nation of young persons with a healthy demographic profile. With a GDP (gross domestic product) growth rate often exceeding 6–7% annually (Ministry of Statistics and Programme Implementation, n.d.), the country has emerged as a formidable player in the global market. The overall increase in production and consumption of goods and services has catapulted the economy

³³² ET Online. (2023, February 02). The Economic Times. Read more at: https://economictimes.indiatimes.com/magazines/panache/amrit-kaal-saptarishi-a-guide-to-the-esoteric-terms-used-by-finance-minister-nirmala-sitharaman-in-budget-speech/articleshow/97518367.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst

to an estimated GDP of more than US\$4.1 trillion. The productivity of Indians has enabled the nation to be one of the topmost “start-up” nations by 2023. Nevertheless, there are some disturbing issues. According to the World Bank, India has a low rank of 91 with a score of 50.7 in 2023 in the Global Governance Index (WGI). This is hotly debated by India. The WGI ranking needs to be analysed as it undermines not only the image of the country but also its credit worthiness.

Another disturbing issue is the glaring difference in development outcomes from one state in the country to another. Many of the so-called backward states in India (BIMARU—Bihar, Madhya Pradesh, Assam, Rajasthan, and Uttar Pradesh) have failed to record commensurate improvements in various dimensions of development. For example, even in 2019–2021, the infant mortality rates (deaths of infants below 1 year of age per 1,000 live births) have varied widely across the states: from low levels of 4.4 in Kerala to high levels of 41.3 in Madhya Pradesh and 50.4 in Uttar Pradesh.³³³ The levels of female literacy rates in 2023 have varied from 89.4% in Mizoram and 95.2% in Kerala to as low as 60.5% in Bihar and 57.6% in Rajasthan.³³⁴ Such inequalities are detrimental to economic growth and social cohesion. It is feared that in a polarised society, poor people with talent, ability, and drive will be consigned to substandard education and unproductive employment. Such uneven growth not only harms the citizenry but also inhibits economic development and social betterment.

The idea that the quality of governance contributes to improved human well-being and sustained development has gained widespread recognition in the past two decades. There is an urgent need to identify key governance capabilities that will help developing countries accelerate economic development and thus eventually improve governance more generally on a sustainable basis. India has taken numerous steps in this

³³³ *Economic Survey 2022–2023*, Statistical appendix, Ministry of Finance.

³³⁴ National Statistical Office (NSO) survey: the state-wise literacy rate in India in 2023.

direction; yet, in the World Bank's assessment, it scores dismally low. This paper seeks to critically examine the rankings assigned to it by the World Bank in the WGI and to study the efforts of Indian government to tackle uneven growth. If India is to achieve Amrit Kaal and aimed at enhancing the quality of life for citizens through inclusive development and bridging the development gap between states' performance, it is essential to analyse governance readiness which will be required to enable us to achieve the era of elixir.

A Conceptual History of Governance

Vedic literature, Buddhist treatises, Jain literature, Dharmasastras, Puranas, the *Ramayana*, the *Mahabharata*, Manusmriti, Sukraniti, *Arthashastra*, etc. are treasure houses of a lot of information on the organisations and functions of Indian administration in ancient India—the most important being Kautilya's *Arthashastra*, a treatise on statecraft, governance, and military strategy, which outlines a detailed administrative structure. Kautilya recommended mainly a “four-fold path of dealing with internal strifes and external threats: *sāman*, appeasement, non-aggression pact; *dāna*, gift, bribery; *bheda*, divide, split, separating opposition; and *daṇḍa*, strength, punishment” (Basu, 2005). The most noticeable aspect of the *Arthashastra* is its emphasis on dharma (righteousness and justice) and well-being of all the subjects as the main goal of the king. Public Welfare even in an autocratic agrarian State—that is where its timelessness lies. *Arthashastra* advocates the prudent use of Danda–Dharma duality of governance (Mundle et al., 2012) and can be considered the first guideline for good governance.

Periods of foreign conquests and the need for establishing control and consolidation over the conquered lands gave rise to the appointment of followers as controllers (*mansabdars*), revenue collectors (*jagirdars*), and *kotwals*, under the strict

supervision of the Centre. This gave rise to a system of civil services characterised by stringent rules, hierarchy, permanency, and stability. The colonial rule saw the rise of such a centralised service with no noble aspirations for the welfare of the public in mind. At the time of Independence, the Constitution of India declared India to be a sovereign, socialist, secular, and democratic republic. The objectives stated by the Preamble are to secure justice, liberty, and equality to all citizens and promote fraternity to maintain the unity and integrity of the nation. However, 200 years of British rule over the country continued to cast its dark shadows on Indian governance and administration for quite some time even after independence.

Trends in Governance

With time, the rapid growth of globalisation and communication, as well as the technological boom, rendered the traditional rule-bound, static bureaucratic system of governance and public administration cumbersome and ineffective. The information-based economy saw the rise of **neoliberalism**, where, in the “organisational society,” many important services are provided through multi-organisational programmes (Ewalt, 2001). In turn, it paved the way for the **welfare state**, crediting a broader role for the state. The overwhelming centralising role of the State became so burdensome that, in the early 1990s, resentment arose against the “overload of government.” The failure of the welfare state to deliver, non-performance in economic and fiscal sectors, red tape, and rising corruption raised doubts about the role of the state. It triggered the quest for efficiency and for cutting the cost of delivering public services.

To solve the problem of “government overload,” global efforts for privatising or contracting out public services and commercialising the public sector gained ground. **New Public Management (NPM)** reforms shifted the emphasis from traditional public administration to public management. Key

elements included various forms of decentralising management within public services (e.g., the creation of autonomous agencies), increasing the use of markets and competition in the provision of public services (e.g., contracting out and other market-type mechanisms), and increasing emphasis on performance, outputs, and customer orientation. Foster and Plowden (1996) termed NPM as a “movement”—“Separating Provision from Production.” This is the logic of “contracting-out.” The state provides, but it does not produce anything; that is the task of the private sector.

The adoption of the NPM practices proved beneficial in some cases; however, there are limitations in resorting to privatisation in all cases—the greatest being the presence of poverty, illiteracy, and lack of capacity to implement the practices.

The capacity concerns include the ability to manage a network of contracts, the development of monitoring and reporting systems, and the difficult governance and institutional environment at all levels. It was, therefore, felt that the new public management approach may not be a panacea for all problems of the public sector. However, a careful and selective adaptation of some elements to selected sectors may be beneficial. (Mongkol, 2011).

Countries which adopted the NPM techniques on a large scale faced the problem of an increasingly fragmented public sector. Privatising, contracting out, and devolution resulted in compartmentalisation of the departments, leading to a lack of coordination and inter-action amongst units. This led to duplication of efforts and waste of resources. This gave rise to the concept of **governance as networks**:

New forms of joined-up government, relational contracts between public purchasers and private providers, public-private partnerships and governance networks were typical responses to the call for crosscutting coordination and multilateral action “governance” referred to “governing in” and “through” distributed networks of agencies and contractors. (Rhodes, 2000)

In the field of development, the concept of governance acquired a broader qualitative hue. In the late 1980s, the World Bank evolved the concept of **good governance**. It was felt that the investments and fiscal adjustment programmes being implemented in some African countries, were not resulting in the expected outcomes because of poor implementation, which the World Bank termed as a “crisis of governance.” Good Governance is characterised by managerial techniques of transparency, accountability, encouraging people’s participation, and reducing corruption.

The Unfolding Concept and Practice of Governance

Today, “governance” is one of the most fashionable and frequently used social science terms in the world. According to the academic approach, “governance” denotes a complex set of structures and processes, which are generally associated with national administration. The elements of good governance and their relation to development have been reflected in a plethora of works undertaken by a number of scholars and multilateral organisations, both national and international.

According to the World Bank (*Governance: The World Banks’ Experience*, The World Bank, 1992), governance is defined “as the manner in which power is exercised in the management of a country’s economic and social resources for development.”

The Development Assistance Committee (DAC) of the Organisation for Economic Co-operation and Development (OECD) includes social aspects in addition to political and economic aspects in the concept of governance. Governance is thus “the use of political authority and exercise of control in society in relation to the management of its resources for social and economic development” (Development Assistance Committee, 1993, p. 18). The Asian Development Bank focuses primarily on the social and economic aspects of governance and identifies accountability of the public sector, participation of the private sector, predictability of the legal framework and public policy, transparency of information, and clarity of regulations and policies as its basic components. The Bank sees governance as being synonymous with the effective management of development.

The United Nations Development Programme (UNDP) relates the concept of governance to sustainable human development. Thus, “All societies have to meet the challenge of creating a system of governance that promotes, supports and sustains human development—especially human development for the poor, the vulnerable and the marginalized” (UNDP, 2010). In the context of India, the term “governance” gained currency during the liberalisation of the Indian economy in the 1990s (Mathur, 2015). Subsequently, the Tenth Plan (2002–2007) in India made explicit mention of the term “governance,” whereby it was stated that “governance has in the recent times merged at the forefront of the development agenda and good governance is one of the most crucial factors required if the targets of the Tenth Plan are to be achieved.” According to the Tenth Plan, governance relates to:

the management of all such processes that, in any society, define the environment which permits and enables individuals to raise their capability levels, on one hand, and provide opportunities to realize their potential and enlarge the set of available choices, on the other. (Planning Commission, 2002)

Governance and Development

“Governance” has become the sine-qua-non for all development schemes and is considered a must for successful policy outcomes. Poor countries are considered poor because their governance quality is bad, and rich countries are those that have better governance quality (Besley and Persson, 2011). The poorly governed countries do not reap the benefits of public spending on various public sectors such as health and education (Rajkumar and Swaroop, 2008). Sen (2000) sees development as expanding real freedoms, such as escaping morbidity, being nourished, being literate, and being able to participate in social functions. The means to these developmental outcomes depend on the nature and state of governance, such as the provisioning of public services, maintaining law and order, and participation of citizens in democratic franchising. Thus, for Basu (2005),

governance is a multifaceted concept, it can be examined along different dimensions. The ability to provide basic law and order (stressed by everybody, particularly libertarians), the ability to provide social services to build up human capital (stressed by endogenous theorists), provide physical infrastructure (stressed by traditional growth theorists) or economic management. are all within the framework of governance.

It has been agreed that in developing countries, political corruption and poor governance inhibit economic development and social betterment (Kurtz, 2007a). A better level of governance has its impact on improvements in infrastructure, productive activities, health, and education facilities and reduction of corruption (Banerjee and Iyer, 2005).

Many studies have empirically examined the relationship between different aspects of governance and economic development and wellbeing at different points in time and space. What becomes evident is that governance matters for economic and social development.

Measures and Indicators of Governance: Measuring the Quality of Governance

While governance is seen as an important variable to mitigate many problems of the public sector system, the discussion becomes particularly vague and ideological when identifying the exact reforms that are required for improving the quality of governance (DARPG, 2009). Governance is a complex, multidimensional phenomenon, and the dimensions could include the “processes” of governance or the “outcomes” of governance. Indicators of the “processes” of governance examine the way governments are selected, monitored, and replaced. Processes capture the extent to which the citizens may participate in the political sphere and the level of freedom of expression and press. Indicators of “outcomes” of governance measure the ability of policy makers to govern society. Examples might include the state’s ability to raise revenue, the strength of the legal system, the success rate in implementing policies, the realisation of policy goals and the extent of poverty, the level of freedom, or the rate of participation (Mark Bevir, 2009). The process is further complicated as governance dimensions could have several additional sub-dimensions, each represented by one or more different variables. Moreover, there are some dimensions that are not directly observable. Particularly challenging is the task of combining all the indicators and sub-indicators into a single aggregate index of the quality of governance that can capture the multi-dimensional features of a government in all its complexity.

Studies conducted by La Porta (1999), UNDP studies (2007–2009), and Besley and Persson (2011) adopted different approaches to quantify governance. La Porta (1999) studied governance from the perspective of promoting development through government interventions, assessing the size of the government, public sector efficiency, quality of provision of public goods, perception of corruption, and political freedom. Data on some outcome measures such as infant mortality, school

attendance, illiteracy, and infrastructure quality were also collected and correlated to the indicators. The UNDP (2007) assessed characteristics of good governance in terms of participation, rule of law, transparency, responsiveness, consensus orientation, equity, effectiveness and efficiency, accountability, and strategic vision. Besley and Persson (2011) based their study on three pillars of good governance: fiscal capacity, judicial capacity, and peace. According to them, effective state institutions, absence of political violence, and high per capita incomes give rise to development clusters.

World Governance Index

The most influential and widely used governance indicators have been developed by the World Bank and have been the criteria on which international assistance is provided. Since 1996, the data on the indicators developed by the World Bank have been published for over 212 countries and are based on some 310 variables, derived from 33 different agencies—public, private, and NGOs—totalling some 10,000 plus data points. The World Bank defines “governance” as the traditions and institutions by which authority in a country is exercised. It then breaks down this broad definition of governance into three components. These are:

1. The processes by which governments are selected, held accountable, monitored, and replaced;
2. The capacity of governments to manage resources efficiently, and to formulate, implement, and enforce sound policies and regulations; and
3. The respect of citizens and state actors, for the institutions that govern economic and social interactions among them (Kauffman, Kraay, and Mastruzzi, 2007).

Each of these three dimensions was measured in two “functional areas” as shown in Table 1.

Table 1: World Governance Index (WGI)

<i>Dimensions</i>	The process by which governments are selected, held accountable, monitored and replaced	The capacity of governments to manage resources efficiently	The respect for the institutions that govern economic and social interactions among them.
<i>Functional areas</i>	Voice and accountability	Government effectiveness	Rule of law
	Political Stability and absence of violence	Regulatory Quality	Control of Corruption

1. **Voice and accountability (VA):** Evaluates the extent to which a country's citizens are able to participate in selecting their government, as well as the freedom of expression, freedom of association, and media freedom.
2. **Political stability and absence of violence (PS):** Assess the likelihood of political instability and politically motivated violence and terrorism.
3. **Government effectiveness (GE):** Gauges the quality of public services, the quality of the civil service, and the degree of its independence from political pressures.
4. **Regulatory quality (RQ):** Examines the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.
5. **Rule of law (RL):** Evaluates the extent to which agents have confidence in and abide by the rules of society and, in particular, the quality of contract enforcement, the police, and the courts, as well as the likelihood of crime and violence.
6. **Control of corruption (CC):** Measures the extent to which public power is exercised for private gain, including both petty and grand forms of corruption.

The data relating to each of these “functional areas” was compiled from records of various international bodies on government functioning, such as the World Bank (WB), Asian Development Bank, African Development Bank, and the International Monetary Fund (IMF). The WB also derives data from polls answered by experts or from surveys answered by the citizens/NGOs of a state, the names of whom are not disclosed.

The variables are converted into appropriate indicators and given appropriate weights to create an index for each functional area, with an estimated governance performance score ranging between -2.5 and $+2.5$. Percentile rankings of countries are given on the basis of these scores. The ranking of the countries on the basis of such percentile scores has elicited a lot of criticism.

India's Reservations with Regard to the WGIs

India's ranking in the WGI 2023 is at 91st position. India's percentile ranking in WGI has shown minimal progress from 2014 to 2022 (see Table 2).

Despite the minimal change in ranking, it is intriguing to note that within the same timeframe, India has ascended to become the fifth-largest economy globally, significantly reducing poverty and considerably expanding its middle class. It would be fitting here to enumerate the various innovations and reforms that have taken place in the country in the last decade, having a direct effect on governance.

Table 2: Worldwide Governance Indicators

<i>Indicator</i>	<i>Year</i>	<i>Number of sources</i>	<i>Governance</i>	<i>Percentile rank</i>	<i>Standard error</i>
			<i>(−2.5 to +2.5)</i>		
Voice and accountability	2014	13	0.05	60.1	0.13
	2022	12	0.41	49.28	0.13
Political Stability and absence of violence	2014	9	−1.00	13.81	0.19
	2022	8	−0.57	24.53	0.22
Government effectiveness	2014	9	−0.22	45.19	0.21
	2022	8	0.37	63.21	0.24
Regulatory quality	2014	10	−0.48	33.65	0.2
	2022	9	−0.05	50.94	0.2
Rule of law	2014	13	−0.07	55.77	0.16
	2022	11	0.11	55.19	0.16
Control of corruption	2014	13	−0.46	39.9	0.13
	2022	12	−0.32	44.34	0.15

Source: <https://www.worldbank.org/en/publication/worldwide-governance-indicators>

Good Governance Initiatives in India

The greatest revolution in modern times has been brought about by the rapid and unprecedented advancement in communication technology. The widespread use of mobile phones, personal computers, and the penetration of Internet services have empowered the common man not merely by

making life easier for him but also by providing greater access to information about various things and conditions which affect him. In 2015, the Government of India launched the Digital India programme with the vision of transforming India into a digitally empowered society and a knowledge-based economy by ensuring digital access, digital inclusion, digital empowerment, and bridging the digital divide (PIB Delhi).³³⁵ The rapid ramp-up of Aadhaar, the national biometric digital identity programme, and its subsequent linkage to the payment of welfare benefits helped in the effective implementation of welfare schemes. Digital platforms have brought a systemic change as they enable Direct Benefits Transfer (DBT), under which cash transfers are directly made to the beneficiaries. It also eased the challenges of dubious inclusion and exclusion of beneficiaries and has made the process of welfare delivery remarkably faster and more targeted. In Andhra Pradesh and Telangana, through Aadhaar seeding alone, around 13–15 lakh dead, duplicate, or migrated beneficiaries have been weeded out under NREGS.³³⁶ Digitising has brought about more transparency in the functioning of the government. E-tendering, e-procurement, and e-Auctions have helped to bring more transparency, efficiency, and cost reductions in government procurements.

Banking reforms have been made to make banking services inclusive and efficient. India's Pradhan Mantri Jan Dhan Yojana is an initiative of a digitally driven financial inclusion scheme making banking activities accessible to the poor, entitling them to several credit, loan, and savings facilities. "More than 50 crore beneficiaries banked under PMJDY since inception. Total deposit balances under PMJDY accounts stand at Rs. 2,03,505 crore. PMJDY accounts grew 3.4-fold from 14.72 crore in March 2015 to 50.09 crore as on 16-08-2023. Around 56% Jan-Dhan account holders are women and around 67% Jan Dhan

³³⁵ Ministry of Electronics and IT. (2022, December 23). PIB, New Delhi.

³³⁶ DBT Mission Cabinet Secretariat, website:
<http://cabsec.nic.in/dbt/origin.html>

accounts in rural and semi-urban areas” (PIB, Delhi),³³⁷ enabling them to avail of MUDRA loans for grassroots enterprises. “Bank Mitras” (agents facilitating people in banking related services) have been appointed in remote areas. The deep penetration of Jan Dhan accounts has acted as a catalyst behind India’s enthusiastic adoption of digital payment platforms such as the Unified Payments Interface (UPI) and debit cards, with 31 crore RuPay cards being issued till 2022. The UPI has onboarded 376 banks and has facilitated 74.5 billion transactions (by volume) worth ₹126 trillion till 2022 (India’s Digital Payment, Annual Report, 2022). Measures like the recapitalisation of public sector banks, the merger of weaker banks with stronger ones, and initiatives to address NPAs have strengthened the banking sector.

The government has also transitioned to a trust-based governance model, introducing reforms such as the Insolvency and Bankruptcy Code, the Real Estate (Regulation and Development) Act, the decriminalisation of minor economic offences under the Companies Act of 2013, the repeal of over 1,400 outdated laws, grievance redressal portals, video recording of the property registration process, extensive use of Aadhaar cards, tax reforms in the form of tax deduction at source (TDS) and faceless income tax assessment, voluntary disclosure schemes, making PAN numbers mandatory for real estate and bullion purchases, installation of CCTV cameras in government offices, especially in local police stations, etc. All these steps put trust and responsibility on people to cooperate with the authorities and lead to transparency and accountability in governance.

The government has also undertaken a wave of structural and regulatory reforms: rationalising the indirect tax system with a single, unified tax under the Goods and Services Tax (GST); “Make in India” initiative to transform India into a global manufacturing hub; amendments to the Companies Act to improve corporate governance standards, enhance

³³⁷ Ministry of Finance. (2023, August 28). PIB, New Delhi.

transparency, and ease compliance requirements; the Black Money (Undisclosed Foreign Income and Assets) and Imposition of Tax Act, 2015; the Fugitive Economic Offences Act, 2018, to tighten the noose on corruption; and the opening of Common Services Centres offering government and business services in digital mode in rural areas through Village Level Entrepreneurs (VLEs). Over 870 digital services are being offered by these CSCs. So far, five and a half million CSCs are functional (including urban and rural areas) across the country (Common Service Centre, 2023, July 15–31); Unified Mobile Application for New-age Governance (UMANG) has been operationalised for providing government services to citizens through mobile. Liberalised foreign direct investment across various sectors such as railways, defence, insurance, and retail, to attract foreign investment and spur economic growth; Atmanirbhar Bharat Abhiyan (Self-Reliant India Mission) to boost local manufacturing, infrastructure, and technology-driven systems to make India self-reliant; Start-Up India to foster innovation and entrepreneurship; Skillup India for increasing employability, etc., have all revolutionised the pace of governance, making it more effective and transparent.

Moreover, India has emerged as a major destination for foreign investment, with total Foreign Direct Investment (FDI) inflows reaching US\$71 billion and equity inflows at US\$46 billion for FY23. The introduction of several schemes to promote the domestic manufacturing sector, such as the Production Linked Incentive scheme, has also resulted in firms scaling up their investments within the country. Educational attainment in India has increased substantially, resulting in the country now having the third-largest pool of scientists and technicians worldwide. Huge expansion in infrastructure development, like roads, highways, educational institutes, universities, airports, medical centres, and metros, has transformed the drab, poor image of the country into a bright, vibrant country on the move.

The gains emerging because of these reforms have been captured through India's progress in the **Global Competitiveness**

Index. The Global Competitiveness Index integrates the macroeconomic and the micro/business aspects of competitiveness into a single index. The report assesses the ability of countries to use available resources. The report is published by the World Economic Forum. India improved its position in the Index from 71st rank in 2014–2015 to 39th in 2023.³³⁸ The **Logistics Performance Index (LPI)** is an interactive benchmarking tool created by the World Bank to help countries identify the challenges and opportunities they face in their performance on trade logistics and what they can do to improve their performance. India improved its position in the Index from 54th in 2014 to 38th in 2023.³³⁹ The **Global Innovation Index** is an annual ranking of countries by their capacity for, and success in, innovations, published by the World Intellectual Property Organization (WIPO). India improved its position from 81st in 2015 to 40th in 2023.³⁴⁰ The **Doing Business Report (DBR)** is the flagship publication of the World Bank Group that benchmarks business regulations in 191 economies. The Report measures regulations that enhance business activity and those that constrain it. In the DBR 2020, published in October 2019 before its discontinuation by the World Bank, India's rank improved from 142nd in 2014 to 63rd in 2019, registering a jump of 79 ranks in a span of 5 years.³⁴¹ In 2023, the World Bank itself acknowledged that India has brought 416 million people out of the poverty line. None of the reforms and outcomes would have been possible without good governance. Yet, the WGIs show that Indian governance has hardly improved over the last decade. This scenario throws up two possibilities: either the World Bank's indicators are not capturing relevant variables of governance, or good governance is not required for development. Let us examine the views of some scholars on the two aspects.

³³⁸ IMD World Competitive Center. <https://www.imd.org/centers/wcc/world-competitiveness-center/rankings/world-competitiveness-ranking/>

³³⁹ Ministry of Commerce and Industry (2024, February, 7). PIB, New Delhi.

³⁴⁰ NITI Aayog (2023, September 28). PIB, New Delhi.

³⁴¹ Ministry of Commerce and Industry. (2024, February, 7). PIB, New Delhi.

Criticism from Across the Globe

India is not alone in having reservations against the perception-based WGIS. The widely used WGIS have come under severe criticism from researchers across the globe on methodological and conceptual grounds for their inability to measure traits of good governance.

1. Any index of governance should take into account the existing political system as given within a country at the national or sub-national levels and develop the indicators accordingly. Andrews (2008) argues that the WGIS are “context-neutral” in the sense that they do not take into account country-specific challenges and environments which could be quite different from each other. Implementation of even welfare schemes is very difficult in a multi-dimensional democratic set up, but can be strictly foisted on the citizens in any autocratic set up. Viewed from this angle, having similar indicators for “voice and accountability” for all the countries is preposterous. Also, these indicators should take a secondary place in the development of the governance index than the effectiveness of programme implementation.
2. Differences in the nature and quality of institutions and customs across countries give rise to the possibility that the same policy may have different effects in different countries (Virmani, Sahu, and Tanwar, 2006). Strict implementation of anti-corruption measures in developed countries with strong institutions leads to greater transparency and efficiency in government operations, but may fail to have any effect in developing countries due to limited enforcement, weaker institutions, and possibly exacerbate corrupt practices as those in power may find ways to circumvent the regulations.
3. Thomas, Melissa (2010) points out that there is a substantial difference between measuring something and measuring perceptions of it. She argues that in the context of governance, perceptions of crime risk have been shown to be quite different from actual crime levels. Likewise, perceptions of

corruption differ from actual corruption levels, and trust in government does not necessarily match administrative performance.

4. According to Langbein and Knack (2008, p. 3), the six indicators seem to say the same thing with different words and hence amount to tautology. They have limited use as guides for policymakers and for academic studies of the causes and consequences of “good governance” as well.
5. Kurtz and Schrank (2007) state that the measurement of governance developed by Kaufmann, Kraay, and their various collaborators at the World Bank is riddled with systematic biases due to selection problems, perception biases, as well as survey design and aggregation problems. This most widely used data set, and the conclusions derived from it on government effectiveness, are, at best, partial and, at worst, misleading because they often measure initial conditions and ostensible effects of governance reforms, rather than the direct consequences of governance reform efforts on growth rates.
6. Huge effort is utilised in collecting the available data on the six indicators of governance. The huge data base is a boon but also a weakness, as about half the variables are objective data from secondary sources, while the rest are based on perception surveys of varying quality and reliability across data sources. Data collected from perception surveys can be subjective and imperfect, especially if the perceptions are from an unrepresentative set of observers. “With such heroic aggregation of huge volumes of data, some objective and others subjective, some reliable and others not so reliable, it is not clear in the end what exactly the KKM³⁴² measures are capturing. Reliability apart, there is also a question whether, with such large data overload, the aggregate indicators reasonably accurately reflect the actual quality of governance

³⁴² KKM: a set of indicators developed by the Malaysian Government for measuring performance in the health sector, known as Kementerian Kesihatan Malaysia.

in a country.” (Mundle et al., 2012)

7. Another problem is that the variables used by KKM are national-level variables, and sub-national data would not be available for most of them.

To sum up, the WGIs are being questioned on the very basis of their formulations. Reliance on indicators based on such shaky grounds is difficult. India’s reservations have been communicated to the World Bank.

Is Good Governance Necessary for Development?

The second scenario that “good governance is not a prerequisite for development” is gaining ground amongst thinkers:

the good governance agenda has defined policy reform goals for developing countries that are widely supported in many developing countries and, especially, internationally. These goals include strengthening protection of property rights, rooting out corruption, achieving accountable and democratic governments, and imposing the rule of law. However, the empirical evidence conclusively shows that countries have only improved governance with development, and that good governance is not a necessary precondition for development. (Khan 2009, 2010)

Citing examples of China, Vietnam, and some Latin American countries, where performance on the governance level, as per the World Bank’s Indicators, is much below the standards, yet they have performed very well on the economic front, the scholars argue that it is development that improves governance and not the other way around. The direct result of such an argument is that there is an urgent need to identify key governance capabilities that will help developing countries

accelerate economic development and thus eventually improve governance more generally on a sustainable basis.

According to Meisel and Ould-Aoudia (2007), the universal “good governance” prescription has actually had modest or even no impact on growth. They see this as an attempt by the developed countries to impose their idea of governance on the developing countries. Such an imposition is often opposed. Hence, although “good governance” is unobjectionable, if not desirable, reforms inspired by this approach have not been and cannot be successful for accelerating economic growth.

Kurtz and Schrank (2007) note that a number of developing countries, especially in East and South-East Asia, have fallen short on the most widely used World Bank good governance benchmarks, yet have performed well in terms of growth, equity, and structural transformation. Amongst the various reasons for their growth are the higher levels of education, social equality, the capacity of the government to manage change, and the free play of market interventions.

Fukuyama (2008) acknowledges the likelihood of two-way relationships between various aspects of governance and economic development. According to him, states with “just enough” governance may lead to economic growth which in turn may accelerate governance improvements. Citing the example of Bangladesh, where problems of corruption and democratic accountability are matters of concern, Fukuyama points out that the economy has been growing impressively since the early 1990s.

From the above discussion, it is apparent that current understandings and measures of governance, especially in relation to economic development, are not only imperfect but also problematic. China, South Korea, Vietnam, Bangladesh, and now India have belied the orthodox view of good governance that since good governance accelerates growth, comprehensive governance and institutional reforms are a prerequisite for development. These countries have proved that growth accelerations can and have occurred under a wide variety of

institutional and policy regimes. Fukuyama states that “good enough governance” implies a more realistic, pragmatic, nuanced, better-prioritised, and sequenced understanding of the evolution of institutions and governance capabilities. Hence, good enough governance may be more realistic for countries seeking to accelerate growth, development, or poverty reduction (Fukuyama, 2008). Among the multitude of governance reforms deemed necessary for economic growth, there is very little consensus on what is essential, what should come first, what should be the short-term methods, or what can only be achieved over the longer term. And if certain institutional and policy reforms matter more for development, these should probably receive the most support. All desirable things cannot be pursued simultaneously. It is essential for developing countries to analyse their unique position, assign priorities, recognise current capabilities, establish what is most important and achievable, and design customised policy reforms for themselves, rather than trying to fill all supposed governance shortfalls or gaps at the same time. Targeted reforms to improve governance rather than wholesale reform may be more effective in accelerating economic growth.

In spite of WGIs being criticised as opinion-based indices, they are widely used due to a lack of alternatives. It is, therefore, all the more imperative that the World Bank acts in a transparent manner and puts in the public domain the sources from which it collects its data. Instead of hiding behind privacy matters, it should disclose the names of its experts and NGOs who act as its think tank. It would be in the fitness of things if suitable modifications in the indicators are made for different countries to suit their unique circumstances. This would lend a greater credibility to the Index.

Great Indian Divergence: Uneven Growth

A serious problem being faced by India is with regard to its uneven growth—geographically, sectorally, and at the household level. Some states have suffered greatly because of historically limited access to education, employment, investments, industrial and commercial development, and health opportunities. As a result, socio-economic development, encompassing income, education, health, infrastructure, and employment, varies significantly amongst states. The southern and western states have done much better than the others. The following table of growth in some sectors for the years 2021–2022–2023, for some big states, brings home the point of unequal development. (The first seven states are the southern and western states.)

The stark unevenness of growth is very apparent. The GDP of the first seven progressive states is much higher than that of the other states, whereas their rate of population growth is much lower. The percentage of poor in these states is also comparatively much lower. Unemployment seems to be a universal problem. If the pace of development remains the same, it is feared that the developed states will move far ahead of the not-so-developed states. This uneven growth mars the overall progress made in the country. The divide between the developed and not-so-developed states is taking on dangerous proportions. This situation came to stark reality during the lock down of the pandemic, when thousands of migrant labourers from Bihar, UP, MP, and Rajasthan, who had gone to the southern states and Mumbai for better earnings, were seen trekking back home in pitiable conditions. State-wise uneven growth has to be tackled quickly.

Table 3: Comparative Table of Growth

	1) State domestic product (in INR)	2) Growth of population in 2022-23	3) Literacy rate	4) Graduate unemployed rate	5) Persons living below poverty line
<i>Kerala</i>	228,767*	0.40%	96.2%	26.9%	0.7%
<i>Tamil Nadu</i>	273,288	0.30%	82.9%	18.7%	4.8%
<i>Andhra Pradesh</i>	219,518	0.35%	66.4%	22.8%	12.3%
<i>Karnataka</i>	301,673	0.62%	77%	12.5%	13.2%
<i>Telangana</i>	308,732	0.48%	72.8%	20%	13.7%
<i>Maharashtra</i>	242,247	0.77%	84%	9.4%	14.85%
<i>Gujarat</i>	250,100*	1.20%	82%	6.1%	18.6%
<i>Uttar Pradesh</i>	70,792*	1.01%	73%	11.3%	37.08%
<i>Bihar</i>	49,470	1.44%	70.9%	20%	33.74%
<i>Madhya Pradesh</i>	140,583	1.19%	73%	11.1%	36.07%
<i>Rajasthan</i>	156,149	1.07%	69.7%	22%	29.5%
<i>West Bengal</i>	141,373	0.48%	80%	9.7%	21.43%

Source: 1. Per capita net state domestic product at current prices; base year 2011-2012. Ministry of Statistics and Programme Implementation, PIB Delhi Press release dated July 24, 2023 (*data relates to the year 2021-2022); 2.

https://statisticstimes.com/demographics/india/indian-states-population.php#google_vignette; 3. Based on the National Statistical Office (NSO) survey the state-wise literacy rate in India in 2023; 4. Based on Rajya Sabha Unstarred Question 2487, answered on 10/08/23.; 5. Department of Social Justice and Empowerment.

Studies in India

Fortunately, in India, a number of state-wise systematic studies are available to quantitatively evaluate various dimensions of governance and to monitor them over time to examine the progress. The studies by Basu (2002), Virmani (2006), and Mundle et al. (2012) for various states, in which they fixed different dimensions of governance to be measured by indicators, have become dated as much water has flowed since these were formulated. In 2009, DARPG formulated an Index with five dimensions and 123 indicators. Being too copious, the same has been revised.

Good Governance Index

DARPG launched the Good Governance Index in 2019. The GGI framework has been formulated to assess the state of governance across the states and union territories (UTs) and rank their performance accordingly. The objective is to create a tool which can be used uniformly across the states/UTs to assess the impact of various interventions taken up by the central and state governments/UTs. It has been kept flexible for incorporating any improvements/revisions based on the need. It includes not only the outcomes and output-based indicators but also inputs and process-based indicators. For example, in the public health sector, it monitors not only the number of beds per 1,000 population and number of doctors available but also monitors the outcomes in the form of changes in maternal mortality rate and infant mortality rates. The GGI 2021 encompasses 10 sectors and 58 indicators. Each sector carries equal weightage and is composed of indicators carrying different weightages. The sectors of GGI 2020–2021 are: (a) Agriculture and Allied Sectors, (b) Commerce & Industries, (c) Human Resource Development, (d) Public Health, (e) Public Infrastructure & Utilities, (f) Economic Governance, (g) Social Welfare and Development, (h)

Judicial & Public Security, (i) Environment, and (j) Citizen-Centric Governance.

Unlike the World Bank which treats all the countries of the world on one platform, India's GGI has categorised the states into four groups considering the variations in size and diversity: (i) North-East and Hill States (11), (ii) Union Territories (7) (iii) Other States—Group A (10) and (iv) Other States—Group B (8). Collection of data is on a biannual basis. As per the PIB report of the Ministry of Personnel, Public Grievances and Pensions dated 25th December 2021, Gujarat, Maharashtra and Goa top the composite score of 10 sectors under the GGI 2021 assessment. Uttar Pradesh has shown an 8.9% increase over the GGI 2019 performance. The GGI 2021 states that 20 states have improved their composite GGI scores over the GGI 2019 scores. This indicates that the overall governance in the States of India is moving in a positive direction (PIB Delhi) ³⁴³. GGI works as a multidimensional tool for monitoring the progress of all sectoral initiatives taken by the governments. It is hoped that rigorous implementation of the same will provide the necessary support to the languishing states to improve their performance as well as aid in policy reformulation wherever required.

Recommendations and Conclusions

1. To sum up, this paper has tried to highlight the dichotomy between India's meteoric rise in the economic field and the low, more or less minuscule improvement in the ranking accorded to it by the WGIs in the field of governance. India has highlighted its reservations to the World Bank. Some suggestions to improve WGIs are as follows:
 - In order to expand the acceptability of the Index, the WB will have to revise the indicators and the variables used for

³⁴³ Ministry of Personnel, Public Grievances and Pensions. (2021, December 25). PIB, New Delhi.

measuring the functional areas. For example, the indicator “political stability and absence of violence” assesses the likelihood of political instability and politically motivated violence and terrorism in the country. Data for this metric is collected through surveys and is entirely perceptive. Likewise in the metric “Control of Corruption,” it is difficult to measure the extent to which public power is exercised for private gain, and data collected for this will be subjective in nature. There should be appropriate methods for validating perception data with hard facts and merging them with indicators of governance.

- The WB should be transparent in its assessment and disclose its sources of data collection, especially those collected through surveys.
- Considering the vast differences in the status of historical experiences, and the level of growth of their institutions, it would be pragmatic to categorise countries into groups according to their existing level of growth and formulate indicators accordingly. No one-size-fits-all approach works.
- The governance indicators are directed more at improving the effectiveness and efficiency of the market system. For example, the Regulatory Quality dimension of the WGIs examines the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. India is yet to come to this stage of development. We need to focus more on the governance indicators that will contribute to the strengthening of the government system and development. The WB should consider making amends accordingly.
- Indicators have to be developed not only at the state and central levels but also at the third tier of governance, viz. the panchayats in the rural areas and nagar palikas in the urban areas.
- The governance indicators should serve a dual purpose. Not only should they measure the level of governance quantitatively, but they should also help to monitor the

improvements in governance over time. They should not be an instrument to criticise countries; rather, they should be supportive of the efforts.

2. It is felt that the DPARG's GGI is more appropriate for India as not only is it multidimensional, but it also carried out at different layers and divisions of the government. Not only does it assess the quality of governance, but it also helps in monitoring the various programmes initiated by the governments. The main problem with the implementation of the Index is the inability of the administration to put its reports which are to be prepared biannually, in the public domain. At the time of writing this paper, the report available in the public domain was only for the year 2021.
3. A large number of schemes have been launched in the country in the last decade. The most widely talked about are Swachh Bharat Abhiyan, Pradhan Mantri Jan Dhan Yojana, Pradhan Mantri Mudra Yojana, Pradhan Mantri Ujjwala Yojana, UJALA Yojana, Deendayal Antyodaya Yojana, Pradhan Mantri Awas Yojana, Direct Benefit Transfer, Mission Indradhanush, Beti Bachao, Beti Padhao Yojana, Make in India, Digital India, and Startup India, etc. The major problem is the lack of their timely execution. In the implementation of programmes, there are large gaps in timelines, differentials in quality, areas and effectiveness and efficiency. The dimension of identifying the various critical "gaps" in programme implementation should be a major dimension of governance.
4. Despite consistent high growth, India still struggles with low Human Development Indicators. India ranks 134th in the Global Human Development Index, says the UNDP report of 2022. The country moved up a rank compared to 2021, but still falls behind Bangladesh (129th position), Sri Lanka (78th), Bhutan (125th), and China (75th). It is generally agreed that "governance is one of the critical factors explaining the divergence in economic performance across developing countries" (Khan, 2010). India needs to make concerted

efforts in the fields of public health and education not only to improve the rankings, but also to improve the quality of life of its citizens.

India's governance readiness to become the third-largest economy hinges on its ability to address the existing challenges of corruption, bureaucratic inefficiency, judicial backlog, social and regional inequalities, poverty, and health-care deficiencies effectively and urgently. Continuous improvements in institutional quality, infrastructure, and social development are crucial. Strong political will and effective policy implementation will play a significant role in driving sustainable economic growth. The trajectory so far indicates positive momentum, but concerted efforts are required to overcome systemic inefficiencies and ensure that economic growth is inclusive and sustainable. If these areas are addressed effectively, India is well positioned to achieve its goal of becoming the third-largest economy in the near future.

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Chapter 16. Higher Education: From Dream to Reality for Every Indian

Ashok Thakur and S. S. Mantha³⁴⁴

Introduction

Indian civilisation has historically placed great emphasis on education. This focus of Indian society enabled the development of a sophisticated educational system rooted in the ancient Gurukul tradition. India also established some of the world's earliest universities, such as Nalanda, which flourished for over 800 years until its end in the 12th century C.E.³⁴⁵

With 44.3 million students, as per the All India Survey on Higher Education (AISHE) 2021–2022,³⁴⁶ India's higher education system is currently the second largest globally, surpassed only by China, at 47 million students.³⁴⁷ According to the latest AISHE report (AISHE 2021–2022),³⁴⁸ the total number of universities/university-level institutions registered is 1,168, colleges 45,473, and standalone institutions 12,002. This number

³⁴⁴ Ashok Thakur is former Secretary, Department of Higher Education, Ministry of Human Resource Development, Government of India; and S. S. Mantha is former Chairman, All India Council for Technical Education (AICTE).

³⁴⁵ <https://nalandauniv.edu.in/about-nalanda/history-and-revival/>

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<https://aishe.gov.in/aishe/viewDocument.action;jsessionid=9ACD95EC0083FAA240D97B7BFFFAA4B6?documentId=353>

³⁴⁷ http://en.moe.gov.cn/news/media_highlights/202403/t20240304_1118146.html
-::~:~:text=BEIJING, March 1 (Xinhua),of Education said on Friday

³⁴⁸ <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1999713>

has grown remarkably, over 400% since 2001, with most of the expansion happening in the private education sector.³⁴⁹

The Indian higher education system has surpassed all expectations, as many of the world's top CEOs, such as Sundar Pichai of Google (IIT Kharagpur), Satya Nadella of Microsoft (MIT Manipal), and many others, are products of the Indian higher education system.³⁵⁰ Indian doctors and engineers are at the forefront of the IT revolution, as evidenced by their global prominence.³⁵¹ With a declining youth population in many developed countries, India is poised to become the global factory supplying trained manpower the world over.³⁵²

However, despite the promise, the challenges are also no less significant. While access to education has been relatively good, the quality still needs substantial attention.

This year, the Indian Institute of Science (IISc) Bangalore is ranked 211th in the QS World University Rankings 2025. The University of Delhi was also in the top 200 of the QS World University Rankings: Sustainability 2024, ranking 220th globally and 30th in Asia. Other Indian universities that ranked in the QS World University Rankings: Sustainability 2024 include IIT Bombay, ranked 303rd, and IIT Madras, ranked 344th.³⁵³ In contrast, China, despite its later start, has 24 institutions in this

³⁴⁹ <https://www.dwh-newdelhi.org/en/2023/12/11/at-rocket-speed-towards-a-science-nation-reforms-and-challenges-in-indias-higher-education-sector/-:::text=The Indian higher education system&text=Over the last three decades,by private universities and colleges>

³⁵⁰ <https://www.indiatoday.in/education-today/gk-current-affairs/story/indian-origin-ceos-leading-top-companies-across-the-world-1893342-2021-12-28>

³⁵¹ <https://economictimes.indiatimes.com/news/international/world-news/every-7th-doctor-in-us-is-indian-and-theyre-working-as-soldiers-fighting-covid-19-aapi-president/articleshow/75406158.cms?from=mdr>

³⁵² <https://www.mckinsey.com/featured-insights/india/indias-turning-point-an-economic-agenda-to-spur-growth-and-jobs>

³⁵³ <https://timesofindia.indiatimes.com/education/news/qs-world-university-rankings-sustainability-2024-outdu-indias-only-university-in-top-200-iits-trailing-far-behind/articleshow/105759501.cms>

Against a nationally announced target of spending 6% of GDP on education since the NATIONAL POLICY ON EDUCATION (NPE) 1986, the higher education department in India's budget for 2024–2025 is ₹47,619.77 crore, which is a slight increase from the previous year's ₹44,094.62 crore. This is about 2.9% of the country's Gross Domestic Product (GDP).³⁵⁶

³⁵⁴ <https://www.timeshighereducation.com/student/best-universities/best-universities-china>

³⁵⁶ <https://www.thehindu.com/business/budget/budget-2024-rise-in-allocation-for-school-higher-education/article67801316.ece> - :~:text=The total allocation for the Higher Education Department is ₹,23 was ₹ 38,556.80 crore

³⁵⁷ [https://www.drishtiias.com/daily-updates/daily-news-editorials/reviving-india-s-r-d-funding-:-~:text=Low R%26D Investment as Percentage of GDP%3A&text=However, with R%26D investment as the United States \(3.5%25\)](https://www.drishtiias.com/daily-updates/daily-news-editorials/reviving-india-s-r-d-funding-:-~:text=Low%20Investment as Percentage of GDP%3A&text=However, with%20investment as the United States (3.5%25))

Background

Evolution of the Indian University System Since the Ages

In ancient India, parents sent their children to *gurukuls* for schooling before enrolling them in *parishads* for further education.^{358, 359} Teachers (*gurus*) held a prominent place in society. Temples and viharas not only provided religious instruction but also taught logic, science, and arithmetic.

The British forcibly replaced the ancient *gurukul* system with clones of their own institutions and universities,³⁶⁰ with the goal of hiring inexpensive clerks to govern the empire rather than educating the population. It started with Thomas Macaulay, who famously stated that “a single shelf of a good European library was worth the whole native literature of India and Arabia.”³⁶¹ This struggle between mass education versus select few, vernacular versus English language, provincial versus central funding can be seen in several reports of the period, including John Adam’s reports of 1835, 1836, and 1838, Wood’s Despatch of 1854, Hunter Commission 1882, Raleigh Commission 1902, Saddler University Commission 1917–1919, Hartog Committee (1929), and Sargent Plan of Education 1944.³⁶² However, the Wardha Scheme of Basic Education (1937), based on Gandhiji’s concepts of “learning

³⁵⁸ Altekar, A. S. (1957). *Education in ancient India* (5th ed.). Nand Kishore & Bros.

³⁵⁹ Swami, Harshananda. (2007). *An introduction to Hindu culture: Ancient and Medieval*. Advaita Ashrama.

³⁶⁰ Odgers, George Allen (1925, October). Education in British India. *The Phi Delta Kappan*, 8(2), 1–6.

³⁶¹ <https://testbook.com/ias-preparation/ncert-notes-education-system-in-india-during-british-rule/>

³⁶² Mookerjee, Syama Prasad (1944, May). Education in British India. *The Annals of the American Academy of Political and Social Science*, 233, 30–38 (published by: Sage Publications, Inc.). <https://www.jstor.org/stable/1025819>

through activity,” could not be implemented due to the outbreak of the Second World War.³⁶³

Education Policies Post-Independence

Several commissions, notably the University Education Commission (1948–1949) and the Secondary Education Commission (1952–1952), examined education rebuilding concerns.³⁶⁴ The first Scientific Policy Resolution was adopted by the Indian Parliament in 1958 which emphasised on scientific temperament in education and society in general. The Education Commission (1964–1966) advised the government on “the national pattern of education as well as the general principles and policies for the development of education in all stages and in all aspects.”³⁶⁵

The National Policy on Education (NPE) of 1968 was a seminal text in structuring education in the post-independence era.³⁶⁶ The policy dwelt on free and compulsory education, language development, providing equal opportunity in education, reducing regional disparities, promoting national integration, merit-based admissions, emphasis on education for girls, promoting education among socially disadvantaged and physically challenged people, examination reforms, promotion of scientific temper, identification of talent for achieving excellence in education, and many other issues.

³⁶³<https://edoc.hu-berlin.de/bitstream/handle/18452/18303/holzwarth.pdf>

³⁶⁴

<https://www.educationforallindia.com/1949%20Report%20of%20the%20University%20Education%20Commission.pdf>

³⁶⁵ <http://www.academics-india.com/Kothari%20Commission%20Report.pdf>

³⁶⁶ https://www.education.gov.in/sites/upload_files/mhrd/files/document-reports/NPE-1968.pdf

The National Policy on Education 1986,³⁶⁷ as modified in 1992,³⁶⁸ served as an anchor sheet for the country's educational progress. The new issues that this document covered were adult education, retention and improving quality in elementary education, education of the girl child, establishing Navodaya Vidyalayas in each district, vocationalisation of secondary education, interdisciplinary research, setting up open and distance learning (ODL) universities in the states, strengthening All India Council for Technical Education (AICTE), etc. all under the rubric of "Education for All." In the Sixth Five-Year Plan,³⁶⁹ the higher education budget was boosted ninefold, and a slew of new centrally funded institutions (CFIs) were established. Accreditation was established as a crucial pillar for increasing educational quality.

New Education Policy 2020

In July 2020, the Union Cabinet of India approved the New National Education Policy (NEP 2020) with the aim of bringing modern reforms to the Indian education system from the school to the college level. This policy stands on the ideology of making India a "global knowledge superpower." The NEP 2020³⁷⁰ follows the previous policy of 1986. It aspires to transform India into a knowledge superpower by providing its students with the skills and knowledge required to become a global factory for addressing workforce requirements in science, technology, academia, and industry.

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https://www.education.gov.in/sites/upload_files/mhrd/files/upload_document/npe.pdf

³⁶⁸ https://www.education.gov.in/sites/upload_files/mhrd/files/document-reports/NPE86-mod92.pdf

³⁶⁹ <http://164.100.161.239/plans/planrel/fiveyr/6th/6planapp.html>

³⁷⁰

https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf

The aim of NEP 2020 for India is to have an education system by 2040 that is second to none, with equitable access to the highest-quality education for all learners regardless of social or economic background. This National Education Policy 2020 is the first education policy of the 21st century and aims to address the many growing developmental imperatives of our country. This policy proposes the revision and revamping of all aspects of the education structure, including its regulation and governance, to create a new system that is aligned with the aspirational goals of 21st-century education, including the Sustainable Development Goal 4 (SDG4), while building upon India's traditions and value systems.

Salient Features of the Indian Higher Education System

Indian Higher Education System Is Huge and Growing

The country's massive population of 1.4 billion people, of which more than 65% are young, aged 20 to 35, is the engine of this juggernaut. The country now claims to be the youngest in the world, with a median age of 28.2.³⁷¹ Despite this, the gross enrolment ratio (GER) of 28.4% in 2021–2022³⁷² fell short of the Ministry of Education's aim of 32% by 2022. However, the State Council of the People's Republic of China reports the GER in

³⁷¹ [https://www.worldometers.info/world-population/india-population/-::~:text=India population is equivalent to,1,244 people per mi2\).&text=The median age in India is 28.2 years](https://www.worldometers.info/world-population/india-population/-::~:text=India population is equivalent to,1,244 people per mi2).&text=The median age in India is 28.2 years)

³⁷² <https://www.thehindubusinessline.com/data-stories/data-focus/tamil-nadu-tops-in-enrollment-ratio-for-higher-education-among-states/article67792516.ece-:::~:text=The all-India average GER,46.8 per cent among men>

China's higher education reached 60.2% in 2023, up 0.6 percentage points from 2022.³⁷³

According to the AISHE 2021–2022, 43.3 million students were enrolled in higher education in India, which is a 26.5% increase from 2014 to 2015. However, the students' enrolment in online education programmes increased 170% between 2021 and 2022, while in ODL programmes it increased by 41.7%. There has also been a 38% increase in the number of higher educational institutions (HEIs) offering online programs in the past one year.³⁷⁴

Establishing a University

There are three ways in which a university can be established in India.

1. The first is by an act of Indian Parliament for Institutions of National Importance (INIs) which is the sole prerogative of the central government.
2. The second way is through the Deemed to be University route, which is approved by the University Grants Commission (UGC) under Section 3 of the University Grants Commission Act, 1956, following approval by the Ministry of Education (MoE).³⁷⁵ This method is for prestigious institutions which, though not universities, are as good such as IISc Bangalore, etc. However, following the Supreme Court judgment of 2009, some rigorous entry-level qualifications have been imposed in

³⁷³

https://english.www.gov.cn/archive/statistics/202403/01/content_WS65e1d71dc6d0868f4e8e487a.html - :~:text=The gross enrollment ratio in,from 2022, the ministry noted

³⁷⁴ <https://www.ndtv.com/education/student-enrollment-for-online-courses-has-increased-170-cent-in-2022-says-ugc-chairman-3468926>

³⁷⁵ <https://deemed.ugc.ac.in/FAQ>

the 2010 Regulations, though subsequent regulations issued in 2022³⁷⁶ on the issue have relaxed some of the stringent aspects.

3. The last is a state university established by an act of the state legislature, which could be either a State University or a State Private University. The promoters must register under the Societies Registration Act of 1860, or any other applicable statute in existence at the time, such as a State or Public Trust, or a Company established under Section 25 of the Companies Act of 1956/2013.

As of January 29, 2024, the total number of universities in India is 1,113.³⁷⁷ These include different kinds of universities, like central, state, deemed, and private universities. There are 56 central universities in India, which the Indian government sets these up. There are 460 state universities, each created by its respective state governments. Further, there are 128 deemed universities which the UGC of India officially recognises. In addition, there are 430 private universities which are started and funded by private organisations.

A total of 165 Institutions of National Importance (INIs) have also been created, including AIIMS, IITs, IIMs, IIITs, IISERs, and NITs.³⁷⁸ The rate of growth of these institutions has been commendable by any standard, coming only 75 years after independence.

Education in India Is Not for Profit

Education in India is not for profit, and any surpluses generated must be ploughed back into the institution. In addition to this stipulation being incorporated in the Constitution, there

³⁷⁶https://www.ugc.gov.in/pdfnews/6159855_UGC-Institutions-Deemed-to-be-Universities-Regulations-2022.pdf

³⁷⁷ [https://infinitylearn.com/surge/english/universities-in-india/-::~:text=universities in India.,Total Universities In India,56 central universities in India](https://infinitylearn.com/surge/english/universities-in-india/-::~:text=universities%20in%20India.,Total%20Universities%20In%20India,56%20central%20universities%20in%20India)

³⁷⁸ <https://www.education.gov.in/institutions-national-importance>

have been several judicial pronouncements on the subject. For example, education is not a business to earn profit, the Supreme Court has noted as it set aside a 2017 Andhra Pradesh government order prescribing a sevenfold increase in the medical course fee, taking it to ₹24 lakh annually, in the state.³⁷⁹ Furthermore, Section 2 (15) of the Income Tax Act defines “charitable purpose” as “relief for the poor, education, medical relief, and the development of any other cause of general public benefit.”

The Affiliation System: A Legacy Issue

The “affiliation system” dates back to colonial times by which numerous colleges are affiliated with a university, generally a government one. Interestingly, the British, from whom we inherited the system, have long since discontinued it. The system has proved to be a hindrance to excellence because the colleges have to function within the boundaries prescribed by the university to which they are affiliated. They have no autonomy to initiate new programmes, change their curriculum, charge their own fees, conduct exams, and grant degrees.

On the positive side, the system suits the present fast-growing higher education landscape. It is much easier to set up a college through affiliation than a university through legislation. The other benefits are uniformity in the maintenance of standards in curriculum, pedagogy, and examinations for which a whole lot of colleges can ride piggyback on the university.

Accreditation and Ranking System

Accreditation is a valuable tool for the quality improvement of educational institutions throughout the world. In India, its accreditation system is led by the National Assessment and

³⁷⁹ <https://www.hindustantimes.com/india-news/education-is-not-business-to-earn-profit-sc-101667929913301.html>

Accreditation Council (NAAC)³⁸⁰ and the National Board of Accreditation (NBA).³⁸¹ NAAC accreditation is done institution-wise, whereas the NBA handles programme-wise accreditation for professional courses such as engineering, management, and others.

The National Assessment and Accreditation Council (NAAC) is a self-governing body supported by the University Grants Commission (UGC). NAAC accreditation criteria typically consist of (a) Curricular Aspects; (b) Teaching, Learning, and Evaluation; (c) Research, Innovation, and Extensions; (d) Infrastructure and Learning Resources; (e) Student Support and Progression; (f) Governance, Leadership, and Management; and (g) Institutional Values and Best Practices. It checks the quality of education, facilities, research, learning, and teaching at the institute, which is then used to determine UGC funding. At a basic level, NAAC bases its certification on three scores: (i) Self Study Report (SSR), (ii) Data Validation Verification (DVV), and (iii) Preparation for Student Satisfaction Survey (SSS), which are followed by an onsite assessment by a peer review.

The NBA was created in 1994 under Section 10(u) of the AICTE Act and achieved complete autonomy in 2013. It does not receive any government or regulatory agency grants. India, through NBA, is a signatory to the Washington Accord (WA), which promotes engineering mobility between signatory countries. Typically, NBA uses criteria such as Vision, Mission and Program Educational Objectives; Program Curriculum; Academic Support Units and Teaching Learning Process; Course Outcome and Program Outcomes; Students' Performance; Faculty Information and Contribution; Facilities and Technical Support; Continuous Improvement Criteria (Institute Level); First Year Academics, Student Support Systems and Governance; and Institutional Support and Financial Resources. Currently, 3,353 AICTE-approved institutions have been accredited by NBA (status as of

³⁸⁰ <http://naac.gov.in/index.php/en>

³⁸¹ <https://www.nhttp://naac.gov.in/index.php/enbaind.org/>

June 30, 2024).³⁸² However, only 15% of higher education courses in India have NBA accreditation.³⁸³

Institutional rankings, such as university rankings, order institutions based on their achievements in various areas. These areas can include teaching, research, reputation, and collaborative efforts. India has its own ranking agency, the National Institutional Ranking Framework (NIRF),³⁸⁴ established in September 2015. At the international level, Times Higher Education (THE) is the most popular in India.³⁸⁵ Both of them have their own sets of parameters for ranking. While NIRF scrutinises Teaching, Learning, and Resources (TLR), Research and Professional Practice (PPR), Graduation Outcomes (GO), Outreach and Inclusivity (OI), and Perception (PR), THE scrutinises Teaching, Research Environment, Research Quality, International Outlook, and Industry. The methodology of NIRF is based on the general recommendations of the Core Committee established by the Ministry of Education (MoE).

Sources of Funding in Higher Education

Central universities receive funding from both the Government of India and the UGC, whilst state universities are mostly funded by state governments, with some funds from the UGC. The MoE provides full funding for the INIs.

³⁸² https://facilities.aicte-india.org/dashboard/pages/aicte_nba.php

³⁸³ [https://indianexpress.com/article/cities/mumbai/only-15-higher-education-courses-in-india-have-nba-accreditation-says-sahasrabudhe-8463438/-:~:text=accreditation,says Sahasrabudhe-,Only 15%25 higher education courses in,have NBA accreditation,says Sahasrabudhe](https://indianexpress.com/article/cities/mumbai/only-15-higher-education-courses-in-india-have-nba-accreditation-says-sahasrabudhe-8463438/-:~:text=accreditation,says%20Sahasrabudhe,Only%2015%25%20higher%20education%20courses%20in,have%20NBA%20accreditation,says%20Sahasrabudhe)

³⁸⁴ <https://www.nirfindia.org/>

³⁸⁵ <https://www.timeshighereducation.com/>

UGC as Higher Education Regulator

According to the Indian Constitution, the Union of India is responsible for the coordination and maintenance of standards in higher education, research, scientific, and technical institutes. The UGC alone has the power to grant degrees. There are 15 de facto “Regulators,” most importantly, the University Grants Commission (UGC), the All India Council for Technical Education (AICTE), the National Medical Commission (NMC), and the Dental Council of India (DCI) in the field of higher education, which sometimes issue contradicting regulations leading to confusion amongst institutions and students alike. To resolve this, the Higher Education Commission of India (HECI) bill was proposed in the new National Education Policy (NEP) that advocated for a single higher education regulator. After its implementation, the bill will replace the other regulatory bodies in the education system in the country and become the single regulatory body. However, it falls short of bringing medicine and law within HECI.

AICTE’s Position as a Regulator of Technical Education

The All India Council for Technical Education (AICTE)³⁸⁶ is a statutory entity under the Ministry of Education.³⁸⁷ AICTE was established in November 1945 as a national-level advisory body to undertake a review of technical education facilities and encourage the country’s development in a coordinated and integrated manner. The main goals have been to promote quality in technical education, plan and manage development, create legislation for the purpose, and maintain norms and standards.

AICTE operates through various bureaus, including e-governance, approval, planning and coordination,

³⁸⁶ <https://www.aicte-india.org/>

³⁸⁷ <https://www.education.gov.in/about-moe>

administration, research, and faculty development. There are 10 other Boards of Studies dedicated to technician, vocational, undergraduate engineering, postgraduate engineering and research, architecture, town and country planning, pharmacy, management, applied arts and crafts, hotel management, and catering technology education. AICTE currently regulates over 10,000 institutions that offer engineering, technology, and management education.

Although the Apex Court described AICTE's role as advisory in its judgment dated April 25, 2013,³⁸⁸ for institutions Deemed to be Universities, and others, it is mandatory to have AICTE approval from the academic year 2018–2019 in compliance with the Honourable Supreme Court order dated November 3, 2017, passed in CA No. 17869-17870/2017.³⁸⁹

Institutions of National Importance (INI): IITs, IIMs, IISERs, and NITs

The Indian Institutes of Technology (IITs) were established under the Institute of Technology Act, 1961. Currently, there are 23 IITs throughout the country. The approximate cost of establishing an IIT is ₹1,000 crore, which is wholly supported by the MoE. The IIT Council is the apex body in charge of academic and other coordination issues.

The IITs are very conscious and proud of their brand equity and play a very important role as stewards of the Joint Entrance Exam (JEE) and mentoring of new IITs. Their flagship curriculum is the 4-year undergraduate course, but attempts are underway to expand PG and PhD numbers as well (“Taking IITs to Excellence and Greater Relevance,” report of Dr. Anil Kakodkar Committee).

Until recently, the Indian Institutes of Management (IIMs) were recognised as autonomous organisations under the Societies Registration Act of 1860. They are now set up and run

³⁸⁸ <https://sug.ac.in/pdf/supreme-court-judgement.pdf>

³⁸⁹ https://www.aicte-india.org/sites/default/files/Website - Public Notice_0.pdf

under the Indian Institute of Management Act, 2017,³⁹⁰ and can award degrees. Twenty-one IIMs are currently established in India. The IIM Council meets under the chairmanship of the Minister of Education.

The Indian Institute of Science Education and Research is a recent addition to the elite group of institutions. These were established under the National Institutes of Technology, Science Education, and Research Act of 2007.³⁹¹ Then the National Institutes of Technology (Amendment) Act, 2012, came about.³⁹²

The IISER Pune and IISER Kolkata were the first to be established (2006), with the goal of attracting young minds to science and research, while the IISc Bangalore served as both inspiration and example. There are currently seven IISERs across the country, in Pune, Kolkata, Mohali, Bhopal, Thiruvananthapuram, Tirupati, and Berhampur.³⁹³

The National Institutes of Technology (NITs), formerly known as Regional Engineering Colleges, are central government-owned, public technical institutes. They are governed by the National Institutes of Technology, Science Education, and Research Act of 2007/2012, which establishes them as Institutions of National Importance (INIs) and specifies their powers, functions, and governance structure. Legacy difficulties afflict these institutes, and NITSER, the IIT Council's counterpart, has been less proactive than the latter. The Government of India funds all NITs. Currently, there are 31 NITs in India. NIRF 2023 rankings put 21 NITs among the top 100 engineering colleges in India.³⁹⁴ As of 2022, all 31 NITs combined have a total of 23,997 undergraduate seats and 13,664 postgraduate seats.

³⁹⁰ https://www.iimb.ac.in/sites/default/files/inline-files/IIMAct2017_0.pdf

³⁹¹

https://www.indiacode.nic.in/handle/123456789/2083?view_type=browse&sam_handle=

³⁹² https://www.iisertvm.ac.in/files/get_file/3871bd64012152bfb53dfd04b401193f

³⁹³ <https://www.education.gov.in/iisc-bangalore-iisers>

³⁹⁴ https://www.nirfindia.org/nirfpdfcdn/2023/pdf/Report/IR2023_Report.pdf

Skill and Vocational Education

In December 2013, the government approved the National Skill Qualification Framework (NSQF),³⁹⁵ which outlines how general education, vocational education, and industry should be integrated throughout the country. It starts with the streaming of students into general or vocational education based on their ability in class IX, as is done in all countries with effective TVET (technical and vocational education and training) programmes, including Norway, Finland, Germany, the United States, the United Kingdom, and even China.

Unlike the stand-alone skill certifications and diplomas provided by the Ministry of Skill Development and Entrepreneurship (MoSDE),³⁹⁶ under NSQF, a person can constantly enhance his/her abilities and obtain certification that is uniform and valid across the country. It effortlessly connects education, skills, and the job market. Reading, writing, maths, and science are some of the fundamental subjects he/she learns in school. Making him/her a part of regular education also helps to de-stigmatise vocational education. Finally, the NSQF places a high focus on the acknowledgment of prior learning, giving school dropouts a second opportunity in life.

Skill development programmes are currently being offered in all states through state and private-sector-run centres. Sector Skills Councils at the national and state levels function as guilds for their respective trades, assisting and advising Skill Missions and the National Skill Development Corporation (NSDC),³⁹⁷ the national apex body for skilling that includes industry and government.

³⁹⁵https://www.education.gov.in/sites/upload_files/mhrd/files/NSQF%20NOTIFICATION.pdf

³⁹⁶<https://www.msde.gov.in/>

³⁹⁷<https://nsdcindia.org/>

Open and Distance Learning (ODL)

India was one of the first to recognise the value of ODL. It established Indira Gandhi National Open University (IGNOU) in 1985, and it has since grown to become the world's largest open university system and one of the seven important participants in the worldwide higher education distance learning industry, serving over 3 million students. Besides IGNOU, most private, deemed, and public institutions offer ODL courses, with students enrolled in Study Centres. Out of the country's 43 million students, over 4.57 million students are enrolled in ODL.³⁹⁸

Another online programme, the National Programme on Technology Enhanced Learning (NPTEL),³⁹⁹ is a collaboration between IITs and the Indian Institute of Science.

What Needs to Be Done in Turning Higher Education from Dream to Reality

We need to make sincere efforts on the following fronts if we want to realise our dream of an excellent higher education system for our country and its future generations.

The First Is to Tackle the Three “E”s of Expansion, Equity and Excellence

Expansion

According to the Economic Survey 2022–2023,⁴⁰⁰ the country has performed fairly well in terms expansion of its higher

³⁹⁸ <https://timesofindia.indiatimes.com/education/enrolment-for-online-education-up-170-in-2022-distance-learning-42/articleshow/95133531.cms>

³⁹⁹ <https://nptel.ac.in/>

⁴⁰⁰ <https://www.indiabudget.gov.in/economicsurvey/doc/echapter.pdf>

education. The report elicits that the Indian higher education system is the laboratory of change for one of the largest young populations in the world, with more than 27% of India's population in 15–29 years age bracket. The infrastructure for higher education has been enhanced overtime. The number of medical colleges in the country has been increased from 387 in 2014 to 648 in 2022, and the number of MBBS seats has increased from 51,348 to 96,077. The number of Indian Institutes of Technology (IITs) and Indian Institutes of Management (IIMs), respectively, stand at 23 and 20 in 2022 against 16 and 13 in 2014. The strength of Indian Institutes of Information Technology (IIITs) is 25 in 2022 against 9 in 2014. In 2014, there were 723 universities in the country, which have been increased to 1,113. 6.69 The total enrolment in higher education has increased to nearly 4.1 crore in financial year (FY) 2021 from 3.9 crore in FY2020. Since FY2015, there has been an increase of around 72 lakh in enrolment (21%). The female enrolment has increased to 2.0 crore in FY2021 from 1.9 crore in FY2020.

Further, the enrolment in Distance Education is 45.7 lakh (with 20.9 lakh females), an increase of around 7% since FY2020 and 20% since FY2015. The current GER is 28.4 in higher education, which is an improvement over the previous years. GER for males increased from 24.8 in FY2020 to 26.7 in FY2021 while GER for females has also shown improvement from 26.4 to 27.9 during the same period. A further increased GER can be achieved by blended/hybrid learning through online/open and distance learning (ODL). The establishment of a National Digital University, as envisaged in the National Union Budget of 2022,⁴⁰¹ could be a right step.

Another important aspect is that online education must be powered by an effective Learning Management System (LMS) that provides a comprehensive solution for administration, documentation, tracking, reporting, programme delivery,

⁴⁰¹ <https://www.education.gov.in/digital-university>

faculty training, and continuous assessment, all based on artificial intelligence (AI)-driven predictive analysis.

Equity

Though the Constitution provides for positive discrimination to the socially depressed segments of its society, even after 75 years, the gaps have not been breached. While the GER for the 18–23 age group is 28.4% in the country, the GER for Scheduled Castes is 25.9%, and for Scheduled Tribes it is barely 21.2%.⁴⁰² However, the GER for males seems to be comparable to the GER for females. College density—that is, the number of colleges per lakh eligible population (population in the age-group 18–23 years)—varies from 7 in Bihar to 59 in Karnataka as compared to all India average of 30. And 60.56% colleges are located in rural area, and 10.75% colleges are exclusively for women.⁴⁰³

Excellence

Though we have some fairly old universities dating back to the 19th century, none of them, including the IITs, are ranked among the top 200 in the globe. However, in 2023, there are 75 universities ranked in the World University Rankings, while in 2024 there are 91. According to a 2023 study by Mercer Mettl,⁴⁰⁴ 45% of Indian graduates are considered employable by industry standards. The study evaluated 440,000 learners across 2,500 campuses and found that graduates are more employable for non-technical jobs than technical jobs. Research, which is considered sine qua non for excellence in universities, is also largely missing. What, then, should be the road map to become

⁴⁰² <https://educationforallinindia.com/ger-at-higher-education-level-in-india-2023/>

⁴⁰³ <https://aishe.gov.in/>

⁴⁰⁴ <https://pages.mettl.com/indias-graduate-skill-index>

the best in the world? To begin with, autonomy must be accorded for governance, funding, and academic performance. The affiliation system must be phased down gradually by promoting UGC's Autonomous College initiative and establishing cluster universities, as is done under Rashtriya Uchchatar Shiksha Abhiyan (RUSA). The NEP 2020 is quite proactive on this subject, and it makes various recommendations for allowing colleges with high rankings and accreditation to be totally autonomous. The NEP's vision of graded autonomy must be implemented. Governance standards need to be improved. Faculty recruitment must be facilitated by recruitments from both within and outside the country. There should be no constraints on topping up the salaries of faculty who can engage with the industry.

Interdisciplinarity, which is the hall mark of excellence in all top universities in the world, has to be prioritised. A university, as the name suggests, represents a world of knowledge in which all disciplines—including science, humanities, medicine, engineering, law, agriculture, architecture, management, pharmacy, and even skills—are considered inextricably interrelated. Human experience demonstrates that all groundbreaking ideas occur on the edges of disciplines. The proliferation of single-subject universities, which have come mostly through the Deemed Universities route, must be discouraged. Perception is important, and therefore we need to encourage accreditation and also participation in world rankings. The National Institutional Ranking Framework (NIRF) must be seen to be fair. It is also important that there is no glaring mismatch between ranking and accreditation, as there are several universities which have received NAAC A grades but did poorly in their ranking.

QS World University Ranking 2025 has IIT Bombay rising from 149th to 118th globally, followed by IIT Delhi and IISc Bangalore. Other notable improvements included IIT Kharagpur, IIT Madras, and the University of Delhi. Jawaharlal Nehru University was India's highest-ranked university for development studies, while IIM Ahmedabad and Saveetha

Institute of Medical and Technical Sciences were also highly ranked.⁴⁰⁵ However, IISc Bangalore is the only institution that has been ranked in the top 250 universities in the world in 2024 by Times Higher Education. In contrast, as of 2023, China has 10 universities in the Shanghai Ranking's Academic Ranking of World Universities (ARWU) and 7 in the Times Higher Education Rankings' global top 100 lists. It appears, we still have a long way to go.

The other long-term steps that the universities need to take to improve rankings are to create effective linkages with the industry. The effort must be to create new processes and products. Transforming patents into products is important, not just filing patents. The other step to improve ranking would be to include more international faculty and students in our campuses. However, international faculty and students will only come if they see value in our universities.

Need to Invest More in School Education as They Are the Building Blocks of Higher Education

The quality of our higher education system is inextricably linked to the quality of our basic and secondary education institutions. We have to invest time and money in our schools, as they are the building blocks of our universities. Even as 2 million enrol in schools every year, it is necessary to pay attention to our government schools, which receive the bulk of the budget earmarked for this sector. As state governments are primarily responsible for school education, they should prioritise a transparent way of teacher selection, promotion, and transfer on the lines of the Kendriya and Navodaya Vidyalayas of the Government of India which have shown outstanding results.

⁴⁰⁵ <https://www.topuniversities.com/world-university-rankings>

Skilling Needs to Be Integrated into Education

MoSDE should also focus on other skilling schemes other than the Pradhan Mantri Kaushal Vikas Yojana (PMKVY), a target-oriented plan which has delivered some amazing results. After 10 years of deployment, the PMKVY 4.0⁴⁰⁶ dashboard reports 24 lakh enrolled, 11 lakh trained, and 8.5 lakh being trained. However, the intended objective of training 400 million people by 2022 hasn't been realised. Aside from that, the majority of individuals trained are at the lowest training levels, ranging from 1 to 4. The reported placement rate of 54% is inadequate. A brief look at the training programmes reveals that the majority of them are trade-based, traditional, outdated, and have a limited reach. NEP's most essential principle is that skilling should be viewed as an integral aspect of education rather than a distinct entity.

We have only around 20 years to enjoy demographic dividends. To expedite the process, we may establish a National Skills University (NSU) under MoSDE/NCVET (National Council of Vocational Education and Training). A National Skills University Bill⁴⁰⁷ was drafted in 2015. However, no National Skill University has come up, though many in the states were setup.

Importance of Proper Implementation of NEP 2020

The NEP 2020 provides action points for education in a short to medium time-frame. The projected goal of 50% GER by 2035 is achievable, assuming there are fewer budget constraints and the system's moving parts, particularly skilling and ODL, are made to play their part. The new NEP, like the last NPE in 1986, calls for spending 6% of our GDP on education. On the ground, however, our education spending has been declining: 6 years ago, in 2012–

⁴⁰⁶ <https://msde.gov.in/en/schemes-initiatives/short-term-training/pmkvy-4.0>

⁴⁰⁷ <https://www.msde.gov.in/sites/default/files/2019-11/Draft-Bill-on-the-National-Skill-University.pdf>

2013, it was 3.1% of GDP, but it fell to 2.8% in 2014–2015. By 2018–2019, we had barely reached 3%. Even the current spending is just about 2.9%.⁴⁰⁸ The percentage spent on higher education has been considerably lower. The Comptroller and Auditor General of India (CAG) also noted that the proper implementation of the Education Cess may significantly remedy this issue.⁴⁰⁹

Several new efforts, such as academic bank of credits, student-centric education, multiple entry and exit options with appropriate certification, personalised education, and so on, are innovative and progressive, but implementing them might be a challenge. They require not just significant financial and technological inputs, but also a paradigm shift in the attitudes of regulators, academics, and bureaucracy.

The policy document also recommends the establishment of a single higher education regulator (Higher Education Commission of India, HECI), segregation of accreditation (National Accreditation Council, NAC), separate funding (Higher Education Grants Council), and regulatory roles (National Higher Education Regulatory Council, NHERC), all of which will yield positive results in the future. However, it is not understood why law and medicine have been kept outside its purview.

The recommendation to phase out affiliation over the next 15 years and give all colleges graded autonomy based on accreditation is a welcome step. Its success, however, will depend on the degree of cooperation received from the faculty in putting in the extra effort required to achieve autonomy. That the government has approved the RUSA scheme to continue until March 31, 2026,⁴¹⁰ is welcome. It could provide a vehicle for forming Cluster Universities from numerous associated colleges.

One of our fundamental shortcomings has been the low research quotient and poor linkage with industry. Research without patents and intellectual property rights is like a body

⁴⁰⁸ <https://bestcolleges.indiatoday.in/news-detail/budget-2024-the-educational-angle-:-:text=When it comes to last,higher than the previous year>

⁴⁰⁹ <https://cag.gov.in/en/audit-report?ts=word&title=education&page=143>

⁴¹⁰ <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1799301>

without soul. The NEP's plan for a new authority, the National Research Foundation (NRF), while good, falls short of establishing a Max Planck or Fraunhofer Society model for setting up institutions. All over the world, they have been the best. They ensure autonomy and an entrepreneurial approach to research, which are critical for national efforts such as "Make in India" and "Start-up India."

Finally, one expected the NEP 2020 to remind us of some best practices, such as preventing inbreeding, automatic promotions, and fair faculty selection. Furthermore, the lack of any measures to prevent commercialisation in higher education institutions is conspicuous by its absence.

Conclusion

The Indian higher education system has enormous potential to become one of the best in the world. It has the benefit of the English language as well as a large pool of qualified manpower, which has earned it the nickname "back office of the world." The technology interventions in the curriculum have ensured front office experts as well. What is interesting is that the foot soldiers for this revolution came from engineering colleges in our Tier 2 cities, rather than from metropolitan cities or our top institutions. The growth of education in the country has lessons for us. For one, it teaches us that when we combine knowledge, skills, and industry, we can achieve incredible things.

Chapter 17. Democratic Decentralisation: Power to the People

Prof. Anil B. Suraj

Introduction

Development, whether economic or social, is attributed to the efficient distribution and use of resources. In achieving public welfare, the eventual consumption of essential goods and services is not as challenging as its dependence on the efficiency of the distributive scheme that forms the basis of such provision. Public administration, as a subject, is the study of people, processes, and principles that ought to govern the efficient use of available resources towards achieving greater public welfare.

In designing systems for greater efficiency, especially towards large-scale distributive outcomes, localisation and decentralisation are the preferred modes. There is no greater challenge in distribution than that of achieving public welfare that is equitable and sustainable. In the Indian context, this challenge is of even greater complexity owing to the sheer size and diversity of the nation. Being the most populous country in the world today, public governance and public administration in India need to constantly reinvent themselves to address concerns of equity and efficiency in achieving social welfare and economic development. Population is just one of the factors of challenge. There is inherent plurality and heterogeneity across regions, be it in terms of language, culture, climate, or natural resources. For

instance, there are 22 languages recognised in the Eighth Schedule of the Indian Constitution, across 28 states.

The composition of the Constituent Assembly of India, in itself, speaks volumes about the diversity of the nation. The members were indirectly elected representatives from more than 40 provinces and princely states. The content of the debates and deliberations in the Constituent Assembly demonstrates the challenges of framing policies to govern the various regions of India. The universally acclaimed principle of “Unity in Diversity” quite aptly describes the objective of policymaking and governance in India.

Local Self-Governance in the Indian Constitution

The Preamble to the Constitution of India articulates the founding principles of the Republic of India. Beginning with the words “WE, THE PEOPLE OF INDIA, having solemnly resolved to constitute India ... ,” the Preamble proceeds to identify the basic principles that must govern public administration in India. The Constitution is, through the Constituent Assembly, adopted and enacted by the people of India, thereby forming the Republic. A nation in which the supreme power is held by the People and their elected representatives is what makes it a Republic. Immediately following the Preamble, in its very first Article, the Constitution of India lays down that “India, that is Bharat, shall be a Union of States.” Foremost, this provision establishes the two levels of government in the Republic of India, that is, the Union Government and the Government of the particular State. The Constitution has a dedicated Part titled “Relations between the Union and the States.” Article 246 and the Seventh Schedule to the Constitution define and enumerate subject matters for the exercise of legislative power—exclusively by the Parliament (Union List), the State Legislatures (State List), and the Concurrent List, wherein States may legislate, subject to the

Parliament's prerogative to also make laws. The federal relations between the Union and the States are designed to weigh in favour of the Union.⁴¹¹ In terms of purview and coverage of subject matter, the Union List has 96 entries, and another entry provides the residuary power to legislate on "any other matter not enumerated" in any of the Lists. The State List has 66 entries, and the Concurrent List has 47 entries. Concomitantly, the scope and extent of executive power is also based on the subject matter for the exercise of legislative power, by virtue of Article 73 (of the Union) and Article 162 (of the State).

A democratic form of government is designed as a social contract between two constituents: the general public, who are the governed, and the officials who administer the different departments of the Executive branch of governance. The Executive is further divided into the political leadership, which comprises elected legislators and ministers, and the administrative bureaucracy, consisting of different cadres of civil service officers bound by strict rules of conduct. The "will of the governed" is assumed to be conveyed through the process of periodic elections. The representatives elected are expected to uphold the will of the people by framing policies, making laws, enforcing rules, and reviewing and holding the government accountable. Elections are festivals of democracy. The electoral process celebrates the fervour and momentum of public participation and collective energy involving significant expenditure and considerable diversion of government resources. As much as elections are essential to sustain the tenets of democracy, there are also ethical and demographic concerns about whether the elected are indeed the true representatives of all the people in their constituency.

⁴¹¹ It must be noted that the framers of the Constitution have preferred the phrase "Union of States" and also have avoided using the term "federalism" in the Constitution.

The closer the governed are to the government, the more likely the outcome is the achievement of the common good.⁴¹² The interaction between the people and their elected representatives must not be restricted only to the period of elections. It must be an ongoing process of deliberative iteration and exchange of ideas towards achieving greater public welfare in an efficient manner. The rationale for any form of local self-government is to bring the machinery of governance closer to the people, and to work in the spirit of cooperation and synergy with the other levels of governance.

The term “local self-government” is part of the text of the original Constitution itself. In Entry 3 of the Union List under the Seventh Schedule, the Constitution refers to the delimitation of cantonment areas and local self-government in such areas. More appropriately, in Entry 5 of the State List under the Seventh Schedule, the original text of the Constitution defines the term by stating: “Local government, that is to say, the constitution and powers of municipal corporations, ... and other local authorities for the purpose of local self-government or village administration.” The 73rd Amendment (the Panchayats) and the 74th Amendment (the Municipalities) to the Constitution became effective in April and June of 1993, respectively. The Panchayats are established as institutions of self-government in village and rural areas, while the Municipal Councils or Municipal Corporations are established as institutions of self-government in urban centres of towns, cities, and metropolitan areas. The 73rd and 74th Amendments further deepened the concept of “local self-government” in the Indian Constitution by making it more Republic through greater scope for public participation in governance, and more Democratic by introducing local bodies of governance comprising elected representatives. These

⁴¹² “The government of a republic originates in the people and is intended to promote their common good.” Quoted from: Duncan, Grant. (2022). Things made from people: Republics, representatives, revolutions. In Grant Duncan, *How to rule? The arts of government from antiquity to the present* (p. 156). Routledge.

amendments have designed the process of devolution of powers to subsidiary forms of government by forming multiple authorities at the local level. Such authorities are typically constituted of representatives elected by the local population.

In drafting these landmark amendments to the Constitution, there appears to be a clear recognition of the formal role and authority of the State Legislature. In practice, this would essentially mean the exercise of authority by the respective State Government. Whether it is for the devolution of functions or the delegation of power to impose taxes, the prerogative of the State Governments is evident in the various Articles and provisions of Parts IX and IXA of the Constitution. It may be observed that the Articles, at various stages, confer discretion on the State Government to “endow,” “authorise,” “assign,” “provide,” “as may be entrusted,” and to provide for “such powers and authority as may be necessary to enable them (Panchayats or Municipalities) to function as institutions of self-government,” and “for the devolution of powers and responsibilities.” These two major amendments also led to the inclusion of the Eleventh Schedule and the Twelfth Schedule in the Constitution. The Eleventh Schedule is pursuant to Article 243G and lists 29 entries of subject matter for which the Legislature of a State may devolve powers and responsibilities to the Panchayats to administer. The subjects include broad areas such as the preparation of plans and implementation of schemes for economic development and social justice, poverty alleviation, social welfare, implementation of land reforms, agriculture, education, and small-scale industries. There are also certain specific areas included in the list, such as drinking water, fisheries, khadi and cottage industries, roads and culverts, fuel and fodder, and libraries, among other priorities of rural development.

Similarly, the Twelfth Schedule is pursuant to Article 243W, and it lists 18 entries of subject matter that the Legislature of a State may devolve powers and responsibilities for the Municipal bodies to administer. The subjects include broad areas such as the preparation of plans and implementation of schemes for

economic development and social justice, urban planning, urban poverty alleviation, public health, and urban forestry and ecology. There are also certain specific areas included in the list, such as slum improvement and upgradation, roads and bridges, provision of urban and public amenities, and water supply for different kinds of purposes, among other priorities of urban development. The Union and the States form the two levels of federal governance. The constitutional amendments in 1993 sought to establish a third level of local self-governance. In reality, it may be more appropriate to refer to the local self-governments as being more in the form of a subsidiary to the State Government than as an independent third level of government, as desired by the Constitution.⁴¹³

Rural Local Governance and Panchayats

History and Evolution

The Panchayat system has been an intrinsic part of local life and governance throughout the ancient history and culture of Indian villages. The etymological foundation of the term *Panchayat* is attributed to a representative council or assembly (*aayat*) of five members (*panch*). The role of Panchayats in governance, also termed “Panchayati Raj,” was constitutionally recognised and defined by the 73rd Amendment in 1993. This amendment has given legitimacy to what Mahatma Gandhi referred to as the basis of the “government of the village.” “The

⁴¹³ “Much we may talk of Gandhi and ancient *Panchayats* in India our local governments, *Panchayats* and municipalities, continue to derive not only their powers but also functions from their respective States.” Quoted from: NITI Aayog. (2020, February). *Measures to augment the resources of panchayats: Empirical assessments 2018–19*. Report sponsored by NITI Aayog, Government of India, and conducted by Indian Institute of Public Administration, p. 20.

government of the village will be conducted by a Panchayat of five persons annually elected by the adult villagers, male and female, possessing minimum prescribed qualifications. These will have all the authority and jurisdiction required.”⁴¹⁴ He further stated that “this Panchayat will be the legislature, judiciary and executive combined to operate for its year of office.” On how villages define India as a nation, Gandhi is famously quoted as saying, “I have believed and repeated times without number that India is to be found not in its few cities but in its 700,000 villages.”⁴¹⁵ Panchayats have emerged as institutions of governance not only of a village (referred to as *Grama*), which predominantly survives on agriculture and related activities, but are also established in Blocks (referred to in some states as *Taluka* or *Mandal*) and Districts (referred to as *Zilla*), which are respectively larger regions of administrative units. The role and form of Panchayats have steadily evolved over the last several centuries. The Panchayati Raj system is a democratic amalgam of people’s trust and choice, serving as an institutional representative of their voice. Whether it is social aspirations or economic development, Panchayats embody the collective will of the people within their region. The local language, culture, traditions, climate, crops, and commerce are all considered relevant factors in making governance decisions by the Panchayats. Its members are elected representatives, usually from the local area, and are known to most people in that village, or the Block. Unlike the formation and functioning of Municipal bodies in urban areas, the Panchayats retain proximity to the governed, both as an accessible institution and in the fact that each of its members is intrinsically part of life in the village.

⁴¹⁴ *Gandhiji on VILLAGES*. (2002). Mani Bhavan Gandhi Sangrahalaya Mumbai. <https://www.mkgandhi.org/ebks/Gandhionvillages.pdf>. Quoted from: *Harijan* (July 26, 1942), 76, 308–309.

⁴¹⁵ *Gandhiji on VILLAGES*. Quoted from: *Harijan* (April 4, 1936), 62, 298.

Current Status and Concerns

There are about 2.6 lakh Panchayats with more than 31 lakh elected representatives in India.⁴¹⁶ A matter of considerable achievement and pride in public administration is that about 46% of the elected representatives are women, and the Panchayats also provide wide representation to the weaker sections of society, including Scheduled Castes (SCs), Scheduled Tribes (STs), and Other Backward Classes (OBCs). There is a dedicated Ministry of Panchayati Raj in the Government of India, formed more than two decades ago, which aims to make each of the Panchayati Raj institutions an “effective, efficient and transparent vehicle for local governance, social change and public service delivery mechanism meeting the aspirations of local population.”⁴¹⁷ It is also relevant to note the Directive Principle of State Policy as mandated in Article 40 of the Indian Constitution, which refers to the organisation of village panchayats. It provides that “The State shall take steps to organize village panchayats and endow them with such powers and authority as may be necessary to enable them to function as units of self-government.” Directive Principles of State Policy, though not exclusively enforceable by the Courts, are a unique feature of our Constitution by which we can evaluate the functioning of the Government. The Ministry of Panchayati Raj, within a year of its formation as a separate Ministry in the Government of India, instituted the Devolution Index.

This exercise of assessing the “Improved Devolution Index” has involved a multi-pronged criterion of what would constitute the operational core of decentralisation and the support systems for devolution. In the Devolution Report of 2015–2016,⁴¹⁸ this Index has been constructed based on considerable weight being

⁴¹⁶ Annual Report 2023–2024. Ministry of Panchayati Raj, Government of India.

⁴¹⁷ Annual Report 2023–2024, *supra*.

⁴¹⁸ Unnikrishnan, P. V. et al. (2016). Devolution report 2015–2016. Where Local Democracy and Devolution in India is heading towards? Ministry of Panchayati Raj, Government of India, and Tata Institute of Social Sciences, Mumbai.

given to foundational factors such as the transfer of finances, transfer of functionaries, transfer of functions, and autonomy of Panchayati Raj institutions. In addition, operational factors of capacity building and systems for accountability and transparency form the comprehensive matrix of assessment on whether the States have indeed devolved enough autonomy and power to the Panchayat system to function as an independent form of local government. The Devolution Index is further broken into measurable points of data, including per-capita funds available from the respective State Finance Commission, percentage of functions actually undertaken by the Panchayats, percentage of local institutions over which Panchayats have full functional control, and percentage of activities in which the Panchayats can make decisions on expenditure with full independence. While the nature and extent of devolution is a challenge to objectively define or assess, the Devolution Index is indeed a fair attempt to measure the various States on their ability and willingness to cede democratic power and functions of governance to the Panchayats.

The working of Village Panchayats, also termed as Gram Panchayat, has not achieved the constitutionally expected levels of decentralised governance. As mentioned earlier, through the constitutional amendments, the State Governments have been vested with the power to decide the nature and extent of functional and financial devolution of authority to the Panchayats and Municipal bodies.⁴¹⁹ This has led to a wide degree of variation in the devolution of powers across the country. The variations begin right from the instance of the names by which Gram Panchayats are addressed across different States.⁴²⁰ Even basic norms, like that of frequency of meetings of the Gram Panchayat or their quorum, are not uniform or standardised across the States. On the core concern of roles and functions of the Gram Panchayat, the variation across the States is indeed

⁴¹⁹ Article 243A, Constitution of India.

⁴²⁰ Rajasekhar, D. (Ed.) (2022). Handbook of decentralised governance and development in India. Routledge. Location 6118 (Kindle edition).

quite stark. The State-level legislations that devolve functions to the Panchayats have been surveyed,⁴²¹ and we may observe the following (with the maximum number of States being 28):

1. Only two States have devolved the function of “consider proposals for fresh taxation or enhancement of existing taxes.”
2. Only nine States have devolved the function to “examine annual statement of accounts and audit report” and to “review programme of work for the year or any new programme.”
3. Only eight States have devolved the function of having to “render assistance in the implementation of development schemes and rendering services in the villages.”

The extent of devolution of functions to Panchayats is certainly a matter of concern. In addition, shortfalls related to funds and functionaries also come forth prominently. In none of the States are the Panchayats given as much power and autonomy as is expected by the constitutional provisions. It is now more than three decades since the amendments to the Constitution, and with the increasing rate of growth of the nation’s economy, the extent of devolution of powers to the system of local government ought to have been far deeper and more empowering.

Urban Local Governance and Municipal Bodies

History and Evolution

The 74th Amendment to the Constitution of India (popularly referred to as the Nagarpalika Act), which came into effect in June 1993, seeks to provide a common framework for the

⁴²¹ Rajasekhar, *supra*. Location 6196 (Kindle edition).

structure of urban local bodies across India. With the introduction of Part IXA, titled “The Municipalities,” into the Constitution, the then existing laws of different States pertaining to urban local bodies had to be suitably modified to conform to the constitutional amendment. It was made clear that the features of local governance, as specified by the amendment to the Constitution, shall define the working of municipal laws across the country.

The etymological foundation of the term “Municipality” can be traced to the classical Latin term *municipalis* which refers to a “citizen of a free town.” There have also been references to a Roman *municipium*, a city whose people had the privileges of Roman citizens but were given autonomy to be governed by their own laws. In the Indian context, Article 243P(e) of the Constitution defines the term “Municipality” as an institution of self-government constituted as either a Municipal Corporation for a larger urban area, or a Municipal Council for a smaller urban area, or a Nagar Panchayat for an area that is in transition from a rural to an urban area. As is evident in Entry 5 of the State List in the Seventh Schedule of the Constitution, the underpinning of self-governance by the Municipalities is based on the power devolved by the Constitution. The primary objective of such devolution may be found in the apparent necessity to diffuse power from the central authorities with respect to local governance. This is also to enable policy differentiation and greater diversity in the content of policy planning and implementation, thereby achieving better standards of local governance. Based on Entry 5 in the State List, read with the power of State Legislatures under Article 246(3), the Constitution provides for States to establish Municipal Corporations, Municipalities, Town and Country Planning Boards, Greater Metropolitan Authorities, and other local organisations in their respective jurisdictions.

Various laws of Municipal bodies, some of which came into existence even before India became independent, had to conform to the essential features of the 74th Amendment to the

Constitution. The leading features of urban local governance, as specified in the constitutional amendment, are:

1. Constitution and composition of Municipalities.
2. Constitution and composition of wards committees and any other related committees at the Ward level.
3. Reservation of seats in favour of women and SCs/STs, in every Municipality to enable diversity in representation.
4. Duration of the Municipalities has been fixed at 5 years, while at the same time providing a process for an untimely eventuality of dissolution.
5. Disqualifications for the membership of a Municipality.
6. Powers, authority, and responsibilities of a Municipality are also established in the Twelfth Schedule to the Constitution, which provides for about 18 different functional activities in relation to which a Municipality can undertake programmes and schemes for implementation.
7. Formation of District Planning Committee and Metropolitan Planning Committee.
8. Funding of a Municipality and its power to tax.
9. Role of the Finance Commission is to review the financial position of finances of local bodies and the maintenance of accounts and audit process.
10. Recognising the importance of elections for the local government, the State Election Commission has been authorised for superintendence, direction, and control of the preparation and conduct of all elections to the Municipalities.

Current Status and Concerns

Urban centres all over the world are facing the reality of migration from rural areas and small towns. The share of the population living in urban areas across India is estimated to have crossed 35%, and the rate of urbanisation is steady, with an increase of 4% in the last decade alone. Metropolitan and mega cities in different parts of India, such as Mumbai, New Delhi,

Kolkata, Chennai, and Bengaluru, are facing the challenge of a rising populace, and these cities would therefore, drag the policy and decision-making in the direction of feeding their growth through a phenomenon termed “urban primacy.”⁴²² It is also predicted that the urban population in India would double by 2050. This demands much greater attention to content and design of governance systems.

The autonomy ceded to a law made by the State Legislature could have wide implications. For instance, the State law is enabled to determine the manner of election of the Chairperson of a Municipality or the Mayor of a Municipal Corporation. Article 243R provides that “all the seats in a Municipality shall be filled by persons chosen by direct election from the territorial constituencies in the Municipal area” (i.e., from the wards). However, this democratic and representative arrangement is subject to the possibility of a State law which may seek to provide representation in a Municipality to different categories of people who are not elected representatives of the wards. Of course, the State law cannot go beyond the following categories as mentioned in Article 243R: persons experienced in municipal administration (without the right to vote), Members of Parliament (MPs), Members of Legislative Assembly (MLAs), Members of Legislative Council (MLCs), and Ward Committee Chairpersons. Furthermore, since there is an express denial of right to vote to such persons who have been given representation on the basis of their experience in municipal administration, it could be an inference that the MPs, MLAs, and MLCs are to be denied voting rights in the Municipality proceedings. However, given that MPs, MLAs, and MLCs typically would enjoy greater political clout, the denial of voting rights may not amount to restricting their ability to influence decisions being made at the local level. It is another legal issue as to what criteria could be

⁴²² Vaddiraju, Anil Kumar. (2022). Urban decentralisation and local governance in the context of urban centralisation. In D. Rajasekhar, R. Manjula, & M. Devendra Babu (Eds.) *Decentralisation in contemporary India: Status, issues and the way forward* (Chapter 11). Routledge. Location 8933 (Kindle edition).

adopted to select persons who have “special knowledge or experience in Municipal administration.” Should this criterion not be used to bring in people who have expertise in urban amenities and affairs, rather than elected representatives of different levels?

There are close to 5,000 urban local bodies in India, and the constitutional power to delimit the wards, the basic territorial constituencies that compose Municipalities or Municipal Corporations, has often been used as a tool by the State Government to delay the elections to the Municipality concerned. Considering that the Municipal bodies are to be primarily constituted by elected representatives, the constitutional amendment lost an opportunity to lay down uniform requirements regarding the election of the Mayors of Municipal Corporations or Chairpersons of Municipalities. Direct elections to the position of the Mayor and a minimum or uniform term could also have been prescribed to preclude the varying forms adopted in different States. There is also no constitutional provision regarding the removal of the Mayors or the Chairpersons. These instances give only a flavour of the implications of allowing the State to continue to follow different models of urban governance and, consequently, the extent of devolution of powers to the local government. The State-centred approach of the constitutional amendment could considerably constrain the democratic basis of local self-governance. While the objective of the Constitution is to provide a basic structure of urban local governance across the country, it has been made to heavily depend on the discretion of each of the States to accord respect to the principles, and their uniformity.

Principles of Public Administration to Govern Decentralisation

Devolution of Powers: Functions, Funds, and Functionaries (3Fs)

Public policy and governance across the world are today broadly defined by the adoption of the Sustainable Development Goals (SDGs) as an agenda for the year 2030. The 17 Goals, as specifically laid out, provide a comprehensive framework to design policies and programmes of action to achieve the social and livelihood outcomes recognised globally. In a recent publication of the Indian NITI Aayog, along with the United Nations Development Programme (UNDP),⁴²³ about 160 policies of the Government of India have been mapped to the 16 thematic goals of the SDGs. This report rightly identifies the urgent need to design policies and governance to be able to achieve localisation of SDGs. Localisation is necessary not only to sharpen the objectives of policies to effectively address issues of public need but also to ensure prompt implementation by means of local governance.

The 73rd and 74th Constitutional Amendments of 1993 strengthened the focus on devolution in terms of what is popularly termed the 3Fs framework, that is, Functions, Funds, and Functionaries. The amendments have been designed to vest the responsibility of such devolution on the respective State Governments. It is indeed the appropriate manner of enabling such devolution of powers. Whether in terms of functions or the fiscal power to raise funds, institutions of local governance are necessarily be nurtured and sustained by the respective State Governments. The functional domain identified for the local government, which is laid down in the Eleventh Schedule

⁴²³ NITI Aayog (2024, July). *SDG Index 2023–24 Report of NITI Aayog*.

(Panchayats) and Twelfth Schedule (Municipal Bodies) of the Constitution, considerably draws upon activities that otherwise ought to have been the domain of the State Government. Concomitantly, the power to raise finances with regard to such activities is also primarily within the purview of the State Government.

Therefore, the devolution of power to local government institutions is entirely within the domain of the State Government. The constitutional amendments did recognise this obvious sequence of devolution of power. As reflected in various reports over the last three decades, the devolution of powers regarding the 3Fs may at best be described as inadequate. There is considerable reluctance and resistance to ceding powers by the State Government. For instance, the Eleventh Schedule lays down certain functional areas for Panchayats, such as Agriculture (including agricultural extension), Drinking Water, Rural Housing, and Social Welfare. These are major domains of policy and social influence in the context of governance across India. State Governments are naturally not forthcoming in devolving powers of policy formulation, fiscal authority, and staffing and personnel to govern such functions with wide implications for public welfare.

We may also similarly analyse the Twelfth Schedule of the Constitution that lays down functional areas for the Municipal Bodies to administer. It lists functions such as, urban planning (including town planning), roads and bridges, water supply (for domestic, industrial, and commercial purposes), public health (sanitation, conservancy, and solid waste management), and urban poverty alleviation. Given the rising rate of urbanisation and the evolution of globally renowned services sector and export-oriented global capability centres that prefer to be located in metropolitan cities, no State Government is willing to give up its policy authority to govern functions of urban planning and development. The potential to raise finances, which can sustain the growth of a larger region of the State, is too high for the State Government to not want to directly administer the entire facet of

urban governance. If we take the examples of Mumbai and Bengaluru, their respective States rely heavily on the economic growth and fiscal collections from these two cities to be able to fund the development across the State. This poses a relevant challenge of whether the devolution of power and independence in the domain of urban governance is indeed beneficial in achieving the larger objectives of growth and development of the concerned State as a region.

If we consider even one instance of urban transportation, there are demands for infrastructure, large-scale and long-term financing, raising of debts, and investments. These are the obvious priorities of the State Government and may also need to be achieved in partnership with the Union Government, as there may be international developmental assistance involved, as seen in the Urban Metro Rail projects. These projects would also involve issues of initial fare fixation and subsequent periodic revisions. Such decisions would have to be made in collaboration with multiple other modes of urban and public transport, involving their respective departments of the State Government. Does the Constitution expect that institutions of local government administer urban transport and the related infrastructure? We must believe that the answer is in the affirmative. However, the reality is that the Municipal Corporations and other urban local bodies are not currently involved in such issues of planning and managing urban transport and infrastructural projects, especially on a large scale. If there is any role for local government, it is merely a formality of being involved in consultations, and it neither involves responsibility nor any form of accountability. This is a clear denial of public voice and participation in the most crucial decisions of urban transportation and infrastructure.

The crucial aspect of “functionaries” is usually not given as much attention as that of the devolution of powers relating to “functions” or “funds.” Governments are functional only through their human personnel. While technology may assist and considerably support this structure of bureaucracy, staffing and

cadre-based expertise remain the most critical elements of any government and its effectiveness. Local government institutions need independence and autonomy in decisions relating to the recruitment of suitable persons and the engagement of professional experts and consultants. This would empower local governments to employ appropriate talent, often locally sourced, to not only support their immediate needs but also sustain aspirational growth and outcomes over a longer term. It may even be possible to establish a separate cadre of professionals to be employed by local governments, across different functions of public utilities and services. Devolution should also mean independence from traditional practices of official deputation from different wings of the State Government. These are officials who are deputed for a fixed time period and are then asked to report back to their parent department. This would be detrimental to the objective of creating a local government cadre of professionals. Given the demand for public services at the local level, there must be a systematic and concerted effort to enable personnel and staffing policies that are best suited to governance with, and among, people. Proximate governance requires a very different set of skills and understanding by the staff. There would have to be engineers and specialists, while we may also need staff trained in public relations, communication, and being humane under tough conditions of civic engagement.

Participatory, and Community-Based Governance

Stakeholder consultations and participatory modes of decision-making have become not only the basic minimum requirements of any process of (local) governance but have also evolved as enforceable rights of the citizens. There are no exceptions to seeking public opinion and feedback in a representative and organised manner. While there is enough space for institutional or administrative autonomy and

professional expertise in laying out the initial set of objectives, issues, concerns, and content, such initiatives are no longer considered legitimate for finalisation unless there has been a comprehensive round of public and stakeholder consultations. With the Internet and wide connectivity, the process of collecting and collating public opinion is further enabled. Governments at all levels and their departments do regularly engage professional support in drafting policy and, as a process, despite there being no particular mandate, do place it as a draft on their website for public feedback and suggestions. Government departments have also been receiving copious feedback which they consider carefully. They also undertake focused group discussions and, in some cases, seek opinions from other experts, academics, and occasionally even from international funding bodies.

The Ministry of Urban Development, Government of India, has provided a model document in 2014, titled *Preparing a Comprehensive Mobility Plan (CMP): A Toolkit*. Annexure 2 of this document lists the multiple benefits of undertaking “stakeholder consultations.” It also goes on to identify relevant stakeholders in any typical urban transport-related policy to include not only representatives of various government departments and civic bodies but also professional experts, elected representatives, NGOs, private transport operators, and unions of auto and taxi drivers. In addition, it may be representative of public opinion to also consider taking feedback and opinions from the general public, neighbourhood communities, commuters, other transport mode operators, Resident Welfare Associations (RWAs), academic institutions, policy think tanks, and the research community, among other such stakeholders. This is especially important when undertaking policy or administrative measures that intensively impact public and user interfaces, such as enabling first/last mile connectivity, or decisions on densification and land use, or designing and implementing transit points, parking, or mobility plans. Policies and decisions arrived at after rounds of feedback from a comprehensive list of stakeholders would help not only in making the process more

effective but also in getting people to understand and accept the policies, and to expect them to eventually comply with them too.⁴²⁴

An aspect of local governance that is as crucial as stakeholder consultations is planning, which is the process of identifying certain goals and the methods of achieving them. The 74th Amendment to the Constitution, through Article 243ZE, seeks to respond to the need for a consistent urban and metropolitan planning process by providing for the formation of a Metropolitan Planning Committee (MPC) for every metropolitan area. Given the multiplicity of urban local bodies and the various services that they are to provide for the benefit of the people, it is hoped that the MPC will be able to integrate the efforts of various agencies in a planned and phased manner. To further supplement this constitutional effort, the Union Ministry of Urban Development has proposed certain Model Laws through the Urban Development Plan Formulation and Implementation (UDPFI) Guidelines for the States to enact laws to govern the establishment and conduct of the MPC within their respective jurisdictions. The Guidelines propose that the MPC should plan the policy priorities and resource requirements over different time periods and be responsible for preparing: (i) a Perspective Plan (for a period of 20–25 years); (ii) a Development Plan (for a period of 3–5 years); and (iii) an Annual Plan.

Based on the premise that local self-government needs to involve the representatives of the people in the process of planning, the Constitution mandates that two-thirds of the MPC shall be composed of elected representatives. These representatives are elected by, and from amongst, the elected members of the Municipal Corporation, Municipalities, and Chairpersons of the Panchayats, which are within the given

⁴²⁴ Ramesh, G., & Suraj, Anil B. (2021, April). Report on discharge of obligations by the Bangalore Metro Rail Corporation Limited and the state government with the applicable policies and contracts. Report submitted to Hon'ble High Court of Karnataka as per orders issued in WP No. 20031/2019 (PIL).

Metropolitan area. The remaining share of membership can be determined by the State Government.

For instance, the Kolkata Metropolitan Planning Committee, headed by the Chief Minister of West Bengal, is usually composed of a total of 60 members, of whom 40 are elected representatives. The remaining 20 members are nominees of the State Government, and until some time back, these nominees included two MPs, two MLAs, eight senior bureaucrats of the State Government, and two urban experts among other ex-officio representatives. The question that we need to address is who represents the voice of the citizens, especially in such critical local bodies of planning? Are the elected representatives of different levels the only voice of the public? This appears to be the prevailing notion. However, the functional mandate of the MPC, as provided in the Constitution and enriched in the Model Law Guidelines of the Ministry of Urban Development, does envisage an active and regular consultation with the civil society formations which, unfortunately, are not represented in the composition of the MPC.

Furthermore, in the realm of urban governance, we have had various forms of legislation for several years laying down the decision-making processes, planning, and priorities for the municipal bodies. For instance, we can take the example of the city of Bengaluru, the capital city of the State of Karnataka, and a thriving city known for its good weather and Information Technology (IT) businesses and enabled services. There was the City of Bangalore Improvement Act, 1945, followed by the City of Bangalore Municipal Corporation Act, 1949, which was later replaced by the Karnataka Municipal Corporations Act, 1976, which was a common framework applicable to all Municipal Corporations across the State. Given that Bengaluru has emerged as “a major centre of economic activity,” and for “improving decentralization, integration of public participation at various levels of municipal governance and ensuring efficient decision making by the municipal authorities,” Bengaluru was given a dedicated legislation for its Municipal Corporation in December

2020. Titled the Bruhat Bengaluru Mahanagara Palike Act, 2020 (Greater Bengaluru Metropolitan Corporation), this law provides a structure to comprehensively govern the Municipal Corporation of Bengaluru, on various aspects, including administrative structure, powers and functions, fiscal plans and sources of revenue, functioning of the Wards, accounts, and audit.

It has been recently reported that the State Government of Karnataka has tabled a Bill for new legislation to be titled “Greater Bengaluru Governance Act, 2024.” The preamble of this Bill states that the existing law of 2020 is inadequate to govern Bengaluru as it does not “address the fragmentation of governance in Bengaluru due to the multiplicity of civic agencies and lack of coordination among them,” and that, therefore, there is a need to establish the “Greater Bengaluru Authority” as an overarching body to coordinate and supervise municipal governance. This Bill also suggests that it shall empower Ward Committees to become “basic units of urban governance and facilitate community participation.” This Authority is proposed to be headed by the Chief Minister of the State Government and shall consist of 21 categories of members, of which 20 are in an ex-officio capacity, and predominantly consist of Ministers and administrative heads of para-statal bodies functioning across various aspects of urban governance. This may be necessary for the Authority to “discharge the role of coordinator among all the City Corporations and other agencies in the Greater Bengaluru Area.” However, the larger question of public participation and representation in urban governance persists. The true meaning of devolution is in the deeper extent of empowering the Panchayat and Municipal-level elected representatives, and in providing for citizens to be directly represented in the various bodies of local government. Whether it the political influence of elected representatives, or the empowered bureaucracy when elections are not held on time, both would work to the detriment

of meaningful decentralisation.⁴²⁵ Direct representation may not necessarily mean that all views of the public are given adequate attention, but the public being represented as an entitlement in itself is a legitimate commitment that we make to the working of democratic institutions and in upholding a republican form of governance.

Systemic and Procedural Reforms: Contractual and Regulatory Orientation

Local self-governance, as a concept, has always been viewed as an outcome of volunteerism and of collective and community action. While this may continue to be the underlying motivation, today we need to design institutions of local government in a manner that is dynamic, professional, and open to adopting innovative forms of governance. Today's institutions of local government must be adept at building collaborations and partnerships, often through long-term contracts. We need to build expertise not only in planning but also in regular monitoring, evaluation, and enforcement.

It would be useful to refer to the core principles that govern the concept of “public service,” for instance, in the realm of French Public Law. It has been stated that “public service is an activity in general interest, provided by a public or private actor and subject to a special legal regime requiring equality of treatment, adaptation to changing needs and security of supply, etc.”⁴²⁶ Therefore, the relevant principles of public service, as also identified in France, can be summed up as being:

1. Equality of users of public services: Requires equality of access to public services for all citizens, and this is based on the concern to prevent discrimination on the basis of social

⁴²⁵ Nath, Suman, & Bhattacharya, Debraj (Eds.). (2022). *Theory, policy, practice: Development and discontents in India*. Routledge, p. 29.

⁴²⁶ Prosser, Tony. (2005). *The limits of competition law: Markets and public services*. Oxford University Press, p. 103.

status, and to also prevent any form of inequality between regions. A related value is referred to as “neutrality,” which seeks to remove any discrimination on the basis of political or religious beliefs.

2. **Adaptability of public service:** Aimed at achieving two objectives: firstly, to ensure the right of the citizens/consumers to receive services whose quality reflects the development of new forms of technology and responds to changing needs; and secondly, it also refers to the power of the Municipal government to modify the functioning of the public services as it thinks fit to meet new objectives.
3. **Continuity of public service:** An obligation to maintain the supply of a public utility without interruption and to the utmost satisfaction of the citizens/consumers.

Therefore, we need to design and empower local bodies to adopt regulatory practices and contractual modes of functioning towards be able to achieve the following:⁴²⁷

1. **Promote the welfare of the citizens:** By upholding a citizen rights-based approach, by securing prompt services, and by redressing any grievances of the citizens regarding public utilities and services.
2. **Purposive orientation of service providers at the level of local government:** By enforcing strict norms of quality through benchmarking and contracts, by building the capacity of service providers through certification and periodic assessment mechanisms, and by assuring opportunities to employ private investments towards enlarging the scope of public utilities being provided.
3. **Provide qualitative support to local governance:** By evolving and updating the norms and standards applicable to local government and related public services, and by consolidating

⁴²⁷ Suraj, Anil B. (2011, September). Regulation of urban municipal services and utilities: A research note submitted as part of Centre of Excellence on Urban Governance. IIM Bangalore to the Ministry of Urban Development, Government of India.

“best practices” in the efficient delivery of public services across the different regions of the country.

Strengthening local government is possible only by providing the necessary independence for the Panchayats and Municipal bodies to grow as professional entities with suitable expertise and independent sources of revenue to sustain their governance efforts.

Public-private partnerships (PPPs) have emerged as “special purpose vehicles” for public service delivery across the world. The economic rates of return have made PPPs quite prevalent in the provision of physical infrastructure, such as, roads, bridges, airports, railways, warehouses, power, and renewable energy plants. Even in sectors like housing, tourism, health, and education, PPPs are now emerging as an economically symbiotic vehicle for social sector development. We are nowhere close to realising the benefits of PPPs at the local level, especially in urban governance, which has a much larger untapped economic potential to attract private investments. Local governments must prioritise building collaborative forms of engaging efficient private service providers. Whether it is electricity, solid waste management, water, network connectivity, schools, or health-care centres and hospitals, there is vast scope for partnerships to be built, based on strong contracts, for efficient public service delivery mechanisms. Legal and regulatory norms could be suitably modified and designed to address issues of local context. Established instruments of economic valuation of social capital formation do enable such collaborations to be undertaken based on a sophisticated understanding of returns over a longer period of time.⁴²⁸ It is neither subject to any philanthropic or charitable initiative of large enterprises, nor does it have to wait for a collective social movement to agitate to make a demand for such initiatives.

⁴²⁸ Sriram, M. S., & Suraj, Anil B. (2023, July). *Report on design and structuring of parastatals in Karnataka*. Report submitted to Karnataka Administrative Reforms Commission-II.

Decentralisation @ Next Level

Transformative Potential of E/M-Governance

Electronic governance (e-governance), or its more specific form mobile governance (m-governance), is now part of government at all levels and across regions. The advent of artificial intelligence (AI) and its applications to various forms of public activities is a reality we need to accept and prepare for, considering its implications on governance. Technology has always been a multifaceted issue. The development of technology, its procurement, adoption and usage, training of staff, change management tools, maintenance, upgrading, and eventually citizen feedback and overhauling of the technology form the life cycle of technology in governance and its management. Obviously, technology has transformed the speed of governance and has considerably enhanced transparency and traceability of various processes of decision-making as part of public governance. We could also say that technology does play an important role in reducing the element of corruption and misuse of human discretion in governance.

We can also vouch for technology, especially thanks to the Internet and connectivity across the expanse of the nation, providing a medium for the expression of the voice of the public at a scale that was hitherto not even imaginable. Public communication has been tremendously strengthened by technology and its various modes of instantaneous dissemination of information. Disaster management and relief efforts, as was evident during the period of COVID-19 pandemic, have benefited immensely by the use of technology. Agriculture, and activities towards furthering its extension, is another area where technology has come about to play a very positive role in making governance deliver in tandem with public expectations. Aspirational levels of governance are today considered

achievable owing to the rapid development and deployment of technology. E-procurement is an example of how technological prowess could transform traditional processes of governance. While there may be concerns that continue to plague certain aspects of e-procurement, nobody can deny that we have now taken a giant leap into a more transparent and verifiable method of procurement.

Data collection and analysis is another area of technology-driven transformation. Government at all levels is a repository of an immense amount of citizen-related data. Subject to the emerging requirement of protecting privacy and safeguarding sensitive forms of data, government departments and agencies could very well harness technological tools, including AI, to draw upon aggregate forms of data and analyse it for policy formulation and effectiveness. Data analysis for policymaking must be viewed as a mandatory obligation of the government and not just as another activity that is lower down in the priority of day-to-day governance. Real-time data collection in local areas, and the potential of predictive analysis, form a great input to governance, just as it is viewed in the business world of analytics. While care must be taken that public welfare and benefits are treated with more attention to attributes of human dignity, equality, and sustainability, the government of today must not shy away from utilising readily available tools of data analytics.

Use of technology and tools of data analytics would effectively strengthen decentralised levels of government. Application and interventions as part of public governance are heavily dependent on accurate, verifiable, and updated data. Thanks to mobile telephony and related adoption of smart technology by people across different segments of society, it is imperative that local governments too keep pace with the aspirations of the governed to interact through digital platforms. Today, people typically own a mobile phone; usually undertake digital payments and banking; store digital copies of important documents and credentials; and wish to transact with the government and officials online. We may still have some time and distance to

cover in terms of access to smart phones and high speeds of connectivity throughout the nation, but the governance processes need to be ready and prepared for this eventuality of “universal digital connectedness” that is not too far away in the future.

Trends in Public Administration and Public Management

For many decades now, literature, discussions, and experiences related to public administration confirm that enhancing people’s participation in public governance is the future. Technology has emerged as a great tool for enabling such participation, at scale and quality. With the use of the prefix “new” in public administration and public management, there are traits and trends proposed to lead the traditional disciplines into the emerging frontiers of governance. The trends are not necessarily new, but they are indeed a reiteration of what ought to be the foundations of public administration. People’s participation in public governance, representative nature of bureaucracy, citizen orientation in public policy, and achieving social equity in public administration are not values that have been discovered recently. These ought to form the basis of governments across the world. We are now made to realise the criticality of instilling these values as founding features of any form of government, especially at the local level.

We have to move beyond considering elections and elected representatives as the only means of public voice and participation in governance. Democracy needs elections to form and compose the legislature and executive parts of the government. However, we do have concerns about whether elections are indeed representative of people’s expectations. As a part of a larger system, elections do keep the democratic flame burning, but we need to creatively look beyond elections to encourage a greater level of people’s participation in local

governance. Decentralisation and local governance require rejuvenation by involving people and their dynamic real-time choices as the leading determinants of local welfare policies, budgets, and any revisions. How often do we see citizens participating in deciding how much money needs to be spent on what form of welfare, or benefit, or infrastructure at the local level?

Porto Alegre, a city in Brazil, is credited with having introduced a form of “participatory budgeting” in 1989. With a population of 1.3 million at that time, the budgeting process was made more participatory to mobilise the poor to also be involved in the exercise and formulation of priorities for budget and expenditure. This process of participatory budgeting is said to have involved “three streams of meetings: neighbourhood assemblies; thematic assemblies; and meetings of delegates for citywide coordinating sessions (the Council of the Participatory Budget).”⁴²⁹ Meetings and discussions were held in public spaces and involved themes that were of a general nature, like setting criteria for the distribution of resources, whether on the basis of population, the extent of poverty, or any other measurement of need or shortage. It is said to have “brought those usually excluded from the political process into the heart of decision making, significantly increasing the power and influence of civil society and improving local people’s lives through the more effective allocation of resources.”⁴³⁰

Not for a moment should we consider that this process is simple or easy to implement or replicate. Each city or region would certainly have its own limitations and challenges. The local government institutions and their leadership must be empowered to undertake such innovative measures of civic engagement and enable their involvement in essential activities of planning and budgeting. An area of emerging importance is

⁴²⁹ Local Government Association. (2016, December 12). *Case study: Porto Alegre, Brazil*. Local Government Association, London. <https://www.local.gov.uk/case-studies/case-study-porto-alegre-brazil>

⁴³⁰ Local Government Association, *supra*.

that of grievance redressal. No system of governance can afford to overlook this essential part of public welfare and governance. Regular feedback and prompt redressal of grievances are, today, to be considered a mandatory part of any level of governance. Digital modes of grievance redressal facilitate this process considerably, and there is no excuse for local governments not to adopt the same. Public comments, feedback, and grievances can be collected in real time. Technology can suitably cluster several such sources of information and categorise them in a manner that is best suited for quick analysis and prompt action. Social media accounts and handles, trending news stories, citizen blogs, and several such other modes and sources of information can be verified and form the basis for any purposive correction and further action. In addition, providing for a whistle-blower process, or any other form of grievance redressal mechanism, would comprehensively address any concerns that any citizen may have.

The clarion call of “Leave No One Behind” (LNOB) forms the basis for achieving the SDGs. Grievance redressal is a feature of public administration that cuts across all the goals identified by the members of the United Nations as a policy agenda for 2030. Collecting, analysing, responding to, and acting upon each and every comment, feedback, or grievance of the public shall have to be the responsibility of the government and its agencies. It shall be an effective form of participatory governance as well.

Conclusion

A truly democratic form of decentralisation is possible only by empowering local government and its institutions to become more *participatory* in their decision-making processes, such as planning and budgeting; more *professional* in their collaborations and service delivery, through private investments and enterprises; and more *promotive* of direct representation of the people’s voice through the effective use of technology.

Institutions and processes of governance need to constantly adapt to the changing social and economic aspirations of the people being governed and also be vigilant about the rapid developments in technology. There is more inter-connectedness in issues of governance, involvement of multiple stakeholders, and layers of decision-making procedures that exercise authority.

Public administration and governance have indeed become far more complicated than what traditional notions have sought to address thus far. With the adoption of technology, the redesign of institutions and processes, and the objective of reaching out to every person governed, local governments at the level of panchayats and municipal bodies shall be able to restore the primary power of governance to “*We, the people of India.*”

Chapter 18. Building Social Capital Through Gender Inclusion

Shalini Prasad

Introduction

The Constitution that India adopted after its establishment as an independent nation contained the dreams and aspirations of the Indian people. This is the promise of making India a vibrant democratic republic where every citizen, regardless of religious, ethnic, social groups, and gender identity would have a dignified life based on the principles of liberty, equality, fraternity, and justice.⁴³¹

The journey of post-independent India is witness to the effort to fulfil this promise. Fulfilling the commitment to build “a prosperous, democratic and progressive nation”⁴³² required grappling with a centuries-old socio-cultural milieu that was both conservative and patriarchal. Society was characterised by the presence of multiple social, ethnic, religious, and economically diverse groups. Women formed a group that cut across these identities, but also had a separate, distinct identity. Such identities defined the lives of citizens. A resultant gap between intention and ground realities was visible when the benefits of development reached these groups unequally. Among the

⁴³¹ Preamble to the Constitution of India.

⁴³² Jawaharlal Nehru, Speech (“Tryst of Destiny”) on the eve of Independence, 1947.

diverse identities present in India, gender remained the largest social category defined by exclusion from policy and decision-making. Disparities and inequality defined the role women played in society. It also needs to be recognised that although gender inequalities were prevalent across social and economic groups, there were hierarchies of gender inequality which was most acute among the poor because of competing interests for scarce resources.

Gender discrimination and inequality remain pervasive and are visible in disparities across sectors like health, education, ownership of assets, incomes, employment, and political representation, as well as the ability to influence decision-making at different levels. Such discrimination and disparities have a direct effect on the physical, mental, social, and economic well-being of affected girls and women. But it also affects families, communities, and the nation, since this limits the ability of almost half the population to fully contribute to their own development and also to the development of family, community, and nation. Equality for women is both an end and a means: an end to realise their own potential and fulfil their aspirations, and a means for meaningful contribution to society. Prevalent inequalities point to the need for a development and growth model which integrates equity and equality as a basic cornerstone of development.

National development priorities found reflection in successive Five Year Plan documents from 1951 to 2017 which stand witness to the transformation of development goals from the earlier Plans that focused on crisis management and economic growth. Initial Five Year Plans were focused on economic growth as the driver of development, although this did not preclude interventions for women. These interventions were largely social welfare measures such as the establishment of maternity and child health centres, provision of nutrition to pregnant women, provision of vocational training, and establishment of homes for destitute women. This approach may be the reason why most interventions were led by the Central

Social Welfare Board (CSWB) which was established in 1953. CSWB continued to play a vital role in the setting up of support services like hostels for working women, crèches, counselling centres, homes for women in need, etc.

It was during this initial period that specific social evils

Box 1: Major Legislations Relating to Women

1. The Special Marriage Act 1954: enacted to provide a special type of marriage and for registration of such marriage
2. The Immoral Traffic (Prevention) Act 1956: enacted to prevent the trafficking of women
3. The Dowry Prohibition Act 1961: enacted to prohibit the giving or taking of Dowry

relating to women were highlighted and three important legislations were enacted (see Box 1).

Although there were few programmes for women in this period, growth and income rises did result in some improvements in the data relating to women, such as an increase in enrolment of girls in schools. However, the increase in enrolment of boys was greater and the gender gap continued.

By the 1970s, the limitations of this development model were clearly visible, and a change in the approach to gender inclusion commenced. The decade of the seventies saw a shift from welfare to development. This period saw major developments in the field of women's development, both in the international and national arenas. At the international level the first World Conference on Women was held in 1975, resulting in a World Plan of Action and the decade 1976–1985 was proclaimed as the United Nations Decade for Women. In 1979, the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) was adopted by the UN General Assembly, which was signed by India in 1980 but ratified in 1994. At the national level, the government constituted a Committee on the Status of Women in 1971 for a comprehensive examination of the questions relating to the rights and status of women, their education and employment and

to provide a guideline for formulation of social policy (see Box 2 for the terms of reference for the Committee).

Box 2: Terms of Reference for the Committee on the Status of Women

- (1) To examine the Constitutional, legal and administrative provisions that have a bearing on the social status of women, their education and employment.
- (2) To assess the impact of these provisions during the last two decades on the status of women in the country, particularly in the rural sector and to suggest more effective programmes.
- (3) To consider the development of education among women and determine the factors responsible for the slow progress in some areas and suggest remedial measures.
- (4) To survey the problems of the working women including discrimination in employment and remuneration.
- (5) To examine the status of women as housewives and mothers in the changing social pattern and their problems in the sphere of further education and employments.
- (6) To undertake survey or case studies on the implications of the population policies and family planning programmes on the status of women.
- (7) To suggest any other measures which would enable women to play their full and proper role in building up the nation.

The 1974 Report of the Committee entitled *Towards equality* was a watershed for women's development. It highlighted in detail discriminatory socio-cultural practices and political and economic processes, and gave recommendations for different sectors: economic, social, and cultural. It also emphasised women's development as a human rights issue, rather than a welfare activity. Even today, half a century after the submission of the report, many of the recommendations made by the Committee remain relevant, pointing to the long journey that still needs to be undertaken.

The Sixth Five Year Plan document that followed in 1980, for the first time, included a chapter on women. The decade of the 1980s saw a multidisciplinary approach to women's issues, with a focus on health and employment. This was the period when the Department of Women and Child Development was established in 1985. The decade of the 1980s also saw the framing of a New Education Policy in 1986, which was a watershed for women's empowerment. This was followed by the National Perspective Plan for Women in 1988, and the constitution of another important commission—the National Commission on Self Employed Women and Women in the Informal Sector. An

important decision taken during this time was that all transfers of assets from the government, such as land and houses, would be in the joint name of the husband and wife.

In terms of programmes and institutions, the decade of the 1980s saw the commencement of the Development of Women and Children in Rural Areas (DWCRA) programme under the Integrated Rural Development Programme (IRDP) in 1982–1993, which pioneered the concept of organising women into small groups for income generation through the provision of credit, training and support services like childcare. Programmes for the support of women entrepreneurs were provided an institutional structure in the form of Women Development Corporations at the State levels. These corporations facilitated loans to women through financial institutions and banks, promoted marketing facilities, organised skill development programs for women to take up self-employment, and promoted women's self-help groups (SHGs). In 1987, another programme "Support for Training and Employment" (STEP), with components for skill upgradation and market linkage, was commenced. During this period an exclusive National Vocational Training Centre for Women was started.

The decade of the 1990s envisioned the empowerment of women as "Agents of Change," and empowerment of women was one of the major objectives of the Ninth Plan. This period saw a slew of initiatives. This included setting up of National Commission for Women in 1992 to safeguard the interests of women. The National Nutrition Policy was adopted in 1993. The concept of a "Women's Component Plan" was commenced, wherein one-third of the budget for many Departments was reserved for women. The 73rd and 74th Amendment Bills were passed during this period which provided the reservation of one-third of seats for women in local bodies. A bill to amend the Constitution to reserve seats for women in Parliament and State legislatures was first introduced in 1996, although it subsequently lapsed.

Initiatives that focused on the economic empowerment of women received special emphasis during this period, which saw the establishment of the Rashtriya Mahila Kosh (RMK) in 1993 to establish a national-level mechanism to meet the credit needs of poor and assetless women in the informal sector.

Schemes of significance for economic empowerment that started in this period included two schemes in the agriculture sector: “Scheme to Assist Women in Cooperatives” in 1993–1994 to take up economic activities in agriculture-based sectors and “Women in Agriculture,” launched in 1993 to train women farmers having small and marginal holdings in agriculture and its allied sectors like animal husbandry, dairying, horticulture, fisheries, and beekeeping. Three schemes for organising women SHGs for a host of economic activities, including promoting savings, credit facilities, awareness generation, and technical assistance for economic empowerment, were commenced. These were Mahila Samridhi Yojana (1993), Indira Mahila Yojana in 1995, and Swa-Shakti (1998) to create an enabling environment for the empowerment of women through setting up of self-reliant SHGs and developing linkages with lending institutions to ensure women’s access to credit facilities for income-generation activities. This period also saw an emphasis on strengthening vocational training for women through women’s Industrial Training Institutes (ITIs) and women’s wings in general/private ITIs and an initiative for skill building in modern trades.

The National Creche Fund was established in 1994 as a national initiative for the provision of crèches. The Mahila Samakhya Programme (Education for Women’s Equality) commenced in 1989, and the National Maternity Benefit Scheme (NMBS) in August 1995 aimed at extending financial assistance to pregnant women for the first two live births, which can be seen today in the form of Pradhan Mantri Matru Vandana Yojana (PMMVY). At the international level, the Beijing Declaration was adopted by the UN at the end of the Fourth World Conference on Women which flagged 12 key areas for action. The turn of the

century saw some significant developments: The first National Agriculture Policy 2000 was adopted which sought to mainstream gender concerns in agriculture by building capacities and improving access to inputs, technology, and other farming resources. Gender budgeting was introduced in 2000–2001. National Policy on Empowerment of Women was adopted in 2001, and the year was celebrated as “Women’s Empowerment Year” to create awareness for women to take their place in the mainstream of the nation’s social, political, and economic life.

The Tenth Five Year Plan (2002–2007) emphasised participation of women and proposed “all necessary steps to guarantee equal access and full participation to women in decision-making bodies, including the legislative, executive, judicial, corporate, statutory bodies and their advisory Commissions/Committees, Boards etc.” and introduction of women-friendly personnel policies.⁴³³ The Plan document continued the focus on women SHGs, which had crossed the one million mark by the end of the Ninth Plan period. SHGs were expected to be the agents of social change, development, and empowerment of women to facilitate financial and material resources, information, and services. The Union Budget 2005–2006, for the first time, included a separate statement highlighting the gender sensitivities of the budgetary allocation under 10 demands for grants. Gender Budgeting Cells were set up in 52 Central ministries. The Tenth Five Year Plan period saw the enactment of two women-related legislations: Protection of Women from Domestic Violence Act (PWDVA) (2005) and Amendments to the Married Women’s Property Act (1874) and the Hindu Succession Act (1956).

The Eleventh Five Year Plan (2007–2012) vision was a continuation of the strategy to empower women as agents of economic and social growth. The focus of the Plan was on gender equity which included: provision of basic entitlements, addressing the impact of globalisation and its effect on women in

⁴³³ Tenth Five Year Plan Document, Planning Commission, Government of India.

the economic field, addressing the issue of physical, economic, social, and psychological violence against women (VAW), ensuring the participation and adequate representation of women at the highest policy levels, and strengthening institutional mechanisms for gender mainstreaming and effective policy implementation.

The Plan further recognised the need for mapping and addressing the specific deprivations of different categories of women and, apart from the general programme interventions, special targeted interventions catering to the differential needs of different groups.

The focus of the Twelfth Five Year Plan (2012–2017) was economic empowerment, and it aimed to improve the conditions of self-employed women with a focus on women's workforce participation, particularly in secondary and tertiary sectors, ensuring decent work for them, reaching out to women in agriculture and manufacturing, promoting financial inclusion, extending land and property rights to women, and increasing women's employability in the formal sector.⁴³⁴ The year 2015 saw the launch of four new schemes. These include "Beti Bachao Beti Padhao" a scheme for communication and sensitisation aimed at bringing about a change in the mindset with respect to the girl child and the Pradhan Mantri Jan Dhan Yojana in 2015 for financial inclusion. Although this is not a scheme exclusively for women, they constitute the maximum number of beneficiaries with almost 29 crore bank accounts opened. Also launched in 2015 was the Sukanya Samriddhi Yojana, a savings scheme for the girl child which bears a higher interest rate, and the Pradhan Mantri Kaushal Vikas Yojana, a skill development scheme started in 2015, which has around 50% women beneficiaries. Pradhan Mantri MUDRA Yojana (PMMY) a programme to provide collateral free credit up to ₹10 lakhs (raised to ₹20 lakhs in the 2024 budget) to micro enterprises, commenced in 2015; here, women constitute a majority of the beneficiaries.

⁴³⁴ Successive Five Year Plan Documents, Planning Commission, Government of India.

Stand-Up India scheme commenced in 2016 to promote entrepreneurship among women, Scheduled Castes, and Scheduled Tribes. By the beginning of 2024, around 1.82 lakh women accounts had been opened. Pradhan Mantri Ujjwala Yojana (PMUY) was commenced in 2016 to provide LPG connections for provision of clean cooking fuel to households. More than 10 crore women have been covered under the scheme.

In 2023, the Women's Reservation Bill for the reservation of one-third seats in the Parliament and State legislatures was finally passed. In 2024, the economic survey heralded the move from women's development to women-led development, with women as equal partners. Women's development is multidimensional, encompassing almost all development sectors, but this paper covers government policies and interventions in the five critical areas of elementary education and health, violence against women, and economic and political empowerment, which have maximum impact on women's lives and where the government has made significant interventions for gender inclusion.

Education

The centrality of education for women's development has long been acknowledged. The Constitution, in Article 45, directed that the State would endeavour within a period of 10 years from the commencement of the Constitution to provide free and compulsory education for all children until they complete the age of 14 years. Education remains perhaps the single most important factor for the empowerment of women. Education raises self-esteem and self-confidence of women and is crucial both as a means of realising the potential of women, individually and collectively, and as a social determinant that impacts all other aspects of women's lives, facilitating informed decision-making in different areas like health, income generation, and political participation. Subsequent Development Plans

reinforced the importance of girls' education and female literacy. The first three Five Year Plans acknowledged the problem of girls education. The Second Five Year Plan document noted,

*A most urgent problem is that of girls' education. Public opinion in every part of the country is not equally alive to the importance of girls' education. Special efforts at educating parents, combined with efforts to make education more closely related to the needs of girls, are needed. Where there are difficulties in the acceptance of co-education, other methods will need to be explored.*⁴³⁵

The document identified many issues relating to girls education, but did not suggest major initiatives.

At the time of Independence, there was a huge gender gap in the educational sector. In 1951, when the First Five Year Plan period commenced, 59% of boys in the 6 to 11 age group and 25% of girls in this age group were enrolled in primary schools. In middle school (11 to 14 age group), this was 22% and 5%, respectively. The Second Five Year Plan set a target of improving girls' enrolment in primary school from 25% to 33% and for boys from 59% to 69%.⁴³⁶ It was in this situation that the Education Panel of the Planning Commission, in 1957 recommended the setting up of a National Committee on Women's Education. The committee was tasked with suggesting measures at the primary and secondary levels for improving women's education and examining continuing education and vocational training for adult women to earn a living and participate in projects of national reconstruction.

The Committee in its report highlighted gender disparities in education at various levels, both overall, but also between urban and rural areas and among States, and the rising gender gap in appointment of women teachers. The report (see Box 3 for summary) stated that the major reason for this gap was "due to

⁴³⁵ Second Five Year Plan Document.

⁴³⁶ Second Five Year Plan Document.

our failure to realise that the education of women has still to be treated as a major ‘special’ problem and not merely as part of the ‘whole’ problem of education and that some vigorous ‘special measures’ have to be adopted to advance it” and suggested that schemes and funds should be made available along with special machinery.⁴³⁷

Box 3: Major Factors Impacting Girls Education Highlighted by the National Committee on Women’s Education

- Socio-cultural Factors: Low awareness on girls’ education, which is not uniform and exists more in urban areas and among more socially advanced classes. Unwillingness to send girls to mixed schools, dearth of women teachers, early marriages, dowry system, parents’ illiteracy, and a feeling that education is not much of use in their lives.
- Economic Conditions: Poverty, domestic and occupational help by girls, inability of parents to provide for equipment and clothes for girls if they go to school, inability to pay tuition fee where education is not free, school timings and holidays which do not suit occupational needs of girls, such as household and seasonal work during festivals, marriage, and agricultural seasons.
- School Environment: Lack of suitably located, well-equipped and well-run schools, separate lavatories for girls.

In its report, the Committee recommended the following measures to promote girls schools:

1. Provision of school facilities where they do not exist; ensuring free education through the provision of scholarships to poor meritorious students, free books, and stationery
2. Educating public opinion, enrolment drives, with support from school committees and Mahila Mandals, enforcing compulsion.

⁴³⁷ National Committee on Women’s Education. *Towards equality 1974*. Ministry of Education.

3. Improving quality of schools including provision of staff, teachers, school mothers, equipment subjects, and separate lavatory for girls.
4. Inclusion of co-curricular activities to make education less bookish and practical.
5. Providing conveniences and incentives: adjustment of school timings and vacation to local needs, subsidised/free mid-day meals, free medical and health facilities for school children, establishment of crèches, attendance prizes, enrolment grants to schools, rewards to villages and individuals.
6. Introduction of part-time education, night schools for girls who cannot attend in daytime.
7. Provision of hostels and subsidised transport at the secondary level where schools are far.
8. Correcting the imbalance in the syllabus that was dominated by an urban bias and boy's view point.

A number of other committees in the education sector submitted their reports in the 1950s and the 1960s, such as the Education Commission (1964–1966), the Secondary Education Commission (1952), and Bhaktavatsalam Commission on Women's education (1965).

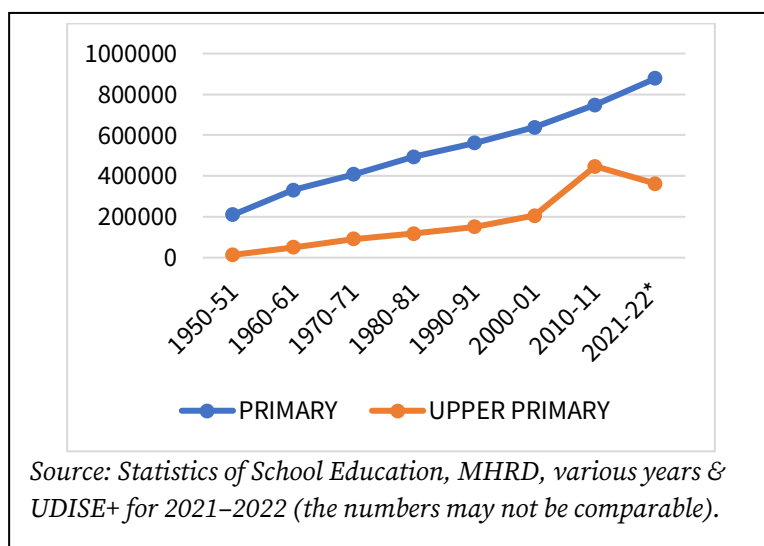
The next important milestone for girls' education was the adoption of the First National Policy on Education in 1968 which recommended the restructuring of the education system. One of the many recommendations of this policy was that girls' education should receive emphasis, not only on the grounds of social justice but also because it accelerates social transformation.

Despite the comprehensive nature of the report of the National Committee on Women's Education and the Bhaktavatsalam Commission, girls' education, regardless of statements highlighting its importance, largely remained part of the "whole" issue of education for many decades to come. Some interim recommendations of the Commission were accepted by the government. But the holistic framework recommended would take a few more decades to be implemented. The focus

initially remained on increasing the number of schools, which did pay some dividends as the enrolment rose.

It was in the decades of the 1980s that a transformative shift in the approach to girls' education became visible. The National Policy on Education (NPE) 1986 brought the fundamental issue of women's equality centre stage:

Figure 1: Number of Schools



Education will be used as an agent of basic change in the status of women. In order to neutralize the accumulated distortions of the past, there will be a well-conceived edge in favor of women... This will be an act of faith and social engineering... The removal of women's illiteracy and obstacles inhibiting their access to, and retention in elementary education will receive overriding priority, through provision of special support services setting time targets and effective monitoring⁴³⁸

Since the 1980s a host of proactive initiatives were undertaken to achieve Universalisation of Elementary Education with a

⁴³⁸ National Policy on Education, 1986. Ministry of Resources Development, Government of India (Chapter IV, page 6, paragraphs 4.2 and 4.3).

special focus on school dropouts, working children, girls who cannot attend formal school, and children of disadvantaged social groups.

The first of these schemes was the Non-Formal Education Scheme (NFE) (1979–2001), for out-of-school children in the 6–14 years age group, which provided flexibility and diversity in learning activities to reach out to children outside the school system. Of the 2.41 lakh NFE centres, there were 1.18 lakh NFE centres exclusively for girls throughout the country.

This was followed by two programmes of special significance for girls' education:

1. Basic Education programmes which included the State-specific programmes which were followed by a National Programme, the District Primary Education Programme (DPEP).
2. Mahila Samakhya (Education for Women's Equality) (MS) 1989: To concretise the ambitious National Policy on Education 1986 objectives into an implementable strategy, MS was designed as an innovative, path-breaking programme to mobilise and organise women for education by creating an environment for learning.

Mahila Samakhya, partly inspired by the Women's Development Programme (WDP), launched in Rajasthan in 1984, was possibly one of the first programmes that moved away from viewing women as objects of welfare. The centrality of education in the struggle to achieve equality was the predominant focus of Mahila Samakhya. The principal strategy was organising women into collectives called Mahila Sanghas or Samooh—a women's collective. The Mahila Sangha provided the space where women could meet, be together, and begin the process of reflecting, asking questions, speaking fearlessly, thinking, analysing and above all feeling confident to articulate their needs through this collective. Educational inputs in the form of Adult Education, Non-Formal Education, Vocational Training, Support Services, Mahila Shikshan Kendra, and ECCE (Early Childhood Care and

Education) centres were introduced in a phased manner, responding to the needs and priorities expressed by the women. Education in Mahila Samakhya was defined as a continuous process of gaining the consciousness and ability to critically engage with one's environment and society and to acquire the knowledge from a position of strength.

The spheres of sangha activity and action were flexible, ranging from accessing basic civic amenities; learning to deal with health issues; committing themselves to ensuring learning opportunities for their children, especially girls; trying doggedly to make themselves literate; breaking gender stereotypes in acquiring new skills like becoming mechanics; learning to manage credit; effectively participating in Panchayati Raj processes (local self-government); learning legal procedures and understanding how administrative and social structures work; gaining the strength to demand accountability and effective delivery of services; to confidently addressing issues like violence against women, child marriage, and the devadasi system, etc. Persuading parents to send their children to schools and monitoring teacher attendance were common activities of sanghas in many places. A host of other innovative educational interventions emerged from this process. These include the Bal Mitra Kendra, designed for working girls aged 9 and above in Andhra Pradesh, the Jagjagi Kendra in Bihar—non-formal education centres designed for adolescent girls, the Kishori Sanghas, etc. These were decentralised education initiatives that catered to the needs of the local community.

The programme gained national and international recognition, including the Noma International Literacy Award from UNESCO. The programme covered 126 districts when it was shut down in 2014.

Basic Education Programmes and DPEP

A series of externally aided State-level basic education programmes were commenced in the 1980s and 1990s. These included the Andhra Pradesh Primary Education Programme (APPEP) (1984), the Bihar Education Programme (BEP) (1990), the Uttar Pradesh Basic Education Programme (UPBEP) (1993), and Lok Jumbish (1992) in Rajasthan. In 1994, a national programme, the District Primary Education Programme (DPEP), was launched.

These programmes were aimed at both the universalisation of primary education and a transformation of the quality of primary education. What differentiated these programmes from earlier programmes was the decentralisation and micro-planning that responded to local needs, which could make a significant dent in the system. Since girls, along with other socially disadvantaged groups, children with special needs, and migrant children, formed the bulk of children with low participation, retention, and learning achievements, they became the focus group of these programmes from the outset. Bridging the gender gap was a stated goal for these programmes. These programmes progressively provided a comprehensive framework for girls' education, with many innovative initiatives. The Lok Jumbish and BEP programmes also retained a strong focus on education for women's equality in keeping with the NPE 1986, similar to the Mahila Samakhya programme (in fact, MS was a part of the BEP programme in Bihar).

Lok Jumbish commenced many innovations like women's collectives; Adhyapika Manch, a forum for women teachers; bridge camps for out-of-school girls like Balika Shikshan Shivirs; and Samvadika including a review of all field-level activities from the gender perspective. It also pioneered self-defence classes for girls. The BEP, along with Mahila Samakhya, similarly adopted a number of initiatives that focused not only on out-of-school girls, but also on components like life skills, legal literacy, and self-defence for both women and girls.

District Primary Education Project (DPEP) furthered the initiatives for girl's education (see Box 4) initiated in the earlier Projects in Bihar and Uttar Pradesh. It was a national initiative with a holistic approach to reduce gender and social disparities and to universalise access, retention, and achievement. Gender and equity concerns informed all aspects of the programme design. Since DPEP attempted a systemic change, an integrated approach to gender was built into planning and management, pedagogical improvement, affirmative interventions for girls' education and strategies for community mobilisation and participation. Gender-related activities were clearly articulated in annual work plans. To concretise and sustain the gender focus within the programme, gender coordinators were appointed at the State and District levels.

The overall outcome of this strategy was a very conducive and supportive environment for girls' education, with an effective role of the community in the management and monitoring of ECE, alternative schooling, and school construction. The active involvement of women was able to influence location of schools, the alternative schooling, and ECCE centres ensuring easy access. A significant outcome of women's mobilisation was an added focus on issues like child marriage and other social attitudes that affect the girl child

Box 4: Major Initiatives for Girls Education Institutionalized Under DPEP

- Ensuring a management structure for girls' education from the national level to the field level that ensured a continuing focus on girls' education.
- Elimination of gender bias from textbooks and other TLM (teacher learning material) through the preparation of checklists, orientation of writers and illustrators, and a systematic review of textbooks. A significant achievement of DPEP was the pedagogical improvement processes. Gender review of learning material, and the overhaul of most textbooks, was completed in all the States.
- Initiative for classroom processes study from the gender perspective to feed into the gender training programmes.
- Representation of women in village education committees and other grassroots bodies like parent-teacher associations, along with special training for women members.
- Appointment of women teachers as well as para teachers which allowed flexibility where women teachers were not available.
- Alternative schooling specially designed for girls aged 9+ and those with sibling care responsibilities.
- Gender training for programme personnel, teachers, educational administrators, and teacher educators.
- Emphasis on school infrastructure like toilets for girls.
- Community mobilisation with a gender focus in awareness drives, with specially designed material. Community participation was institutionalised within the programme through Village Education Committees, mother-teacher associations, parent-teacher associations, and mothers' associations and self-help groups ensuring a greater ownership of the educational process.

With a conducive environment for girls' education created at the community level, girls' enrolment also saw a significant upward trend in DPEP districts compared to non-DPEP districts and the issue of girls' education was brought firmly centre stage.

In 2001, the Sarva Shiksha Abhiyan (SSA), a national programme for UEE, was commenced. Soon thereafter, DPEP

was merged into this programme. A separate gender component plan in the educationally backward blocks of the country (around one-thirds of the total blocks) was included as a part of the SSA programme with components of community mobilisation, incentives to girls, gender sensitisation, remedial teaching, etc.

Over and above the SSA interventions, two new schemes were formulated for the Tenth Plan (2002–2007) in 2,198 blocks that were backward in terms of female literacy:

1. The “National Programme for Education of Girls at the Elementary Level” has been designed to address both girls out of school and those already in the system. The programme works through women’s groups at the village level to build an environment conducive to girls’ education and to follow up on girls’ enrolment and attendance. The programme allows flexibility to enable specific village wise interventions in order to prevent any drop outs, which could vary from incentives to escort systems and remedial classes. At the cluster level, one school was to be developed as a “model” school. This school functioned as a resource centre for all schools in the cluster, with components like supplementary gender-sensitive reading material, teacher training for gender, and classes on additional subjects like self-defence, gender, life skills, etc. which had been trialled in schools run under the Mahila Samakhya programme. The programme aimed to encourage a gender-sensitive environment in schools and the classroom, so that girls could pass out with self-confidence and self-esteem.
2. The second major initiative was the Kasturba Gandhi Swatantra Vidyalay (later renamed as Kasturba Gandhi Balika Vidyalaya [KGBV]) scheme, to set up residential schools in the educationally backward blocks. These schools drew on the experience of Mahila Shikshan Kendra (MSK) established under Mahila Samakhya to impart a gender-sensitive education. This scheme targeted areas that have small, scattered habitations where no schools were provided, and distances made it impossible for girls to attend the formal

primary schools. These schools also targeted communities where girls were more disadvantaged, that is, SC/ST, OBC, and minorities. Girls from many KGBVs have performed well and have also entered professions like the civil services.

These initiatives had a positive impact on the education of women and girls, not only in increasing enrolment and reducing dropouts, but in fostering the education system as a catalyst for gender equity. By 2005–2006, the Gross Enrolment Rate for girls at the primary level had crossed 100, and by 2010–2011, the Gross Enrolment Rates for both boys and girls crossed 100, with GER for girls surpassing that for boys. It would, however, take a few years for GER at the upper primary level to reach parity.

The improved GER for girls indicates parity in elementary education, but newer forms of discrimination are visible. For example, more boys are being enrolled in private schools which are perceived to be of “better quality,” while more girls are being sent to “free” government schools that also offer incentives like scholarships, midday meals, uniforms, etc. (UDISE+ 2021–2022).⁴³⁹

⁴³⁹ Ministry of Education, UDISE+.

Figure 2: Gross Enrolment Rate

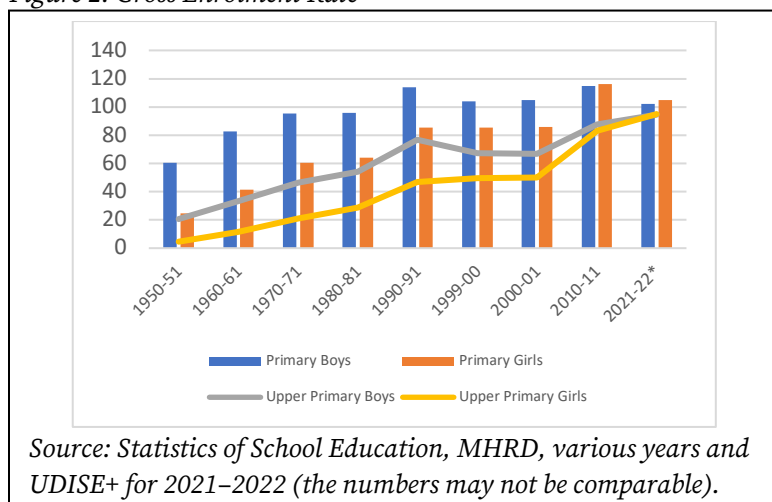


Figure 3: Percentage of Children enrolled in Private Unaided Schools of Total Children enrolled by Gender

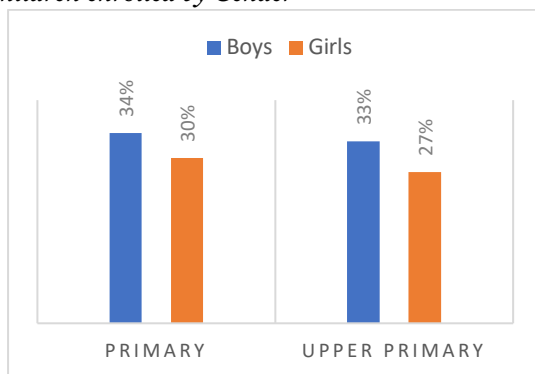
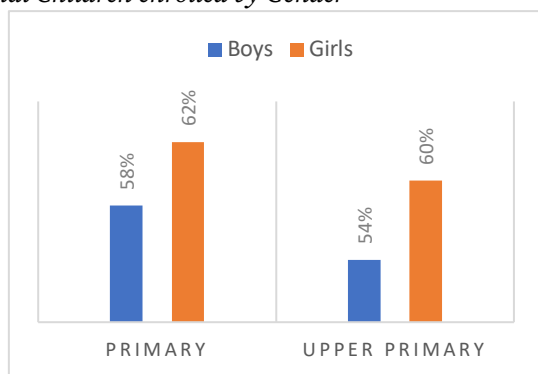


Figure 4: Percentage of children enrolled in Government Schools of Total Children enrolled by Gender



Subsequently, the Budget 2018–2019 announced the Samagra Shiksha scheme, an integrated scheme for school education from pre-school to Class XII, which encompassed earlier schemes. The stated objectives of the scheme include bridging social and gender gaps in school education and ensuring equity and inclusion at all levels of school education. In 2020, a New Education Policy (NPE 2020) replaced the earlier NEP 1986 (Box 5).⁴⁴⁰

While girls' education remains a stated focus area, the holistic approach to gender adopted by the Basic Education Programmes, DPEP, NPEGEL, and Mahila Samakhya, and the focus on education as a transformational tool for gender equality has not, however, found the same focus in Sarva Shiksha Abhiyan or Samagra Shiksha or in NPE 2020.

⁴⁴⁰ National Education Policy 2020, Ministry of Education, Government of India.

Women's Health

The universal provision of quality health care at affordable prices for all citizens remains a central premise for the development of any nation. The economic and social cost of a development policy that does not prioritise health care would necessarily be high. This is also in line with the Sustainable Development Goal (SDG)

Box 5: New Education Policy 2020: Recommendations for Girls' Education

- Policies and schemes designed to include students from socio-economically disadvantaged groups should be especially targeted towards girls.
- Government of India to constitute a “Gender-Inclusion Fund” for States to implement priorities determined by the Central government for assisting female and transgender children (such as the toilets, bicycles, conditional cash transfers, and community interventions).
- Free boarding facilities in school locations where students may have to come from far particularly for students from socio-economically disadvantaged backgrounds.
- Strengthening and expansion of Kasturba Gandhi Balika Vidyalayas up to Grade 12.

3 to “ensure healthy lives and promote well-being for all at all ages.”

Since Independence, India has placed the provision of health care as central to its development policy. The strategy adopted focused initially on creation of infrastructure at different levels and provision of manpower. Disease-specific programmes, which initially focused on communicable disease, and subsequently included non-communicable disease, followed. Maternal child health programmes, including nutrition and safe deliveries were integrated into the health strategy from the outset. The linkage of referral services with maternity and child health services in primary health units was included in the 1960s. By the

Third Five Year Plan (1961–1966), the importance of other determinants of health like rural sanitation and water supply, health education, and family planning was acknowledged.

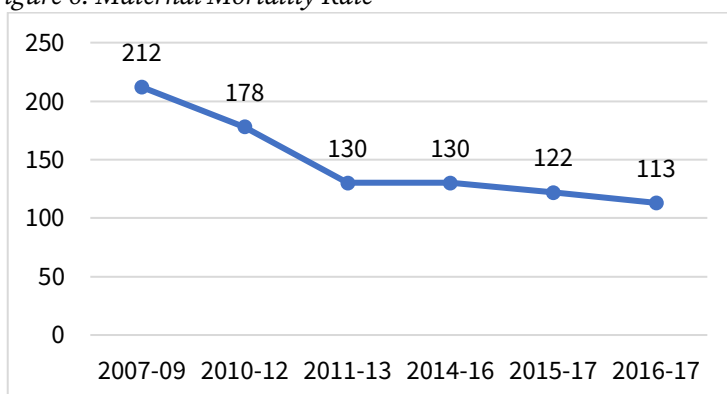
The focus on women's health has so far been largely confined to reproductive health. A series of programmes on reproductive health were initiated, like the Programme of Maternal Child Health, the Child Survival and Safe Motherhood Programme (1992–1993). In the Ninth Five Year Plan period, this became the Reproductive Child Health Programme (RCH), followed by RCH II. The RCH II programme was succeeded by the Reproductive, Maternal, Newborn, Child, Adolescent Health and Nutrition (RMNCAH+N) programme, including adolescent health in the programme.

Maternal health, with sustained attention from policymakers is an area which has resulted in a steady improvement in indicators. Some of these are:

1. Reduction in Maternal Mortality from 212 in 2007–2008 to 113 in 2016–2018 (SRS).⁴⁴¹
2. Institutional delivery has increased from 78.9% in National Family Health Survey fourth round (NFHS-4) (2015–2016) to 88.6% in the fifth round (NFHS-5) (2019–21)
3. Ante natal check-up (ANC) in first trimester has increased from 58.6% in NFHS-4 to 70% in NFHS-5.
4. Percentage of women receiving four ANC has increased from 51.2% in NFHS-4 to 58.1% in NFHS-5.
5. Post-natal check-up (PNC) has increased from 62.4% in NFHS-4 to 78% in NFHS-5.
6. Percentage of women with BMI below normal has reduced from 22.9% in NFHS-4 to 18.7% in NFHS-5.⁴⁴²

⁴⁴¹ Office of Registrar General, Sample Registration System (SRS).

⁴⁴² International Institute for Population Sciences; National Family Health Survey, (NFHS 4 and NFHS 5) 2019–2021.

Figure 6: Maternal Mortality Rate

Source: Sample Registration System (SRS), Office of Registrar General and Census Commissioner.

Some indicators have not seen the same improvement:

1. Percentage of women aged 15–49 who are anaemic has increased from 53.1% in NFHS-4 to 57% in NFHS-5. Similarly, pregnant women who are anaemic has increased from 50.4% to 52.2%.
2. Under-5 mortality, expressed as deaths per 1,000 live births, for girls (33) remains higher than for boys (31) (SRS). In some States, the difference is more stark, like Assam (38, 43), Chhattisgarh (37, 45), Rajasthan (37, 43). For some States, the under 5 mortality is higher for boys: Kerala (12, 4), Himachal Pradesh (28, 19).
3. IMR is 28 for both boys and girls, but it is adverse in many States like Assam, Bihar, Chhattisgarh, Jharkhand, Karnataka, Odisha, Rajasthan, Punjab, Telangana, West Bengal, and Uttar Pradesh (SRS).

The focus on maternal health interventions was necessary to reduce morbidity and mortality for women and children. The last SRS report on “Cause of Deaths” 2017–2019, has registered that 6.6% of deaths in females in the 15–29 age group and 2.2% in the 30–44 age group are due to maternal conditions. This entails a

substantial reduction from 11.3% and 4.1% respectively in 2007–2009, but it is still significant.

The major cause of death for both men and women is non-communicable disease (NCD) (58.3% for males and 52.7% for females), with cardiovascular disease (30.8% and 26.2%, respectively) topping the list, followed by communicable, maternal, perinatal, and nutrition as the next major causes of death at 19.4% and 24.3% for men and women, respectively.⁴⁴³ Injuries constitute the third largest group (12.7% and 7.5%) (source: SRS 2017–2019). The focus on maternal health, while essential, is no longer adequate to address the issues relating to women's health. The National Plan of Action 1976, which followed the Report of the Commission on Status of Women, also pointed out that "the health of women who are not pregnant or nursing is an area which has received inadequate attention so far."⁴⁴⁴

Addressing women's health requires addressing a host of issues related to the ecosystem which affect women's health. The social determinants of health (SDH), that is, the social and economic circumstances, significantly influence health outcomes and are a major factor in health inequities.

Biological, socio-economic, and cultural situations and circumstances all affect health outcomes. Since these are different for men and women, their vulnerability is also different. Gender, therefore, is a major factor in health care and until the health system, from policy-makers to grassroots workers, understands and analyses these differences and responds with interventions that are specific to the situation of women, it may not be possible to realise desirable outcomes. Myriad factors limit access of women to health services. These include family reasons, such as a lack of decision-making power and economic constraints, fuelled by a lower priority given to women's health. This affects not only access to health care but also adherence to

⁴⁴³ Office of Registrar General; Medical Certification of Cause of Death.

⁴⁴⁴ International Institute for Population Sciences; National Family Health Survey (NFHS-4 and NFHS-5) 2019–2021.

treatment. Health facilities also limit access of women. These are often geographically distant and manned by staff who are not sensitised. Moreover, many facilities in rural areas are located in isolated places that women may be hesitant to visit. The availability of public or personal transport also influences access, as do safety concerns and social norms that prevent women from travelling alone. Major vulnerabilities of women include:

1. The opportunity cost of visiting health-care facilities is also high, even when health care is free. This includes loss of wages and lack of support systems that can allow women to leave children and other responsibilities to avail health care, whether in an institutional form like crèches or within the family or community, can also inhibit access to health care.
2. Education and Information: Women have lower access to information and education, which is crucial for health-seeking behaviour, especially in the context of NCDs and epidemics like COVID-19 and HIV, since lifestyle and behaviour change is the key to prevention and control. Men have greater access to information not only because they are likely to have greater interactions outside the home, but also due to greater access to Internet and mobile phones (NFHS-5).
3. Poverty: Economic issues are key to the management of health, as poverty is often a causal factor, limiting access to information and education, leading to migration, etc. Poverty also limits treatment and access to necessary interventions like adequate nutrition. Poverty affects both men and women, but power dynamics within the family, and greater poverty affecting women headed households, put women at a greater disadvantage.
4. Migration: Migration is often an outcome of poverty. Migration usually increases vulnerability of women. Men who migrate without families, often indulge in high-risk behaviour and can bring back infections when they re-establish sexual relations.
5. Female/family migration leading to sexual exploitation poverty can be a major reason for women's movement,

forcing them to travel to find other work. Being dispossessed of land and other means of production at home, and without enough formal skills to participate in economic activities, affects the vulnerability of women. Lack of economic resources can force women to stay in situations where their physical and emotional wellbeing is at risk. Poverty limits women's choices, and in turn, their ability to protect themselves.

6. Violence against women: Women are subjected to a variety of gender-based violence including in abusive marriages, rape, incest, or assault by family members or friends, trafficking, and violence at the workplace (formal and informal). Violence against women is a major public health issue that affects both the physical and mental health of women.
7. Marriage and negotiating power constitutes a separate category of vulnerability for women, especially young women and girls. In India, more than 23% of women aged 20–24 were married before the age of 18, as per NFHS-5. Often young women are married to older men who have been sexually active for longer and who are more likely to have acquired sexually transmitted infections. In marriages, abstinence and condom use are usually not available options even where husbands are indulging in high-risk behaviour. Prevalent notions of masculinity and femininity generally mean that women have little control or negotiating power in sexual relationships, including marriage.
8. Inhalation of smoke from cooking: The supply of subsidised LPG cylinders and cook stoves to families under the Ujjwala scheme has increased the number of households that use clean cooking fuel. However, more than 40% women still do not use clean cooking fuel. Smoke from such cooking remains a risk factor for women's health since they bear most of the burden for cooking within the household.
9. Other issues affecting women to a greater degree include the burden of care and support for persons who are unwell, both within the family and also as care workers. Breast cancer and

cervical cancer predominantly constitute a risk for women.

10. Sex-based susceptibility to disease in the Indian context is also an area where greater surveillance and research are required to enable treatments to be more focused.

Although data availability is scarce, there are some indicators that suggest unequal access:

1. Share of male deaths in medically certified deaths is 64%, while that of females is 36%. The report mentions that it appears more males availed themselves of medical facilities during the time of terminal illness as compared to females⁴⁴⁵ (source: Report on Medical Certification of Cause of Death 2020, Office of Registrar General, India).

Figure 7: Average Expenditure Per Spell of Ailment for Non-hospitalised Treatment During 15-Day Period (in ₹)

	<i>Male</i>	<i>Female</i>
<i>Rural</i>	621	567
<i>Urban</i>	711	710
<i>All</i>	655	621

Source: NSSO.

⁴⁴⁵ Office of Registrar General, Medical Certification of Cause of Death.

Figure 8: Average Expenditure on Immunisation (in ₹)

	Male	Female
<i>Rural</i>	42	29
<i>Urban</i>	243	260

Source: NSSO.

Towards the end of the Eleventh Five Year Plan, the newly created Department of Health Research had proposed a pilot programme on Gender and Health, with a proposed financial outlay for 2 years of ₹10 crores. The aim of the programmes was to conduct a gender-based analysis on a continuing basis on issues like vulnerability to disease, access to testing and health services, mobility, care and support, testing, adherence to treatment, expenditure on treatment, differences in biological vulnerability, and socio-cultural factors like education and access to information, mobility, care, and support services, and to respond with public health interventions that are specific to the situation of women. Unfortunately, the scheme was not accorded necessary approvals.

Going forward, it is essential that while designing any health programme, it is scrutinised from the gender perspective at all levels, including prevention programmes, communication campaigns and messages, treatment programmes, gender sensitisation of personnel, access to treatment, provision of an adequate earmarked budget, issues of stigma, and discrimination, especially in case of STIs and HIV-AIDS.

Monitoring that health facilities are located in a building that is “safe” for women (not geographically distant, not isolated, well connected through safe public transport, provision for stay, provision for children, manned by staff that is sensitised). Ensuring adequate women are on the staff of these facilities and conducting of patient feedback surveys among women.

Ensuring that all data collected is disaggregated by gender and that it is reviewed from the gender perspective to see if there are any gender gaps.

A concerted gender focus that can integrate a gender perspective in project design and its implementation has generally been lacking. This has also meant that surveillance, data collection, monitoring, and audit lack the necessary focus that could ensure that men and women benefit equally from health programmes.

Violence Against Women

Violence against women remains a major human rights and public health issue both globally and in India. Given the magnitude of the issue, for the purpose of this paper, this is being taken up independently from the health section. The United Nation defines violence against women as *any act of gender based violence that results in, or is likely to result in, physical, sexual or mental harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or private life*.⁴⁴⁶

The World Health Organization has estimated that 1 in 3 women worldwide have been subjected to physical or sexual violence.⁴⁴⁷ The last National Family Health Survey (NFHS-5) in India found that 29.3% of ever-married women in the 18–49 age group have experienced spousal violence, while 6% of women in the 18–49 age group reported experiencing sexual violence.⁴⁴⁸

National Crime Records Bureau (NCRB) in its publication “Crime in India 2022”⁴⁴⁹ presented the following status of crimes against women:

⁴⁴⁶ Declaration on the Elimination of Violence against Women. (1993). UN General Assembly. United Nations.

⁴⁴⁷ World Health Organization.

⁴⁴⁸ International Institute for Population Sciences; National Family Health Survey (NFHS 4 and NFHS 5) 2019–2021.

⁴⁴⁹ Ministry of Home Affairs, National Crime Record Bureau; Crime in India 2022.

<i>S. no.</i>	<i>Crime</i>	<i>Rate (per 100,000 population)</i>
1	Murder with rape/gang rape	0
2	Dowry death	1
3	Abetment to suicide	0.7
4	Acid attack	0
5	Cruelty by husband / family members (Section 498A)	20.9
6	Kidnapping & Abduction	12.7
7	Human trafficking	0.1
8	Selling of minor girls	0
9	Rape	4.7
10	Attempt to commit rape	0.5
11	Assault with intent to outrage modesty	12.4
12	Insult to modesty of women	1.3
13	Dowry Prohibition Act	2
14	Immoral Traffic Prevention Act (women victim cases)	0.1
15	Protection of women from domestic violence cases	0.1
16	Cyber crimes	0.4
17	POSCO	9.3

One striking feature of violence against women is that it often takes place within the family or with persons known to the family (NCRB and NFHS-5). The extent of violence against women is likely to remain under reported and difficult to assess due to power equations within the family and because issues of “honour” prevent reporting sexual violence.

Violence against women is prevalent throughout the lives of women and is manifested in various forms:

1. Pre-birth: It is seen in the sex-selective foeticide to ensure the birth of boys. India remains one of the few countries with an adverse sex ratio, indicating high levels of foeticide.
2. During childhood: Female infanticide, as well as preference for son, results in neglect within families due to nutrition,

medical attention, schooling and other opportunities, child marriage, trafficking of children, and violence against the girl child.

3. Adolescence and adulthood: Restrictions on movement; denial of schooling; early marriage; sexual harassment; trafficking; prostitution; social systems like devdasis, jogini, etc.; acid attacks; dowry harassment and murder; isolation; and mistreatment in marital home. With the advent of Information technology, cybercrimes like publishing or transmitting of sexually explicit material, blackmailing and defamation, morphing, etc. have also proliferated.
4. Old age: Abandonment of old women and usurping of property. Many such widows can be seen in the religious centres of Mathura and Vrindavan, where families often abandon these women.

The government has responded with the enactment of three acts to specifically target such violence. These include the Pre-Conception and Pre-Natal Diagnostic Techniques (PCPNDT) Act in 1994 to stop female foeticide and arrest the declining sex ratio. Although the sex ratio is improving, it remains adverse. Reports of female infanticide, which were prevalent at one time, have since declined.

Apart from the PCPNDT Act, two other Acts have been made to deal with some of these issues, namely the Dowry Prohibition Act 1961 and the Protection of Women from Domestic Violence Act 2005. New sections in the Indian Penal Code like 498A in 1983 to address cruelty by husband and his family and 304B in 1986 to tackle dowry deaths were added to deal with some of these issues. The Protection of Children against Sexual Offences Act (POCSO) was further passed in 2012. The Immoral Traffic (Prevention) Act had earlier been enacted in 1956. Other Acts of significance to target specific forms of violence include the Tamil Nadu Devadasis (Prevention of Dedication) Act 1947 and the Commission of Sati (Prevention) Act 1987.

With the enactment of the Protection of Women from Domestic Violence Act 2005 (PWDVA), civil protection was afforded to victims of domestic violence. The PWDVA provides a definition of domestic violence that is comprehensive and includes all forms of physical, emotional, verbal, sexual, and economic violence, and covers both actual acts of such violence and threats of violence.

Primarily meant to provide protection from domestic violence for wives and female live-in partners at the hands of husbands and male live-in partners or their relatives, the PWDVA has been extended to also protect women living in a household, such as sisters, widows, or mothers.

Although a legal framework has been established to address some forms of violence, the implementation of the Acts has not always had the desired impact. Evidence of such violence can be seen in the following data.

Evidence of foeticide can be seen in the Sex Ratio at Birth which improved by 3 points to 907 in 2018–2020 from 904 in 2017–2019. This does not capture the geographical differences; Uttarakhand had a child sex ratio of 844.⁴⁵⁰ (Sample Registration System Statistical Report 2020, Office of the Registrar General and Census Commissioner). The NFHS-5 (2019–2021) reported an adverse sex ratio at birth of 929.⁴⁵¹

Dowry continues to be a reality across the country. The rate of dowry deaths under Section 304B (1 per lakh), cases under the Dowry Act (2 per lakh), and cruelty under Section 498A (20.9 per lakh) bear testimony to the extent of the problem.⁴⁵²

NCRB data shows a rate of 0.1 per lakh cases under the Protection of Women from Domestic Violence Act. However, in the last NFHS-5 survey in India 29.3% of ever-married women in the 18–49 age group reported experiencing spousal violence.

⁴⁵⁰ Office of Registrar General, Sample Registration System (SRS)

⁴⁵¹ International Institute for Population Sciences; National Family Health Survey, (NFHS 4 and NFHS 5) 2019–2021.

⁴⁵² Ministry of Home Affairs, National Crime Record Bureau; Crime in India 2022.

One-fourth of ever-married women aged 18–49 who have experienced spousal physical or sexual violence report having physical injuries, but only 14% of women who experienced violence sought help to stop the violence. The difficulty in tackling this issue can be seen from the fact that 45% of women and 44% of men interviewed believe that a husband is justified in beating his wife in at least one of seven specified circumstances, such as showing disrespect for in-laws or refusal to have sex.⁴⁵³

The government has taken some additional steps, apart from legislative action, that require mention. One of these is the establishment of short-stay homes for women victims. This commenced in the 1950s, initially under the Central Social Welfare Board (CSWB), which also introduced the scheme of Family counselling Centres. This is currently being implemented as the Swadhar Greh Scheme by the Ministry of Women and Child Development. The scheme provides shelter, food, clothing, and health as well as economic and social security for women. Counselling and cells in police stations are also being operated.

The incidence of gang rape and murder in December 2012, generally referred to as the Nirbhaya incident, proved to be a catalyst for government action on violence against women. In the wake of this incident, the government appointed a committee headed by Justice J. S. Verma to look into possible amendments in the criminal laws related to sexual violence against women, which submitted its report in January 2013. It made recommendations on laws related to rape; sexual harassment; trafficking; child sexual abuse; medical examination of victims; and police, electoral and educational reforms. Intensive adoption and follow-up of the recommendations of the committee could help ameliorate the situation, but only a handful of States like Karnataka have made an effort to introduce such reforms.

The Indian Council for Medical Research had earlier constituted an expert group with experts from the health sector

⁴⁵³ International Institute for Population Sciences; National Family Health Survey, (NFHS 4 and NFHS 5) 2019–2021.

(including mental health and forensic), legal sector, NGOs, and police to draft comprehensive guidelines on the health sector's response to violence against women, which was subsequently drafted and placed in the public domain for comments. Many of the recommendations of this paper found a place in the Justice Verma Committee.

Following the December 2012 incident, the government also set up a dedicated fund—Nirbhaya Fund—which can be utilised for projects specifically designed to improve the safety and security of women, like one-stop centres, helplines, etc. It is a non-lapsable corpus fund, being administered by the Ministry of Finance. The pace of utilisation of funds has been questioned, but the initiative was much required.

Although a legal framework has been put in place on issues regarding violence against women, the need for better and more sensitised implementation structures, intensive monitoring, and follow-up could increase the impact on this issue.

Economic Participation and Empowerment

Economic inclusion is widely recognised as a fundamental prerequisite to improving the status of women. Any discussion on gender inclusion is incomplete without reference to economic empowerment. While economic growth is the accepted goal for all nations, there is now a realisation that all sections of the population have not benefited equally or adequately from economic growth. Underserved communities, like women, have traditionally been excluded in different degrees from the benefits of economic growth that is essential for sustainable development, poverty alleviation, and improvement in living standards.

The National Development Plans have given importance to the issue of women in economic development and its facets to different degrees. Initially, this was confined to vocational

training for self-employment and some efforts to provide home-based work to women.

It was not until 1980 that the need for a special focus on women was acknowledged in the Sixth Five Year Plan document which stated, “The low status of women in large segments of Indian society cannot be raised without opening up of opportunities of independent employment and income for them.”⁴⁵⁴ Since then, the issue of Women’s work has entered the arena of public discourse. A number of initiatives have been taken up to address basic issues like skill upgradation and provision of credit. Such measures have had mixed outcomes, demonstrating the efficacy of various initiatives.

Economic Situation of Women

Indian society remains highly differentiated, with many women achieving a high degree of success in all fields and breaking barriers to enter new areas of work that have traditionally been the preserve of men. However, when we examine the macro data, the following situation emerges.

Labour Force Participation

India has one of the highest gender gaps in labour force participation rates (LFPR). The global labour force participation rate for women aged 15 and above is low at 45.6% compared to men (69.2%)⁴⁵⁵ (World Employment and Social Outlook, May 2024 update ILO), but this is still considerably higher than India’s rates. The last Annual Report for the Periodic Labour Force Survey (PLFS) (July 2022 to June 2023) shows that the labour force participation rates in the country, in the 15 and above age group

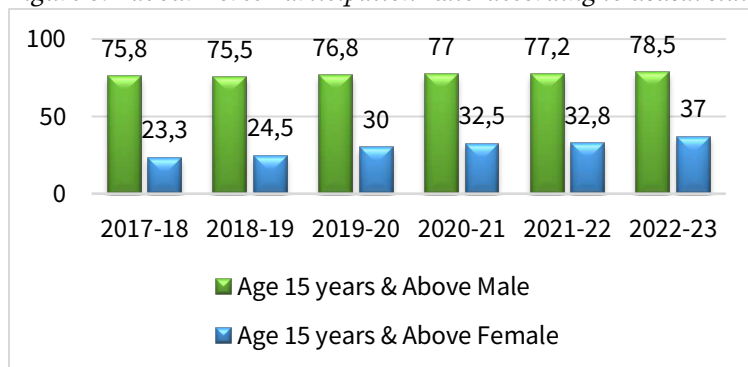
⁴⁵⁴ Planning Commission; Sixth Plan Document

⁴⁵⁵ International Labour Organization (ILO). (2024). World Employment and Social Outlook update May 2024.

for males was 78.5% compared to a rate of 37% for females. The gender gap in labour participation rates in the country is 41.5%.⁴⁵⁶ The global gap is 23.6%. The data presented by the Centre for Monitoring Indian Economy (CMIE), for 2022–2023 pegs the female labour force participation rate at 8.8%, which is considerably lower.⁴⁵⁷

This disparity is further accentuated in many regions. Only eight States (Chhattisgarh, Himachal Pradesh, Arunachal Pradesh, Nagaland, Meghalaya, Sikkim, Jammu and Kashmir, and Ladakh) had a female LFPR above 50%, while six States (Lakshadweep, Delhi, Bihar, Assam, Haryana, and Chandigarh) had a female LFPR below 25%.⁴⁵⁸ (28) PLFS 2022–2023). The encouraging trend is that although the gender gap remains substantial, it has decreased over the last few years.

Figure 8: Labour Force Participation Rate according to usual status



Source: Annual Report Periodic Labour Force Survey (PLFS) 2022–2023, NSSO.

⁴⁵⁶ NSSO, Periodic Labour Force Survey (PLFS) 2022–2023.

⁴⁵⁷ Centre for Monitoring Indian Economy.

⁴⁵⁸ NSSO, Periodic Labour Force Survey (PLFS) 2022–2023.

Quality of Work Available for Women

Women workers in India are normally forced to undertake more arduous, low-paying jobs that are casual and intermittent. Among women workers, the proportion of “main workers” remains consistently low. As a percentage of total main workers, women constituted only 25% in 2011, but as a percentage of “marginal workers,” women constituted 51% of total workers (Census 2011).⁴⁵⁹

Table 1: Quality of Work Available to Women

Category of workers	Percentage of total workers		Percentage of population	
	Males	Females	Males	Females
Main workers	75%	25%	44%	15%
Marginal workers	49%	51%	9%	10%

Source: Census 2011.

This is corroborated by the PLFS data, which shows significantly lower number of hours of work and pay for women.

Where Women Work?

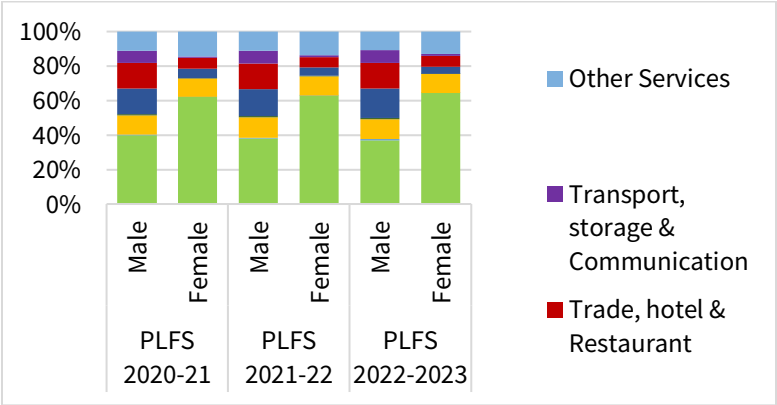
Women predominantly work in the agriculture sector. In earlier decades, both men and women worked predominantly in the Agriculture sector. However, male migration from rural areas has led to what has been termed as the “Feminisation of Agriculture.” Balkanisation of agriculture lands, has led to small, fragmented, uneconomic holdings, and the average size of operational holdings has declined⁴⁶⁰ (Agriculture Census 2015–2016). This has made agriculture increasingly unremunerative for the large number of marginal farmers and unable to support

⁴⁵⁹ Census 2011

⁴⁶⁰ Agriculture Census 2015–2016.

families, forcing family members to migrate to seek opportunities in non-agricultural sectors. With this transition, work in agriculture has been taken over by women. The sector also continues to have differentiated work responsibilities, with women undertaking more arduous, lower-paying tasks.

Figure 9: Distribution of Workers by Broad Industry Classification (%)



Source: Annual Report Periodic Labour Force Survey (PLFS) 2022–2023, NSSO.

Agriculture is the only sector where the percentage of women far out numbers that of men. The manufacturing sector employs a comparable percentage of men and women, and men far outnumber women in all other sectors.⁴⁶¹

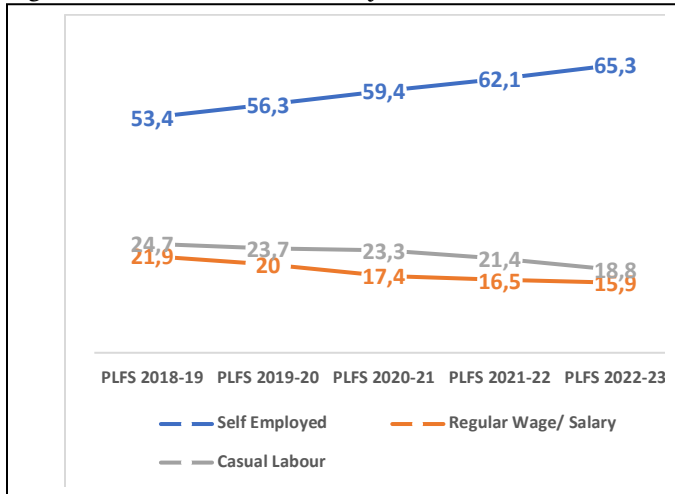
Status of Women’s Employment

A majority of women workers are self-employed (65.3%), more than 10 percentage points in excess of men, and this percentage continues to see an increasing trend. Among other categories of women workers, 18.8% work as casual labour, and

⁴⁶¹ NSSO, Periodic Labour Force Survey (PLFS) 2022–2023.

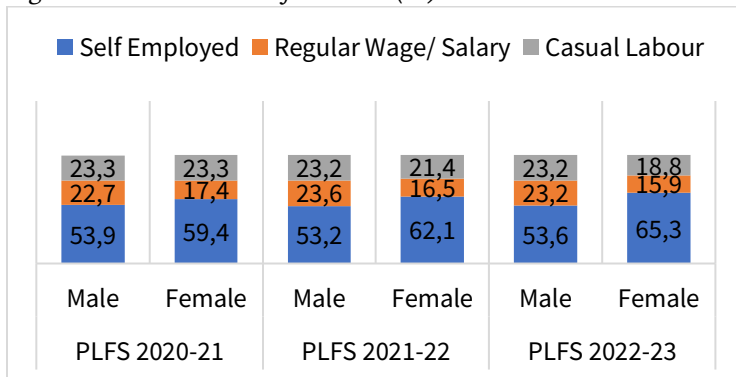
only 15.9% have a regular wage/salary. Both these categories are seeing a decreasing trend for women workers.

Figure 10: Percent Distribution of Women Workers



Source: Annual Report Periodic Labour Force Survey (PLFS) 2022–2023 NSSO.

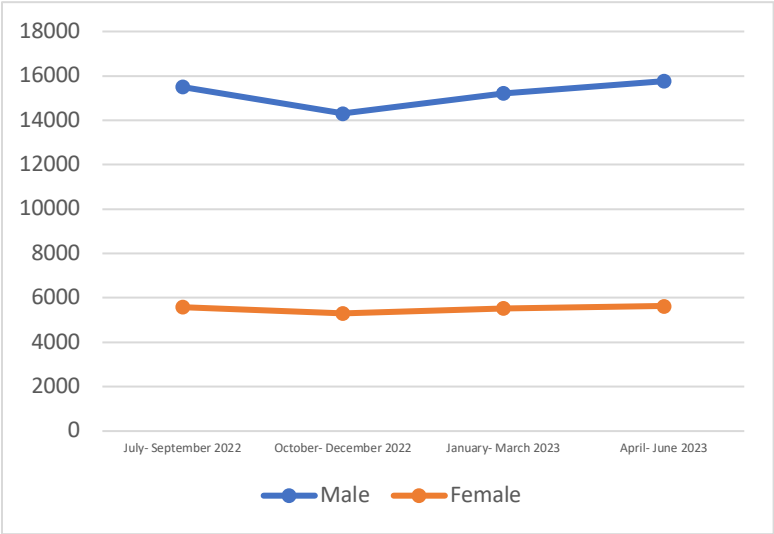
Figure 11: Distribution of Workers (%)



Source: Annual Report Periodic Labour Force Survey (PLFS) 2022–2023 NSSO.

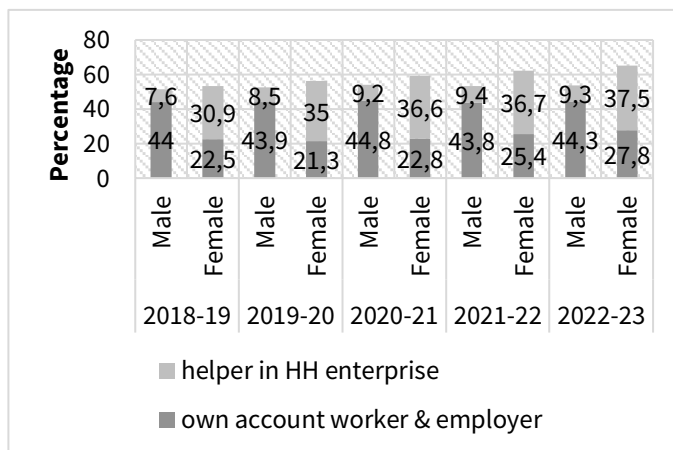
Gender disparities are visible not only in the percentage of women who are self-employed but also in ownership patterns. Self-employment remains the largest category for men as well; the gender disparity in this category can also be seen in the table below. Men account predominantly for own account workers/employers, while a significantly larger proportion of women work as helpers in household enterprises. The gender gap in earnings of self-employed workers is also significant.⁴⁶²

Figure 12: Average gross earnings in Rs during the last 30 days from self employment work in current weekly status



⁴⁶² NSSO, Periodic Labour Force Survey (PLFS) 2022–2023.

Figure 13: Status of Self Employed Workers

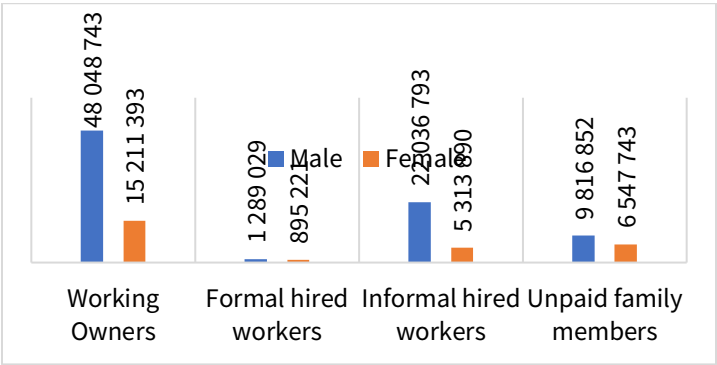


Source: Annual Report Periodic Labour Force Survey (PLFS) 2022–2023 NSSO.

Of the 6.5 crore enterprises belonging to the unincorporated sector, 24.18% are headed by women. Of these 6.5 crore enterprises, 5.53 crores are own account establishments, while 97 lakhs are hired worker establishments; 27% enterprises are in the manufacturing sector, while 34.71% and 37.88% are in the trade and other service categories, respectively. Of the women-headed proprietary establishments, the share of manufacturing, trade, and other services is 54.73%, 12.41%, and 11.12%, respectively, and 25.63% of total workers in this sector are women. This number rises to 43% in manufacturing (source: Annual survey of unincorporated sector enterprises (ASUSE) 2022–2023, NSSO, MOSPI).⁴⁶³ The breakup is shown in the figure:

463 NSSO. (2024). Annual survey of Unincorporated Sector Enterprises (ASUSE) 2022–23.

Figure 14: Workers in Unincorporated Sector Enterprises by Category



Education and Employment

Among main workers who are females, the largest proportion is of illiterate women. As the level of education rises, the proportion of women workers decreases, with the exception of women with a technical degree or diploma equal to a degree or post-graduate degree. For marginal workers, the lowest proportion of women in the workforce is in the category of technical diploma or certificate not equal to a degree.⁴⁶⁴ This data also impacts the emphasis on skill development and vocational training for increasing employment.

Barriers to Economic Inclusion of Women

The decision and ability of women to participate in the labour force depend on a number of economic and social factors. ILO evidence suggests that this gap mainly stems from family responsibilities (marriage and parenthood), indicating that

⁴⁶⁴ Registrar General and Census Commissioner; Census 2011.

women's disproportionate share of unpaid care work plays a major role in shaping gender employment gaps globally.⁴⁶⁵

However, actual participation is also hindered by multiple barriers. The barriers to work for women not only relate to cultural and societal norms which restrict female employment, such as restrictions on mobility, but to an entire ecosystem that creates barriers for women. These include:

1. Limited access to employment near one's residence and an inability to travel long distances for work, hindered by both social norms and safety issues, as well as limitations for self-employment such as knowledge, availability of credit, raw materials, marketing linkages, and other inputs.
2. Discrimination and exploitation at the workplace include issues of working conditions, low wages, harassment, and exploitative practices. Safety issues such as the location of workplaces, safety features like adequate lighting and exits, etc. at the availability of adequate and safe transport are also concerns.

This is accentuated by issues like sexual harassment and exploitation, and the non-availability of infrastructure like washrooms, restrooms, and crèches. The expansion of the proportion of contractual workers has affected working conditions and job safety for all workers, but especially for women. Moreover, recruitment processes and equal opportunities for hiring often include inbuilt biases against women.⁴⁶⁶

Balancing the competing burdens of work and family responsibilities is a significant challenge. Women have the dual burden of household responsibilities and child and elderly care. On average, women spend more than 7 hours daily on unpaid domestic services for household members and unpaid caregiving for household members.⁴⁶⁷ There is a lack of support systems

⁴⁶⁵ ILO; World Employment and Social Outlook update, May 2024.

⁴⁶⁶ World Value Surveys in South Asia.

⁴⁶⁷ NSSO, report on time use in India 2019.

within families, especially when women migrate after marriage. Institutional support services like childcare, and safe public transportation are grossly inadequate. Some of these issues are discussed below.

Access to Resources

A larger proportion of women are self-employed; however, their access to resources is generally lower than that of men. This reflects adversely on their ability to work and on their earnings.

Access to Credit

The share of female borrowers in the banking system accounted for 33.6% of loan accounts and 23.4% of the amount of bank loans to individuals in March 2024.⁴⁶⁸ Outstanding credit to Micro, Small & Medium Enterprises (MSMEs) for women entrepreneurs constitutes only 7% of the total outstanding credit in comparison to their ownership of around 24%. Inability to show collateral for lending remains the biggest barrier for women accessing credit, although issues like bias against women borrowers and the lower number of applications for formal loans by women, inhibited by both a lack of knowledge and confidence in approaching the banking system, also play a role.

Since the 1980s, a number of initiatives have been taken by the government to channel credit to women. The Government of India established the Rashtriya Mahila Kosh (National Credit Fund for Women) in 1993 under the Department of Women and Child Development (DWCD), with a corpus fund specifically for this purpose. Other schemes launched by DWCD include STEP, Swashakti, and Swalamban schemes for providing credit, training, and other support for livelihoods. Many small credit schemes by other Departments like KVIC also targeted women. Many small credit schemes through establishment of special

⁴⁶⁸ RBI, BRS II.

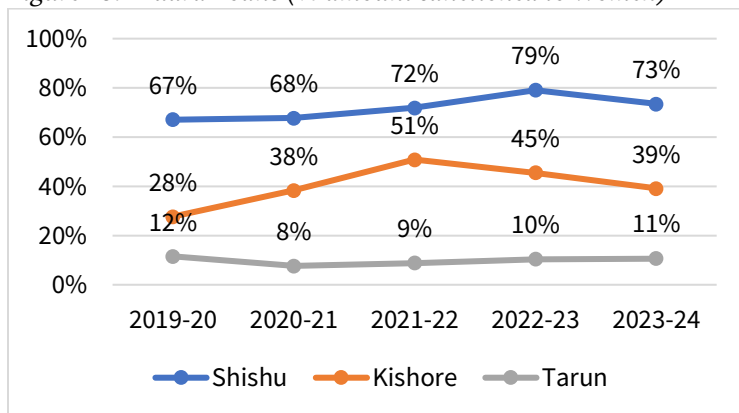
agencies for credit for self-employed and home-based workers also targeted women, as did Women Development Corporations at the State level. Women beneficiaries were targeted in most poverty alleviation schemes like Integrated Rural Development Programmes (IRDP) and Swarnjayanti Swarojgar Yojana (SRY), where they were provided credit and subsidy for income-generating activities. One of the earliest schemes provided support to self-employed women like street vendors, petty shopkeepers, and weavers. Even earlier, socio-economic programmes were channelled to Mahila Mandals and voluntary agencies through CSWB for wages and self-employment. Some of these schemes were exclusively for women, while some had quotas determined for women.

The Stand-Up India scheme mandates lending to at least one woman entrepreneur by each branch of scheduled commercial banks. So far almost 2 lakh women entrepreneurs have received credit under this scheme.

One of the success stories in terms of credit to women can be seen in the case of Pradhan Mantri MUDRA Yojana (PMMY) loans, a scheme launched in 2015 for providing loans up to ₹10 lakh (recently enhanced to ₹20 lakh) to non-corporate, non-farm small/micro enterprises. Three types of loans were provided under the scheme: Shishu (loans up to ₹50,000), Kishore (loans from ₹50,000 to ₹5 lakh), and Tarun (loans from ₹5 lakh to 10 lakh). Around 65% of loans under this scheme have been sanctioned to women, although these are largely in the lowest category of loans less than ₹50,000.⁴⁶⁹

⁴⁶⁹ MUDRA, Ministry of Finance. <https://www.mudra.org.in/>

Figure 15: Mudra Loans (% amount sanctioned to Women)



Source: MUDRA website.

One reason for the success of the scheme can be attributed to the fact that no collateral is required for availing loans under the scheme. The learnings from this success could inform other programmes. Micro credit through SHGs has been showcased as a preferred method to ensure credit to women, especially in lower-income groups and to reduce dependence on informal sources like moneylenders. Many initiatives have been taken by the government. The Self-Help Group (SHG)–Bank Linkage was introduced by NABARD in February 1992, as a pilot project with policy back-up from the RBI in Karnataka and Tamil Nadu. A number of non-government players like PRADHAN, MYRADA, DHAN, and SEWA also promoted this model in the 1990s.

The Government of India (Ministry of Rural Development) pioneered the programme Development of Women and Children in Rural Areas (DWCRA) in 1982–1983 as part of IRDP. Under DWCRA, groups of 15–20 women from poor households at the village level were formed to obtain access to services like skill training, credit, cash, and infrastructural support for self-employment. By the end of the Ninth Plan, 1 million SHGs had been established. Carrying this process forward, the government is implementing the scheme: Aajeevika–Deendayal Antyodaya

Yojana–National Rural Livelihood Mission (DAY-NRLM). The scheme aims to reach out to poor households by mobilising rural women into SHGs and their federations and collectives at different levels. The programme has mobilised 8.64 crore women members into 80 lakh SHGs and more than ₹5.83 lakh crore has been provided as bank credit to the SHGs (source: DAY-NRLM website).⁴⁷⁰

The Annual Survey of Unincorporated Sector Enterprises (ASUSE) 2022–2023 has recorded that 3.7% of such enterprises are through SHGs.⁴⁷¹ The NFHS-5 study has reported that the use of microcredit programmes by women has increased from 8% to 11% from NFHS-4 to NFHS-5. Knowledge of microcredit programmes has also increased. These numbers would need to be increased further to maximise impact from this approach.

Ownership of Assets

Ownership of assets for women has historically been lower compared to Men. This not only impacts economic security for women but also limits their access to credit. Inheritance laws and practices have led to the devolving of family assets largely to male family members. For example, women workers predominate in the agriculture sector; however, the last agriculture Census held in 2015–2016 found that the share of female operational holders remained low, increasing from 12.79% in 2010–2011 to 13.96% in 2015–2016 with corresponding figures of 10.36% and 11.72% in operated area. In 2015–2016, participation of female operational holders was highest under the marginal category (72%) followed by small (17%) and semi-medium (8.1%) (All India Report on

⁴⁷⁰ NSSO. (2024). Annual survey of Unincorporated Sector Enterprises (ASUSE) 2022–2023.

⁴⁷¹ NSSO. (2024). Annual survey of Unincorporated Sector Enterprises (ASUSE) 2022–2023.

Agriculture Census 2015–2016; Ministry of Agriculture and Farmers' Welfare).⁴⁷²

The government has taken some positive steps to improve the situation. For land allotment schemes to poor households, most States started a practice to allot land in the joint name of the husband and wife where possible. In the 1980s, the Central government also mandated such transfers. Of the 146.45 million agricultural holdings in the 2015–2016 agriculture census, 2.025 million were joint holdings with women as co-holders.⁴⁷³ NFHS-5 indicates that among women and men aged 15–49, 42% of women and 60% of men own a house, and 32% of women and 42% of men own land either alone or jointly with someone else.⁴⁷⁴

Similarly, for house allotment under Indira Awas Yojana, houses were allotted in the joint name of the husband and wife. Subsequently, it was allotted preferably in the name of the woman. Currently, under the Pradhan Mantri Awas Yojana, houses are allotted preferably in the name of the woman of the household. In 2005, an amendment was made to the Hindu Succession Act 1956 to give daughters an equal right in inheritance in a joint Hindu family.

Skill Development and Vocational Training

The government has initiated a number of schemes since the First Five Year Plan to impart vocational skills for self-employment. Subsequently, special institutes were established exclusively for women, or women wings were opened in institutions like Industrial Training Institutes. Census 2011 also showed that while there were fewer female workers, the

⁴⁷² Agriculture Census 2015–2016.

⁴⁷³ Agriculture Census 2015–2016.

⁴⁷⁴ International Institute for Population Sciences; National Family Health Survey, (NFHS 5) 2019–2021.

percentage was better only for women with a technical degree or diploma equivalent to a degree or post-graduate degree.⁴⁷⁵

Financial Inclusion

The move for financial inclusion can be said to have started in the 1960s, but it was after the launch of the Pradhan Mantri Jan Dhan Yojana in 2014 to provide access to financial services like credit, insurance, and pension that financial inclusion came centre stage. Around 460 million bank accounts were opened under this scheme, of which 56% were owned by women.⁴⁷⁶

One constraint seems to be the number of inactive accounts. Moreover, access to other services envisaged under the programme, namely credit, insurance, and pension has remained lower. The percentage of women who have a bank or savings account that they themselves use has substantially increased from 53% in 2014–2015 to 79% in 2019–2020. Over half (51%) of women in India say that they have some money that they alone can decide how to use (NFHS-5).

Control over Income

For women who are in the workforce and earn in cash, control over their income is not guaranteed. According to NFHS-5 only 18% of women reported making their own decisions about the use of money. Another 67% reported making the decision jointly with their husband. For 14% of women, the husband is the sole decision-maker regarding the use of women's earnings.⁴⁷⁷

⁴⁷⁵ Census 2011.

⁴⁷⁶ Pradhan Mantri Jan Dhan Yojana (PMJDY). <https://pmjdy.gov.in/>

⁴⁷⁷ International Institute for Population Sciences; National Family Health Survey (NFHS-5) 2019–2021.

Mobility and Freedom of Movement

Women's mobility is restricted partly due to lower access to transport and also due to social norms that restrict their movement. Fewer women than men own personal transport. The availability of public transport is restricted outside of metro cities. Safety in public transport, especially at odd hours, is also a constraint. NFHS-5 reported freedom of movement based on whether women are usually allowed to go alone to the market, the health facility, and to places outside the village or community. Overall, only 42% of women are allowed to go alone to all three places, and 5% are not allowed to go alone to any of the three places. Such restrictions on mobility add another layer of disadvantage to women's work.⁴⁷⁸

Participation in Decision-Making

Indian industry has a share of 20% women in top and middle management, lagging behind the global average of 33% in 2019⁴⁷⁹ (National Council of Applied Economic Research [NCAER]). The Companies Act 2013 mandates every listed company or public company with a paid-up capital of ₹100 crore or a turnover of ₹300 crore to have at least one woman on the Board. In 2018 SEBI made it compulsory for the Boards of top 1000 companies to have at least one independent woman director by April 2020. However, Women Directors are paid nearly 40% less on average than men⁴⁸⁰ (Business Standard, July 4, 2024).

⁴⁷⁸ International Institute for Population Sciences; National Family Health Survey (NFHS-5) 2019–2021.

⁴⁷⁹ Srivastava Navya, Vasishth, Mahima, & Sahay, Ratna. (2024, July). *Female leadership in India: Firm performance and culture*. National Council of Applied Economic Research (NCAER).

⁴⁸⁰ *Business Standard* (2024, July 4).

Implementation of Labour Laws Relating to Women

There have been a number of significant legislations for working women. Some of these have been enacted specifically for women, while others include sections to benefit women. Some of the major legislations are mentioned below. The Maternity Benefit Act 1961 offers 6 months of paid maternity leave to all women employees, regardless of the nature of their employment. Regular workers, contractual workers, daily wagers, temporary employees, and part-time workers are all eligible for maternity leave. Many organisations exhibit some form of bias against women taking maternity breaks. One major reason is the lack of replacements during maternity breaks. Anecdotal evidence suggests that contractual workers and regular workers without formal contracts are asked to resign once they are known to be pregnant. The document *Shram Shakti*⁴⁸¹ also captured this practice. The Maternity Benefit Act also acts as a disincentive for hiring women workers. Statistics show that 2 years after the enactment of the United Provinces Maternity Benefit Act in 1938, the number of women hired in factories across United Provinces decreased significantly.

A policy that allows a break in service post-maternity benefit, with or without pay and promotion benefits, with provisions for reskilling or a lateral entry system for qualified women post-maternity breaks with age relaxations, could be considered. Resolution of concerns of new mothers decreases their attrition rate and enables productive participation. Giving employers benefits for implementing the Act could go a long way to help improve implementation of these provisions.

⁴⁸¹ Ministry of Labour and Employment. (1988). *Report of the National Commission on Self Employed Women & Women in the informal Sector "Shramshakti"*, Ministry of Labour and Employment, Government of India.

Income and Wage Disparity

Globally, women receive a lower share of labour incomes as compared to men. ILO's "World Employment and Social Outlook, May 2024" has also noted that "even when women are employed, they receive sizeably lower labour income than men—especially in the developing world. In high-income countries, employed women earn 73 cents to the dollar compared to employed men. In low-income countries, women earn just 44 cents to the dollar."⁴⁸² Article 39 of the Constitution directed equal pay for equal work for both men and women. In 1976, India enacted the Equal Remuneration Act, which mandated equal pay for men and women. Despite this legal guarantee, the goal of equal pay remains to be actualised, especially for contractual and outsourced workers. As per the 2022–2023 PLFS report, the average wage/salary for regular wage/salaried female employees in CWS status is 73–81% of the wages/salary received by men, and the average earnings per day by casual labour (female) engaged in works other than public works in CWS is 60–67% of the average earnings of male workers. This disparity is also visible in the agriculture sector.⁴⁸³ Minimum Wages Act 1948 enables the fixation of minimum wages for different categories of (scheduled) employment. One issue raised by key frontline female workers like ASHA, AWW, and AWH is low pay. Many such functionaries are not covered under the scheduled employments under the Minimum Wages Act, and work hours are not fixed.

The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act was enacted in 2013. More than a decade after the enactment, most women feel that the Act is not implemented in either letter or spirit in most organisations. The situation for unorganised labour is worse.

Child Care Facilities: A number of Labour laws have made provisions for child care facilities. The Maternity Benefit Act

⁴⁸² ILO; World Employment & Social Outlook, May 2024.

⁴⁸³ NSSO, Periodic Labour Force Survey (PLFS) 2022–2023.

mandates the establishment of crèches. Apart from the Maternity Benefit Act, a number of Labour Acts establishment of crèches based on the number of workers. This includes The Factories Act 1948; Plantations Labour Act, 1951; The Mines Act, 1952; The Beedi and Cigar Workers (Conditions Of Employment) Act, 1966; Building and other construction workers (regulation of employment and conditions of services) Act, 1996; and The Unorganised Workers' Social Security Act, 2008. The National Rural Employment Guarantee Act, 2005, also mandates crèches.

Most of these Acts are to be consolidated in the Labour Codes, which raises the number of workers required for establishment of crèches as provided in the three previous Acts (Beedi and Cigar from 30 to 50; Factories Act from 30 to 50; and Contract labour from 20 to 50). Moreover, The Occupational Safety, Health and Working Conditions Code 2020 replaced the word “shall” with “may,” thereby making this provision discretionary.

Setting up crèches under these statutory provisions so far has been limited. This can be partly attributed to the design of the Acts, since crèches are to be established in workplaces with 20 or more workers (variable across acts) and less than 20% of workers are employed in workplaces with more than 20 workers (PLFS), most workplaces remain outside the purview of crèche facilities, and partly to a lack of monitoring of these provisions.

Two central initiatives were commenced for the provision of crèches; however, the numbers have now dwindled substantially. These include the National Creche Scheme for the Children of Working Mothers under MWCD and the Scheme for Assistance to Creches for Working and Ailing Mothers through CSWB, which at one time supported close to 4 lakh crèches.

The World Bank's report *Women, business and the law 2022* highlighted the minimal state involvement in childcare provision in South Asia, in comparison to other regions. The low availability and high cost of child care remains a critical

impediment for women's work in India, pushing mothers to stay at home or adopt informal arrangements.⁴⁸⁴

A landmark for understanding the issues relating to women's work in India remains the report of the National Commission on Self Employed Women and Women in the Informal Sector submitted in 1988, entitled *Shramshakti* which can still serve as a template for the economic inclusion of women.

Box 1: Shramshakti: Report of the National Commission on Self Employed Women and Women in the Informal Sector, 1988

Recognised:

1. The Labour market is not neutral to men and women, with gender inequalities in most sectors including education and vocational skills, division of labour with women mainly doing more arduous lower paying jobs
2. More women in the unorganised sector doing intermittent jobs at low wages or own work, characterised by lack of job security and social security
3. Obstacles for women to access credit, raw materials, and marketing
4. Women headed households suffer higher incidence of poverty
5. Migration adversely affecting both women left behind and those migrating
6. There is a lack of childcare facilities
7. Weak implementation machinery for legislation

Recommended:

1. Enhance ownership and control over productive assets by women
2. Ensure percentage of allocation of resources in investment to women
3. Need for holistic approach to women's issues ensuring fuel, fodder, and water
4. Strengthening employment through support in areas of skill, training, credit, and marketing
5. Protecting women from casualisation and contractualisation
6. Provide supportive services like housing, toilets, and childcare

⁴⁸⁴ The World Bank. (2022). *Women, business and the law 2022*. World Bank.

7. Proper and effective implementation of industrial and protective legislation
8. Adequate resource allocation and orientation of programmes for women producers in agriculture
9. Identification of industries in small scale sector which can help women to become self employed
10. Commence contribution of contractors to a welfare fund in construction
11. Devise suitable insurance against maternity, illness, and old age

Political Empowerment and Participation

Opportunity for women to influence the course and direction of development is directly related to their participation and representation in the politics and the executive. A full and equal representation could signify the space for voicing views and taking up issues of concern regarding women and influencing development policy and implementation. In the political sphere, this entails participation both as voters and as members of Parliament, State legislatures and local bodies. In the executive, this entails representation in the Cabinet, judiciary, and administration. Each of these are discussed in brief below.

Women's Vote in India

In India, elections to the House of the People (Lok Sabha) and to the Legislative Assembly of each State on the basis of universal adult suffrage was a right gained with independence and guaranteed by the Constitution (Article 326 of the Constitution).⁴⁸⁵

⁴⁸⁵Constitution of India, Article 326.

In fact, from the year 1919, a limited number of women had been granted the right to vote, first by certain Provincial Governments and Princely States, and after the enactment of the Government of India Act 1935—a centrally mandated right—albeit in a limited manner, and based solely on their identity as a wife or mother of persons eligible to vote.⁴⁸⁶ In the run-up to the first General Election in 1951–1952, there were some hiccups in the preparation of the voter lists, especially in the “States of Bihar, Uttar Pradesh, Madhya Bharat, Rajasthan and Vindhya Pradesh.” About 94% of adult women were registered in the electoral rolls after the first revision of electoral rolls after they agreed to disclose their proper names.⁴⁸⁷

Although the voting percentage of women was comparatively lower in the first few general elections, the mobilisation of women in large numbers during the Independence Movement, where they participated in movements like the Swadeshi Movement, Non-Cooperation Movement, and the Quit India Movement, had already brought women into the public sphere. Many women played significant roles in the freedom movement. Mahatma Gandhi, especially, was instrumental in the mobilisation of women on a large scale.

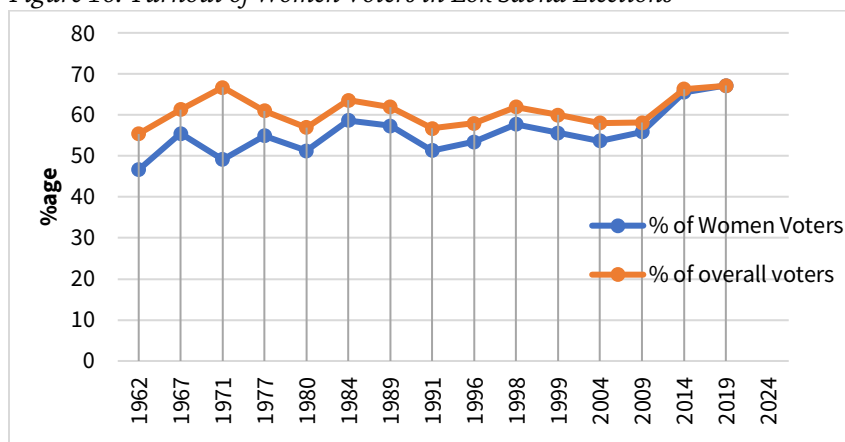
An encouraging trend has been the increasing women voter turnout over subsequent elections. While the percentage of women voters compared to men was traditionally lower, in the 2019 Lok Sabha elections, the percentage of women voters surpassed that of male voters, although by a narrow margin.⁴⁸⁸

⁴⁸⁶ Government of India Act 1935, Sixth Schedule: Additional Qualifications for Women.

https://www.legislation.gov.uk/ukpga/1935/2/pdfs/ukpga_19350002_en.pdf

⁴⁸⁷ Election Commission of India; Report of the First General Elections in India, 1951–1952.

⁴⁸⁸ Election Commission of India. <https://www.eci.gov.in/>

Figure 16: Turnout of Women Voters in Lok Sabha Elections

Source: Election Commission of India.

The increased turnout of women to vote can be attributed to both Political parties acknowledging the importance of and targeting women voters with schemes, especially closer to elections, and to greater awareness among women voters. Efforts made by the Election authorities to encourage voters have also influenced turnout.

Representation of Women in Parliament and State Assemblies

Although the percentage of women voters has surpassed that of Men, women's representation in Parliament and Assemblies remains low. Globally also, representation of women in the political sphere has been low.⁴⁸⁹

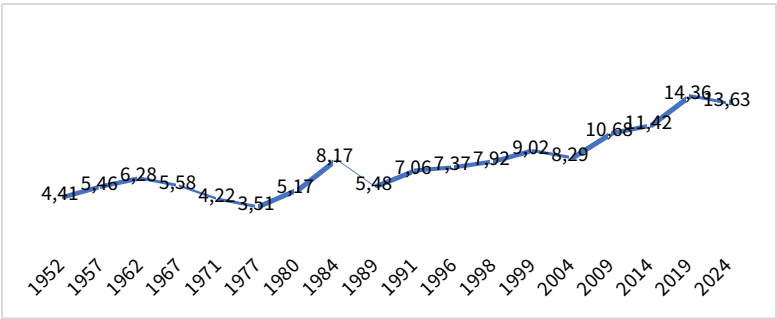
India's experience in this context has been mixed. Women gained the right to stand for elections in different degrees from

⁴⁸⁹ UN Women. (2024). *Global Data on Women Political Leaders 2024*. UN. <https://www.unwomen.org/sites/default/files/2024-06/Poster-Women-political-leaders-2024-en.pdf>

1919. The first woman in the State legislature was Muthulakshmi Reddy, who was appointed to the Madras Legislative Council in 1926, where she played a pioneering role in raising the age of consent for marriage. She also proposed the Madras Devadasis (Prevention of Dedication) Act bill to the Madras Legislative Council in 1930, although it was finally passed in 1947.

Post-Independence, in the first Lok Sabha elections held in 1952, only 22 women were elected, less than 5%. In the Lok Sabha, the maximum number of women who have been elected was in 2019, when 78 women were elected in a house with a strength of 543, slightly over 14%. In the last Lok Sabha elections held in 2024, the number of women contestants was the highest at 794, but the number of women elected came down from 2019 to 74.⁴⁹⁰

Figure 17: Percentage of women Members of Parliament in Lok Sabha

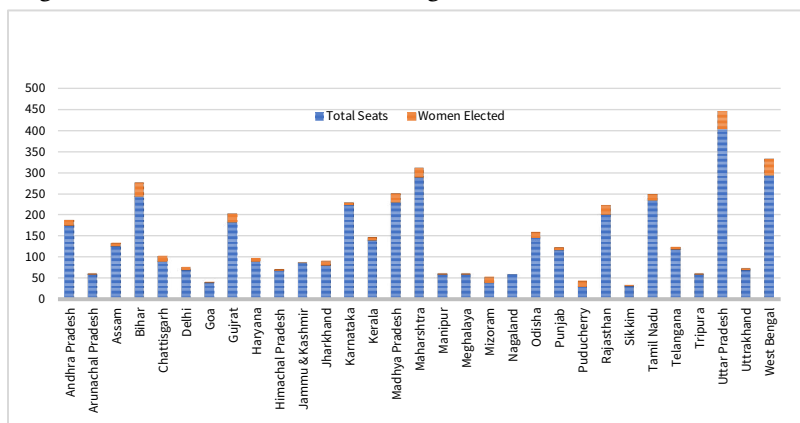


Source: Election Commission of India.

⁴⁹⁰ Election Commission of India.

The percentage of women elected to State Legislative Assemblies is lower than that of the Parliament, at around 11% (source: Women and Men in India 2020. Social Statistics Division, National Statistical Office, Ministry of Statistics and Programme Implementation).⁴⁹¹

Figure 18: Women Elected to State Legislatures



Source: Women and Men in India 2020; Social Statistics Division, National Statistical Office, Ministry of Statistics and Programme Implementation.

A major reason for low representation of women has been the reluctance of Political Parties to nominate women for elections. The All India Trinamool Congress Party (TMC) stands out as a party which nominates a large number of women, resulting in a larger percentage of its MPs being women. In percentage terms, of the three parties with double-digit women Members of Parliament in Lok Sabha, TMC with 37.93% has the maximum representation of women, followed by Congress at 13.13% and Bharatiya Janata Party at 12.92%.

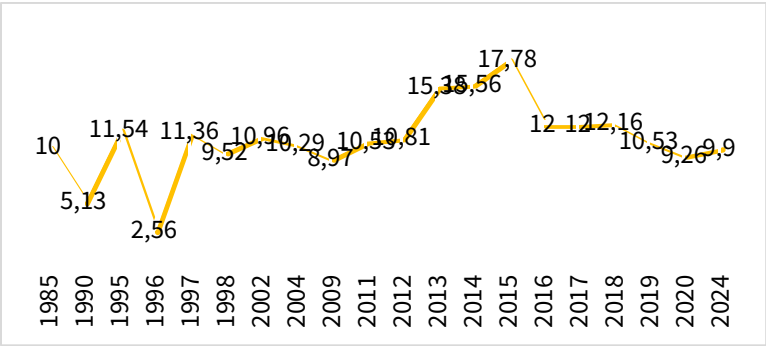
⁴⁹¹ Ministry of Statistics and Programme Implementation. *Women and men in India, 2020*. <https://mospi.gov.in/publication/women-and-men-india-2020>

Representation in Government

As of January 1, 2024, there were 27 countries led by women and 23.3% of Cabinet members heading Ministries globally (UN Women Global Data on Women Political Leaders 2024). This document ranks India at 171 among 190 countries.⁴⁹² Currently, India has 2 women in the Cabinet among 31 members (6.5%). There are 71 members, including Ministers of State, of whom 7 are women. This includes 2 Cabinet Ministers and 5 Ministers of State (just under 10%).

The first Union Cabinet formed in 1950 had 15 members, of whom only 1, Rajkumari Amrit Kaur, the Minister for Health, was a woman. The second Cabinet, formed after the first general elections in 1952 retained Rajkumari Amrit Kaur as the only woman in a Cabinet which had 25 members, including the Prime Minister. None of the 18 Ministers of State were women.

Figure 19: Percentage of Women in Union Cabinet of Ministers



Source: *Women and Men in India 2020*. Social Statistics Division, National Statistical Office, Ministry of Statistics and Programme Implementation.

⁴⁹² UN Women. (2024). *Global Data on Women Political Leaders 2024*. UN. <https://www.unwomen.org/sites/default/files/2024-06/Poster-Women-political-leaders-2024-en.pdf>

Indira Gandhi remains the only woman Prime Minister of India. There have, however, been two Presidents who have been women: Srimati Pratibha Patil (2007–2012) and the current President Shrimati Draupadi Murmu who took charge in 2022. At the State level, however, there have been a number of women Chief Ministers, starting with Sucheta Kriplani in Uttar Pradesh in 1963, followed by Nandini Satpathy, Sashikala Kakodkar, Syeda Anwara Taimur, Janaki Ramchandran, J. Jayalalitha, Mayawati, Rajinder Kaur Bhattal, Rabri Devi, Sushma Swaraj, Sheila Dixit, Uma Bharti, Vasundhara Raje, Anandiben Patel, Mehbooba Mufti, and Mamata Banerjee, who is currently the only female Chief Minister.

Reservation of Seats for Women in Parliament, State Legislatures, and Local Bodies

In view of the low representation of women in Parliament and Legislative Assemblies, there have been recurring demands both for Political parties to enhance the number of tickets given to women candidates and for the reservation of seats for women in legislative bodies. Interestingly, the Government of India Act 1935 included a provision for the reservation of 41 seats for women, in different provinces. These included 28 General seats, 10 seats for Muhammadans, and one seat each for Sikhs, Anglo-Indians, and Indian Christians (Fifth Schedule: Composition of Provincial Legislatures; Government of India Act 1935).⁴⁹³

⁴⁹³ Government of India Act, 1935.

https://www.legislation.gov.uk/ukpga/1935/2/pdfs/ukpga_19350002_en.pdf

A.D. 1956
1956
1956

[Ann. 30] Government of India Act, 1956. [Sec. 30, Gov. 53]

TABLE OF SEATS.
Provincial Legislative Assemblies.

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.
Province.	Total Seats.	General Seats.	General Seats reserved for Backward Classes.	State reserved seats for Backward Classes.	Religious Minorities.	Muslims.	Anglo-Indians.	Hindus.	Indian Christians.	State reserved seats for Scheduled Castes and Scheduled Tribes.	State reserved seats for Scheduled Castes.	State reserved seats for Scheduled Tribes.	State reserved seats for Scheduled Tribes.	State reserved seats for Scheduled Tribes.	State reserved seats for Scheduled Tribes.	State reserved seats for Scheduled Tribes.	State reserved seats for Scheduled Tribes.	State reserved seats for Scheduled Tribes.
Madras	216	140	20	1	—	28	2	3	8	6	6	6	6	6	6	6	6	6
Bombay	176	114	18	1	—	117	3	3	11	10	10	10	10	10	10	10	10	10
Bengal	250	78	20	—	—	117	3	3	11	10	10	10	10	10	10	10	10	10
United Provinces	220	140	20	—	—	117	3	3	11	10	10	10	10	10	10	10	10	10
Punjab	176	42	8	—	31	84	1	1	1	1	1	1	1	1	1	1	1	1
Bihar	102	86	18	—	—	14	1	1	1	1	1	1	1	1	1	1	1	1
Odisha Province and Orissa	112	84	20	1	—	14	1	1	1	1	1	1	1	1	1	1	1	1
Assam	108	47	7	9	—	36	—	—	1	1	1	1	1	1	1	1	1	1
North-West Frontier Province	60	9	—	—	—	36	—	—	—	—	—	—	—	—	—	—	—	—
Orissa	60	44	6	8	—	4	—	—	1	1	1	1	1	1	1	1	1	1
Andhra Pradesh	90	18	—	—	—	33	—	—	2	1	1	1	1	1	1	1	1	1

In Bombay seven of the general seats shall be reserved for Marathas.
In the Punjab one of the Scheduled Caste seats shall be a seat to be filled by a Mussalman.
In Assam and Orissa the seats reserved for women shall be non-communal seats.

Reservation of seats for women in independent India would come much later in 1992 for Panchayats and Urban Local Bodies. Reservation in Lok Sabha and State Assemblies was approved in 2023 after many failed attempts, although the actual implementation will commence later.

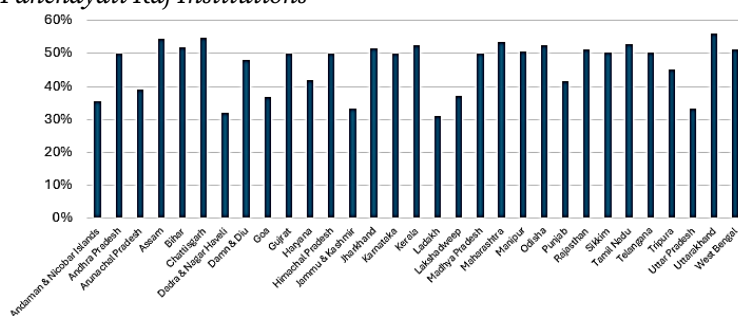
A bill to amend the Constitution to reserve seats for women in Parliament and State Legislative Assemblies was first introduced in the year 1996. This bill, along with subsequent bills on this issue that were introduced in Parliament, lapsed. Finally, in the year 2023, the Parliament approved reservation of one-third of seats for women in the Lok Sabha, State Legislative Assemblies and the Delhi Legislative Assembly albeit with conditionalities.

Women in Panchayats and Urban Local Bodies

Representation of women in local bodies in the initial years remained low. Many committees like the Balwant Rai Mehta Committee (1957), the Committee on the Status of Women (1976), Ashok Mehta Committee (1977), recommended some form of reservation for women in such bodies, but opposition on this issue did not encourage reservation for many years. Although the Central government initially resisted the idea of reservations, some State governments like Karnataka (1985) and Andhra Pradesh (1986) initiated 20–25% reservations at the State level.

The year 1992, can be considered a watershed, when the Constitution's 73rd and 74th Amendment Acts approved 33% reservation in Panchayats and Urban Local Bodies, respectively. Many States followed this by State Acts which raised the reservation to 50%. This includes the States of Andhra Pradesh; Assam; Bihar; Chhattisgarh; Dadra and Nagar Haveli and Daman and Diu; Gujarat; Haryana; Jharkhand; Karnataka; Kerala; Madhya Pradesh; Maharashtra; Odisha; Punjab; Rajasthan; Sikkim; Tamil Nadu; Telangana; Tripura; Uttarakhand; and West Bengal (22 States and UTs). The number of elected women representatives is now around 46%.⁴⁹⁴

Figure 20: Percentage of Elected Women Representatives in Panchayati Raj Institutions



Source: Ministry of Panchayati Raj, Government of India.

Autonomy of Women's Vote

One of the questions that has arisen over successive elections has been the autonomy of women and the influence of family or spouse on their vote. The successive CSDS National Election Studies have shown that women are more likely than men to be guided before voting by family members. It is, however, significant that the number of women voting autonomously has increased over successive elections. Both anecdotal evidence and

⁴⁹⁴ Ministry of Panchayati Raj, Government of India. <https://panchayat.gov.in/>

some recent studies show an increasing assertion of women in deciding whom to vote for, without direction from the family. Gender gap reduced from 37% in 1996 to 22% in 2014.⁴⁹⁵

Effectiveness of Elected Women Representatives in Local Bodies

An issue that has often arisen is that many elected women representatives (EWRs) have not proven to be effective administrators. Many EWRs have accepted that very often the male Panchayat members have condescending attitudes and would deliberately make functioning difficult for women representatives.

This is partly due to the socio-cultural environment which has not undergone much change, and many women are burdened by purdah and other such constraints. Functioning in a predominantly male environment can be challenging for many rural women. Such challenges can be further compounded by caste and economic considerations. The transformation that is required is liable to take time. However, there are also many encouraging trends visible.

Studies conducted in areas where the Mahila Samakhya Programme was implemented found that the systematic training given to MS members made them effective administrators and enabled them to overcome the patriarchal attitudes that inhibited many EWRs from functioning effectively. Most States conduct training for Panchayat members. The centrally sponsored scheme of Rashtriya Gram Swaraj Abhiyan (RGSA) has a major component for the training of Panchayati Raj members.

Progressive States like Kerala have demonstrated higher participation by women. This could also be a result of the higher levels of education in Kerala. Such examples have lessons for the effective functioning of EWRs in the future.

⁴⁹⁵ Sardesai, Shreyas, & Attri, Vibha. (2017). Vote choice of Indian voters: Guided or independent? *Studies in Indian Politics*, 5(2), 276–285.

The Phenomenon of Proxy Candidates

One criticism of reservation in Panchayati Raj Institutions has been the incidence of proxy politics. Many women were introduced to the elections by their families, many of whom were previously wielding power in such bodies. Post-elections, they continued to usurp the powers of the EWR. Such power brokers have been called by different names like Pradhanpati or Mukhiyapati.

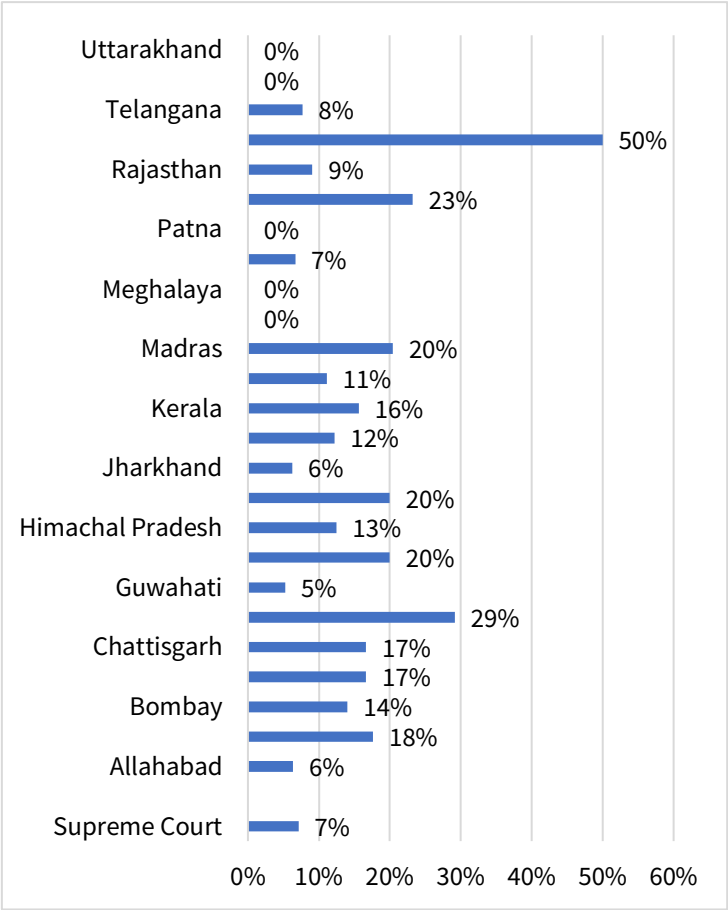
Discussions on proxy candidates ignore the fact that the incidence of proxy politics is common but not universal. There have been many other entry points for EWRs, apart from being proxy candidates. The social assessment study for the World Bank-aided ICDS programme in the State of Uttar Pradesh, for example, found that almost 25% of the EWRs elected in the first round of elections after the 73rd Amendment were from the ICDS system. Such women had already entered the public sphere before they entered the election fray. Moreover, as the EWRs enter a second term, many of them become more assertive.

Studies by institutions like National Institute of Rural Development (NIRD) have highlighted the commendable work done by many EWRs, even amid all the challenges that they face. It may be said that while reservation may not be a quick-fix solution for the representation of women's voices, it is a foundation that is likely to result in a greater voice for women in governance.

Representation of Women in Supreme Court and High Court

There were 2 women judges in the Supreme Court (of a total of 30 judges) and 78 women judges in different high courts (against a total of 673) as of March 20, 2024.

Figure 21: Percentage of Women Judges in Supreme Court & High Court



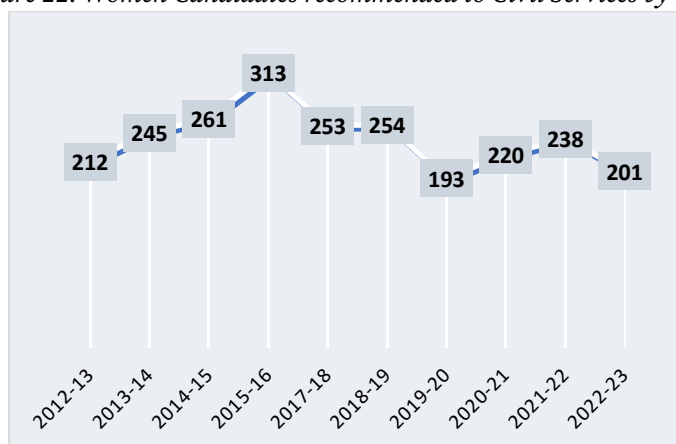
Source: *Women and Men in India 2023*, Social Statistics Division, National Statistical Office, Ministry of Statistics and Programme Implementation.

Representation of Women in the Civil Services

In the year 2024, of the 1,016 candidates selected for the Civil Services, 352 were women, which is 34%. In 2020, of the 922

recommended candidates, 220 were women, which was around 24%. The corresponding figure for 2010 was 21%.⁴⁹⁶

Figure 22: Women Candidates recommended to Civil Services by Year



Source: UPSC, Annual Reports multiple Years.

Although there has been a steady increase in the number of women in the civil services, it still needs to improve to reach parity.

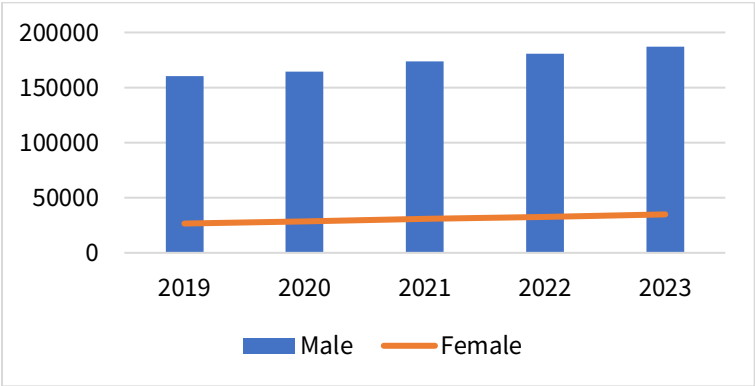
Representation in Industry

The 2024 NCAER study found that after the Companies Act 2014 mandated that every listed company or public company with a paid up capital of ₹100 crore or turnover of ₹300 crore to have at least one independent woman on the Board by April 2020, the number of woman on Boards has increased more than 9% to reach 17% by 2021. By 2023, the number increased to 28% (source: Women and Men in India 2023, Social Statistics Division, National Statistical Office, Ministry of Statistics and Programme Implementation). However, women directors are paid nearly

⁴⁹⁶ UPSC, Annual Reports multiple Years.

40% less on average than men (Business Standard, July 4, 2024). Representation of women in middle and senior management did not go up and remained at 17%.⁴⁹⁷

Figure 23: Persons in Senior Management Positions



Source: *Women and Men in India 2023*, Social Statistics Division, National Statistical Office, Ministry of Statistics and Programme Implementation.

Conclusion

Social inclusion of women is an essential prerequisite for the development and progress of the country. Since the time of Independence, the government has taken a number of proactive initiatives to improve the status of women in the country, beyond mere rhetoric, in the form of legislation, policies, and programmes.

While there has been considerable progress in many areas, and many path-breaking policies and programmes have been introduced, major disparities still exist among men and women.

⁴⁹⁷ Srivastava Navya, Vasishth, Mahima, & Sahay, Ratna. (2024, July). *Female leadership in India: Firm performance and culture*. National Council of Applied Economic Research (NCAER).

The task of women's inclusion in the development process and improving the status of women in key areas remains an ongoing task. The journey so far has thrown up many lessons for the journey ahead. The task of policymakers is to assimilate such lessons so that they can fully inform future policy and programmes.

Chapter 19. Social Justice and Affirmative Action

Amarjeet Sinha

Introduction

This chapter is an attempt to understand how the Indian Constitution has shaped public policies to secure social justice through affirmative action. It will look at the indicators of human well-being at the time of India's independence and how they have evolved across the decades of development. As poverty is multidimensional, any assessment of social justice must consider a range of indicators that capture the efforts made to improve the lives and livelihoods of deprived households and vulnerable social groups over the last 75 years. In doing so, it will examine the policies for affirmative action that have impacted social participation in India's nascent democracy. The chapter will also analyse the performance of Indian provinces and explore the role of devolution and education of girls in the relative performance of states. It will also consider social and political movements and their consequences for social justice. The deepening of democracy has translated into greater attention to social justice in the policies of competing political parties, aiming to secure better lives for our citizens. It will conclude with an assessment of where we have reached and what more needs to be done to ensure that every Indian citizen gets a social opportunity to develop their fullest human potential and live happy lives. It will also assess how efforts at affirmative action have enabled India to progress faster in political participation at all levels.

Need for Social Justice and Affirmative Action

India's journey in 1947 began with very unsatisfactory indicators of social development and economic progress. Colonial India had suffered the ravages of de-industrialisation, high levels of poverty, lack of universal education, unequal gender relations, and very severe forms of social inequality among the vulnerable social groups. Social inequalities in the form of caste and its consequences ⁴⁹⁸ had aggravated during colonial times. The Constitution of India reflected the aspirations of every Indian, ⁴⁹⁹ and that is why the focus was on social justice and affirmative action to ensure not only equality but also equity. Equality and equity have taken on slightly different meanings in conversations around social justice. Equality, in this context, means that people are given the same access to opportunities, regardless of historical or other forms of injustice that may alter how much someone can access those opportunities. Equity, in contrast, tries to account for an imbalanced social system by providing the resources to create an equal outcome. Equity is a vital part of ensuring a just society, given the social inequalities of a hierarchical society.

Pursuing Equality in a Land of Hierarchy: The Constitution of India

Marc Galanter, in his famous 1986 essay "Pursuing equality in the land of hierarchy: An assessment of India's policies of compensatory discrimination for historically disadvantaged groups,"⁵⁰⁰ remarked,

⁴⁹⁸ Gallanter, Marc. (1989). *Law and society in modern India*. Oxford University Press.

⁴⁹⁹ Khosla, Madhav. (2012). *The Indian constitution*. Oxford India Paperbacks.

⁵⁰⁰ Gallanter, supra, pp. 185–230.

These compensatory discrimination policies entail systematic departure from norms of equality. These departures are justified in several ways: first preferential treatment may be treated as needed for personal fairness, a guarantee against the persistence of discrimination in subtle and indirect forms. Second, such policies are justified in terms of beneficial results that they will presumably promote: integration, use of neglected talent, more equitable distribution, etc. With these two—the anti-discrimination theme and the general welfare theme—is entwined a notion of historical restitution or reparation to offset the systematic and cumulative deprivations suffered by lower castes in the past.

The Indian Constitution paved the way for the incorporation of affirmative action in the public policies of India.

Understanding Social Justice

Social justice refers to a fair and equitable division of resources, opportunities, and privileges in society. It has come to be conceptualised as distributive justice that creates social institutions delivering access to economic benefits. John Rawls' *A theory of justice* (1971),⁵⁰¹ is perhaps the most famous examination of social justice. Amartya Sen⁵⁰² thereafter has looked at inequality and social justice from the perspective of the entitlements of the deprived. John Rawls outlined his vision of justice as fairness. Access, equity, diversity, participation, and human rights are the main principles of social justice.

⁵⁰¹ Rawls, John. (1971). *A theory of justice*. Harvard University Press.

⁵⁰² Sen, Amartya. (1998). *On economic inequality*. Oxford India Paperbacks.

Understanding Affirmative Action

Affirmative action refers to a set of policies and practices within a government or organisation seeking to benefit marginalised groups. Historically, support for affirmative action has been justified by the idea that it may help with bridging inequalities in employment and pay; increasing access to education; promoting diversity and social equity; and redressing alleged wrongs, harms, or hindrances. Reservation in India is a form of affirmative action designed to improve the well-being of Scheduled Castes (SCs) and Scheduled Tribes (STs) and other Backward Classes (OBCs), defined primarily by their caste. Members of these categories comprise about two-thirds of the population of India. According to the Constitution of India, up to 50% of all government-run higher education admissions and government job vacancies may be reserved for members of SC, ST, and OBC categories and 10% for those in Economically Weaker Sections, with the remaining unreserved.

Reservation in Electoral Processes, Education, and Employment

Reservation in electoral constituencies in local, state, and national elections has led to the active participation of hitherto vulnerable social groups in electoral politics. Access to education and employment has improved access for individuals from vulnerable communities. It has also mainstreamed vulnerable social groups into the governance and administration of departments. These changes over the decades have aided the processes of social integration, though challenges still remain. Compensatory discrimination has led to redistribution, representation, integration, acceptance, integrity, incubation, mobilisation, stimulation, self-liquidation, fairness, secularism, and development. There are a few counter arguments with regard to stagnation, self-perpetuation, over protection, etc., but

overall, compensatory discrimination has strengthened mainstreaming of all communities in the democratic process of the country. The Constitution of India has triumphed.

Political, Social, and Economic Democracy

Dr. B. R. Ambedkar, one of the principal architects of the Constitution of India, was aware of the challenges of social justice. He expected universal adult suffrage to secure political, social, and economic democracy. His apprehension was that democracy itself would collapse if political democracy is not accompanied by social and economic democracy.⁵⁰³ Given that the glass of human well-being is only half full, some coalitions and new partnerships have let political democracy survive despite insufficient social and economic democracy. Affirmative action for elections, education, and employment of the scheduled castes, scheduled tribes, and other backward classes created an interest among all social groups for the survival of political democracy. As Sudipto Kaviraj⁵⁰⁴ remarked, while caste was on the decline in terms of “purity–pollution” and other social forms of discrimination, it was on the ascendancy in the Indian democratic experiment and politics.

Assessing Social Justice and Affirmative Action

In assessing the success of social justice and affirmative action, one has to bear in mind the extreme disadvantage from which India began her journey. Our social indicators were dismal and stagnant at the time of independence. We were further saddled

⁵⁰³ Dr. B. R. Ambedkar, Constituent Assembly Debates; quoted in Sinha Amarjeet. (2003). *India: Democracy and well-being*. Rupa Publications.

⁵⁰⁴ Kaviraj, Sudipto. (1997). *Politics in India*. Oxford India Paperbacks.

with hunger and drought, epitomised by the 1943 Bengal famine and the religious riots on account of the partition of India in 1947. Turmoil defined our tryst with destiny, and social justice through affirmative action was also seen as a way of holding the country together, in spite of its contestations and conflicts.

The Severity of India's Challenges

The severity of India's challenges is reflected in the 32 years' life expectancy and an infant mortality rate of 146 in 1950–1951. Even in 1986–1987, regarding the educational situation, the 42nd round of National Sample Survey (NSS)⁵⁰⁵ presented a very dismal picture:

1. In rural areas, 42.79% males and 69.23% females aged 6 and above never enrolled in any educational institution. The comparable figures for urban areas were 17.15% and 36.31%, respectively.
2. In rural areas, 47.61% males and 68.38% females were non-literate. Only 6.52% males and 1.98% females had reached matric (secondary and above) in rural areas.
3. Ever-enrolled female SC/ST/others who discontinued at the primary level reveal social group-wise levels of drop-out.
4. In Andhra Pradesh, the drop-out rate at the primary level in rural areas was 100% for ST girls, 82% for SC girls, and 71.63% for other girls.
5. In Bihar, drop-out rate at the primary level in rural areas was 149.64% for ST girls, 100% for SC girls, and 78.51% for other girls.
6. In Kerala, drop-out rate at the primary level was 64.16% for ST girls, 38.50% for SC girls, and 32.27% for other girls.

⁵⁰⁵ National Sample Survey Organization (1986–1987). *National Sample Survey* (42nd round). Department of Statistics and Programme Implementation.

As the data above reveal, while the social justice and affirmative action thrust facilitated faster progress, there was still a lot of ground to cover.

The Impact of Sarva Shiksha Abhiyan on Social Participation

The results of the 2014 NSS 71st round are significant. It also marks a decade and a half of implementation of the Sarva Shiksha Abhiyan for Universal Elementary Education. There is no difference in net attendance ratio of girls and boys up to the elementary school level (Class 8) in rural and urban areas. Ninety-nine per cent children enrolled in schools, with primary school within 2 kilometres of 99% households and upper primary schools within 2 kilometres for 86% households in rural or urban areas. Universal school participation has become a reality. The participation of girls and children from vulnerable social groups is also near universal in elementary school education.⁵⁰⁶ The challenge of quality and learning remains daunting, as a large number of those who enrol and attend schools are not able to attain learning and writing competencies commensurate with their schooling years. We need to understand how “all children in school” will also lead to “all children learning.” The Nipun Bharat Mission becomes critical in this journey.⁵⁰⁷

Improvement in Health Indicators

The National Rural Health Mission (NRHM) was launched on April 12, 2005. It sought to provide accessible, affordable, and quality health care to the rural population, especially the vulnerable sections. NRHM recognised the leadership role of the

⁵⁰⁶ De, Anuradha, et al. (2006). PROBE revisited. CORD.

⁵⁰⁷ Sinha, Amarjeet. (2024). *Why children don't learn: Evidence based way forward*. Isaac Centre for Public Policy, Ashoka University.

states. It proposed flexibility to the states to take care of local needs. States, in turn, were expected to decentralise planning and implementation arrangements to ensure that need-based and community-owned District Health Action Plans become the basis for interventions in the health sector.⁵⁰⁸

NRHM aspired to reach 2% of Gross Domestic Product (GDP) on public spending by 2012, in partnership with States. “Communitisation,” flexible financing, monitoring progress against Indian Public Health Standards, improved management through capacity, and innovations in human resource management were the five key approaches adopted by NRHM. The National Health Systems Resource Centre (NHSRC) was set up to drive reforms by building human resource capacity at all levels. Strengthening the public system of primary health-care delivery with some partnerships as per need was its avowed thrust. NRHM recognised the need for crafting a credible public system, whose need is felt even more strongly post-Covid.

NRHM has reached all three quantifiable targets of IMR (infant mortality rate), MMR (maternal mortality ratio), and TFR (total fertility rate), much after 2012, with public spending barely a little above 1% of GDP. Primary health care has many wider determinants that make attribution very difficult. The ability to conduct vaccinations during Covid (2021) in the remotest locations—with the active community connect role played by the Accredited Social Health Activists (ASHAs) and with adequate cold chain and vaccinators at the cutting edge—is a tribute to the investments from 2005 onwards in strengthening the public system.

The table below⁵⁰⁹ highlights the variations across states. Several state-specific factors play a critical role: social movements for justice, a focus on human development, and a progressive acceptance of entitlements for all contribute to

⁵⁰⁸ Sinha, Amarjeet. (2024). *NRHM: An assessment*. Isaac Centre for Public Policy, Ashoka University.

⁵⁰⁹ Based on Sample Registration System data of respective years released by Registrar General of India, Census of India.

better functioning systems of primary health care in states. Kerala and Tamil Nadu had strong social movements that recognised the access to public services for all, including the scheduled castes, the scheduled tribes, other backward classes, and women. The focus on women as a constituency, the promotion of small families, and education for all were part of large social movements in these states, contributing to a faster progress. In northern Indian states like Uttar Pradesh and Bihar, while there were many political movements, there were very few impactful social movements that improved human development indicators.

Table 1: Improvement in IMR and MMR – NRHM Led

	IMR 205	IMR 2020	MMR 2007-9	MMR 2018-20
<i>India</i>	58	28	212	97
<i>Kerala</i>	14	6	81	19
<i>Tamil Nadu</i>	37	13	97	54
<i>Assam</i>	68	36	390	195
<i>Odisha</i>	75	36	258	119
<i>Uttar Pradesh</i>	73	38	359	167

Lessons on Devolution and Development

There have been three key evidence-based lessons for an inclusive India in recent studies and reports. The Reserve Bank of India's 2023 *Report on the role of panchayats in economic development* concludes, on the basis of the Devolution Index, that States with higher Devolution Index scores (Kerala, Karnataka, Tamil Nadu, Maharashtra) are found to have better quality of socio-economic development. It illustrates this by comparing under five mortality and higher secondary transition rates with greater devolution. The Ministry of Panchayati Raj's Devolution

Index of States (2015–2016), meticulously constructed, provides evidence across the human development sector of such a correlation.

The report of the United Nation Development Programme in 2022 and Niti Aayog's Multi-Dimensional Poverty Report in 2022, based on the National Family Health Survey-5 (2019–2021) data, also brings out how states like Kerala, Tamil Nadu, and Karnataka report much lower incidence of multidimensional poverty. A comparison with Gross National Income per capita for 2021–2022 for states also shows that while incomes are important in reducing poverty, Kerala has only 0.55% multidimensionally poor persons despite being 11th on per capita income alone. Kerala and Tamil Nadu are also at the top in Monthly Per Capita Consumption Expenditure (MCPE) 2022–2023, released recently. Mission Antyodaya's annual ranking of Gram Panchayats on 209 localized Indicators, in accordance with the Sustainable Development Goal (SDG) parameters, by Panchayats themselves, validated by women's self-help groups (SHGs) as well, presents a similar picture of devolution contributing to better performance of panchayats.

Six Factors for Faster Poverty Reduction in Southern Indian States

The contribution of six factors to a faster decline of poverty in southern Indian states has been documented in my recent book, *The last mile: Turning public policy upside down*.⁵¹⁰ The six key factors are (i) adolescent girls in higher education, (ii) decline in fertility rates, (iii) improved primary health care, (iv) formation of women's SHGs, (v) women's participation in skill and vocational courses, and (vi) access to collateral free lending for women's SHGs. Performance in female literacy and access to credit for SHGs is also linked to the devolution index, making a

⁵¹⁰ Sinha, Amarjeet. (2023). *The last mile: Turning public policy upside down*. Routledge.

women-led, decentralised social development thrust, the most inclusive approach to creating a developed India.

Need for Convergence for Human Development Outcomes

There is evidence to show that outcomes in human development (education, health, nutrition, skills, livelihoods) do not lend themselves to narrow departmentalism, as there are interconnected needs and a large number of wider determinants for outcomes. Community connect, use of technology as a means, and professionals to supplement the institutional arrangements for planning and implementation, along with a local government-led initiative of leaving no one behind, are the only way forward for a more equal society. Allocations for human development have to be as per national norms, and, clearly, states with greater deficits will need more resources. For everything else, allocation can be absolutely transparent and based on equitable principles. Human development is integral to a common minimum level of well-being.

The constitutional mandate, reflected in the 29 transferred sectors in the Eleventh Schedule for rural areas and 18 sectors in the Twelfth Schedule for urban areas, needs to be implemented as a priority. The state legislatures have been mandated by the Constitution to bring about the devolution to local governments. No one wishes to lose authority over financial resources, whether central or state. It is time for the Sixteenth Finance Commission not only to settle the vertical and horizontal distribution of taxes, it must mandate central and state governments to ensure complete devolution in the sectors assigned to them as a precondition for receiving some of the grants.

Urban Devolution

Urban devolution will need a major reform to provide for elected *basti*-level leaders in the urban local bodies. The current ward size is huge in many large corporations (30,000–300,000), making muscle power overtake community organisations and connections. It is time we built strong and resilient community organisations from the *basti* upwards in urban areas. Like the Rural Livelihood Mission, there is a very strong case to create social capital for human development outcomes in urban areas.

Local government-led human development also determines private sector investments in manufacturing and services as human capital is at the core of enterprise development. Tamil Nadu, Maharashtra, Delhi, Hyderabad, and Bangalore get most of the private sector jobs, as that is where human capital is. Gujarat, besides its own human capital, is able to attract human capital for its private sector growth from other states in large numbers. Migration is a national need, but critical local skill availability does influence investment decisions.

It is time for learning outcomes in schools, employable skills in courses and colleges, quality of services in health, and a drastic reduction in stunting and wasting through a convergent community-led action to become the topmost priority. Crafting credible public systems should be the focus for public goods. Untied funds in proportion to the gap, with local governments and under community oversight, can get us outcomes. Recruitments must be professional by Public Service Commissions.

Income Poverty and Multidimensional Poverty

Decline in poverty has speeded up since 2005–2006, even when we look at Multi-Dimensional Poverty.⁵¹¹ Social development indicators and asset deficits of the poor, seen in terms of housing, toilets, electricity, roads, bank accounts, immunisation, cooking on LPG, and membership of SHGs in the Livelihood Mission, etc. have improved.

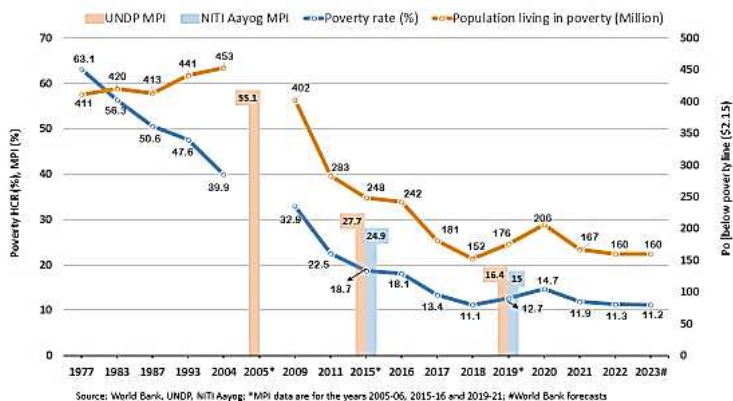
The below figure from Dr. Ashok Gulati's piece on poverty in *The Indian Express*⁵¹² sums up the historical movement on income poverty and multidimensional poverty. It is obvious that the dislocation of human lives and livelihoods due to Covid adversely impacted the income of poor households across the world. India was no exception. Dr. Gulati, therefore, argues how income poverty may have increased due to the Covid dislocation. That the economy has grown well thereafter may have started settling this set back, but one has to acknowledge that multidimensional poverty improvement rates during Covid can never be what they were prior to Covid. There is a sobering case for evidence-based appreciation of the ground realities. The PRICE Survey 2022 also captures the challenge to incomes in the last two quintiles.⁵¹³

⁵¹¹ United Nations Development Programme. (2022). *Multidimensional poverty data of India*. UNDP; Niti Aayog. (2022). *Multidimensional poverty data*. Niti Aayog.

⁵¹² Gulati, Ashok, & Ghosh, Shyma. (2024, January 8). India's stubborn income poverty problem. *The Indian Express*.

⁵¹³ People's Research on India's Consumer Economy, 2022.
<https://www.price360.in>

Figure 1: Income Poverty and Multi-Dimensional Poverty



The United Nations Development Programme's Multidimensional Poverty Report 2022⁵¹⁴ clearly highlighted how India had successfully lifted 415 million people out of multidimensional poverty between 2005–2006 and 2019–2021. The southern Indian states had shown a remarkable reduction. Even in the northern Indian states, the declines were significant.

The 2022 World Bank Report on India states that extreme poverty in India in 2019 was 12.3% lower than in 2011 (falling from 22.5% in 2011 to 10.2% in 2019). Poverty reduction was higher in rural areas (declining from 26.3% to 11.6% between 2011 and 2019). The study also found that farmers with small landholding sizes have experienced higher income growth.

Pro-poor Public Welfare and the “Labharthi Varg”

The present government's approach post-2014 has been to improve the ease of living for the poor. Such efforts were previously called the Minimum Needs Programme, social safety nets, and so on, albeit many of them did not aspire to universal

⁵¹⁴ United Nations Development Programme. (2022). *Multidimensional poverty in countries*. UNDP.

coverage in a time-bound manner. Since 2014, the focus has been on removing the asset deficits of poor households, seen in terms of access to cooking gas, electricity, safe housing, individual household latrines, availability of electricity, bank accounts for women, accident and life insurance, access to credit, women's collective and diversification of livelihoods, etc. Many of the initiatives launched since 2014, like Ujjwala, Ujala, Pradhan Mantri Awaas Yojana, Saubhagya, Swachh Bharat Mission, Mudra loans, and the renamed Deen Dayal Antyodaya Yojana–National Rural Livelihood Mission, were all meant to establish the dignity of a deprived household by improving the asset base of such households. It was argued that this would automatically lead to better access to public services, education, and health, and ultimately to higher-order employment and incomes.

The 2022 Multidimensional Poverty Index of the United Nations Development Programme (UNDP) brings the good news of about 415 million persons in India coming out of multidimensional poverty between 2005–2006 and 2019–21. It also shares the concern of the largest number of poor persons living in India. While the World Bank studies also recognised the reduction in poverty in India at a faster pace until 2019, the impact of Covid on incomes and employment seems to have dented some of the gains, considering the sharp contraction of the Indian economy in the first Covid year. While there has been a restoration of the lost growth phase and early signs of recovery are very discernible, a world on the verge of recession is throwing up fresh challenges.

The Fifth National Family Health Survey (NFHS-5, 2019–2021), when compared with NFHS-4 (2015–2016), clearly highlights the progress of asset-based focus in the pro-poor public welfare thrust of the Government. A series of well-researched articles have been published, bringing out the success of the “new pro-poor public welfare” seen in terms of improved access to sanitation, electricity, safe cooking gas, bank accounts, improvement in immunisation, and so on. The basic data and its analysis are already in the public domain; therefore this chapter

will only examine how the new pro-poor public welfare has been crafted to deliver results and what the approach of the government has been. By doing so, it hopes to answer some questions regarding the critical necessity of identifying the deprived households in a transparent manner. This is a major public policy challenge as we move towards universal access to a basic quality of life, leaving no one behind.

A replacement level fertility of 2.1, 96.8% population living in households with electricity, 70.2% with improved sanitation facilities, 58.6% households using clean fuel for cooking, 88.6% institutional births, 76.4% children fully vaccinated, and 78.6% women with bank accounts all highlight the rapid progress made since 2015–2016. It clearly brings out the meticulous last-mile planning to address all the implementation challenges. NSS data 69th round (2011–2012) and 76th round (2018) have shown significant improvement in safe and pucca housing. Similarly, access to health and family welfare services, age at marriage, and health indicators are all registering significant progress.

Unsatisfactory Progress on Under Nutrition

The pace of achievement in under nutrition and anaemia needs to substantially improve in the years to come. Many more elements of community connect, decentralisation, and holistic and convergent care need to be fully operationalised in these sectors. India has been embarrassed by high levels of stunting, wasting, and underweight children. While successive governments have emphasised a need for a breakthrough, substantive success still eludes us. Science is certain that the persistence of under-nutrition creates irreversible changes in the learning abilities of many infants, besides susceptibility to disease as they grow. The first thousand days are the key to reversing changes and ensuring proper nutritional development of every infant and mother. The Fifth National Family Health

Survey (NFHS-5, 2019–2021) reports 35.5% children under age 5 are stunted, 19.3% are wasted, and 32.1% are underweight. These are unacceptable levels for the present and for our future generations. It irreversibly compromises the learning abilities of such children and their adult health.

The challenge of under-nutrition is no rocket science. It can be tackled effectively over a short period if the thrust is correct. The recently released NFHS-5 highlights the unfinished agenda and the slow rate of decline in under-nutrition. It also shows how Sikkim, Uttar Pradesh, and Bihar did better than some other states in reducing stunting and underweight children during this period. The women's collectives have already shown their impact in the southern states. Punjab and Haryana suggest how food and prosperity alone, without gender equality, are inadequate. The role of the community in Sikkim, the Jeevika SHG women in Bihar, well-trained ASHAs and their role in Uttar Pradesh, and an improved community understanding of behaviour change do make a difference. Nutrition as a subject does not lend itself to narrow departmentalism. It actually calls for a whole-of-government and whole-of-society approach. Technology can at best be a means, and monitoring too has to become local and community led. Panchayats and community organisations are the best way forward. The nutrition challenge is also a women's empowerment challenge. It is an important behaviour change challenge in favour of exclusive breastfeeding, natural foods instead of junk food, clean water, sanitation, and food diversity.

Gram Swaraj Abhiyan in 2018 in 63,974 villages

The government's declared policy has been on an integrated, decentralised, whole-of-government and whole-of-society approach with Janbhagidari, in consonance with the objective of "Sabka Saath, Sabka Vikas, Sabka Vishwas, and Sabka Prayas." Universal access to basic necessities and subsidised access for

those who need it most but cannot afford it has been the overarching framework. The government has emphasised the whole-of-government and whole-of-society approach with primacy to community participation, use of technology, and convergence. The Gram Swaraj Abhiyan 2018, with its mandate to provide saturation of access to seven public services—electricity to households, LPG connection, LED bulb, immunisation, bank account, accident insurance, and life insurance—to 63,974 purposively selected villages with over 50% population of Scheduled Castes and Scheduled Tribes, reflects the approach. The panchayats; the livelihood women SHG members and other community organizations; the frontline workers; the line departments of local, state, and central governments dealing with the subject; the use of technology in village-specific monitoring; the deployment of central- and state-level monitors to ensure actual achievement on the ground were all part of the approach. This intensive and organised community connection with solutions to all challenges translated into manifold improvement and increase in the seven services in the most deprived villages.

Socio Economic and Caste Census 2011 for Deprivation-Based Beneficiary Selection

The Department of Rural Development has focused on the development and diversification of livelihoods of poor households during this period. The Socio Economic and Caste Census (SECC) 2011, released in July 2015, provided evidence-based criteria for the selection of beneficiaries under various government programmes. The application of deprivation criteria of SECC to the provision for LPG gas connection under Ujjwala, free household electricity connection under Saubhagya, selection of beneficiaries under Pradhan Mantri Awaas Yojana-Gramin, and now selection under Ayushman Bharat for National

Health Protection have ensured that the benefits of development reach the most deprived on a priority basis. The use of SECC in the finalisation of labour budgets to states under the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) and insistence on enrolment of all women from households with deprivation under SHGs of Deen Dayal Antyodaya Yojana–National Rural Livelihood Mission (DAY-NRLM) have also ensured that poor regions with a larger number of poor households receive priority in programmes of rural poverty. The Sumit Bose Committee, set up to suggest ways of using the SECC 2011 data in rural development programmes, paved the way for its extensive use across programmes, ministries and sectors. Table 2 highlights the kinds of deprivation.

The numbers indicate some of the challenges in rural India. They also provide household data for interventions. For example, 7.16 lakh Divyang with no able-bodied adult member could be taken up immediately for need-based interventions, and 68.98 lakh female-headed households with no adult male member between age 16 and 59 could be taken up for livelihood diversification on a priority basis. Over 4.21 crore households with no literate person above age 25 raise the issue of many older persons without skills, who are non-literate as well. It makes a strong case for interventions for market-linked assured old-age pension to the eligible. A very large number of households of Scheduled Castes and Scheduled Tribes are present. The women's collectives made special efforts not to leave a single household with deprivation out of the livelihood mission. This was a Cabinet decision regarding saturation to be accepted only when no deprived household was left out. The data on landless labourers could be used for the finalisation of labour budgets of states. The Sumit Bose Committee provided a variety of points for action.

Table 2: Deprivation Under SECC 2011

<i>Particular</i>	<i>Deprived households</i>
Only 0 room or 1 room with kutchra walls and kutchra roof (D1)	23,731,674
No adult member between 16 to 59 (D2)	6,515,205
Female-headed households with no adult male member between age 16 to 59 (D3)	6,896,014
Disabled member and no able-bodied adult member (D4)	716,045
SC/ST households (D5)	38,582,225
No literate adult above 25 years (D6)	42,147,568
Landless households as manual casual labour (D7)	53,701,383
Another 16 lakh households have been automatically included as the poorest of the poor households.	

Some critics point out that deprivation data and poverty data are not identical and that some households were left out. As mentioned earlier, there are ways of inclusion. The rural SECC data quality was far better than the urban one, and when we limit ourselves only to rural poverty, there is a relationship between poverty and deprivation.

Evidence-Based Identification of the Poor

The use of the Socio Economic and Caste Census 2011 (SECC 2011) provided a unique opportunity for evidence-based identification of deprivation, free from the manipulation of locally prepared BPL (below poverty line) lists. Being a census outside the Census Act using the same listing of households as the National Population Register and the Census 2011, SECC, for the first time, provided household deprivation data that was caste, creed, and religion neutral. Deprivation was to be ascertained on the basis of easily verifiable indicators after automatically excluding those

who had government jobs, three pucca rooms, a motorised vehicle, irrigated land, and so on. The application of SECC to development initiatives for housing, LPG gas connection, electricity connection, and Ayushman Bharat listing provided an opportunity to attend to the multidimensionality of poverty through a range of pro-poor public welfare programmes. Identification of the poor has been one of the greatest development challenges, and the use of SECC opened a new paradigm of beneficiary selection. This also ensured that hitherto uncovered regions with very high deprivation got many more beneficiaries to be supported. It was the less developed states that got the maximum support. Pursuit of a universal thrust based on a survey, as in the case of the Swachh Bharat Mission, also had the same impact, with hitherto backward regions getting the maximum support. The bridging of the inter-state disparity that Surjit Bhalla talks about is the result of a design rather than by accident.⁵¹⁵ The government's thrust has been to ensure that not a single poor person should get left behind. It is for this reason that additions were permitted in programmes like Ujjwala, and surveys were carried out to identify kutchha homes over and above those listed in the SECC.

Decline in Multidimensional Poverty in Poorer Regions and States

The figure and the table below on poverty reduction, as presented in the 2022 UNDP Multidimensional Poverty Index, also confirm the improvement on account of the adoption of the SECC. The reduction in absolute numbers is larger in states with a higher incidence of poverty. Deprivation-specific indicators have shown improvement in the 2005–2019 period.

⁵¹⁵ Bhalla, Surjit. (2022, November 29). *The Indian Express*.

Figure 2: Multidimensional Poverty Index in Various States

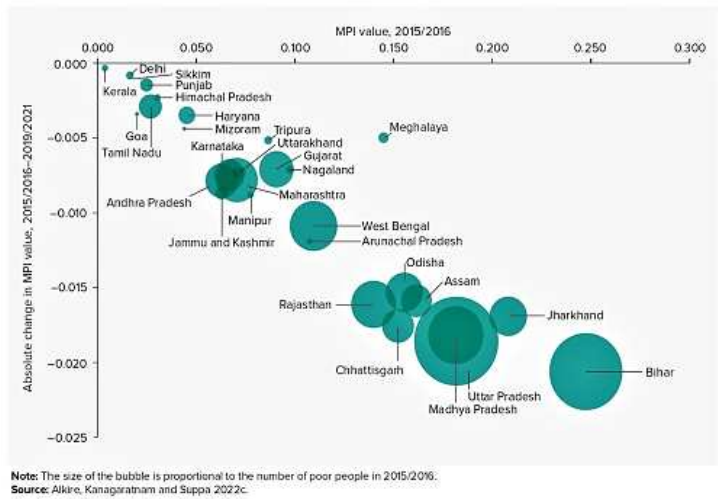


Table 3: Deprivation-Specific Headcount Ratios

	HEADCOUNT RATIOS			ANNUAL RATE OF DECLINE	
	2005-6 (NFHS-3)	2015-16 (NFHS-4)	2019-21 (NFHS-5)	2005-6 to 2015-16	2015-16 to 2019-21
HEALTH					
Nutrition	57.3%	37.6%	31.6%	4.1%	3.8%
Child mortality	4.8%	2.7%	2.1%	5.6%	5.7%
EDUCATION					
Years of schooling	25%	13.9%	11.4%	5.7%	4.2%
School attendance	21.3%	6.4%	5.3%	11.3%	4.2%
AMENITIES					
Cooking fuel	74.3%	58.5%	43.9%	2.4%	6.2%
Sanitation	70.9%	51.9%	30.1%	3.1%	11.4%
Drinking water	21.3%	10.9%	7.3%	6.5%	8.5%
Electricity	32.9%	12.2%	3.3%	9.5%	25.3%
Housing	55.9%	45.6%	41.2%	2%	2.2%
Assets	46.8%	14%	10.2%	11.4%	6.8%
Weighted average of 10 with "MP weights"	-	-	-	6.4%	6.4%
Multidimensional poverty	55.1%	27.7%	16.4%	6.7%	11%

*Weights: 1/6 each for health and education indicators, 1/18 each for amenities.
Source: global MPI Data Tables.

Women's Collectives for Development

The expansion of the National Rural Livelihood Mission from 2.5 crore women in 2014 to nearly 10 crore rural women in its fold has strengthened the community connect, in partnership with the 31 lakh panchayat-elected leaders, 42% of whom are women. It is these women; their participation in high school and higher education; and access to credit, skills, and diversified livelihoods that make them key change agents. The 3-lakh-plus Community Resource Persons of the Livelihood Mission, who are women and who have come out of poverty, add weight to the social development agenda of age at marriage, access to services, etc. Improvement in family welfare, health, and nutrition indicators is also a function of the social capital of the village. The power of the collectives and its role in transforming lives and livelihoods has been reported from different parts of the country in recent times. Women's collectives under the Livelihood Mission have brought about transformational changes in the lives of the poor. This has been possible due to the community connect, the access to credit, and handholding by the Community Resource Persons. These Community Resource Persons are women who have successfully won the war against poverty and are today transforming the lives of other poor women. From rejuvenating rivers to diversified livelihoods, from solid and liquid resource management to sustainable agriculture, these women have demonstrated their ability to come out of poverty. What started in the southern Indian states of Kerala and Tamil Nadu has now expanded to most parts of the country, with nearly 100 million women in SHGs of the Deen Dayal Antyodaya Yojana (DAY-NRLM). The improvement in indicators of women's empowerment, brought out by Meeta Rajivlochan, is on account of this mobilisation for pro-poor public welfare.

Concluding Remarks

The journey of **India for all** needs to learn from the lives of these women who have overcome deprivation and poverty. They have presented India with a model of shared growth, a model of community collectives that have access to credit, but are equally conscious of the need to use it effectively with negligible non-performing assets. They have offered the nation a model of enterprise among the poor, an enterprise nurtured by skill development, social capital, handholding, and, most of all, a confidence to interface with institutions of public services, banks, panchayats, and markets. Social and economic development is about opportunities for equitable development and opportunities for growth and well-being. With over 40% of elected representatives in panchayats being women, the partnership of SHGs and Panchayats is also opening new frontiers of shared growth and well-being.

The explanation for population stabilisation and replacement level fertility rate will have to be seen not merely in the provision of family planning services. The increased participation of adolescent girls in higher secondary and higher education has a very strong correlation with the decline in fertility. The schooling revolution for girls, thanks to Sarva Shiksha Abhiyan and Samagra Shiksha, is making a difference as much as the improvement in family welfare services, courtesy of the interventions under the National Health Mission and Ayushman Bharat.

The gains are major and significant and are a tribute to the approach of new welfarism. The last mile challenges have been the basis for meticulous planning that has created a functional machinery for pro-poor public welfare across states. These are major steps forward in improving the asset base of poor households. This will, over time, improve the participation of these households in higher forms of economic activity, human development, skills, and livelihoods for even higher-order employment and incomes. The findings of the NFHS-5 (2019–

2021) and the 78th round of NSS 2021 (see tables below) bear out the gains in an independent evaluation.

Table 4: National Family Health Survey Findings

	2015-6	2019-21
<i>Population living in households with electricity</i>	88.0	96.8
<i>Children 12-23 months fully immunized</i>	62.0	76.4
<i>Clean fuel for cooking</i>	43.8	58.6
<i>Women with bank accounts</i>	53.0	78.6

Table 5: 78th Round NSS Findings (2020-21)

	76 th Round (2018)	78 th Round (2021)
<i>Households with Access to latrines</i>	71.3%	78.7%
<i>Clean fuel for cooking (rural)</i>		49.8%
<i>18 years and above with bank account (rural)</i>		89.3%
<i>All weather road withing 2.5 km</i>		92.5%

In conclusion, it can be said that the use of the SECC 2011 played a critical role in the identification of the deprived. Its adoption across programmes created the constituency of the deprived. The success of the pro-poor public welfare owes its success, among other factors, to the evidence-based, easily verifiable indicators of the Socio-Economic Census as well. The mobilisation of women in collectives of the Livelihood Mission has also been a defining moment in the creation of a constituency of women that all political parties have associated with. The

larger participation of women in elections and in the percentage of votes cast is also a reflection of the newfound role of women in India's democratic space. Universal adult suffrage is leading to higher women's participation and emergence as a key constituency for political parties at the local level. The pursuit of policies of social justice and affirmative action has made a difference to the lives and livelihoods of the deprived. The glass is still half full, and we have to improve performance on many parameters, especially on quality learning outcomes in schools, skills, nutrition, health care, and livelihoods, to enable households to be more productive and earn wages of dignity. The participation of women from vulnerable social groups needs to improve further in order to catch up to the overall average.

Chapter 20. Into the Crystal Ball: Looking Towards 2047

Adil Zainulbhai

Today, every institution and every individual should move with a resolution that every effort and act will be for Viksit Bharat. The aim of your goals, your resolutions should be only one—Developed India.

Prime Minister Narendra Modi, at the launch of “Viksit Bharat@2047: Voice of Youth.”

Introduction

The 21st century is poised to be India's century. While India's moment of arrival has long been documented by commentators from different specialisations and walks of life (Chandler and Zainulbhai, 2013; Das, 2002; O'Neill, 2001; Panagariya, 2008; Panagariya and More, 2023), due to the reforms engendered in the last decade, there is now a sense of inevitability regarding India's emergence as a fully developed global superpower. The numbers speak for themselves: India is currently the fifth-largest economy in the world (GDP of US\$3.94 trillion), having grown eight times since 1997 and six times in GDP per capita (World Bank, 2023), and is slated to become the world's third largest economy by 2027, once its GDP crosses US\$5 trillion (International Monetary Fund, 2023). At the current rate of economic growth, India's economy is expected to reach US\$30 trillion, with all the attributes of a developed nation, ably supported by an expanding demographic dividend which is expected to stay stable until 2070 (Ladusingh and Narayana,

2012). It will be a “*Viksit Bharat*,” a country that affords the promise of realising capabilities and equality of opportunity for all.

Table 1: India's GDP Projection Compared to Other Countries (Fiscal Year)

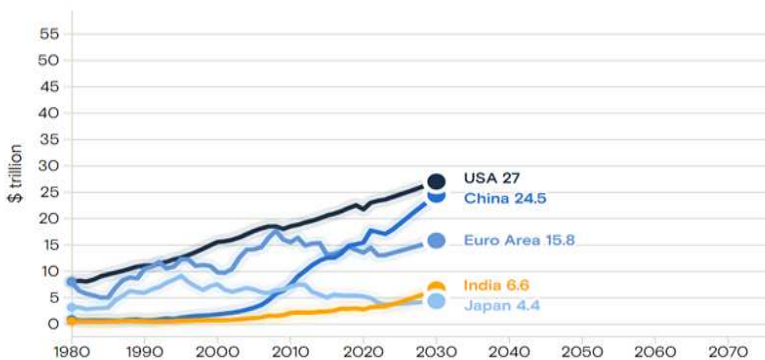
	2022 –23	2023 –24	2024 –25	2025 –26	2026 –27	2027 –28	2028 –29
In US\$ trillion							
<i>US</i>	25.46	26.85	27.74	28.77	29.9	31.09	32.35
<i>China</i>	18.1	19.37	20.88	22.41	24.04	25.72	27.49
<i>Japan</i>	4.23	4.41	4.53	4.73	4.92	5.08	5.34
<i>Germany</i>	4.08	4.31	4.45	4.64	4.82	4.95	5.04
<i>India*</i>	3.39	3.74	4.06	4.4	4.77	5.15	5.58
<i>UK</i>							
In PPP International Dollar trillion	3.07	3.16	3.38	3.57	3.79	4.02	4.25
<i>China</i>	30.22	33.01	35.26	37.39	39.6	41.78	44.03
<i>US</i>	25.46	26.85	27.74	28.77	29.9	31.09	32.35
<i>India*</i>	11.86	13.03	14.17	15.33	16.56	17.88	19.31
<i>Japan</i>	6.14	6.46	6.67	6.83	7	7.15	7.31
<i>Germany</i>	5.35	5.55	5.73	5.96	6.18	6.37	6.57
<i>UK</i>	3.71	3.85	3.97	4.13	4.29	4.45	4.6

Source (basic data): IMF World Economic Outlook (April 2023).

This consensus among commentators, economists, think tanks, forecasters, and opinion makers alike was never considered an absolute given earlier. Indeed, from the early 2000s to the mid-2010s, India's developmental transformation was approached with caution and uncertainty—through studied scepticism in light of geopolitical realities (Malone, 2015); as a schizoid consumer market hyper-sensitive to regional disparities, demographic trends, sectoral deficiencies, and

misdirected government spending (Bijapurkar, 2009); and as a “breakout nation” performing an illusory economic feat—replete with countervailing tendencies in demographic inclusion and consumption patterns underlying its macroeconomic growth structure—provocatively labelled as “the great Indian hope trick” (Sharma, 2013). Many of these readings were impelled by a data-driven criticism calling out the hype around the emerging markets hypothesis (O’Neill, 2001) amidst the then global economic tailwinds—the era of easy money, rising commodity prices, and global trade, which came unstuck due to the black swan event that was the global financial crisis of 2007–2008. This was a time when the entanglements between prediction and outcomes were being critically re-examined in the wake of fuzzy forecasts. The Indian economy chugged through a period of average growth rates which have now become robust due to a spate of critical reforms and transformative agenda-building efforts put in place since 2014.

Figure 1: India’s GDP Projection Compared to Other Countries (Fiscal Year)



Source (basic data): IMF World Economic Outlook (April 2023).

With declining poverty (Desai, 2024), emerging global prowess (Baru, 2020), improved governance and public service delivery (especially government schemes like Clean India Mission [NITI Aayog, 2018]) and advances made in new

industries, India is poised to become a global superpower as it approaches the 100th year since Independence. The aim of this article is to provide an opportunity to actualise the difference between foresight and prediction, predicated on a shared aspirational vision of a fully developed India—Viksit Bharat 2047. In drawing out the far-sighted impacts of key levers of progress, I argue that synchronising this vision, especially across the civil service ecosystem, will propel us to wholly and fully realise our tryst with destiny by the centenary of our Independence. Herbert Simon (1968) famously said, “Prediction is a narrow view, often quantitative. Foresight requires a broader perspective, integrating qualitative insights and understanding system dynamics.” This view is also echoed by noted statistician Nate Silver (2012) who reminds us that the key to making a good forecast is not in limiting yourself to merely quantitative information: “The signal is the truth. The noise is what distracts us from the truth.”

Viksit Bharat is such a visionary orienting signal to all stakeholders and contributors to proactively participate in ushering India’s transformation into a fully developed country by 2047, linking the macro goals to the sectoral targets. It aims to create S.M.A.R.T. goals for designing progressive cycles of modular reform by building participatory platforms for engagement around a shared ideal—rooted in India’s civilisational wisdom and ideas of public service. First championed by the Honourable Prime Minister as a clarion call on India’s 75th Independence Day, it is an iterative agenda-building principle that reminds us that foresight is not about predicting the future, but about minimising surprise through action, feedback, and continuous learning.

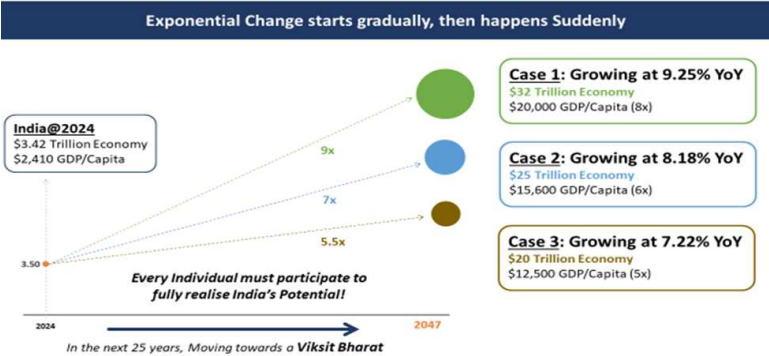
This article frames the premises of a Viksit Bharat based on five key pillars of India’s economic performance, which will enable us to elevate ourselves to full development from this take-off stage. In discussing the fifth pillar, which involves improvements to governance through harmonising state capacity, I draw on my own recent experiences and efforts in

enhancing the civil service capability ecosystem initiated through the National Programme on Civil Service Capacity Building (NPCSCB), popularly known as “Mission Karmayogi.” I conclude by arguing that the three Cs of *collaboration*, *commitment*, and *capabilities* are key to steering institutional performance towards this ideal of holistic and transformative development that inspires collective and concerted action.

Five Pillars of India's Development Transformation

India's current growth impetus is a continuation of post-liberalisation trends which have begun to mature into a stage of high mass consumption consistent with technological innovation, rapid urbanisation, and hyper-connectivity. This has been ushered in through reforms that have reinvigorated private investment and infrastructural development, spurring better interlinkages between the manufacturing and service sectors, which will support sustained endogenous growth (Chhibber and Soz, 2021; Panagariya, 2020, Panagariya and More, 2023). India has managed to come out of the pandemic with a K-shaped recovery and has recorded a steady growth rate of 6% to 8% in the past decade, according to various national and international GDP estimates (International Monetary Fund, 2023). Unfolding within this pattern of longer macroeconomic change are *five crucial pillars* that provide a platform for a decisive take-off towards the Viksit Bharat milestone of a US\$30 trillion economy (US\$18,000–US\$20,000 per capita), for which India needs an annual growth rate in excess of 9%.

Figure 2: Moving Towards a Fully Developed Viksit Bharat by 2047
(Projections Based on Three Scenarios of Nominal GDP Growth Rates CAGR)



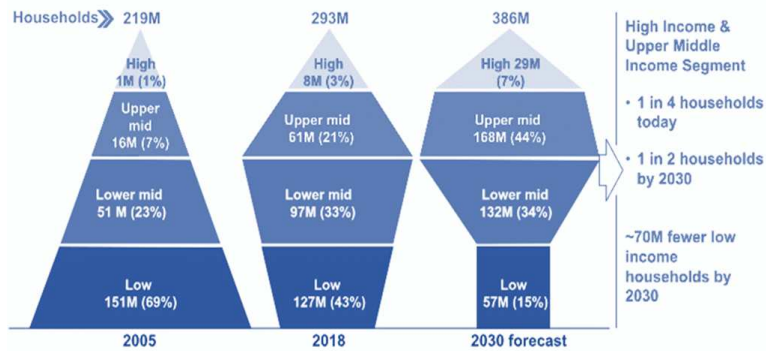
These five trends, which are outlined below, serve as both growth levers and productive social currents in New India’s aspirational growth story: networked patterns in infrastructural development; advancing India’s ongoing digital revolution; upskilling its labour force to improve GVA and sustain human capital formation; and improvement in our state capacity and the quality of citizen services.

Trend One: The New India Growth Story

The source code of India’s future architecture can be found in the growth mindset of its aspirational society—a generational story of middle-class expansion, gains in wealth creation, and entrepreneurial prosperity, along with large-scale poverty reduction driven by its steady economic growth since liberalisation (Bhagwati and Panagariya, 2013).

Currently numbering about 432 million households and defined as having a household income between ₹5 lakh and ₹30 lakh in 2021 (17–100 US\$/day), a more recent survey by the Indian think tank People Research on India’s Consumer Economy (PRICE) found that this category of Indians increased to 41% of the population in 2020–2021, up from 30% in 2004–2005.

Figure 3: Middle-Class Consumer Expansion in India



Source: PRICE Survey (2022).

New businesses need to understand how layers within the middle class constitute discrete market segments as catalysts for funnelling mass consumption and learn to address this cross-section of consumer demand. This approach will boost greater private investment in the economy while also spurring entrepreneurship and value-added services.

Figure 4: Contribution of Middle Classes to Marginal Propensity to Save and Consume (in %)

BIGGEST CONTRIBUTOR IN TERMS OF INCOME, SPENDING AND SAVINGS					
Category	Household	Population	Income	Expenditure	Saving
Rich (>₹30L)*	3	4	23	17	43
Middle Class (₹5L-30L)	30	31	50	48	56
Aspirers (₹1.25L-₹5L)	52	52	25	32	1
Destitutes (<₹1.25L)	15	13	2	3	0

*Annual household income at 2020-21 prices | Source: PRICE (figures in %)

Source: PRICE Survey (2022).

These macro-statistics can equally be dovetailed with India Inc.’s growth story, reflected in the emergence of a robust capital market (Figure 4), as well as the improved performance of its banking sector, which has reduced its cost of banking intermediation through the resolution of NPAs and stressed assets. This has been aided by improved corporate solvency (Figure 5) through reforms initiated by enacting the Insolvency and the Bankruptcy Code (2016). Further soft-touch regulatory steps in this direction have been taken through the recent amendment to the Competition Act (2023).

Figure 5: India’s Capital Market Growth over Three Decades in a Comparative Global Context

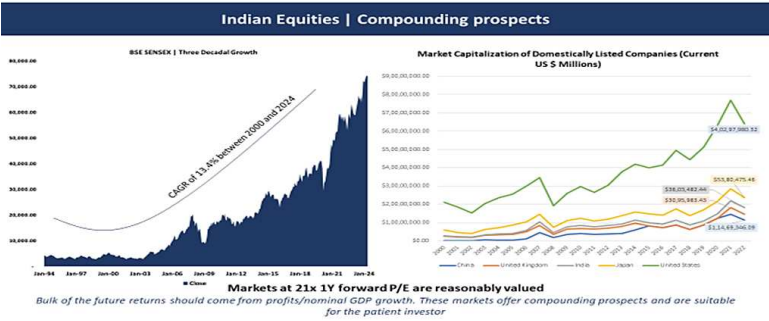
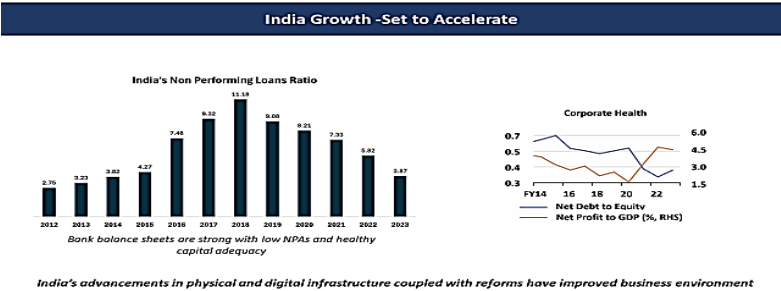
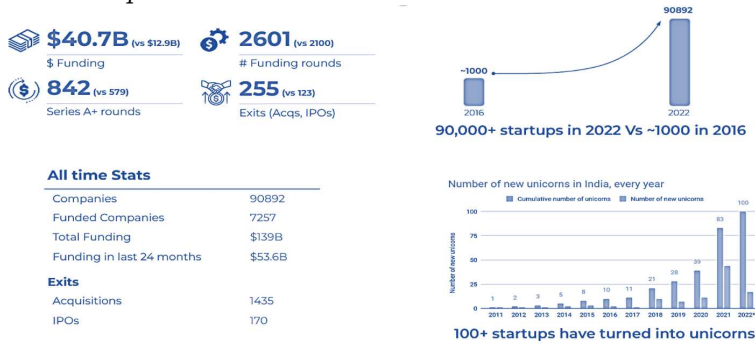


Figure 6: India’s Private Sector Scenario Reflected Through the Profitability and Creditworthiness of Corporates Compared to the Capital Adequacy and Quality of Credit of India’s Banks



At the other end, it is India's startup story that truly defines this aspirational growth mindset. Within a mere six years (2016 to 2022) of initiating the Digital India and Startup India missions, Indian startups have grown by an astronomical 900%, boasting the third-highest number of unicorns in the world.

Figure 7: India's Startup Scenario Since the Advent of Digital India and Startup India



For context, we may note that India has the third-highest number of unicorns in the world, substantially behind the US and China, but ahead of the UK and Germany. According to the most recent Hurun Global Unicorn Index (2024) (Hurun Research Institute, 2024), the number of unicorns registered in India has slipped to 67, while India has the highest number of offshore unicorns at 109. New India's aspirational growth story also requires continued reform to improve access to financial services and capital markets, a segment where new wealth management tools and investment management applications have a formative role to play. These *fintechs*⁵¹⁶ need soft-touch regulation, requiring de-siloed working and smooth coordination between

⁵¹⁶ India is home to more than 10,000 fintech companies, ranking third highest in the world, behind the US and the UK (12,500), and ahead of China (3,600). This is a market segment that needs openness and creativity to attract greater global fintech funding (which grew to 6.5% in 2022 before tailing off last year) in order to build on the rails of India's digital public infrastructure and to harness the huge potential of the swelling middle-class aspirations (see *The Elevation Bottomline report on fintechs 2023* [Elevation Capital, 2023]).

the RBI, SEBI, and the Finance Ministry to unlock India's intellectual dividend and create foundational technology platforms that funnel middle-class savings frictionlessly into sources of value creation for India and the world.

Trend Two: Infrastructural Networks— Connecting People and Places to Aspirations of Mobility

India's ambitious infrastructure development initiatives are rapidly propelling the nation closer to its vision of a *Viksit Bharat@2047*. Over the past decade, the country has witnessed a remarkable surge in infrastructure spending, reflecting its commitment to modernise and expanding crucial sectors. The overall expenditure on infrastructure has increased more than fivefold in recent years, marking a significant leap towards sustainable economic growth (*Economic Survey 2023*; Ministry of Finance, 2023a).

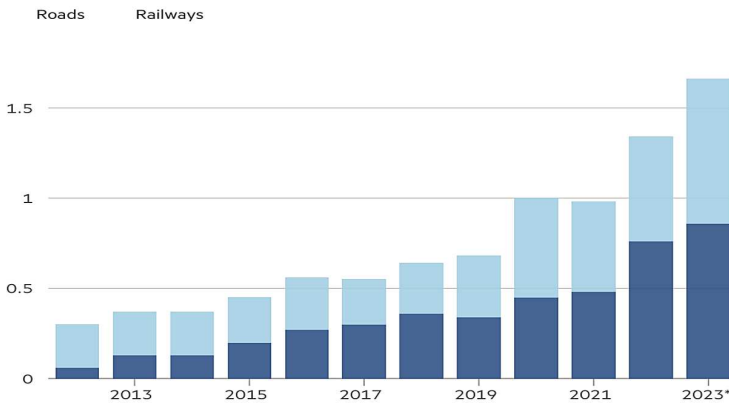
In the fiscal year 2023–2024 alone, India allocated a staggering ₹10 lakh crore (a 37.4% increase) towards capital expenditure, underscoring its aggressive stance on infrastructure investment (see Figure 8 drawn from Union Budget 2023; Ministry of Finance, 2023b). This substantial funding is intended to bolster key sectors such as transportation, energy, and urban development, laying the foundation for future economic prosperity.

One of the standout achievements has been the massive expansion in metro connectivity across urban centres. India currently boasts 17 operational metro systems. Metro rail networks have seen a remarkable increase in coverage, facilitating seamless and efficient transportation options for millions of commuters. This expansion not only eases urban congestion but also enhances connectivity, driving economic activities and promoting sustainable urban development. Today, India operates metro rail, suburban rail, and monorail systems.

Among these, metro rail has shown remarkable expansion, growing from 222 km across three cities in 2011 to 697 km in 13 cities by 2021. An additional 1,032 km of metro rail network has been approved, which will extend metro services to 27 cities.⁵¹⁷

In rural India, the focus has been on improving connectivity through road infrastructure. The government's ambitious targets include constructing rural roads at an average rate of 91 km per day (totalling 7.4 lakh km of rural roads under the Pradhan Mantri Gram Sadak Yojana) (National Rural Development Infrastructure Agency, 2023).

Figure 8: India's Capital Expenditure on Mobility Infrastructure (% of GDP)



Source: Economic Survey, 2023 (Ministry of Finance, 2023a).

These efforts aim to enhance accessibility, reduce logistical costs, and integrate rural economies more effectively into the national framework, acting as a connectivity bridge between people, places, and their aspirations. Another crucial aspect of India's infrastructure enhancement is the development of natural gas pipelines. A comprehensive National Gas Grid has been planned to ensure sufficient availability and equitable

⁵¹⁷ See Union Internationale des Transports Publics (UITP). (no date). <https://cms.uitp.org/wp/wp-content/uploads/2021/11/India-Metro-Annexe.pdf>

distribution of natural gas across the nation. Currently, there is an operational natural gas pipeline network spanning approximately 17,000 km in India (see Natural Gas Pipelines entry in Ministry of Petroleum and Natural Gas, 2023-24). Championing a sustainable development push, the government has committed an outlay of ₹17,490 crore to the National Green Hydrogen Mission (MNRE 2023), out of which ₹400 crore will be allocated to the identification of regions suited to becoming National Green Hydrogen hubs. This mindset towards clean energy transitions is geared towards promoting industrial growth while reducing dependency on traditional fuel sources and aligns with India's global commitments to achieving concurrent Sustainable Development Goals (SDGs).

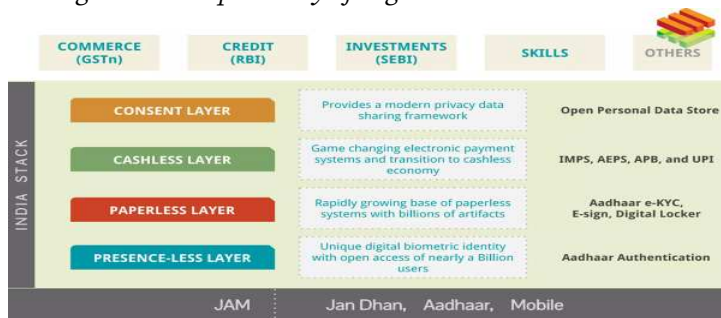
Ranked the third-largest startup ecosystem in the world (*Zinnov-NASSCOM India tech start-up landscape report*, 2023; see Gupta et al., 2023), India prides itself on having over 136,075 DPIIT-recognised startups (Ministry of Commerce and Industry, 2024) steadily contributing to the country's growth story. In the maritime sector, India has made substantial strides. In the fiscal year 2023, major ports in India managed 783.50 million tonnes of cargo, indicating a compound annual growth rate (CAGR) of 3.26% from fiscal year 2016 to 2023 (Ministry of Ports, Shipping and Waterways, 2023). This expansion not only enhances trade efficiency but also positions India as a maritime hub in the region. Improved port infrastructure is crucial for facilitating international trade and integrating India into global supply chains.

Furthermore, the establishment of mega food parks and agro-market reforms has revolutionised the agricultural sector. These initiatives facilitate direct farm-to-fork product movements, ensuring better price realisation for farmers and enhancing food security. By modernising agricultural infrastructure, India aims to boost rural incomes, reduce wastage, and strengthen the overall agricultural value chain. The significant increase in infrastructure expenditure, coupled with targeted projects in transportation, energy, and agriculture, underscore the country's

commitment to sustainable growth and inclusive development. This is reflected in India's improvement in the World Bank's Ease of Doing Business rankings (63 in 2020 from 142 in 2014) and the Logistics Performance Index (up to joint 38th in 2023) which has been boosted since the launch of multimodal Network Planning Group (NPG) set up under PM Gati Shakti to facilitate close coordination among key infrastructure-related government departments throughout the project planning and execution phases. As these initiatives continue to unfold, they promise to propel India towards becoming a global economic powerhouse while improving rural-urban connectivity to enhance the quality of life for all its citizens.

Trend Three: Leapfrogging Using Technology— Advancing India's Revolutionary Digital Public Infrastructure (DPI) Approach

Figure 9: The India Stack Concept Enabling e-Commerce Services Through the Interoperability of Digital Public Goods



India's most exciting prospect of leapfrogging into an elevated global superpower status lies in advancing the Digital Revolution that began with the Aadhaar Revolution. Providing a presence-less layer of biometric identification linked to a unique 12-digit social security number has established a foundational layer to seamlessly enable direct beneficiary transfers of government benefits to individuals, cutting out leakages and reducing

unnecessary red tape. Building on this foundational layer through the renowned JAM trinity,⁵¹⁸ enables a genuine revolution by *stacking* interoperable databases involving cashless (IMPS/UPI), paperless (DigiLocker/eKYC), and consent layers designed to decentralise e-commerce and customise financial services.

This “India Stack” approach can help us leapfrog directly from being a data-poor country to a data-surplus country, becoming a capabilities enabler for the world economy through the provision of our digital public goods. This enables the building of solutions through a set of open-source Application Programming Interfaces (APIs), interlocking consumers to access digital marketplaces via cross-cutting open data platforms (Figure 9). This advantageous form of decentralised “protocol thinking” can generate considerable network effects for our domestic platform economy, further enhancing our reputation as a global ITeS (information technology enabled services) exporter and solutions provider.

This ongoing Digital Revolution is, in no small part, owed to India’s efforts in building resilient connectivity infrastructure through the erstwhile mobile phone revolution in India (see Figure 10). This is, in itself, an exemplary case of a second-order change which has led to an increased density of smartphone penetration in India (two-thirds of India’s population). Spurred by the lowering cost of mobile data, we now have GSM mobile phones exceeding 900 million, owing largely to India’s indigenous capabilities in 4G/5G communication, thanks in large part to the Digital India Mission and India’s Atmanirbhar push in the telecom sector. With the growing increase in rural internet penetration, India’s digital transformation is set to assume a revolutionary status.

⁵¹⁸ Thanks to the JAM trinity, the amount disbursed through DBT was ₹5.52 trillion in 2020–2021, compared with a mere ₹7,367 crore in 2013–2014 (*Economic Survey 2022*; Ministry of Finance, 2022).

Figure 10: India's Digital Public Infrastructure Integrating Cross-Platform Marketplaces through Stack Economisation

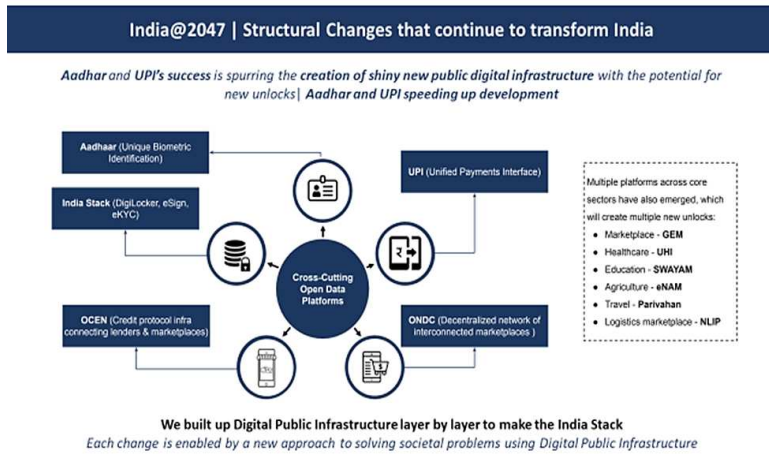
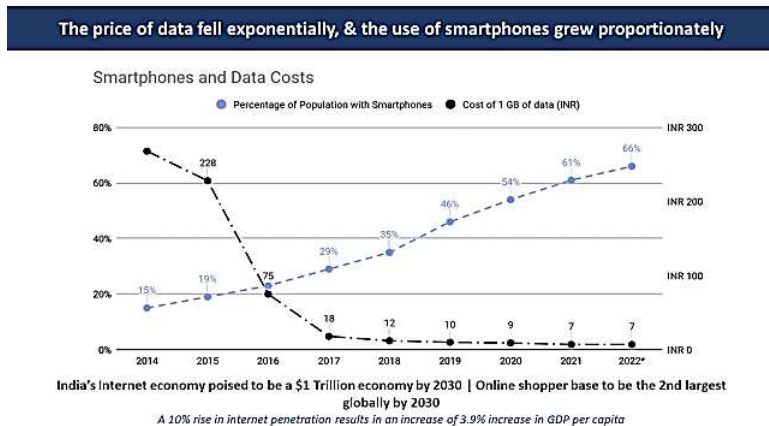


Figure 11: Telecom Revolution in India Encapsulated by the Inverse Relationship Between the Price of Data and Smartphone/Internet Penetration



Finally, a cornerstone of India's digital transformation that is most directly a consequence of the Pradhan Mantri Jan Dhan Yojana (PMJDY) is the digital payments revolution, which has made India a world leader in the digital transactions space. This "cashless" revolution has boosted merchant payments and

resulted in a faster multiplier effect in absorbing consumer demand, while also formalising large segments of small and micro-enterprises (see Figure 10). The next step in expanding the fintech sector is to address rural micro-finance and smooth retail lending for small businesses, thereby further boosting directed and customised financial services. The India Stack approach (Figure 12), centred on the consent architecture of account-aggregator (Figure 13), is a vital step towards this direction (see Figure 14 for its trajectory). Digital India has enabled the creation of open-network protocols as public-interest technologies that have a far-reaching impact on how public goods are created and public services are performed. They have enhanced the delivery of services to our citizens by digitalising trust through the platform of governance—endowing rules and structures to the mantra of perform, transform, and reform (see Figure 14 for Open Network for Digital Commerce [ONDC]).

Figure 12: Digital Payments Scenario in India

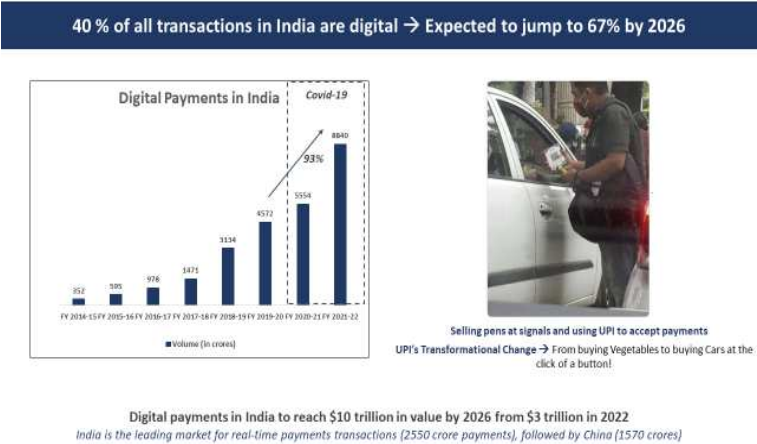


Figure 13: The Decadal Success of Direct Benefit Transfers Has Been Positively Reinforced by Digitalisation

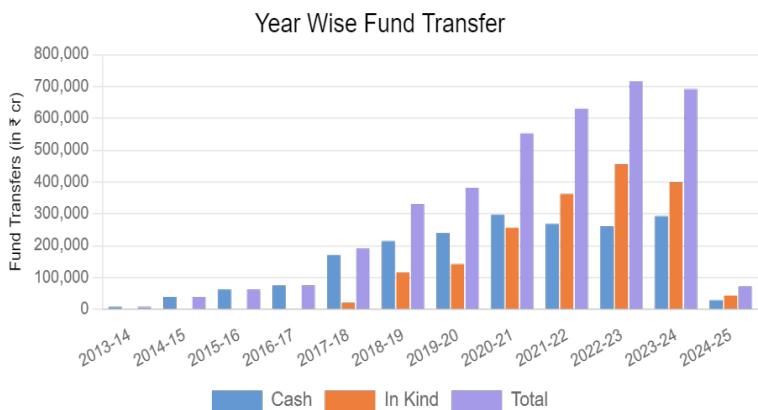


Figure 14: The India Stack Approach to Creating Open Digital Ecosystems Enabling Multi-sector Digitisation

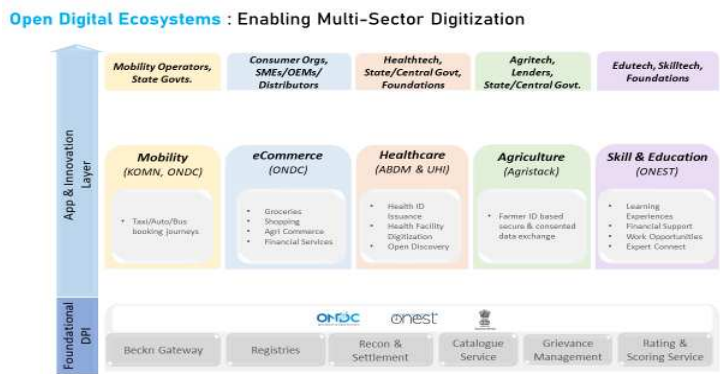


Figure 15: The Account-Aggregator Framework Seeks to Add a Consent Layer to Revolutionise Financial Services like Lending, Life Cycle Finance and Micro-credit

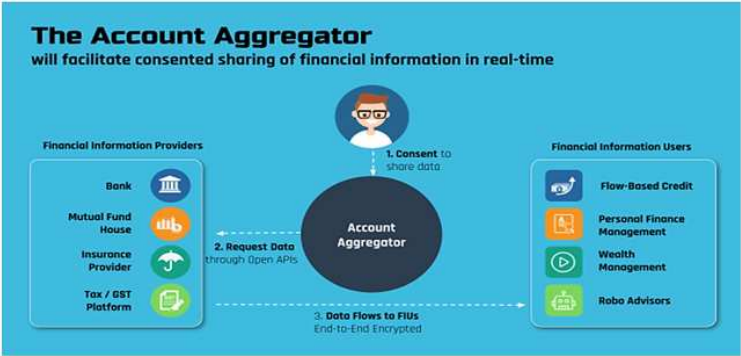


Figure 16: The Evolutionary Trajectory of India Stack from Aadhaar to ONDC via UPI/JAM

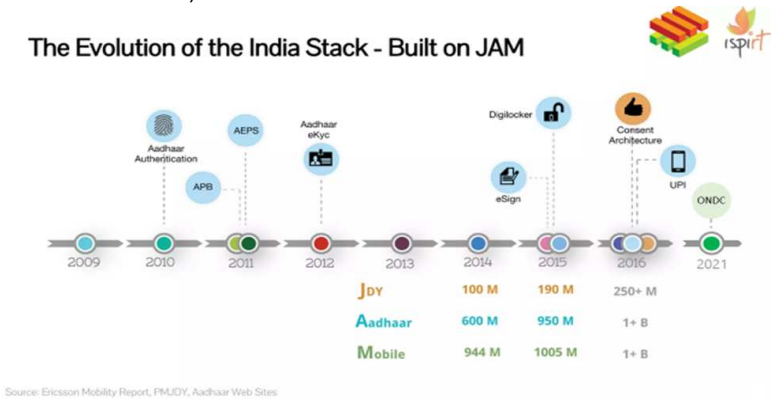
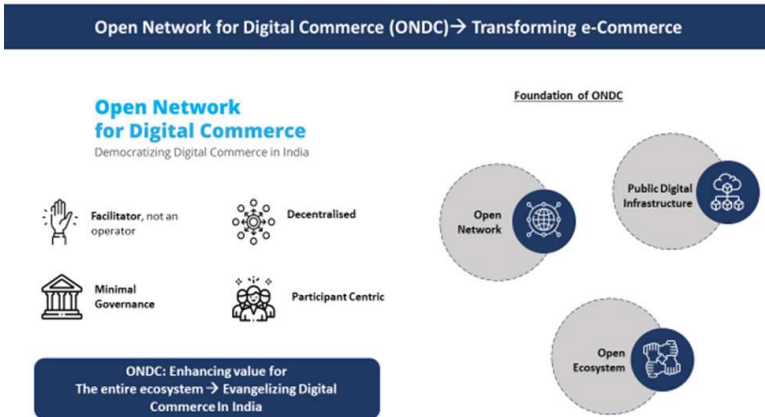
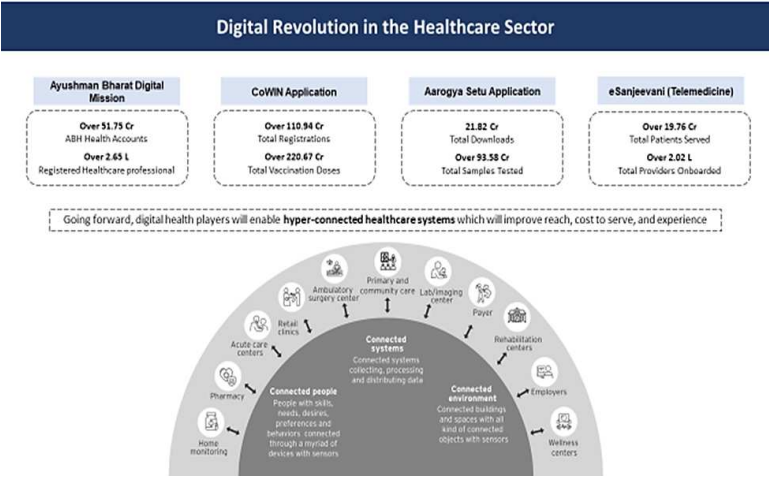


Figure 17: The Network Ecosystem Behind ONDC: An Integrated Marketplace Enabled Through Open APIs that Can Inter-operate Through Applications



A compelling instance of technological trust for public interest is the impact of the digital revolution on the health sector, including the CoWIN and Aarogya Setu applications, which seamlessly integrate and track COVID-19 vaccinations and spread, as well as the PMJAY Mission, the cornerstone of which is the Ayushman Bharat Digital Mission (Figure 15).

Figure 18: The Hyper-Connected Systems Approach Enabled by India’s Digital Health-Care Revolution



The Indian Information Technology Enabled Services (ITeS) sector holds a prominent position on the global stage and has been steadily enhancing export growth and generating job opportunities. For the fiscal year 2023–2024, the IT-BPM sector in India, excluding e-commerce, is projected to achieve a value of US\$254 billion, with exports contributing approximately US\$200 billion. Additionally, the industry has significantly contributed to employment, with an estimated 5.43 million professionals working in the sector, marking an increase of 60,000 jobs compared to the previous fiscal year. Women represent 36% of the total workforce in the industry (Ministry of Electronics and Information Technology, 2024).

As 2023 came to a close, India’s Global Capability Centres (GCCs) sector skilfully navigated a tough economic climate. According to the Zinnov-NASSCOM India Report, 2023 (Ghosh et al, 2024), the semiconductor industry was particularly notable, with 30% of the newly established GCCs working in this sector.

The semiconductor GCCs in India are shifting their focus to cover the entire chip development cycle, evolving from simple service providers to key players in transformation. This change

is reflected in the diverse range of job roles related to wafer design, fabrication, and system integration (Zinnov-NASSCOM India Report, 2023; see Ghosh et al, 2024). Chips produced by these centres are now essential across various industries, including automotive and telecom, impacting a wide range of products.

Trend Four: The Capabilities Approach to Engender a Skilled Workforce

India entered the stage of its demographic dividend in 2005 which is expected to last until 2055. This period has fuelled the quest for aspirational mobility and prosperity. India has already utilised 40% of this period and yet records low employment elasticity compared to China during the 1980s and especially the East Asian “tiger” economies in the 1960s. To grow at 9.25% per annum, as per the Viksit Bharat target, India needs to rapidly enhance the capabilities of its workforce and foster a new culture of anytime adult learning, to be embedded in organisations and converging through institutional praxis and sustained investment in human capital.

India’s working-age population will increase by at least 12 million per year until 2030—roughly adding a Belgium every year. India’s Labour Force Participation Rate (LFPR) is around 0.5—reasonably high for men at about 0.8 but shockingly low at 0.20 (and declining) for women. The reasons why it is so low are still a puzzle, with explanations ranging from the need to perform unpaid housework to a lack of appropriate jobs, safety issues, discrimination, inadequate training for women, and overall patriarchy (Chhibber and Soz, 2021, p. 121). Adding to this, there is a dualistic structure to India’s labour market due to its uneven rural–urban structural transformation, lack of skills-based education, and pace of demographic transition. India would need to create at least 8.5 to 9 million jobs every year until 2030. This implies 6 million jobs to meet the employment needs of everyone

entering the workforce and looking for a job; 1.5 to 2 million more jobs if the LFPR of women rises to 0.5, making the average LFPR 0.65; and another 1 million to gradually absorb the sink of underemployed people eking out a precarious living on the streets. At present, according to the World Bank's report on jobs in South Asia, India creates 0.75 million jobs for every 1% growth (Chhibber and Soz, 2021, p. 122). It is in this context that "inclusive growth" has become the mantra of sustainable and equitable development of the Indian economy and the aspirations of its people. A Viksit Bharat urgently needs to match the upskilling of its labour force with job creation, requiring a multifaceted approach that encompasses education, vocational training, and policy reforms, striving to create Gross Value Added (GVA) services to generate greater employment elasticity to GDP.

India's higher education system is currently underperforming in equipping graduates with the necessary skills for the modern job market. Many graduates find themselves unemployable due to outdated curricula and inadequate teaching methods.

Described below are some of the proposed strategies for effective upskilling:

1. **Revamping Higher Education:** The National Education Policy (2020) has been developed to address this by introducing credit-based and choice-based curricula, with multiple exit and entry points that integrate cultivation of critical thinking skills, with vocational training as well as applied skill-based courses. We urgently need to expand liberal education across the higher education landscape while improving specificity of employable skill-sets through vocational and application-oriented technical education. The private sector needs to play an active role in increasing excellence in the former, while improving targeted matching, industry linkages, apprenticeship opportunities and capacity building of ITIs and Polytechnics to address and expand the skills component, which will have a multiplier effect on Indian manufacturing.
2. **Rationalising Public Funding of Higher Education Institutions (HEIs):** Public funding should be supplemented with

reasonable fees from those who can afford to pay and by endowments from philanthropic donors and alumni to create a sustainable model that can support top-notch research and employable outcomes. Business internships and higher order applied skills like data science, machine learning, and AI need to be concurrently developed to incentivise firms to hire from a wider cross-section of campuses and institutes. More coordinated efforts to address the skills gap need to be found within higher education, with a commitment to incubating startup solutions that may drive self-sustaining positive externalities.

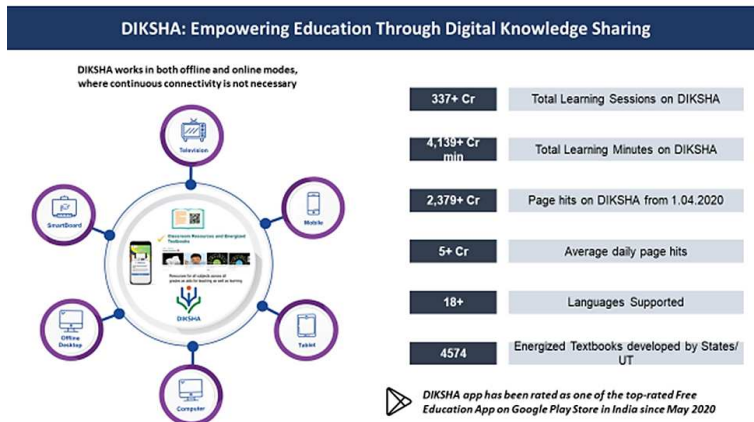
3. Vocational Training and Lifelong Learning: Beyond formal education, vocational training programmes are essential for upskilling the workforce. Here, we need a mindset change and should encourage autonomy for higher education institutions (HEIs) to modify their curricula and foster partnerships with vocational training institutions. Delhi Skill and Entrepreneurship University (DSEU) is one such initiative that can be replicated as a hub which needs to be connected to many spokes, especially smaller colleges that offer traditional courses. It should be mentioned that about half of our college students are enrolled in three traditional courses: Bachelor of Arts, Science, or Commerce, typically in small colleges (AISHE 2020; Ministry of Education, 2020). Addressing professional shortages in areas like veterinary science, which are connected to sectors where India can afford to pursue supply-side solutions like dairy and livestock, is the need of the hour.

The linkage between higher education and vocational training needs to be brought under the ambit of the Skill India Mission—in a manner that eschews over-dependence on state-run units and centres. Instead, we should create platforms that enable incentives for traditional skill and technology transfer to take place in a decentralised manner, promoting value-added inclusive growth. Master craftspersons or technicians from

across the country, representing a wide variety of technical and craft specialities, can be paid and incentivised to adopt the apprentice model of skill transfer. Furthermore, each successful student/apprentice who passes a standard skill test could earn the master an additional monetary bonus. Firms like Tilfi have adopted such a model to ensure bespoke artisanal quality in their weaves, and dresses and these may be acknowledged as skilling champions to mobilise our human resources.

The Role of Technology in Dissemination and Lifelong Learning: Leveraging technology can significantly enhance upskilling efforts. Online learning platforms can provide flexible and scalable solutions for delivering quality education and capacity building. Lifelong learning initiatives based on learning management systems (LMS) also need to be replicated at an organisational level, allowing individuals to continuously upgrade their skills in line with technological advancements and changing skill requirements that further dictate job-market dynamics. Digital learning tools like the DIKSHA platform are exemplars in this regard. They help in monitoring progress while providing personalised learning experiences, thereby effectively scaling dissemination and improving outcomes.

Figure 19: DIKSHA App as an Exemplary Edu-Tech Platform Providing Resource Commons



As Chairman of the Capacity Building Commission, I have closely witnessed the success of the iGoT (Integrated Government Online Training) Karmayogi platform in fostering a culture of learning and forward-looking agility within the wider Civil Service Training and Capacity Building Ecosystem. Having a tech platform which is steadily evolving into an integrated learning management system for over 3.5 million civil servants has led to the gradual embedding of an adult learning culture to upskill civil service competencies according to their specific job roles. This is, in itself, a far-reaching “silent revolution” fostering a model of agentive change that can align national priorities with performance orientation, adjusted to citizen expectations in moulding an updated, competent, agile, and future-ready civil service.

Figure 20: iGoT Karmayogi Platform



Trend Five: Putting Them Together: Improving State Capacity as a Lego Problem

Recent works by Devesh Kapur (2020) and Chhibber and Soz (2021) have highlighted the structure of India's "boutique government" (2020) as "small but expensive." They provide counter-intuitive evidence that the Indian bureaucracy is, in fact, disproportionately bloated at the top, with a shortage of critical service personnel per citizen (too few judges, police officers, teachers, doctors, and so on), particularly at the local government level which is the actual citizen-interface level. India's public expenditure is quite large, but as far as it is spent on the permanent executive to improve state capacity, it is spent poorly. An immediate conclusion from this is not that India should increase government spending but that it should reorient its spending more effectively. Almost 50% of total governmental expenditure is non-developmental, with large portions going to administrative salaries, pensions, and interest payments. India also spends too much at the central and state levels and very little (3%) at the local administration level. The same amount spent at the local level would enable the hiring of many more teachers, nurses, and other critical frontline workers as local wages are

much lower than those determined at state capitals or at the centre in New Delhi. This has a direct effect on state capacity as it leads to planning and commitment fallacies in balancing service delivery across specificity and transaction volume (Israel, 1987; Chhibber and Soz, 2021).

Figure 21: Classifying Government Activities by Specificity and Transaction Volume

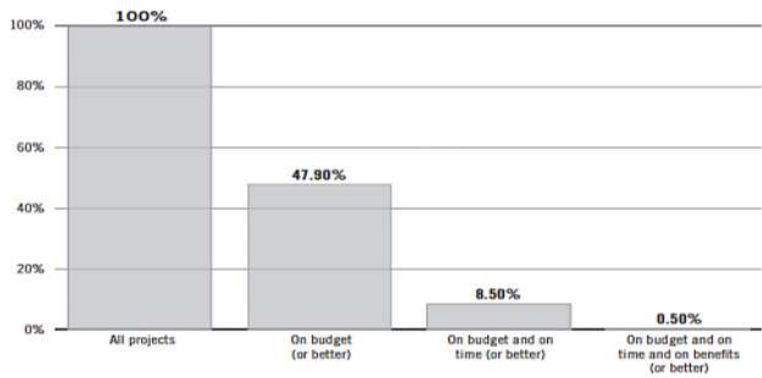
Specificity	<p>Q1</p> <p>RBI</p> <p>Election Commission</p> <p>ISRO</p>	<p>Q2</p> <p>Telecom</p> <p>Financial regulation</p> <p>Electricity</p> <p>Railways</p>
	<p>Q3</p> <p>Foreign policy</p> <p>Higher education</p> <p>Tertiary health</p>	<p>Q4</p> <p>Judicial system</p> <p>Police</p> <p>Primary education</p> <p>Primary health</p>
Transaction Volume		

Figure 21 describes four quadrants of government activities. Q1 has specialised professional institutions that perform highly specific tasks (with less direct citizen contact), enjoying functional autonomy and delivering high quality of government services. In contrast, Q4 contains services with high interaction with citizens and low efficiency or quality (adapted from Israel, 1987).

This skewed state capacity structure requires significant overall remodelling, especially as the role of the state changes to service provisioning, effective regulation, and project oversight, with the private sector carrying out the bulk of the actual tasks to carry out production, build infrastructure, and create value—key features of New India’s growth story. Good governance requires overcoming the “iron law of megaprojects” (Flyvbjerg, 2017, pp. 1–18)—a phenomenon affecting large-scale interventions and developmental projects by virtue of them going “over budget, over time, under benefits, over and over again”—a fate bogging

down the quality of public goods and services and affecting state capacity by virtue of choke points, design frictions, and complex systems bottlenecks.

Figure 22: The Iron Law of Megaprojects Leads to a Fat-Tailed Distribution in Achieving Large Project Outcomes



Source: Flyvbjerg and Gardner (2023).

The only way out of this impasse is for India to design lean public-service systems that are not top-heavy and will not over-regulate or crowd out private investment, while augmenting the base of critical services that only the state can perform. This requires resource augmentation and flexibility in setting up goals and to lessening organisational noise through harmonisation and algorithmic forecasting, while establishing an iterative vision that tackles ecological complexity with common-course agenda building through “iterative visioning.” This is exactly what Viksit Bharat does by designing a common agenda through the three Cs—*Commitment*, *Collaboration*, and *Capabilities*—that enable *modularity*⁵¹⁹ (Flyvbjerg and Gardner, 2023).

⁵¹⁹ The idea that completing many small things concurrently, heuristically referred to as building blocks (What’s Your Lego?), helps achieve the one big goal which is the target megaproject—in our case, a fully developed India by 2047.

This is exactly the approach we have taken at the Capacity Building Commission (CBC) to institutionalise Mission Karmayogi across the labyrinthine civil service ecosystem. We've started small by targeting a “big push” to digital learning resources—providing a set of common-interest courses and topical caselets (Gyaankosh) for learners to readily engage with and draw upon as a reference. The goal has been to put building blocks in place for targeted role-based learning of encadred officers belonging to groups B, C, and D of the permanent civil service at the centre. We have tinkered and experimented with MDO-wise annual capacity building plans and inter-ministerial workshops and realised how to improve individual capabilities at the margin, perfecting the art of repetition with experimentation—the core hallmark of *modularity* (Flyvbjerg and Gardner, 2023, pp. 153–154).

Viksit Bharat as a Multi-scalar Modular Approach to Getting Big Things Done

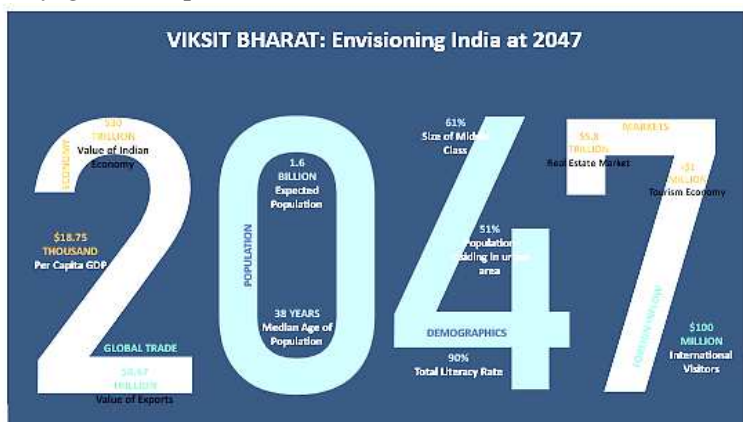
Figure 23: Constituent Modular Goals of Viksit Bharat@2047



Viksit Bharat@2047 is a similarly multi-directional and modular “developmental Lego model” that allows us to collectively pursue our dreams by reverse engineering creative solutions through collaborative channels, unleashing tipping

points across 12 key sectors to achieve the end goal of a US\$30 trillion economy by our centenary year (see Figure 23). It endeavours to sustain a multi-directional effort to steadily actualise organisational forecasting through a nuanced and feedback-oriented consolidation of effort, using the three Cs of *Commitment*, *Collaboration*, and *Capabilities*, so that India's "tryst with destiny" is completed fully and unequivocally, not left to chance, luck, or prevarications of reading the crystal ball.

Figure 24: Realising Viksit Bharat@2047 Is a Task of Conscionable Foresight: Requiring Commitment (Sankalp), Collaboration (Sahyog), and Capabilities (Kshamata)



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Conclusion

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Reddy & A.P. Singh

The 20 essays enclosed within the covers of this volume offer a panoramic view of certain dimensions of the Indian politico-socio-economic scenario. By the very nature of the essays, this view cannot be complete or comprehensive; certainly, there is much that remains unsaid. Any country on the trajectory of growth is perpetually a work in progress. And in this journey, it has to constantly adapt to national and international changes if it seeks to sustain that growth over the long term. Indeed, in this year of 2025, when we celebrate the 75th anniversary of the adoption of the Constitution and the formation of the Republic of India, we are at a vantage point in history to assess the path hitherto travelled and chart out the direction of the road ahead.

Presently, in the world around us, there are arenas of international conflict that threaten to disturb world peace. There is a clear and present danger that the other countries of the world may get sucked into the conflict. International economics is displaying volatility that we must learn to manage and steer clear of. The change of leadership in the United States presents a picture of uncertainty that may spread to areas as yet unknown. There are old and new dangers in the neighbourhood of our country that we have to contend with. Within the country too, there are severe challenges that persist despite all attempts being made to resolve them. Religion, caste, gender, and socio-economic discriminations continue to create divisions within the population, and fissiparous tendencies do threaten our integrity. Though we experience high rates of economic growth, the burgeoning population and issues of inequality dampen the

natural forward trajectory of our country. It is through all these challenges that we have to find the path ahead.

If we search for some of the challenges that lie in our way, we can certainly identify some of them. Climate change will affect our development in ways that we cannot predict today. Artificial intelligence is an unknown force that will mutate the manner in which we progress ahead. There are challenges of sustainability, employment, reasonable rates of growth, redistribution of wealth, removal of inequality, and many other dangers that lie in our path. The manner in which we address these issues and move ahead, while at the same time ensuring social justice, better health, education, and the rule of law, will determine how we reach our goals by the year 2047, when our country turns a century old.

Our distinguished writers who have contributed to this volume have examined in great detail the issues pertaining to their respective sectors. A historical background of the evolution of our Constitution is the first in this collection of essays. In another chapter, challenges in building and sustaining a thriving democracy in the future have been highlighted. Along with this, questions related to democratic decentralisation and ways to strengthen the participation of people in the governance of our country at the grassroots level have also been looked at. Again, in agriculture, although we have attained self-sufficiency in food, related questions about providing a remunerative price to the farmers, diversifying our crops, enhancing the value of finished products, and ensuring that productivity and area under cultivation increase in the years to come have been examined. Serious issues regarding building social capital through gender inclusion, as well as issues related to social justice and affirmative action, have also been examined in some depth. The role of the civil service as a permanent institution in our country's administrative structure and its empowerment to ensure that the delivery of services takes place up to the last mile are also issues that this volume has delved into in some depth. Industrialisation and infrastructure development also find their place in this

volume, as does the expansion of digital public infrastructure which has a direct impact on providing public goods to the people without harassment. Higher education and the expansion of medical facilities have also been closely examined in this volume.

What lies ahead for our country? At least in the short run of the next 25 years, we can attempt to make a list of our priorities. First and foremost, it is clear that we have to protect our territorial integrity from the envious glances of our geographical neighbours. This would be one of the important areas which the country would be attempting to secure in the days lying ahead. Strategic partnerships with friendly nations, along with developing economic ties internationally, are perhaps the only ways to ensure that the unity and integrity of our country is preserved from external forces. Strengthening our military resources is a natural corollary of the same.

On the other hand, we have to ensure that all the citizens of the country are provided with the necessary food security to ensure their long-term well-being. India became self-sufficient in food grains a long time ago. However, the distribution of its food to all deserving people of the country is a goal that we are yet to achieve. Fortunately, the Food Security Act, along with annual bumper food grain production, has ensured that people living below the poverty line do not go to sleep hungry. The nutritional status of the children of our country is a genuine concern. Despite several decades of the Integrated Child Development Scheme, substantial numbers of children still need to be protected to ensure their healthy growth.

About 60% of our population is dependent on agricultural and allied activities, though they provide only about a 17% share in our GDP. Many measures have been undertaken over the last decades to ensure a remunerative price for the crops produced by our agriculturists. Ensuring the market for their produce, diversifying their crops, and aiming for doubling their income within a reasonable period of time are some of the major concerns that the government would have to take up in real earnestness. Large swathes of our population have been lifted

above the poverty line. Those who remain are also to be uplifted as early as possible.

Ensuring that there is sufficient fund flow for the development of the country's infrastructure is yet another goal of our economy. Indeed, there has been significant progress in the expansion of the road and air network in the subcontinent. This pace has to be kept up in the coming years as well, to ensure that industrial development and growth of the manufacturing sector reach sufficiently high levels so as to employ large numbers of our youth. It cannot be denied that unemployment remains one of the crucial factors that is hampering economic growth and alleviation of poverty. This has to become one of the high priorities for the country in the days ahead.

We are fortunate that we have technical manpower matching the best anywhere in the world. Our IT and software engineers are much in demand across the planet. The recent "Make in India" campaign is ensuring that the import of technical know-how and manpower is gradually decreased until we become fully self-sufficient as we go along. That we can become international leaders in this sector of the economy is an objective that we need to follow up with utmost diligence and determination.

India watchers have also been emphasising the fact that the country has a long way to go in areas of human and social development such as education, universal health, skill development, empowerment of women, social justice, etc. A concerted attempt in these areas would surely provide satisfying rewards in the immediate future. Certain states have already taken adequate measures in this regard and are moving ahead insofar as human development is concerned. On the other hand, there are some states where the parameters of human and social development are still low. This disparity is likely to cause interregional imbalances that a country like ours cannot afford. The all-round development of all states of the country, across the length and breadth of the subcontinent, is therefore of primary importance. The ultimate objective is that human potential must be achieved to the maximum extent possible, as this in turn will

galvanise the growth of our country in the years to come. There are crimes and atrocities committed against the disadvantaged sections of our population, as well as our vulnerable women population, that should not be allowed to continue. The Preamble of our Constitution emphasises the paramount importance of liberty, equality, and fraternity under the umbrella of justice. Each one of us should strive to realise the dreams of our founding fathers, so that we become a Ram Rajya where all people are equal and achieve their full potential.

This volume of essays is dedicated to the 75th anniversary of our country becoming a Republic on January 26, 2025. In this regard, we have reviewed developments in various sectors of the economy through the lens of these essays. We can but try to look into the crystal ball regarding what to expect in, say, the next quarter of a century. If we focus our attention on some of the issues mentioned above and try to address them in the best manner possible, keeping the interest of all our diverse peoples in mind, then there can be no doubt that we will soon stand in the ranks of the most advanced countries of the world. “Into that heaven of freedom, my Father, let my country awake.”

VIKSIT BHARAT @2047

GOVERNANCE TRANSFORMED

This book is the result of a fruitful collaboration of the Department of Administrative Reforms and Public Grievances, Government of India and the International Institute of Administrative Sciences, Brussels. Being published on the occasion of the 75th anniversary of the Republic and celebrating the achievements of the nation in fulfilling the aspirations of the people expressed through the Constitution of India, the book is a collection of essays written by academics and experienced former bureaucrats. Each essay tells the story of the development of the identified sectors over the last three-quarters of a century since Independence from colonial rule. It relates the early struggles of implementation leading to our solid achievements contributing to the unprecedented growth of the economy. These essays cover a wide range of subjects, including the Constitution of India, the nature of our democracy, the civil service and our administrative systems, as well as crucial sectors of our political economy such as industry, information technology, health, education, energy, water, rural and urban issues, while also not ignoring sensitive areas such as gender inclusion and social justice. It is our hope that this volume of essays will prove useful for students, researchers, academics, India watchers, as well as the general reader, who wish to know more about India and its aspirations and commitment to achieve Viksit Bharat @ 2047*.

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