



Cutting-edge  
Transformations





# CONTENTS

## Innovation (Centre)

1.	<b>Onboarding Suvidha for Air Passengers</b> - Air Suvidha, Ministry of Civil Aviation, Government of India	8
2.	<b>Land Records:One Nation, One Software</b> - National Generic Document Registration System, Department of Land Resources, Government of India	14
3.	<b>In Pursuit of Self-reliance</b> - DRDO, Ministry of Defence, Government of India	20
4.	<b>Combating Road Fatalities with iRAD</b> - iRAD, Ministry of Road Transport and Highways, Government of India	28
5.	<b>A Helpdesk for Everyone in Need</b> - MyGov, Government of India	32
6.	<b>Harnessing Self-reliance in Defence Production</b> - iDEX, Department of Defence Production	38
7.	<b>Technology Predicting Natural Disasters</b> - Landslide Monitoring and Warning System, IIT Mandi	44
8.	<b>Reinventing the Information Age</b> - Startup Hub, MelTy, Government of India	48
9.	<b>Education Never Stopped</b> - PM eVIDYA and NISHTHA, Central Institute of Educational Technology	54
10.	<b>India, the Defence Export Hub</b> - Defence EXIM, Ministry of Defence Department of Defence Production	60
11.	<b>Overcoming Himalayan challenge with drone technology</b> - Indian Council of Medical Research	64

# Innovation (State)

- 1. Technology-Driven Transformation of School Education System** - Vidya Samiksha Kendra, Education Department, Gujarat **68**
- 2. Building a Robust Admission System** - MAHA ITI, Directorate of Vocational Education and Training, Maharashtra **72**
- 3. Farm Fresh 'Tarkaari' to Consumers** - Bihar State Vegetable Processing and Marketing Cooperative Federation Ltd., Bihar **78**
- 4. Farming in Harmony with Nature** - Prakritik Kheti Khushhal Kisan Yojana, Himachal Pradesh **84**
- 5. Innovation Driving Nutrition and Comfort** - Building of Efficient Greenhouse to grow crops, Agriculture Department, Ladakh **88**
- 6. Bridging Knowledge for Corona Warriors** - Chikitsa Setu App for training of Medical Staff, Medical Education Department, Uttar Pradesh **92**
- 7. A House to Call it Home** - BASERA, Punjab Municipal Infrastructure Development Company, Department of Local Government Punjab **96**
- 8. Turning Scrap into Gold** - UT Administration of Dadra and Nagar Haveli and Daman and Diu **100**
- 9. Clarity in Governance Heralds Clear Vision** - e-Paarvai, TN eGovernance Agency, Tamil Nadu **104**
- 10. A Digital Innovation Bazaar for Ideas** - Virtual Innovation Register, Administrative Reforms Department, Goa **110**
- 11. Ensuring Benefits Reach the Last Person** - Mukhaya Mantri Antyodaya Parivar Utthan Yojana (MMAPUY), Department of Information Technology, Electronics & Communication, Haryana **114**
- 12. Securing Assets and Creating Governance Models** - Dharani Portal for Digitization of Agricultural lands, Chief Commissioner of Land Administration Revenue Department, Telangana **118**

# Innovation (District)

1. **Start-Up Zone in Lockdown** - "Navpravartan" Start-up Zone, Chanpatia, West Champaran, Bihar **122**
2. **Towards a Malnutrition Free District** - Project Sampurna, Bongaigaon, Assam **126**
3. **Star Gazing** - Application of Citizen Science, Bulandshahr, Uttar Pradesh **130**
4. **Achieving Sustainable Farming Innovatively** - Dharwad, Karnataka **136**
5. **'Har Ghar Dastak', Everyone Protected** - Kinnaur, Himachal Pradesh **142**
6. **Facilitating a Dynamic Citizen** - MO SARKAR, Dhenkanal, Odisha **148**
7. **Inspiring Linkages of Livelihood, Tourism** - Namsai, Arunachal Pradesh **152**
8. **Sustainable Dignity and Pride** - DANNEX, Dantewada, Chhattisgarh **156**
9. **Setting Benchmarks in Hospital Creation** - Narayanpet, Telangana **162**
10. **Rise of the Young Minds "Yuvoday"** - Bastar, Chhattisgarh **166**
11. **Tap Water in the Mountains** - Chamoli, Uttarakhand **170**
12. **Winning the COVID Battle** - Kurukshetra, Haryana **174**
13. **Pratyek Gram Me Ek Talaab** - East Champaran, Bihar **178**
14. **Innovations Driving Transformation** - Gadchiroli, Maharashtra **184**







# AIR SUVIDHA

## CIVIL AVIATION

GOVERNMENT OF INDIA

# Onboarding 'Suvidha' for air passengers

Unleashing a true game changer for safe International air travel

**A**ir Suvidha is a contactless, digital, easy contact tracing process for International passengers arriving in India to support Centre/ States/ UTs with real-time information.





Unlike the rest of the world, complying with COVID-19 guidelines by International passengers traveling to India is not a hassle. Thanks to Air Suidha, the digital platform created by the Ministry of Civil Aviation (MoCA).

The initial days of the COVID-19 pandemic led to several issues for International passengers. Long queues and over-crowding at the arrival terminals of the airport became the norm. Combination of the arriving passenger traffic and the mandatory compliance of COVID-19 protocols led to chaos at the airport. Frayed nerves and tempers were testing both the passengers and the airport staff.

## SEARCH FOR A SOLUTION

The need of the hour was to develop a process led systematic solution. Thus, came the Air Suvidha Portal - a game changing solution by the Government of India in coordination with State Governments, Union Territories, Airport Operators, Airlines and various Central Ministries to handle COVID-19 pandemic.

The Air Suvidha platform, created by the Ministry of Civil Aviation (MoCA) in collaboration with Delhi International Airport Limited (DIAL) is a contactless and self-declaration digital portal, launched in August, 2020 to help International passengers comply with COVID-19 guidelines.



## USING TECHNOLOGY TO SOLVE AND SCALE: 3CS AND R

Contact-less Solution

Contact Tracing

Compatible with All Modern Devices

Role-based Access

## COLLABORATIVE INNOVATION

The use of the Air Suvidha digital platform made air travel not just easy and safe but also supported the Indian Government to curb the spread of COVID-19.

Air Suvidha platform incorporated the needs of all International passengers. It was routed through 36 State Airport Health Organizations (APHO) and Central Ministries to ensure safe International travel.

## HAPPY GUESTS, HAPPIER AIRPORTS

When a crisis strikes, the need of the hour is to ensure people are comforted in the best possible way. Passengers travelling from International destinations had a sigh of relief to witness seamless processing of their documents for entry during the Covid pandemic with the help of the Air Suvidha platform. The efforts of the Ministry and its innovation team were rewarded to see citizens back home assured that they were welcomed with a hassle-free return to their motherland.

### CHALLENGES FACED

Proper, extensive and systematic training for Government officials  
 24X7 Customer Relationship Management (CRM) support



### FINAL OUTCOMES



**1.5 CR+**

Total Passenger Count  
 (as on 28th March 2022)



**130**

Stakeholders



**130+**

countries from where the  
 flyers registered



**24X7**

Customer Relationship  
 Management



Testing facility integrated for all the  
 major Indian airports





# **NGDRS**

(NATIONAL GENERIC  
DOCUMENT REGISTRATION SYSTEM)

MINISTRY OF RURAL DEVELOPMENT AND  
LAND REFORMS,  
GOVERNMENT OF INDIA



# Land Records:One Nation One Software

Towards sustainability and  
transparency

**N**ational Generic Document Registration System (NGDRS) is like a sweeping idea for which the time has arrived. It is justice to the poor and a milestone towards achieving equity in dealing with assets and vital documents. This national level digital document registration system addresses the dire need of organising and dealing with land documents in transparent manner in our country.

## THE CHALLENGE

Registration of documents is an integral part of the Revenue system which affirms authenticity and helps in avoiding fraudulent cases by facilitating mutation and updation of land records. As land is a State subject, different States and UTs have been using different applications for the computerization of document registration processes. Drawbacks in terms of comprehensiveness, security, scalability, reusability, interoperability with the State land records systems and departmental applications have been a recurrent observation across these previous applications for registration of documents.

## THE SOLUTION

To address the above issues it was decided to create a 'One Nation One Software' for the registration of documents and deeds under the Registration Act, 1908 through a generic software.

## PARTICIPATION OF STATES

Though the advantages of a generic customizable software for all States are albeit self-evident, it may be succinctly said that country-wide uniformity in computerized registration will enable anywhere access to data and information, including consolidated country-wise reports, etc. to both enforcement and regulatory agencies as well as to the common man. The software application technically consists of certain modules for interface with other sources of different values.

## THE ROAD AHEAD

The NGDRS has made a major shift from the existing manual registration system to an online one for all types of deeds of transactions, including sale, purchase and transfer of land. The system has enabled the Union Government to maintain a uniform land record registration system across the country. Citizens are empowered as all their activities, be it submission of documents, calculation of stamp duty and fees, depositing the fees, etc. can be done online. This brings in transparency and efficiency in the system and brings ease of living to the common man.



## CHALLENGES FACED

**Time, Cost and Quality:** The biggest challenge faced is to ensure that NGDRS delivers the agreed objectives within time, cost and quality.

**Resources:** Effective deployment of human & hardware / software resources.

**Technical:** Due to the unique nature of NGDRS to accommodate the specific needs of the State, technology is required to be upgraded from time to time.

**Legal:** The NGDRS will have to deal with State-specific laws and legislations.

**Environment:** The NGDRS needs to accommodate the internal and external factors as per the indigenous rules and regulations and practices followed in the State concerned.



## FINAL OUTCOMES

Citizen empowerment.

Cost effective solution with improved efficiency, accountability and transparency.

SMS and email enabled.

Reduces document registration process.

External system integrations.

Accommodates all variations.

Configuration under the control of State Registration Department.

Property rate chart available for citizens.

Rule based transparent online valuation.

Presentation for Document registration anywhere within concurrent jurisdiction.

Standard procedures followed.

Ease of maintaining valuation rules, property rates, fee and exemption rules.

Alert during transaction on prohibited properties.

Data analytics, usable by important Government authorities/stakeholders.







**DRDO**

Defence  
Research &  
Development  
Organisation

MINISTRY OF DEFENCE

# In pursuit of self-reliance and successful indigenous development of Defence requirements

**T**here has been quantum jump in India's military might in recent years, generating effective deterrence and providing crucial leverage of technology. Thanks to DRDO, with its watchword "Balasya Mulam Vigyanam" meaning the source of strength is science, Defence Research and Development Organisation (DRDO), the R&D wing of Ministry of Defence has been working steadfastly since 1958 for nation's security and self-reliance in terms of science & technology for military services.

Founded with the vision to empower India with cutting-edge defence technologies, DRDO has been equipping our armed forces with State-of-art weapon systems and equipment in accordance with the strategic requirements. It has a matured network of laboratories dedicated for defence technologies in the areas like: aeronautics, armaments, electronics, combat vehicles, missiles, advanced computing, radars, sonars, special materials, naval systems, life sciences etc.



## Anti-Satellite Missile “Mission Shakti”

Mission Shakti is the story of the challenges involved in developing the country’s first anti-satellite missile through untiring efforts of DRDO scientists who worked round-the-clock to meet the target. The mission was one of the most complex operations undertaken by DRDO in which a missile launched from ground had to hit and neutralise a fast-moving satellite with pinpoint accuracy in orbit hundreds of kilometres away.

India's space programme is critical for India's security as well as its economic and social development. Mission Shakti was an important milestone in this direction. DRDO successfully neutralised a satellite in space with its anti-satellite (ASAT) missile on 27<sup>th</sup> March, 2019 under Mission Shakti. The successful mission demonstrated DRDO’s technical prowess and ability to defend country’s assets in space, the fourth dimension of warfare. Through this Mission, India joined an exclusive group of nations who have such capability.

## 4+ generation fighter aircraft “TEJAS”

Tejas is the indigenously developed fighter aircraft operational with Indian Air Force. Tejas was designed to fill a huge void of 20 years, in indigenous fighter aircraft development and technologies since “HF24 Marut”.

Today, the Nation is self-reliant in most of the contemporary military fighter aircraft technologies and this has been possible largely due to the Tejas programme. This has given confidence to the “aeronautical engineering/scientific community” in the country; to go ahead with other big ticket Indigenous fighter aircraft programmes. Thus, the Tejas aircraft program has made India one of the few countries in the world to have indigenously developed fighter aircraft.

It has also saved the country billions of dollars in foreign exchange. It has generated large direct and indirect employment in the country over the past 30 years [including Maintenance, Repair and Overhaul – MRO] as well as during production, creating jobs in MSMEs. Future indigenous military fighter aircraft programmes will also contribute tremendously to the national pursuit of self-reliance and advanced technology development.



## The Magnificent Bouquet of Missiles

Prithvi was India's first indigenously developed ballistic missile developed under the Integrated Guided Missile Development Program (IGMDP). The missile was developed to meet the Indian Army's requirements for a reliable surface-to-surface short-range missile with high accuracy.

The first flight of Prithvi took place on February 25, 1988. The test was successful, following the predicted trajectory and hitting a designated terminal area. In 1996, India formally inducted the missile into service.

### Dhanush (Prithvi II)

Dhanush is the naval version of Prithvi missile. It is a short-range, ship-based ballistic missile that entered service in 2010.

The maiden flight of Prithvi gave a boost to other projects of IGMDP. The Re-Entry technology demonstrator vehicle (Agni) was configured as a two stage vehicle. The Re-Entry vehicle was designed with Re-Entry control surface to have Re-Entry Manoeuvre.

### BrahMoS a supersonic cruise missile

BrahMoS is a universal long range supersonic cruise missile system that can be launched from land, sea and air. BRAHMOS has been jointly developed by DRDO, India, and NPOM-Russia.



## MAIN FEATURES OF BrahMoS

**BrahMoS is world's fastest anti-ship cruise missile currently in operation.**

The system has been designed as Anti-Ship and Land-Attack roles. BrahMoS is deployed with the armed forces.

The missile has supersonic speed all through the flight, leading to shorter flight time, consequently ensuring lower dispersion of targets, quicker engagement time and non-interception by any known weapon system in the world. It operates on 'Fire and Forget Principle', adopting varieties of flights on its way to the target. Its destructive power is enhanced due to large kinetic energy on impact.

### Main Battle Tank "Arjun"

MBT Arjun is a Made in India and Made for India, family of tanks developed by DRDO to provide India with an MBT as an armoured fighting vehicle.

MBT Arjun offers the troops a State-of-the-art tank with superior firepower, high mobility and excellent protection. Due to its excellent performance at the highly challenging operational conditions in harsh desert environment, MBT Arjun has been named as a “Desert Ferrari” by tank experts. The primary variant Arjun Mk-1 entered service long back and now the latest MBT Arjun Mk-1A is set to enter the armed forces.

MBT Arjun has supremacy over the opponents in tank-to-tank battle scenario in Indian subcontinent terrains since this is extensively tested in Indian terrains and desert condition.

## Electronic Warfare Systems

DRDO has developed multiple EW systems for Indian Armed Forces. EW is an important expertise which has made country self-sufficient in the this critical component of modern warfare. Under Nowav EW programme “Samudrika”, DRDO has developed seven Electronic Warfare (EW) systems, which includes three ship-borne systems (Shakti, Nayan & Tushar) and four air-borne systems (Sarvadhari, Sarang, Sarakshi & Nikash).

Indian Navy is in the process of inducting Shakti and Nayan Systems. The 1st Shakti production system was handed over by Hon’ble Prime Minister to the Chief of Naval Staff on 19 November, 2021 during ‘Rashtra Raksha Samarpan Parv’. It has been installed on an Indian Naval ship. In addition, many other EW systems are being developed by DRDO for various scenarios and applications.

## Modular Bridges

DRDO has developed many bridges of different class to overcome different terrains and to aid the Indian soldiers during war and peace. One of the bridges developed by DRDO is mechanically launched single-span 46m MLC-70 modular bridge with variable length from 14m to 46m. The bridge superstructure, launching nose and bank seat beams were tested and all user evaluation trials were completed. Acceptance of Necessity (AoN) has been approved by The Defence Acquisition Council (DAC). The system was handed over by Hon’ble RM to the Armed Forces in December 2021, during ‘Defence Iconic week’ as part of Azadi ka Amrut Mahotsav.



## Short Span Bridging System-10m

The vehicle-mounted, multi-span, mechanically launched mobile bridging system is designed for speedy deployment and retrieval under tactical conditions. The 10m bridging system consists of two foldable bridge segments, a launching system and pier system mounted onto re-engineered 8x8 chassis. The system is capable of negotiation by all in-service vehicles including MBT Arjun. It is also compatible with Sarvatra bridging system to negotiate intermittent span ranging from 10m to 75m in the step of 5m as a multi-span bridge. The launching operation is carried out manually or with an electrical system.

## Torpedo

DRDO has developed many torpedoes like Varunastra & TAL. The new variant under stages of development is Advanced Lightweight Torpedo (ALWT), which is an anti-submarine torpedo.

Capable of being launched from helicopter and ship, ALWT has dual speed capability and endurance.



## Pinaka Mk-I (Enhanced Range) Rocket System

Flight stability and range performance of the enhanced range version of the rocket system were proven in flight trials conducted during the year. Rockets were realized through industry partner for assessing accuracy & consistency of rocket.







# ROAD TRANSPORT AND HIGHWAYS

MORTH, GOVERNMENT OF INDIA

# Combating road fatalities with Integrated Road Accident Database

Building credible databases and establishing a uniform accident data collection mechanism in our country.

**R**oad accidents in India claim the lives of more than 1 lakh people annually. Most of them are young and this, thereby, robs the country of productive individuals who could have contributed to the growth of the nation. While India has one percent of the global vehicle population it has six percent of global road traffic accidents. It was imperative to come up with a data based solution to address this human loss, and for that, the first step was authentic data collection.

Integrated Road Accident Database (iRAD), an initiative of the Ministry of Road Transport and Highways (MoRTH), Government of



India, funded by World Bank and supported by Indian Institute of Technology (IIT), Madras and National Informatics Centre Services Incorporated (NICS) aims at building credible databases and for establishing a uniform accident data collection mechanism for India. The purpose of iRAD project is to provide such a mechanism to collect and analyse road accident data from all over the country to understand the causal factors of the accident and formulate new interventions and policies to facilitate reduction in the number of road accidents by enhancing road safety measures in India.

## ABOUT THE INNOVATION

The iRAD application is developed in both Mobile and Web platforms with necessary work flow processes, covering the nodal department viz. Police, Transport, Highways and Health. Provision is given to the police departments to enter basic accident details like date and time, location of the accident, details of vehicles, drivers, passengers and pedestrians. The iRAD project is live in 25 States/UTs.

## iRAD: WEB SERVICES

To fetch vehicle details and drivers licence, iRAD System is integrated with VAHAN AND SARATHI system. Furthermore, it will also be connected with Crime and Criminal Tracking Network & System (CCTNS) Application to pass the data for First Information Report (FIR) generation in association with National Health Authority (NHA), National Health Mission (NHM) and ambulance system for patient details.



Subsequently, in order to facilitate the victims for their timely claims and compensations and to reduce the pendency of the cases in the Motor Accident Claims Tribunals (MACTs), iRAD is further extended to provide necessary support to manage the entire process as **e-Detailed Accident Report (e-DAR)** at the instance of Hon'ble Supreme Court of India .

## SALIENT FEATURES

Available in Mobile (Android & iOS) and Web Platform.

Workflow Login Credential based access.

Local Language Interface and enabling the respective State for suitable translations.

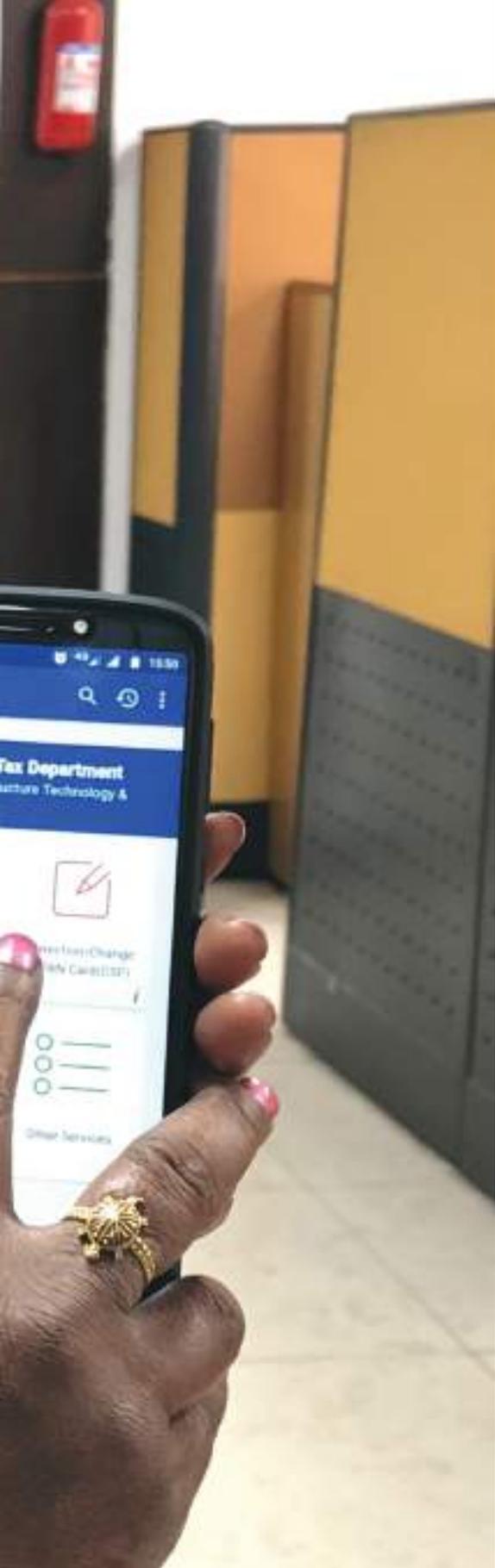
Easy Data Entry – Drop-down selection using Check box and Radio Button.

Capturing of GPS Location of accident site with base map reference.

Customized look and feel for the respective States/Departments.

Highly scalable Modular architecture and Open Source Relational Database Management System (RDBMS) for storing Data.





# MYGOV

# CORONA HELPDESK

GOVERNMENT OF INDIA

# A Helpdesk for everyone in need

**W**hen the pandemic hit India, every minute was crucial for help to reach the needy. The crisis brought with it many problems. Physically, it weakened a person and more than that people became mentally tired and worried. Myths and misinformation kept creeping in through social media and mobile feeds and it was a state of urgency. During this crisis, what was needed the most was genuine and credible guidance.

## MYGOV CORONA HELPDESK

MyGov created the Corona chatbot in just six days to disseminate correct information related to COVID-19, including symptoms, facts, Government notifications, travel advisories & guidelines, etc. WhatsApp is the most popular app for communication in India, so, MyGov decided to develop the MyGov Corona Helpdesk using WhatsApp.



## THE PROCESS

- MyGov quickly collaborated with various stakeholders and multiple Ministries (Health & Family Welfare, Ayush, Home Affairs, External Affairs, etc.) to source and disseminate correct information to the public.
- To ensure the widespread reach of the MyGov Corona Helpdesk App, while it was initially launched in English, very soon Hindi and other regional languages were added.
- It is the first Artificial Intelligence enabled COVID Chatbot in the country which was updated twice daily & real-time through Application Programming Interfaces (APIs).
- It is integrated with 14 State Bots and the Cowin Platform through Application Programming Interface (APIs) and it allows citizens to find vaccination slots, book vaccination appointments and download vaccination certificates.

## HOW IT WORKED

With a simple interface and user friendly approach, the app provides the users with a wide range of information like COVID vaccination, Government updates, professional advice on improving immunity through Ayush and Yoga, Corona symptoms and where to get help.

The chatbot was trained to intelligently accommodate queries other than the standard menu and even respond appropriately. So, to the message “is Hindi available”, the chatbot recognizes ‘Hindi’ and automatically changes the language and provides the menu in Hindi to continue the conversation.

The AI engine is being continuously trained to improve responses to

## FINAL OUTCOMES

**39 Crore** user messages since inception with almost **30% repeat users**.

**6.62 Crore** users in relation to the **Cowin Facilities**

**32+ lakh Vaccine** certificates downloaded by citizens

MyGov Helpdesk also had over **9.41 Lakhs** of users in relation to the **DigiLocker services**.

Almost **4.3 Crore** users checked for **Latest updates & Alerts**.

questions. Every question that it does not understand is looked into and mapped to the database of answers, so that the chatbot can give more relevant and appropriate responses. Being API-driven, changes and updates to it happen dynamically.

## GOING FORWARD

Integrating with the popular DigiLocker APIs, MyGov has scaled up the services in the helpdesk allowing users to access their documents like Aadhaar, Driving License, PAN Card, Vehicle Registration Certificates etc., using WhatsApp. Replicated across bots active on popular social media channels, the aim is to scale this MyGov Helpdesk further to add commonly sought citizen-centric services.







**iDEX**  
DEFENCE  
INNOVATION  
ORGANISATION

INNOVATIONS FOR DEFENCE EXCELLENCE

# Harnessing civilian talents for self-reliance in defence production



DEX has created an ecosystem to foster innovation and technology development in defence and aerospace by engaging industries including MSMEs, start-ups, individual innovators, R&D institutes and academia.

India as a nation is steadfastly moving towards achieving self-reliance in the field of defence and defence production. The concerted aim is to minimize dependence on imports as India today is the world's largest defence equipment importer and is expected to spend around USD 220 Billion in the coming decade to modernize its armed forces.

Innovation for Defence Excellence (iDEX) is a specialised team funded and managed by a Defence Innovation Organisation (DIO) and formed as a 'not for profit' company as per Section 8 of the Companies Act 2013. iDEX with its functional autonomy has been setting up and managing iDEX network in form of Independent Defence Innovation Hubs. It has organised various challenges and hackathons to shortlist potential technologies for defence and aerospace use. It facilitates scale-up, indigenization and integration in manufacturing facilities for successfully piloted technologies. It has capacity to evaluate newer technologies and products. And it is also an interface with the military top brass.



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## SUCCESS STORIES



**Pankaj** Raut

**Dimension NXG Pvt. Ltd.** (Brand Name: AjnaLens)

**Innovator:** Pankaj Raut, Abhishek Tomar & Abhijit Patil

**Technology Used:** Augmented Reality Technology in Situation awareness

**Innovation:** See-through armour system for armoured vehicles.



**Saif Automations Services LLP**

**Innovator:** Ahmed Shaikh Abdeally Calcuttawala, Taher Calcuttawala and Aliasgar Calcuttawala

**Technology Used:** Unmanned Systems Technology, Long Range Radio Frequency Systems, Computational Hydrodynamics and Hull design Methodology

**Innovation:** Battery-operated self-propelled lifebuoy to remotely save lives in water.



**Aliasgar** Calcuttawala



## SUCCESS STORIES



Harshad Dave

**Gurutvaa Systems Pvt. Ltd.**

**Innovator:** Harshad Dave

**Technology Used:** VCO/Synthesizer

**Innovation:** Counter drone system



**Lekha Wireless Solutions Pvt. Ltd.**

**Innovator:** Ramu T Srinivasaiah and Amarnadha Reddy

**Technology Used:** 3GPP based 4G technology

**Innovation:** Integrated eNodeB product suitable for macro and micro cell deployments.



Ramu T Srinivasaiah







**IIT**

INDIAN INSTITUTE  
OF TECHNOLOGY

MANDI

# Technology Predicting Natural Disasters

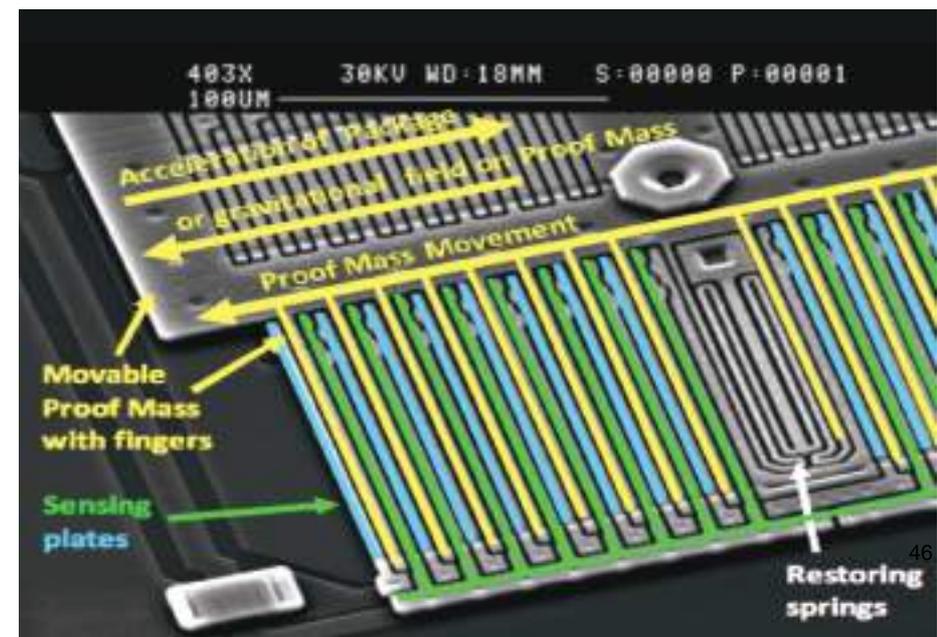
Indigenous low cost landslide monitoring and early warning system has come as a boon for travellers and inhabitants of mountainous terrain.

Every year, landslides cause major infrastructure damages and deaths. As per the data provided by National Institute for Disaster Management (NIDM), more than 5,000 people are buried alive under landslides and economic losses of more than USD 4 billion is reported every year globally due to it. In India, landslides cause more than 1,000 deaths every year.

The main objective of this innovation by Indian Institute of Technology (IIT), Mandi was to develop an indigenous, low-cost, and real-time landslide monitoring and warning system which could overcome this annual problem.

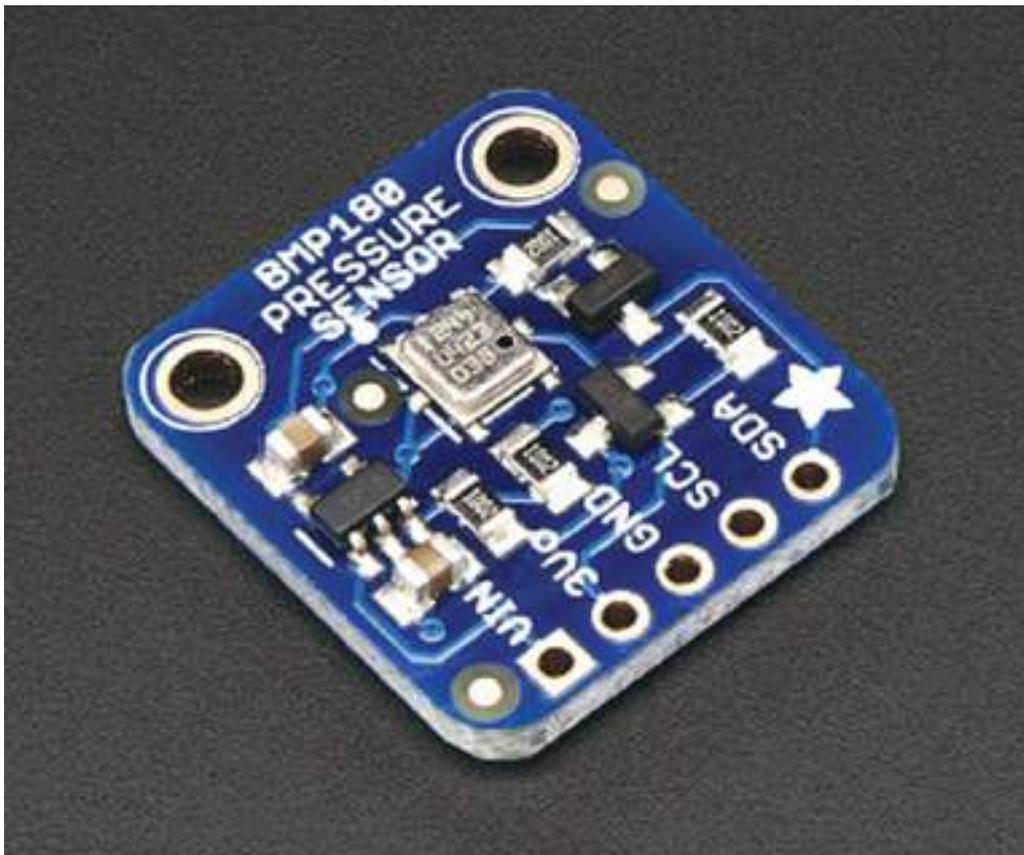
Not all the landslides can be treated or mitigated. However, major disasters can be addressed by landslide monitoring and early

warning. The low-cost landslide monitoring and early warning system developed by IIT Mandi senses various soil parameters and weather properties at a landslide prone site.



“ A major tragedy was averted at Kutropi along the Mandi – Jogindar Nagar National Highway due to rains and flash flood by this low-cost landslide monitoring system. The system issued a set of warnings minutes before the disaster at Kotropi. The local disaster response and security team stopped traffic before the flash flood and avoided a big disaster.”

This technology first captures data of historical rainfall records, soil properties and geological information of the selected site. Then it is analysed to understand the susceptibility of landslides in the area.



## SENSORS USED IN THE SYSTEM

- **Accelerometer:** Sensitive to both linear acceleration and the local gravitational field.
- **Capacitive Soil Moisture Sensor:** Measures the amount of moisture in the soil with the help of the volumetric soil moisture sensor.
- **Weather sensors:** Temperature, humidity, atmospheric pressure and light intensity sensors are used for measuring the weather parameters.
- **Rain Gauge:** Measure rainfall duration keeps a track of intensity.

In addition to these sensors, a Global System for Mobile or Long Range Radio (LoRa) service is used for uploading the sensed data at regular time intervals to the cloud. This data is used to generate local and global alerts. Also, a local storage device is installed for keeping data stored locally.



Airth

WORLD'S  
ANTI-MICRO

VSL

of Bombay  
SAVE ₹ 10

Airth  
Antimicrobial  
Air Purifier

Protects you like never before

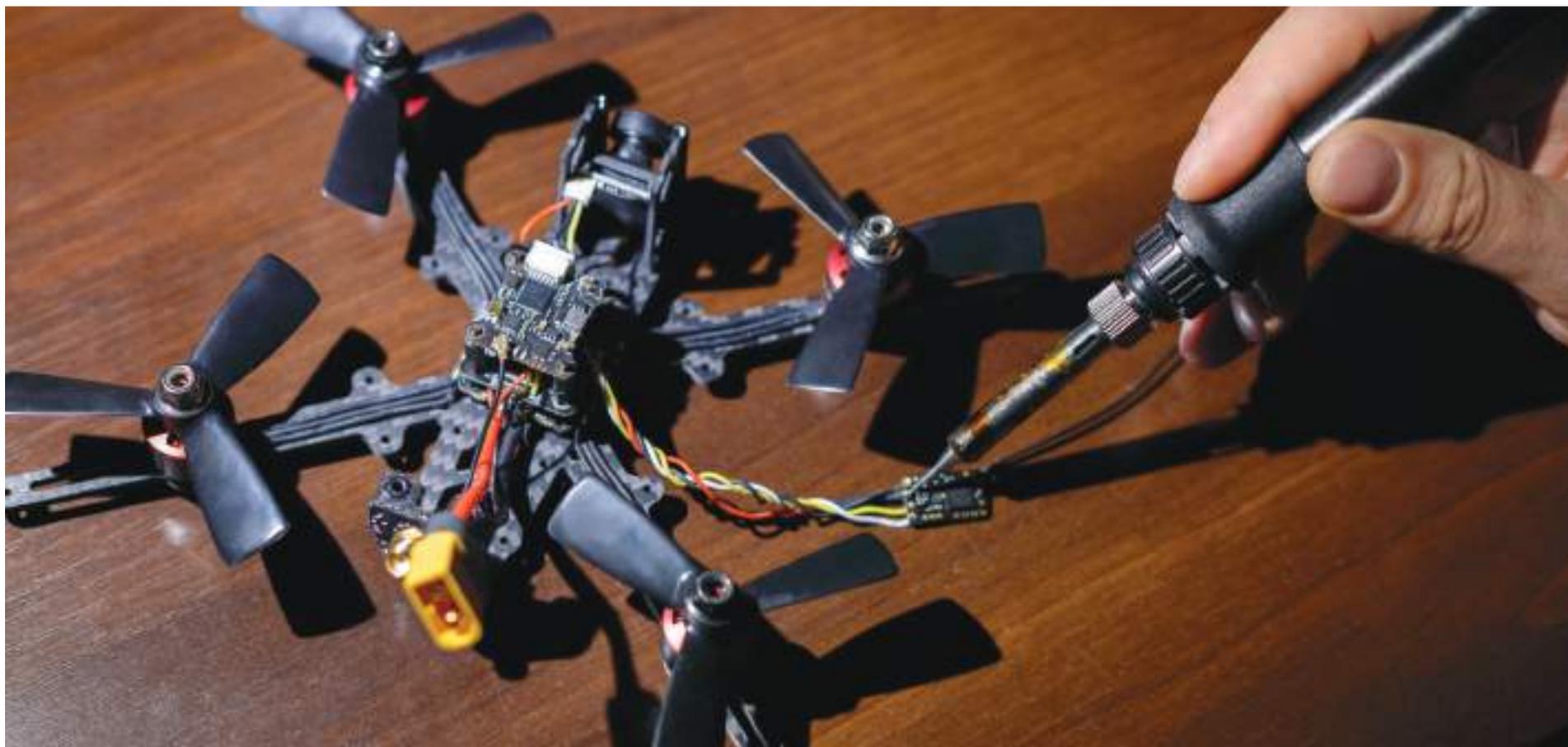




# MeitY

## MINISTRY OF ELECTRONICS & IT

GOVERNMENT OF INDIA



## Reinventing the information age

Creating a generation of entrepreneurs to propel India on a growth trajectory

The Government of India has created a one-stop-solution digital platform to serve startup needs efficiently through its nodal Ministry. The platform is scalable, comprehensive, modular, inclusive, and will create an impact by engaging and empowering the startup community. More than 3,000 start-ups have benefitted till now.

India is fast becoming the startup capital of the world. The Indian youth is no longer satisfied with becoming a job seeker and is fast-moving towards becoming job givers. Fired by ideas and support of technology infrastructure, it is looking for just a little support from the Government to achieve their dreams.

**MeitY Startup Hub (MSH)** is a high-impact initiative of the Ministry of Electronics & Information Technology (MeitY) to strengthen the startup ecosystem by integrating the MeitY resources, schemes and societies, on a single platform and providing unified single-window access and implementation for all startups initiatives and schemes of MeitY.



## KEY OBJECTIVES

Creating a one-stop scalable, comprehensive, modular, inclusive, solution for startups.

Single window for implementation and coordination of all MeitY schemes and programs related to startups, innovation, investment, and entrepreneurship.

Unlocking value of assets through effective monitoring, measuring, reporting, and timely performance intervention.

Access to relevant authorities for necessary policy reforms and resolutions to enable ease of doing business for startups.

Modernizing approach to disburse financial support by possibly taking equity in exchange for funds.

Enabling International growth of Indian startups by creating linkages with global startup ecosystems and launching startup exchange programs to provide access to foreign markets and capital.

Aggregating and creating a community of deep-tech freelance experts.

Structured mentorship program.

Enhancing startup's capacity and skill development via events, knowledge series, training, workshops, and conferences.

## HOW IT WAS ACHIEVED.

A programmatic approach was implemented using the 5P framework of Policy, People, Programs, Process, and Platform.

### Policy:

**Goal-** To address start-ups needs with speed.

**Action-** Structuring of MeitY Startup Hub (MSH) as an independent Business Division to give autonomy.

### People:

**Goal-** Building a team of professionals with relevant knowledge, expertise and passion for startups.

**Action-** Recruited a professional CEO with international and domestic experience in investments and built a team of professionals from various parts of India with complementary skills and expertise

### Programs:

**Goal-** To increase the impact of the scheme on start-ups.

**Action-** Created metric-based and outcome-driven schemes such as Startup Accelerator of MeitY for Product Innovation, Development and Growth (SAMRIDH) to build the accelerator ecosystem and International Market Access Program.

### Process:

**Goal-** To bring efficiency and productivity to the process to reduce the time for program and scheme executions.

**Action-** Templated and standardized the process and created execution alignment.

### Platform:

**Goal-** To increase accessibility and availability of MeitY schemes, programs and assets for start-ups pan-India.

**Action-** The process of creating a national start-up platform that will be an aggregator of resources and enabler of access by allowing start-ups to book resources, seats and equipment online directly will increase the Return on Investment (ROI) on scheme expenditure.



## FINAL OUTCOMES

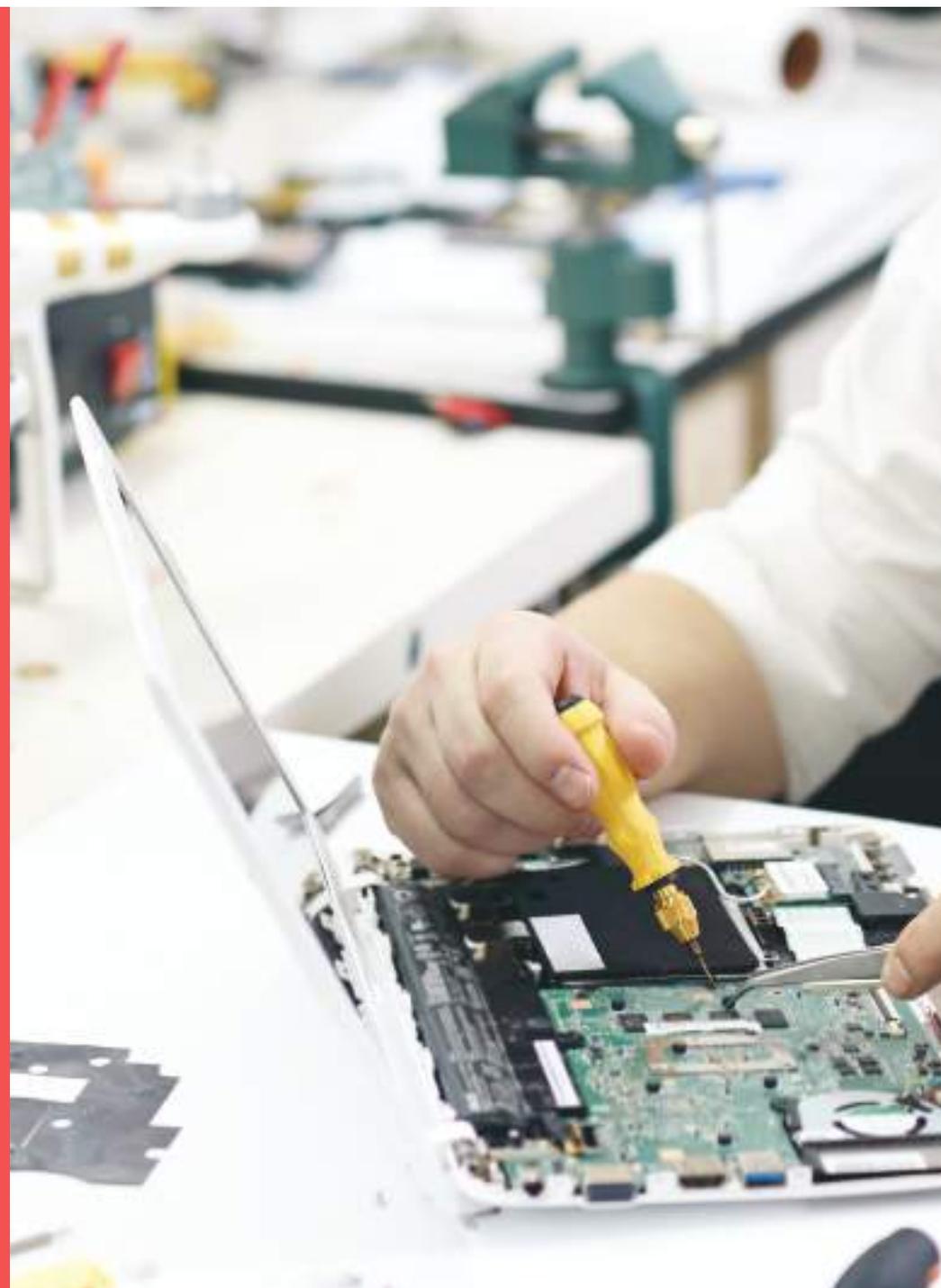
51 Technology Incubation and Development of Entrepreneurs (TIDE) centres, 26+ Centres of Excellence (COEs)

Multiple bodies/societies of MeitY, accelerator programs, and theme-based incubators integrated. 84+ challenges/Hackathons

Multiple International startup exchange/acceleration programs

50+ Corporate and Institutional partners providing funding, technical mentoring, pilot opportunities and discounted products

More than 3,000 start-ups have benefitted from the various programs and schemes of MeitY





- Will enable digital/online/on-air access to education
- Will benefit more than 25 Crore school going children
- DIKSHA : Digital Infrastructure for Knowledge Sharing
- SWAYAM online courses in MOOCS format for school and higher education
- One earmarked TV channel per class from 1 to 12
- Extensive use of Radio, Community radio and CBSE Podcast - Shiksha Vani
- Special e-content for visually and hearing impaired

di



**PM eVIDYA**

CIET



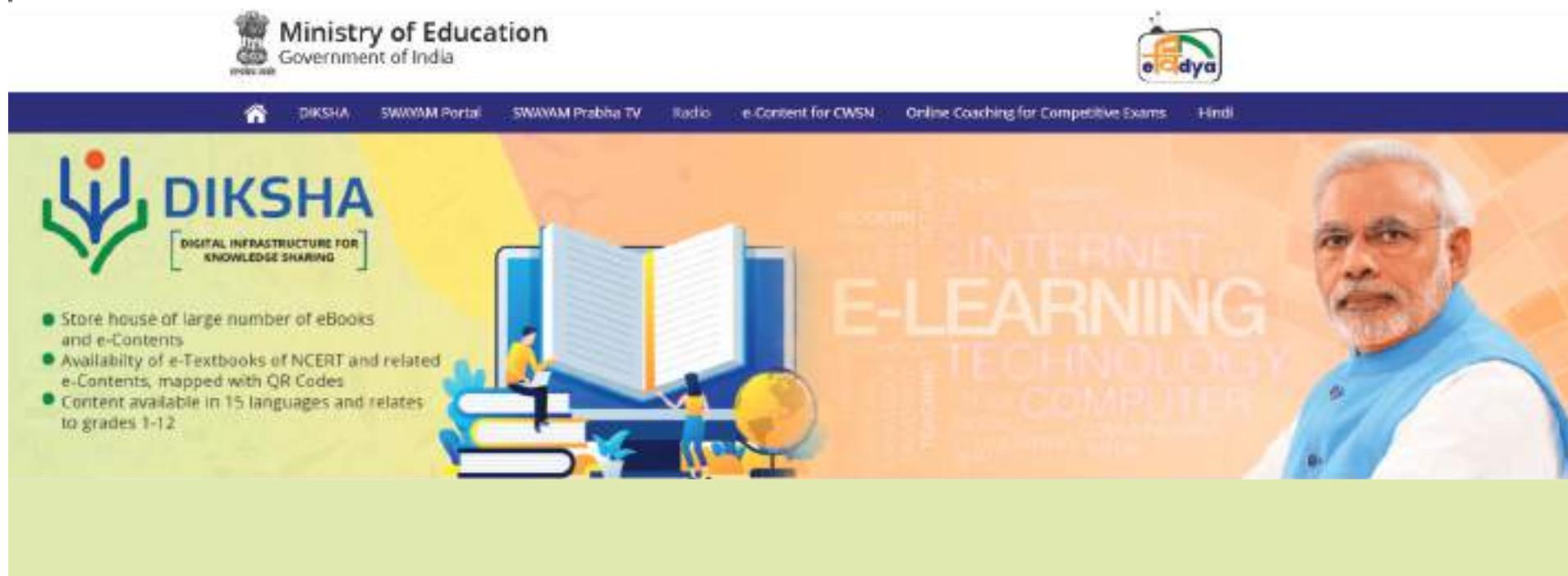
## **When the world came to a halt, education in India never stopped**

Schools in India are today equipped with various type of video programmes from drama, demonstration of Science and Maths activities, Animated stories and Documentaries. The CIET team has even created the Indian Sign Language videos.



**P**andemic resulted in schools being shut all across India. Globally, over 1.2 billion children were out of the classroom. Education was all set to change and the Indian education system rose up to the occasion to deliver innovative solutions. Central Institute for Educational Technology (CIET) set in motion a revolution in the way learning and teaching was approached in this country.

It has created and distributed content to schools and learners with a wide range of possibilities. From Augmented Reality (AR) to interactive videos, the education tech laboratory of the country CIET has responded to a crisis innovatively and constructively.



## MULTIMEDIA AND MULTILINGUAL

PM eVIDYA by CIET is a unique and innovative venture to facilitate multi-mode (Internet, TV, Radio, Podcasts, etc.) access to learning resources of various types for students and teachers. The initiative encompasses and integrates various programmes and initiatives such as DIKSHA (One Nation-One Digital Platform), MOOCs on SWAYAM, use of Community Radio and Podcast, development of eContents for DIVYANG in addition to 12 DTH Channels under One Class-One Channel (Free to Air DTH Channels for Education). These 12 channels were launched on 1<sup>st</sup> September, 2020, and curriculum-based content for each class of school education

(classes 1-12) are done on 24x7 basis. Till date about 3,395 pieces of curriculum-based radio programmes are available on various platforms and many more are in the process of production.

## CHALLENGES

Time bound scaling and dissemination of the content was a herculean task.

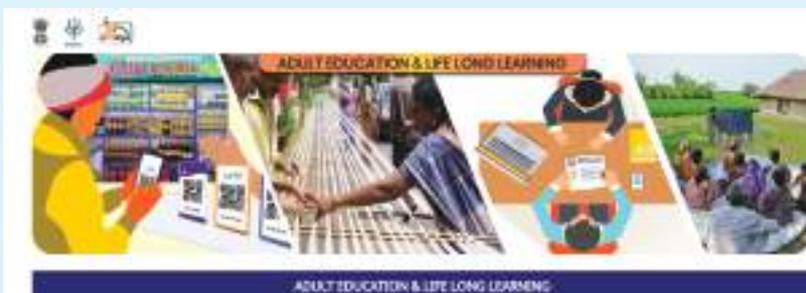
In a pluralistic country like India with such huge diversity in language, geographical locations, culture and socio-economic conditions, last mile delivery was a challenge.

## SCALING UP OF THE SUCCESS

- With the historic success of 12 PM eVIDYA TV Channels, this year's Union Budget has announced launch of 200 PM eVidya DTH TV channels.
- Decision to create video programmes in regional languages as per state curriculum.

## TECH BASED INNOVATIONS

- Integration of QR Code feature for PM eVidya content.
- NCERT textbooks embedded with QR codes for accessing a variety of e-resources such as audio, video, multimedia, texts.
- ePathshala App for curriculum-based video programme.
- Comprehensive DIKSHA portal for all content access.







**DEFENCE**

EXIM

DEPARTMENT OF DEFENCE PRODUCTION

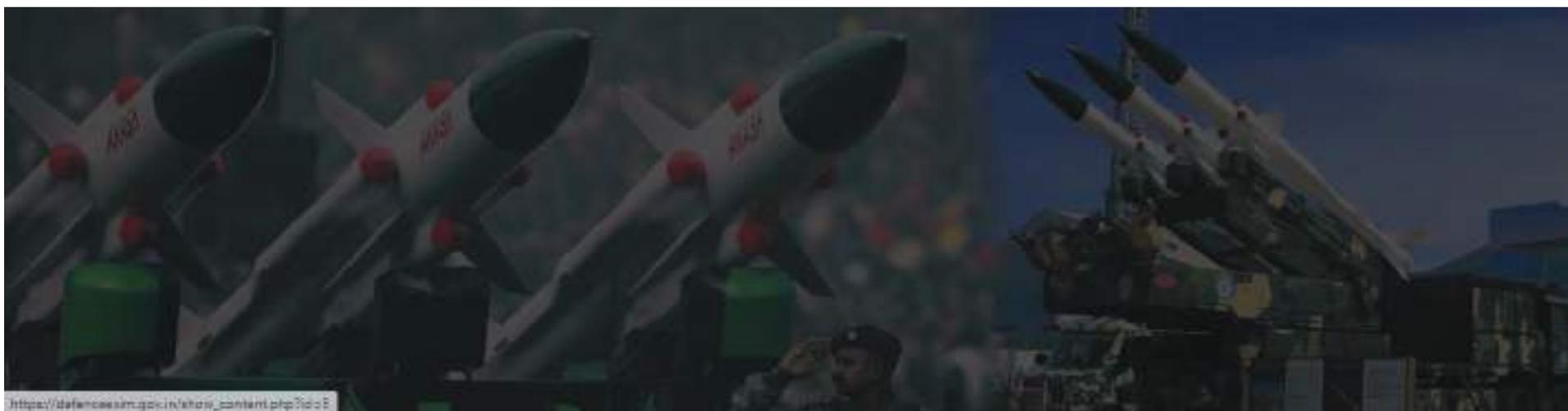
# Making India a defence export hub for the world

Quick and transparent online defence export authorisation regime for innovators and entrepreneurs as a boost to the economy

**G**one are the days of red tapism and undue delays for entrepreneurs in India. Defence exporters can file applications from any location instantly which is notified to the regulator for quick action. Now there is also a sense of transparency as exporters can now also see the status of their application on the portal and see it move. All the processing of the application is done through the portal and once approved, a digitally signed export authorization is issued which can be accessed by the exporter instantly from anywhere. Grant of authorisations has now become paperless.



Defence Exim is first of its kind web-based portal for issue of export authorization with the click of a button from any location across the globe. The 'defenceexim' portal was launched in October 2018.



## THE RESULTS SPEAK VOLUMES

The number of authorisations issued increased from 288 in 2016-17 to 1,104 in 2021-22.

The export value based on the authorisations issued by the government increased from 1,522 crores in 2016-17 to almost 12,000 crores in 2020-21 despite the pandemic situation and other limitations.

The average time taken to grant export authorisation improved from 86 days to 35 days in case of systems and sub systems. While the time decreased from 24 days to 13 days in case of parts and components.

No. of exporters increased from 31 in 2017-18 to 76 in 2021 besides the Public Sector Units.

## FINAL OUTCOMES

Each exporter is now assured that the export authorization requested by them will be issued by the concerned department within days and they can in turn assure their business partners abroad of timely delivery of goods.

Due to digital authorisations, elimination of the possibility of fake certificates being submitted by anyone.

Customs or any other agency can verify the authenticity of the authorisation from EAC tab on the portal from anywhere.







# DRONES TO THE RESCUE

INDIAN COUNCIL OF MEDICAL RESEARCH

# Overcoming Himalayan challenge with drone technology

When rocky mountain ranges and remote islands became a daunting task for COVID warriors, this initiative employed pilotless aviation tools to make things feasible.

**E**nsuring access and equity in health services requires overcoming of many factors including that of physical barriers. This becomes even more challenging when the country faces a once-in-a-generation pandemic. Everyone knew that leaving gaps in vaccination can make the difference between beating the disease or succumbing to it.

When India initiated one of the biggest-ever immunisation tasks of providing vaccines to over a billion people to arrest and control the situation, the officials were aware of the obstacles ahead and a vital innovation came in handy.

India made history, as it has now become the first Southeast Asian country to transport vaccines from the mainland to an island using drones.



## HELP FROM THE SKY

ICMR piloted India's first drone delivery of vaccines in remote areas of North-East India in October 2021. The project called 'I-Drone' which stands for 'ICMR's Drone Response and Outreach for Northeast' utilised drones to reduce the time to transport life-saving vaccines and medical supplies significantly. Drones were capable of circumventing many of the structural challenges obstructing universal immunization, offering quick and cost-effective mode of transport. It ensured last-mile connectivity and opening up of secluded and isolated areas to critical healthcare.

### CHALLENGES FACED

The project depended upon complicated technology and elaborate healthcare protocols. This added to the challenge of the cold storage systems, transportation, weather conditions, and community acceptance.

Overcoming the challenges was made possible with public participation and working with partners like the Ministry of Civil Aviation, Directorate General of Civil Aviation, Airport Authority of India, State Health Authorities, local security forces, healthcare workers, and many community leaders.

"The pace of the drone machine astonished not just us but also the technical officials at the site. The drone lands with blue box of the vaccines. The nurses and the healthcare workers are ready. They walk to the nearby healthcare centre located 150 metres away from the landing site, and within another 20 minutes, post safety and technical checks, a shot in the arm has been given to the first person." said Romen, local community leader and partner in the vaccination drive.







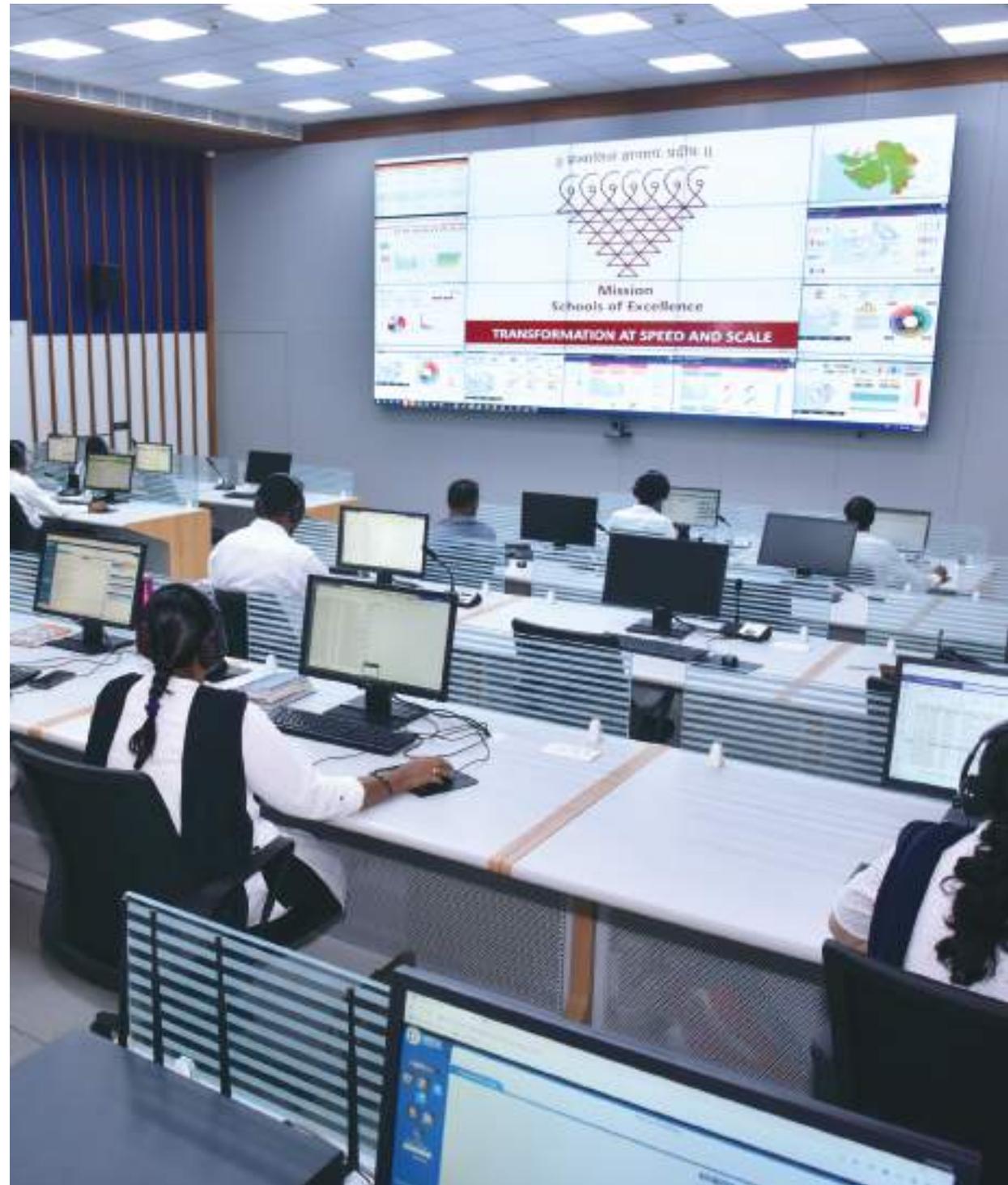
# TECHNOLOGY-DRIVEN TRANSFORMATION OF SCHOOL EDUCATION

GUJARAT

**A state-of-the-art platform to coordinate and control teaching activities in Gujarat aiming at teacher support and educational growth**

**G**ujarat has more than 54,000 schools, 4.5 Lakh Teachers and 1.15 Crore students in its school education system. Additionally, 2.5 Lakh Government employees work in the school education department in the State.

There was an urgent need to establish appropriate monitoring and support mechanism for these employees. There was also a need to create support mechanism and a system to support students to enhance their learning outcomes. To achieve these two important objectives, the education department set up the country's first Vidya Samiksha Kendra (VSK) in the education sector in the year 2019.



## THE INITIATIVE

This world-class state-of-the-art VSK is equipped with cutting-edge technology and constructed on 20,000 square meters of land. Two huge video walls have been established at VSK for data driven online real time continuous monitoring. 50 specially selected and trained teachers are providing continuous guidance through live data sharing and communication with Block Resource Centres (BRCs), Cluster Resource Centres (CRCs), District and Taluka officials, Head Teachers of Schools. The VSK collected and analysed more than 500 crore different types of data sets from initiatives like Periodic Assessment Test (PAT), Session end and Annual Summative Examinations, Daily Online Attendance of Students and Teachers, Data of School Accreditation etc., annually.

"Systems like VSK knows how technology helps students learn better, teachers teach better and help school systems becoming more effective. It focuses resources on achieving goals and to make a real difference."

**Mr. Andreas Schleicher**, Director - OECD, Education & Skills

"Transformational journey that Gujarat is undergoing on a critical path which is taking the State from schooling to learning. VSK is extremely interesting and a model for many countries on how to use data to drive the systems."

**Mr. Jaime Saavedra**, Global Director, Education - World Bank

## FINAL OUTCOME

Jump in enrolment to improved attendance.

Achieving grade appropriate learning outcomes for every student in the State.

Improving governance through monitoring.

Using big data, artificial intelligence and machine Learning to analyse large set of data generated from across the State.

Real time dashboards and reports to share insights, triggers and action points at all levels.

Using data to develop the blueprint for large scale transformation projects that result in maximum return and maximum impact on investment.





M.M.V.

EXIDE

I.T.I.



# **BUILDING A ROBUST ADMISSION SYSTEM**

MAHARASHTRA

**A sustainable and reliable online platform to make procedures transparent, fast and scalable**

**W**ith increased stress on STEM education, youngsters across the Country are queuing up in technical institutes for innovative learning and certificates for quality livelihood opportunities. Maharashtra is a State gifted with a wide network of technical institutes. Admissions to all Government and private ITIs are done through a centralized online admission process. The procedures have been refined year on year to provide transparent and user friendly system.



**“A model which empowers students, makes system transparent and error proof”**

MAHA ITI is the culmination of the innovative efforts of multiple stakeholders in Maharashtra to build one of the most robust admission systems in the Country. The model has been replicated across various departments in the State and Country. This system facilitates admission to any ITIs across State through a single application process and allotment on basis of merit strictly adhering to reservation and other policies.

Maharashtra was the first State in the Country to introduce online admission for Government ITIs in the 2013 academic year. The admission rules and process were then revised in 2015, in line with online admission process.

Maharashtra introduced a centralized online admission process for admission through the mobile Application “MahalTI” for ITI admission in the 2018 admission session.

## **EVOLVING A TECHNOLOGY PLATFORM FOR ADVANCED SYNERGY IN CRISIS**

During the 2020, admission session, due to the COVID 19 situation, the centralized online system was integrated with the State Staff Selection Commission Board which facilitated online verification of entry qualification.

The online payment gateway facility was integrated for easy contact less payment of application fees.



A woman with dark hair, wearing a white shirt, is seen from the back, looking at a large white relief sculpture on a wall. The sculpture depicts various pieces of machinery, including a tractor, a bicycle, and a large industrial machine. The background wall is yellowish and shows signs of wear. A blue semi-transparent box is overlaid on the left side of the image, containing text.

## EVOLVING A TECHNOLOGY PLATFORM FOR ADVANCED SYNERGY IN CRISIS

Directorate of Vocational Education & Training, Maharashtra (DVET) was established in 1984 and has been working on skill development, entrepreneurship, employment and innovation in Maharashtra. DVET is imparting vocational training through 417 Government Industrial Training Institutes and 538 Private Industrial Training Institutes and presently having training capacity of 1.8 lakh students. Year long activities are executed in the State to connect the schools with the ITIs through "School Connect Program."







# FARM FRESH 'TARKAARI' TO CONSUMERS

Bihar

Bihar State Vegetable Processing and Marketing Scheme has created a virtuous cycle for vegetable producers and consumers through a three tier cooperative structure with affordable vegetables and reliable supply to people.

The joy of eating dishes made from fresh vegetables is unparalleled. Bihar is one of the largest producer of vegetables in the country but even with bountiful produce the farmers often don't get the best returns on their labour and investment. This is due to low volume, poor supply chain infrastructure, and poor access to market and information.

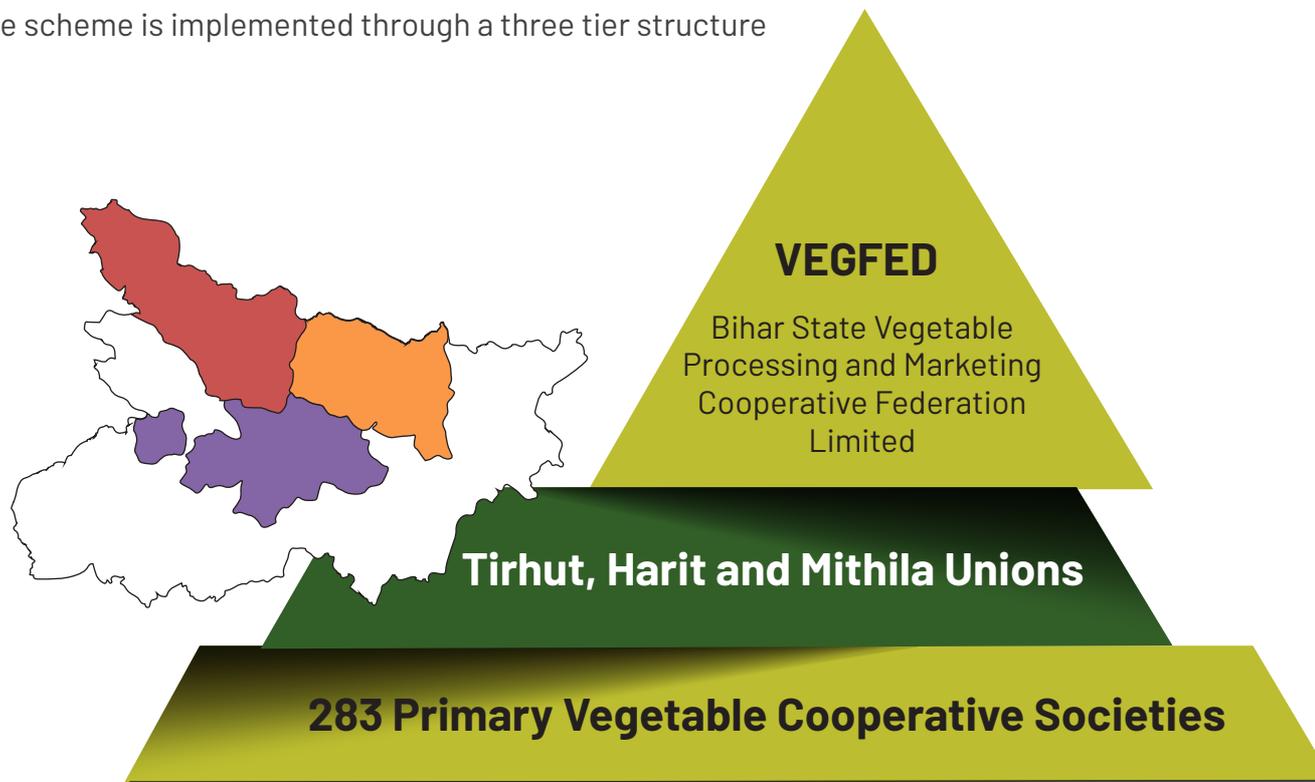
To address their needs and also to ensure affordable vegetables to the citizens Cooperative Department, Government of Bihar has launched the **Bihar State Vegetable Processing and Marketing Scheme**. Under the brand 'tarkaari' and the mission, '*Har thali mein Bihari tarkaari*' it aims to provide farm fresh vegetables to the consumers round the year at reasonable and affordable price. This scheme aims at organizing Bihar's state vegetable producers into three tier cooperative structures for ensuring remunerative prices to farmers and standard quality vegetable at reasonable price to consumers .





## THE STRUCTURE

The scheme is implemented through a three tier structure



## FINAL OUTCOME

A farmer's vegetable supply chain network in and outside Bihar

Minimize the post-harvest losses by enhancing the product shelf life

Value addition by processing, packaging and branding the product

Bridge demand and supply gap of fresh & quality vegetables

Increase in vegetable production and productivity in the state

Provide training and extension services to the vegetable growers

Generate employment opportunities and enhance the income of vegetable growers

Establishing retail outlets for retailing of business

Creation of a central vegetable processing hub at Union level

Creation of collection centres and permanent marketing infrastructure at PVCS level



## ROAD AHEAD

Expansion to all 38 districts in Bihar

Scale up to benefit more than 2 lakh vegetable growers

To reach international markets

Enhancing the market linkage and promoting entrepreneurship and employment







# **SUSTAINABLE FARMING IN HARMONY WITH NATURE**

HIMACHAL PRADESH

## Prakritik Kheti Khushal Kisan Yojana (PK3Y)

### A big step towards natural farming in Himachal Pradesh

Existing cultivation systems in the hill state of Himachal Pradesh have been severely impacted over the last 3 decades by the green revolution based process techniques. Expensive use of chemical inputs led to a severe impact on the producers' livelihood besides increasing cost of cultivation and affecting the income of 90% of the rural population. Therefore, a shift in on-farm programs and production process towards a low-input and high output farming system is the only Sustainable Agricultural alternative.

Farmers like Sushma Chauhan and Ajay Rattan have taken to it wholeheartedly changing their farming methods and increasing the productivity and income. While Sushma was a graduate with an interest in horticulture and Ajay an engineer, both found the answer to their search for sustainable agriculture in PK3Y.

Sushma and Ajay are now the self proclaimed ambassadors of the scheme in their village and families.

## THE INITIATIVE

The Himachal Pradesh Government launched the Prakritik Kheti Khushal Kisan Yojana (PK3Y) in 2018 to promote eco-friendly initiatives.

It is based on the use of natural farm inputs like Jeevamrit, Ghanjeevamrit etc. prepared with dung and urine of desi cow and other locally sourced inputs.

The aim is to increase their income in harmony with nature through sensitization, training and handholding of the farmers practicing natural farming.



“I can see the difference in quality of soil and plants in 5 bigha orchard with non chemical natural farming in short period.

## TOTAL OUTCOME

Transforming agriculture from monoculture to diverse crops enhancing nutritional status of the farm.

PK3Y has conducted several scientific studies, which have validated the relevance and viability of the natural farming technique in Himachal Pradesh.

The farmers observed that crops grown with natural farming have better drought resistance and better taste and flavour than chemically grown crops.

The Yojana is now working on the principles of traceability, transparency and true costing for sustainable food systems in the overall interest of farmers' economy and nutritious food.

An innovative self-assessed certification by the farmers, which is easier and transparent, will help the farmers to sell their natural produce in the market with ease.





# **INNOVATION DRIVING NUTRITION AND COMFORT**

GREEN HOUSE, UNION TERRITORY OF LADAKH



A technology for improving food security with efficient Green House to grow crops.

**T**he temperature in Ladakh drops down to  $-30^{\circ}\text{C}$  in winter and long harsh winter months reduces the cropping season to just 4 - 5 months in a year. The Union Territory of Ladakh remains cut-off for six months in a year due to heavy snowfall and closure of the highways connecting with the mainland and the availability of fresh vegetables decreases significantly during the winter months resulting in an unbalanced and nutrient

deficient diet. Studies have established that deficiency of micronutrients is highly prevalent during the winter months due to lack of fresh vegetables and fruits. A phenomenon that is known as 'hidden hunger'.

To address this critical concern of the Ladakhi people, UT Ladakh and Defence Institute of High Altitude Research (DIHAR) undertook an innovative project- Ladakh Greenhouse Project. The project aims at improving food security and promoting livelihood in Ladakh.

## CHALLENGES

The temperature inside the Green House often drops to 6 to 10° C at night in winter months.

Only leafy vegetables can be grown in winter.

The cladding material needs to be removed from the greenhouse structure during summer months due to excessive heat.

Not suitable for heavy snowfall regions.

Need frequent repair and maintenance.



This green house is also a part of Mission Organic Development Initiative (MODI), which aims to make Ladakh an organic region by year 2025. The project aims at establishing about 1,000 number of Ladakh Greenhouses in Leh and Kargil districts between 2021-23 with 75% subsidy by the Agriculture Department, UT of Ladakh.

A single Green House can generate up to Rs 75,000 in a year for the farmer.

“I have earned Rs 1.75 lakh from the crops grown and my income from farming has increased and doubled.” Tashi Tundup, farmer in Thiksay village.

“Women Self-help Group Barba, Village Shey, Leh Ladakh generated an income of approx. Rs.40,000 in just five months by installing Green Houses.”



## FINAL OUTCOMES

Reducing the cost of living index for local population.

Water and Energy Conservation through Sustainable Organic farming.

Women empowerment.

Creating agricultural entrepreneurs.



विकिन्सा सेतु



क्वारेन्टाइन वाई में ड्यूटी क्या करे जगदीश

VINOD JAIN

YouTube



# BRIDGING KNOWLEDGE GAP FOR CORONA WARRIORS

UTTAR PRADESH

### **A revolutionary step in medical training, creating credible knowledge bank for frontline workers**



Lakhs of health workers and para medical staff strived hard day and night to overcome the almost insurmountable pandemic during the last two years. While these corona warriors worked diligently for the nation to be healthy, the vulnerability of these workers was the highest. At these testing times, a small but vital innovative adaptation rendered the much needed capacity building for these angels in uniform.

Chikitsa Setu, an online and contact-less training solution for frontline workers to help keep them safe and secure became a boon for them. Now, there was no need of training handbooks, big auditoriums and large groups to deliver trainings. World class trainers and state-of-the-art instruction manuals were accessible to all health workers at the click of a button.

### **A revolution in training - the one stop solution for all medical knowledge**

The innovation by the Uttar Pradesh Government helped frontline workers, the backbone of public health delivery systems, to avoid instruction meetings and infections.

Health workers in the State were armed with mobile phones with knowledge and precise training on how to deal with the virus and how to protect themselves through Chikitsa Setu.



## CHALLENGING SITUATION

Evolving COVID protocols had made training impossible. There was need to create a medium to deliver authentic and correct information, in simple and easy language to Corona Warriors in real time.

## QUICK AND AUTHENTIC

Short videos were created on various topics ranging from how to properly wear a mask, how to shift a patient from ambulance to hospital and how to clean a COVID ward, etc.

The topics were selected after extensive field surveys of various

districts of Uttar Pradesh, wherein Corona warriors were involved in understanding their needs.

Teaching material was made available by medical experts of King George Medical University, Lucknow.

## OUTCOME

Chikitsa Setu brings e-governance to trainings.

Distribution of Smartphones to Accredited Social Health Activist (ASHA) and Anganwadi workers.

Bridges capacity building gap and provides work satisfaction.





# A HOUSE TO CALL IT HOME BASERA

PUNJAB

Increasing urbanization has also given rise to proliferation of slums in Punjab, both in large industrial as well as small agricultural towns.

Poor are the most vulnerable in society. Urban poor living in slums often miss out basic amenities and services like safe potable water, sanitation and toilets, making lives miserable for them. Having largely been excluded from the statutory planning processes has deepened the inequality. COVID 19 exacerbated the situation.

To address the above, the Punjab Government came up with The Punjab Slum Dwellers (Proprietary Rights) Act (PSD Act) and Chief



Minister's Slum Development Program 'Basera'. It is a collaborative effort of the Government involving, multiple stakeholders and partners such as State Government Departments, Urban Local Bodies, Non-Governmental Organisations and Communities. It addresses these fundamental pretexts of inequities that tie the slum dwellers to poverty, including the lack of tenure security. Through this initiative, it aims to adopt a two-pronged approach to address the vulnerability of 1.4 Million slum dwellers across 166 Urban Local Bodies (ULBs) in 23 Districts.

## OPERATIONAL DETAILS

- At the State level, two committees are set up chaired by the Hon'ble Chief Minister and Chief Secretary, of the State respectively to guide the overall implementation of BASERA and to facilitate inter-departmental coordination.
- The Department of Local Government is the nodal Department and Punjab Municipal Infrastructure Development Corporation (PMIDC) is the nodal agency for the day-to-day steering of the program.
- Slum Area Rehabilitation and Relocation Committee (SARRC) chaired by the concerned Deputy Commissioner-cum-District Collector is formed at ULB level to facilitate slum surveys, fixing of physical boundaries of the slum, identifying beneficiaries for conferring proprietary right, among others.
- At various stages of the initiative, community engagement, with representations irrespective of caste, age, gender and ability, is envisioned. Local NGOs are involved in the activities like community mobilization including conducting household surveys, continuous dialogues with slum dwellers.

## FINAL OUTCOMES

220 slums situated on the State Government Land across the urban towns and cities of Punjab have been identified for intervention. out of which 47 slums are untenable.

Drone surveys and base maps have been drawn for 174 slum sites.

12,000 beneficiaries have been approved, out of which 9,783 Proprietary Rights Certificates have already been distributed to the eligible beneficiaries.

The Government of Punjab is committed to making cities and human settlements inclusive, safe, resilient and sustainable. BASERA has the potential to contribute directly in achieving Sustainable Development Goals and will have a lasting impact on the lives of the urban poor by integrating them in to city fabric. Post-grant of Permanent Resident Certificate (PRCs), slum Households will become eligible to avail public housing subsidies and other welfare schemes.



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# **TURNING SCRAP INTO GOLD WITH SYSTEM TRANSFORMATION**

SUGAMTA, DADRA AND NAGAR HAVELI,  
AND DAMAN AND DIU



**A** story of digitally driven and transparent mode of scrap disposal system making life easier and richer for industry owners

The Union Territory of Dadra and Nagar Haveli and Daman and Diu has a rich conglomeration of industrial units of different sizes and areas of output. It has around 7000 industrial units in an area of approximately 600 square km.

Of these, around 1,000 of the big industrial units generate around 2-3 lakhs of scrap material every year primarily consisting of hazardous ferrous and non-ferrous materials. The total cost of these scrap in terms of market value is estimated to be around Rs. 100-200 crores.

## THE CHALLENGES

Unaccountability – most of the ongoing trade in scrap was without documentation.

Non-transparent system and unfair competition

Cartelization

Arbitrary rates

Corruption and illegal activities

Environmentally unsafe disposal system

Tax evasion and lack of proper data



## THE SOLUTION

The administration as part of the Ease of Doing Business (EoDB) initiative launched the programme “Sugamta” on 15th August 2020 for transparent and easy disposal and sale of scrap materials. Since the benefits were clear to everyone, most of the scrap producing industries of UT became part of this initiative within 3 months of the launch.

## PARTICIPATORY SYNERGY OF ENTITIES

- State PSU OI DC (Omnibus Industrial Development Corporation) Ltd.
- Central PSU MSTC Ltd.
- Labour Department of the UT Government.

## FINAL OUTCOMES

Increase in tax revenue for industrial units from scrap sale. Rates received were 15%-20% more, compared to traditional modes.

Nationwide coverage where actual users participate.

Eliminates monopolized scrap cartels and illegal activities related to it.

Saving of time and money attract bidders.

Works on “cash & carry” concept.

Access to scrap data by Government agencies for proper monitoring.

All transactions being done digitally and were taxable.





**CLARITY IN  
GOVERNANCE  
HERALDS  
CLEAR VISION  
FOR PEOPLE**

TAMILNADU



Early detection and removal of cataract can help an individual retain proper vision. People from the poor strata often can't avail the opportunity for an early warning and cure because screening for cataract can only be done by trained medical professionals.

Cataract happens when the eye's natural lens becomes cloudy and there is beginning of disruption in the vision. If not treated at the

right stage, it might lead to blindness. Cataract is the leading cause of blindness for more than 70%, in people above fifty years in India.

With only around 12,000+ ophthalmologists in India, cataract screening drives becomes a difficult task especially in the rural areas. Unfortunately, several cataract cases go undetected leading to avoidable blindness. The Tamil Nadu Government rose up to the need to detect and correct Cataract on a mission mode.



## THE DIGITAL GOVERNANCE MODEL FOR CLEAR VISION

The e-Paarvai app launched for the mission aimed to impact the lives of more than 2 Cr plus residents of Tamil Nadu. The biggest beneficiaries of this app are senior citizens in the rural areas of Tamil Nadu as they do not have access to quality eye care screening.

## EXECUTION STEPS

The e-Paarvai app is currently being used by the Tamil Nadu State Control Blindness Society (TNSBCS) to screen citizens in more than 30 districts in Tamil Nadu.

The AI Model is rolled out using an Android App (e-Paarvai) where the field workers capture the eye of the patient and know whether they have mature cataract, immature cataract, IOL or no cataract.

TNeGA has developed an intelligent mobile application leveraging artificial intelligence to identify the presence of cataract in the eye of the person being screened. It uses computer vision and its a state-of-the-art object detection model to solve the problem.

## THE PROCEDURE

The field worker's downloads the application on their digital device. The application uses Artificial Intelligence for giving a quick

screening on an eye image to classify it as cataract or not. Depending upon the analysis, once a patient is found to be positive for cataract then the base hospital in the district is informed to treat the patient through surgery.





## CHALLENGE

An external team consisting of experts had to be created for labelling the large dataset collected.





# A DIGITAL INNOVATION BAZAAR FOR BUDDING IDEAS TO BLOOM

VIRTUAL INNOVATION REGISTER, GOA

Aspirational entrepreneurs and go-getters of Goa are no more worried about support and handholding.

Every innovator's first step to the start-up dream begins with an idea and ideas are vulnerable. A single wrong move in early days of a venture can be detrimental to the growth of the enterprise. Even if they survive, once they go through the ruthless process of evaluation, the chances are they may not get a proper platform that will help them flourish and prosper.



The need was to create a credible and effortless platform to ensure the minds with a budding idea is mentored to grow and create the best results. After a thorough need analysis and brainstorming exercise carried out by the Goa State Innovation Council, it was decided that a platform should be created where such ideas could be documented and presented before persons who could assist in taking these ideas forward through an easily accessible platform.

## BIRTH OF AN AUTHENTIC DIGITAL MENTOR PLATFORM

VIR (Virtual Innovation Register) was created and launched by the former Chief Minister of Goa and former Defence Minister of India, late Shri Manohar Parrikar on 05.07.2018. The platform turned out to be a unique initiative by the Goa State Innovation Council to harvest potential ideas and innovation in a very systematic manner. Keeping in line with the ethos of Digital India, the VIR developed as an online platform where innovators and entrepreneurs can register their ideas virtually and source the required support to achieve the expected results. VIR functions as an innovation bazaar where young innovators display prototypes and directly talk to prospective buyers.



## FINAL OUTCOMES

- Safeguarding unique innovations and ideas
- Validation of idea and support from experts
- Hassle-free digital registration from the comfort of their home or office
- Intellectual Property Rights (IPR) support
- Support for commercialization by Government
- Pitching made easy and transparent to prospective buyers
- Collaboration with mentors and experts
- Support for raising funds
- Access to global resources for incubation
- Locating and partnering with Co-Founders

## SUCCESS STORIES

The Virtual Innovation Register has successfully registered several innovative start-up ideas till date. Out of the total 444 ideas registered on VIR, 54 are from established start-ups and 390 were new ideas of first time innovators.



मुख्यमंत्री अत्याधिक परिवार उत्थान योजना मेला

नगर परिवहन भवन, रायचूर



# ENSURING BENEFITS REACH THE LAST PERSON IN THE SOCIETY

MUKHYAMANTRI ANTYODAYA PARIVAR UTTHAN YOJANA  
(MMAPUY), HARYANA

An innovative programme armed with digital and physical tools in Haryana is assuring the intended scheme reaches the person unhindered.

Every year the Central and State Governments announce many new schemes and programs targeting the poor in society. To ensure that the benefits reach the intended classes and to improve the outcomes of these schemes, the Administration in Haryana set in motion a dedicated mission. This mission aimed at making these schemes more accountable and responsive to the citizens.

Mukhyamantri Antyodaya Parivar Utthan Yojana (MMAPUY), Haryana was envisaged as a consolidated drive for creating awareness, fight against corruption and rejuvenate the system bringing confidence and prosperity to masses.

**No effort is spared in achieving the vision of “Antyodaya”**

Welfare Schemes come in various forms and works under different departments like health, education, skill, social welfare and many others. Coordination and keeping track of beneficiaries and left out masses become a herculean task for the administration. It also becomes impossible for identifying duplicate beneficiaries and invalid applications.



## INITIATIVE TO REACH OUT

The MMAPUAY platform created by Haryana makes of around 50 Government Schemes seamless and every benefit can be applied for and progress of the application tracked in real time. The issue of lack of awareness among masses about their rights to avail the Schemes is also sorted by linking the platform to personalised messaging tools.

## PEOPLE FRIENDLY PROCESS

The first set of Antyodaya Utthan Melas were organized for 1.5 lakh families in the month of December 2021 at the block level in every district of the State and the events created awareness and helped the beneficiaries directly interact with the administration to seek help.



The beneficiaries were identified at the “counselling desk” in the “mela” based on any one of the unique parameters like family id, mobile number, address, head of the family details, etc. Each beneficiary was given an auto generated form with details of the citizen and his family members in a printout.

Post verification of the applications, targeted interventions under different Schemes through institutional credit, social security, skill generation, wage employment etc. were made by designated officers.

The benefits were approved based on the willingness and financial conditions of the identified families after verification.

## THE FOLLOW-UP PROCESS

Regular follow up meetings in the form of ‘melas’ have been conducted to review and monitor the status of applications submitted. Survey of the shortlisted families is done electronically with the help of MMAPUY mobile.





**SECURING ASSETS  
AND CREATING  
GOVERNANCE MODEL  
FREE OF GRIEVANCES**

DHARANI, TELANGANA



A digital platform installed to act as a single source of truth for all land parcels in Telangana to handle all land related functions in an integrated, citizen-friendly, discretion-free manner.

**T**here was a time when mutation of land in Telangana was time consuming. Involvement of middlemen in registration with offline payments and citizens unaware of their rights was the norm. Land records were not in electronic form and the safety of Government, endowments and waqf lands were not assured and

the discretion was with officials on market value and prohibited properties.

But things were destined to change with the Telangana Government resolved to bring in a digital revolution of sorts through the Dharani initiative. It stands for good governance through transparent, citizen friendly, and discretion-free land record management system.

## CONCLUSIVE LAND TITLING SYSTEM

- Combined registration and mutation. Earlier, registration of lands was done by Registration department and mutation by revenue department.
- Achieve real time transaction similar to core banking solution.

### FINAL OUTCOMES

All the land records were digitized

Land ownership was linked to Aadhaar or CIN number

New 'pattadar' passbook with 18 security features issued to land owners

All transactions now through biometric based approval of buyer, seller and registration officials

Instantaneous ownership change and issue of electronic passbook enhancing citizen convenience

No discretion to the registration officials on market value or prohibited properties

100% advance slot booking for availing registration work

Dharani has proved to be a forward looking innovation which is having a massive impact on service delivery in land records management with transparent, discretion free and fraud proof system. Citizen's convenience and securing of land records, the core objectives of the scheme fulfilled to the best of everyone's satisfaction.







# WHEN THE NATION LOCKED DOWN WEST CHAMPARAN 'STARTED UP'

WEST CHAMPARAN, BIHAR

**A story of turning adversity into opportunity.**

**“Navpravartan” Startup Zone, Chanpatia in West Champaran District of Bihar provided an innovative solution to the returnees during COVID crisis.**

**P**andemic put the whole world in an unprecedented crisis. Lingering uncertainty, generalized economic depression, unemployment and quarantined population was the norm. Unavoidable lockdown and travel-ban imposed globally was executed in India as a necessity to tackle the pandemic. Migrants were one of the most vulnerable groups during the lockdown. Their livelihood was gone, they had nowhere to go to sustain their family income.

## **HISTORIC VULNERABILITY**

For decades, going to other states for better economic prospects has been a way of life in West Champaran District. In the pandemic, they all had to return home, which created a situation of crisis in the region.



Distressed people returned back home from various parts of India and abroad like Dubai, Qatar with lost livelihood. Once home, migrants were afraid of going back even when situation normalised as a number of them had bitter experience with their employers. They wanted to find a solution to the uncertainty of their jobs and careers.

## THE 'START-UP' MOVEMENT

The move of setting up the “Navpravartan” Startup Zone, Chanpatia in West Champaran District was an innovative and transformational step towards realizing the true potential of the migrants back home.

- It provided them livelihood solutions near home.
- Accelerated economic growth of the district by bulk production model using latest technologies and generating employment.
- Nurtured entrepreneurial ecosystem and provided an efficient public service delivery system leading to the goal of “AtmaNirbhar Bharat”.

## JAAN BHI, JAHAN BHI

Administration was guided by the Prime Minister’s mantra which implied that the Administration had to focus on not just saving lives but also on kickstarting the economy and livelihood.



“After return I was contacted by top officials who helped me a lot in setting up my company. My textile industry experience abroad was tapped to the full potential. Now, we are getting huge orders and working continuously to fulfill demand from local markets.”

Aamil, Dubai returnee



C/NG-92  
MRCCLNO-05  
DATE-25-10-2020



# **TOWARDS A** MALNUTRITION FREE District

BONGAIGAON, ASSAM



### What is the one thing that springs to mind when we hear about Assam?

**A**nswer, the delicious and aromatic Assam tea. The fan following of Assam tea is not confined to just India but around the world. Working on the tea estates is a major source of livelihood in Assam. However, low levels of wages, the prevalence of vector-borne diseases and a lack of awareness among the labour class about nutrition in Assam's Bongaigaon District have pushed it into the deep trench of poverty and malnutrition.

To handle the issue of malnutrition, the Prime Minister's Overarching Scheme for Holistic Nutrition (POSHAN Abhiyaan) is being implemented vigorously in the Bongaigaon region. The programme aims to address the issue in a mission mode.

Poshan Abhiyaan at Bongaigaon followed the 3 themes given by the Prime Minister:

2019	Focus on Complementary Feeding
2020	Identification & Tracking of Children with SAM
2021	Creation of Poshan Vatika

Under the aegis of POSHAN Abhiyaan, Bongaigaon launched a unique initiative, Project Sampoorna. Project Sampoorna is an innovative, inclusive, and sustainable project launched by the District Administration, Bongaigaon during the third Rashtriya POSHAN Maah in September 2020. This project focuses on the United Nations' Sustainable Development Goal 2.

The National Institute of Rural Development, IIT Guwahati, the Indian Institute of Entrepreneurship, United Nations International Children's Emergency Fund (UNICEF), Tezpur University, and Tezpur Medical College and Hospital collaborated on this project. It was implemented using the four-tiered institutional mechanism consisting of Anganwadi Workers (AWW), Anganwadi Supervisor level, Child Development Project Officer (CDPO-level) and District Social Welfare Officer (DSWO-level) committees along with convergences of Social Welfare, Health, Assam State Rural Livelihood Mission (ASRLM), Education, Agriculture, and allied Departments.

This initiative has brought about significant results, leading to a reduction in malnutrition among 95.6% of children of the targeted groups in the District and 90% of mothers being economically empowered by being included in Self Help Groups (SHGs) under National Rural Livelihood Mission (NRLM) after one year of Project Sampoorna.

To implement the project under POSHAN Abhiyaan, a decentralised 4-tiered model was devised and followed, along with community participation at the grassroots level.



Interventions such as identification and tracking of children with Severe Acute Malnutrition (SAM) and Moderate Acute Malnutrition (MAM), complementary feeding, and POSHAN VATIKA were taken in order to ensure effective implementation of the Abhiyaan in the District. These steps resulted in a downward trend in the number of malnourished children from 2,628 in September 2019 to 2,416 in September 2020 and from 1,178 in September 2021 to 327 in December 2021 to 191 in January 2022.

### Recognition from the Government of India

Innovation award from Ministry of Women and Child Development, GoI under Poshan Abhiyaan Mission worth Rs.27 lakh.

Innovation Award worth Rs.123.05 lakh under Pradhan Mantri Matsya Sampada Yojana of Ministry of Fisheries, Animal Husbandry and Dairying, Government of India for Project Sampoorna.

The District Administration is committed to continuing its efforts in this direction and making Bongaigaon District malnutrition free.



# BUILDING BLOCKS OF UNIVERSE | ब्रह्मांड के निर्माण के

भौतिकी के मूलकण

इलेक्ट्रॉन (एक प्रकार का लेप्टॉन)

कण

प्रमाण

समय

न्यूट्रिनो

प्रोटॉन

ये पदार्थ लेप्टॉन और कण

सोर्स

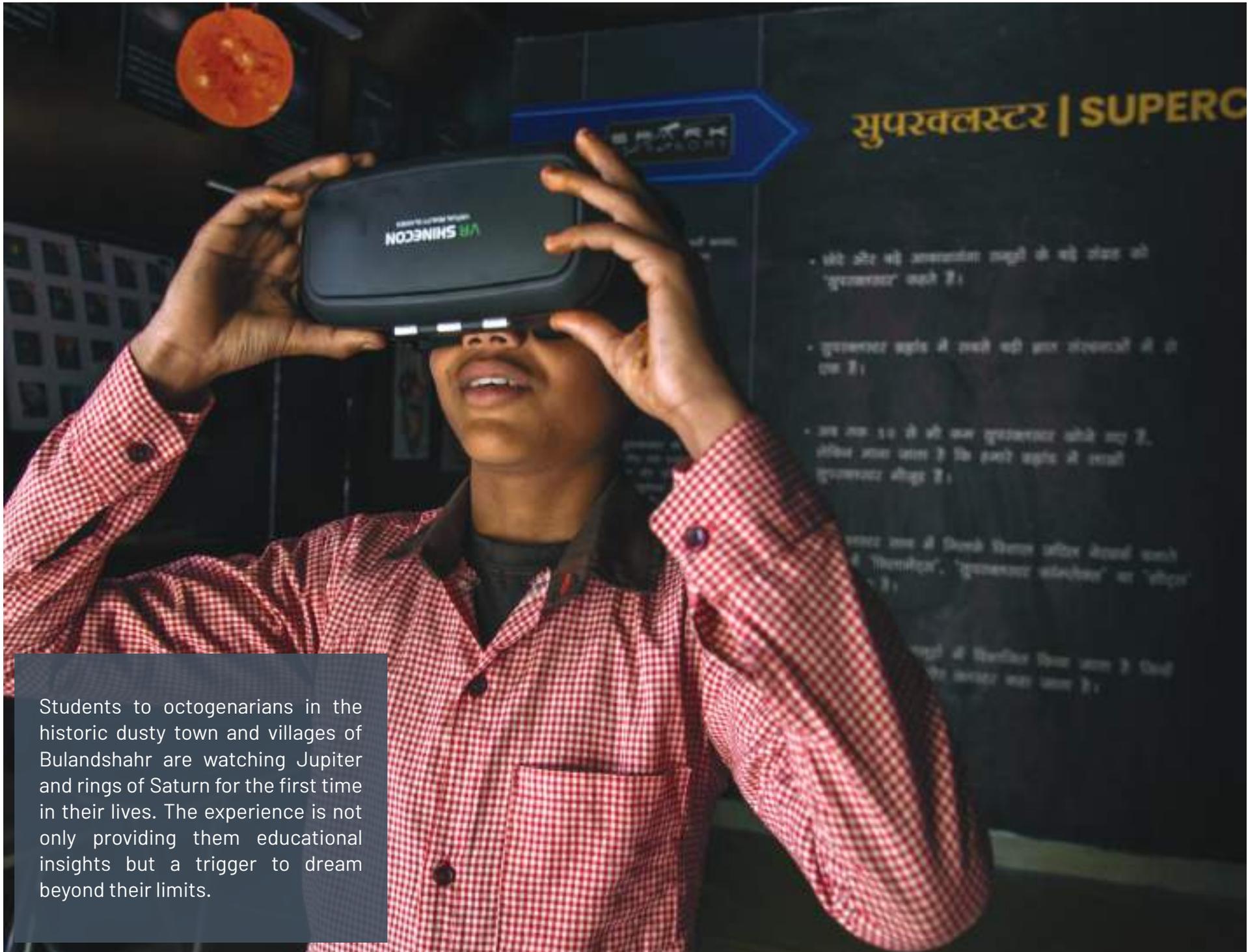




# STAR GAZING

## UNDERSTANDING TIME AND SPACE

BULANDSHAHR, UTTAR PRADESH



Students to octogenarians in the historic dusty town and villages of Bulandshahr are watching Jupiter and rings of Saturn for the first time in their lives. The experience is not only providing them educational insights but a trigger to dream beyond their limits.

In a nation advancing towards providing experiential education to every child, a silent yet significant revolution in astronomical science is underway in the Bulandshahr District of Uttar Pradesh. More than 105 astronomy labs in Government primary and upper primary schools of Bulandshahr in Uttar Pradesh are a reality that is inspiring young minds to study the universe closer and better. The establishment of Astronomy labs in Government schools of Bulandshahr was first received with a sense of amazement but it soon became a mission with the local population participating in it.

**Every time a telescope reaches out to the stars in the village night sky, it allows the kids to rise above the rich-poor, urban-rural disparities that unfairly influence quality of education.**

The first lab was dedicated to Sir Shanti Swaroop Bhatnagar, who completed his elementary education from Bulandshahr.

## OUTCOMES

A child centric school of experiential learning for conceptual clarity.

Rich inventory of teaching and learning material.

Tools for identification of gifted children.

## PARTICIPATIVE IMPLEMENTATION

The innovation has been implemented in a cluster-based method to provide teachers and students avenues for peer learning.

Labs positioned to act as vehicles of character building as astronomy is a humbling science.

School curriculum and adult literacy aims are set to be addressed by cultivation of scientific temperament in the community.

These labs are set up by the Gram Panchayat through a consultative process of decision making.



## CURRENT COVERAGE

**105** labs

**77,175** students

from 525 schools are linked to these labs.









# ACHIEVING SUSTAINABLE FARMING INNOVATIVELY

DHARWAD, KARNATAKA

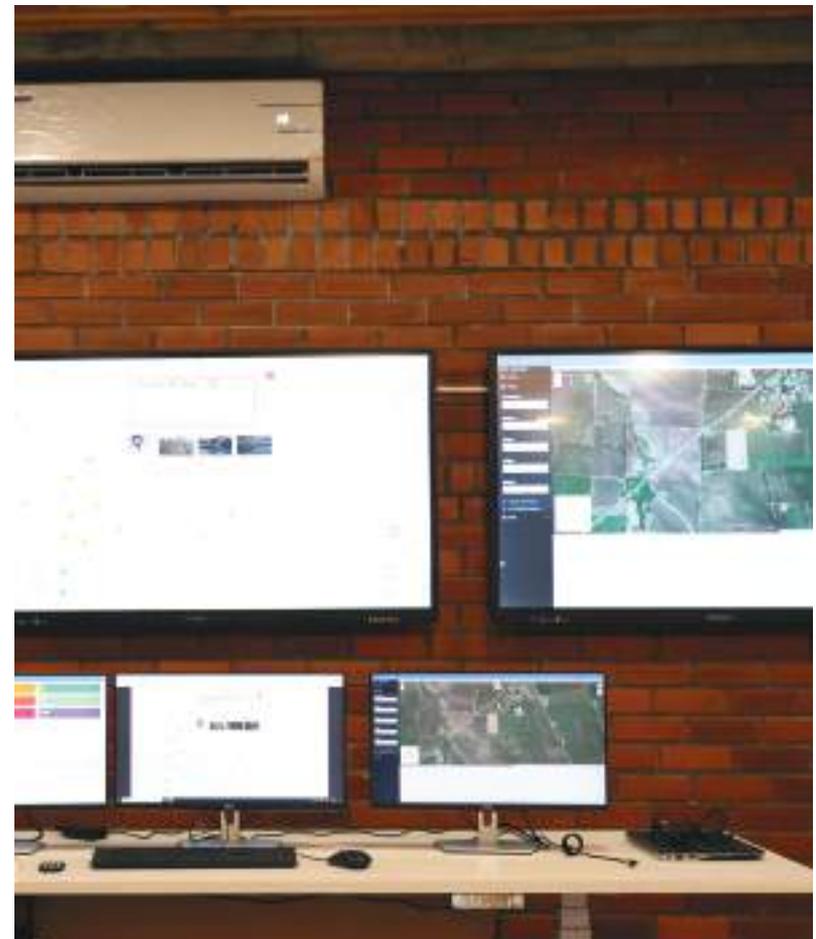
## Development of Farm Ponds, Farmer Producer Organisations by putting technology in use

Each year, farmers in rain-fed areas face several adversities such as climate variability, crop failure, non-remunerative prices and lack of water during the cropping season. Nearly 90% of Karnataka’s Rabi cultivable land is in the Northern regions of the State, which are amongst the worst affected by drought<sup>1</sup> and water scarcity. Some of the talukas in Northern Karnataka have been under ‘severe drought’.

This innovative initiative seeks to harness technology and banks financing Joint Liability Groups (JLGs) of farmers to scale farm ponds program across North Karnataka region, to usher water security in drought hit regions.

Water harvesting - a low cost alternative for irrigation, is one of the key adaptation strategies for successful rain-fed farming. Water harvesting is a directly productive form of soil and water conservation, which can improve the yield. To promote and nurture sustainable farming, Dharwad District Administration, Deshpande Foundation (NGO), SBI, NABARD, FPO and other corporate stakeholders partnered to create innovative and replicable models of water harvesting.

Farm Ponds was one of the solutions. The Farm Ponds program is supplemented by the FPOs. They were encouraged to leverage the technical knowledge through Agri Advisory services powered by Rural Transformation



<sup>1</sup><https://ksdma.karnataka.gov.in/storage/pdf-files/Rabi%202018%20drought.pdf>



Technology Center (RTTC) and implement innovative farm practices from the stage of land preparation to post harvesting, introduction of integrated farming systems, agroforestry, natural farming, soil testing, etc. Both FPO & the farmers were empowered with business planning & market linkages to realise the best possible price by avoiding middlemen.

Kalmeshwara Farmer Producer Company Ltd. (KFPCL), the body undertaking the project, effectively serves farmers through inputs and output sales along with extending support in agriculture extension work as well.

## FINAL OUTCOMES

- Construction of farm ponds
- Procurement of input tools
- Seed production
- Commodity trading
- Aggregation and storage of produce
- Quality control
- Marketing to institutional buyers
- Connecting farmers to the Government, Agri, and Horticulture Department

## IN CONCLUSION

This easily replicable initiative is structured in such a way that any institution or Government body can adopt this and start implementing it with immediate effect. A program tool-kit along with Standard Operating Procedures (SoP) to implement the farm pond program has been created. It will enable replication of this model.

The aim is to scale the Farm Ponds programme by leveraging the Technology and JLGs to reach over 1 lakh Farm Ponds over the next 5 years. The farm pond funding will move to a model where farmers contribute 100% of the farm pond construction cost and bank loans. The FPO will deliver farm pond construction as a service. The objective is to create farmer entrepreneurs who are supported by the ecosystem of finance and Government/Non-Government Institutions in the entire process.

Thus, the model is replicable as well as sustainable.

## RURAL TRANSFORMATION TECHNOLOGY CENTRE (RTTC) AND ITS ROLE

Identifying Farm Pond location using land elevation with satellite imagery.

Consolidated status updates from the field.

Identifying the shortest route to initiate the pond construction.

Detecting farming activity and cropping patterns over years using satellite imagery.

Inlet & outlet for the pond so that only water will go into it.

Establishing farm gate market linkage for a filtered list of crop sources to lift the farm produce.









# 'HAR GHAR DASTAK', EVERYONE PROTECTED

KINNAUR, HIMACHAL PRADESH



**The beautiful land of Kinnaur leads the nation by becoming the first fully vaccinated District.**

**C** OVID -19 vaccination in India was one of the largest vaccination drives ever taken up in the world. Despite its difficult terrain and inclement climatic conditions, District Kinnaur in Himachal Pradesh achieved the feat of becoming country's first District to fully vaccinate all adult eligible beneficiaries on 13th Oct, 2021. This resulted in the curbing of morbidity and mortality in the District due to COVID 19.

**The feat accomplished by an efficient, time bound and effective approach has created a milestone for others to follow and learn from.**



## CHALLENGES FACED

Kinnaur is a tribal District with a very difficult terrain.

The region lacks infrastructure and human resource in health sector.

A COVID infected person in the place had to travel 7-8 hours via road to another District for proper treatment.

Vaccination drive initially was facility based which was not easily approachable for all beneficiaries.

Erratic internet signal in many places was resulting in difficulty in operating COWIN portal.

Number of vaccinators, verifiers, infrastructure and vehicles in the health department was proportionately very limited.

There was hesitancy among people because of lack of awareness.





## WHEN THE TASK GOT TOUGH, THE TEAM BECAME TOUGHER

Vaccination team members walked for many hours in hilly routes to reach and vaccinate the beneficiaries even on mountain tops and orchards in far flung areas.

A manual record comprising the details of beneficiaries during session were kept. The session team then used to reach area with network connectivity and upload all the data online

Shortage of vaccinators were overcome by using Medical Officers, Health educators, Health supervisors as vaccinators.

To tackle vaccine hesitancy issue, local religious leaders and social influencers were involved in the drive. Elected representatives from Panchayati Raj Institutions (PRI) were given responsibility to prepare list of eligible beneficiaries and ensure their vaccination.

**Hon'ble High Court of HP named it the "Kinnaur Model". The model was elaborated in detail by Deputy Commissioner and Chief Medical Officer to other Districts in Himachal Pradesh.**





# **FACILITATING A** DYNAMIC CITIZEN

DHENKENAL, ODISHA

**A watershed reform in digital governance, where the Government seeks to boost last-mile democracy through the participatory role of citizens.**

**N**ow, a citizen no more has to wait for months for the grievance to be heard. With the changing dynamics of governance, Governments are tapping into multiple channels to reach out to citizens. A constructive and two-way relationship with citizens is being built to create a sustainable and just environment, where institutions foster inclusive economic growth and higher standards of living for all segments of society.

Mo Sarkar means My Government. In the annals of history, it will be recorded as an important transformative initiative implemented by the Government of Odisha focusing on citizen centricity.

The technology-led feedback system aligns the 5Ts of governance of Transparency, Technology, Teamwork, and Time-bound action leading to transformation.

With rapid strides in digital governance, Odisha has been one of the early movers in adopting emerging technologies to enhance citizen service delivery.

## OUTCOMES

The process of garnering citizen feedback has shifted gears from reactive to proactive by infusing a behavioural change in the way officers tackle citizens' grievances.

## CHALLENGES FACED

There was lack of a centralized system to loop in feedback.

There were multiple sources of heterogeneous citizen data.

Mapping a resolution strategy for citizen grievances was a challenge in the absence of a top-down approach to troubleshooting.

Absence of a mechanism to monitor official's performance in resolving citizen's complaints through data-driven insights for improving public service delivery.

Launched on 2<sup>nd</sup> October 2019, Mo Sarkar today actively collects feedback from the citizens by both inbound and outbound calls. Centralized processing of feedback collects and generates actionable insights promptly by tagging the concerned officials to take action.

## THE MO SARKAR NETWORK

Total no. of departments: **29**

Number of services covered: **235**

Total citizen contact details: **2,50,64,011**

Total feedback received: **17,11,678**

Average no. of calls made by Ministers and officials each month: **20,000**

Average feedback received by Ministers and Officials each month: **8,470**



Mo Sarkar is testimony to a new wave of direct citizen participation sweeping the shores of our Governance. The crowdsourcing of feedback for reinforcing public service delivery is slated to become the new normal for citizen-centric Governance.





# **INSPIRING LINKAGES** OF LIVELIHOOD, TOURISM

NAMSAI, ARUNACHAL PRADESH

A unique project integrating water supply with employment generation and providing wayside comforts and facilities for tourists and pilgrims.

**N**amsai District in Arunachal Pradesh is speckled with pilgrimage and tourist destinations which attract more than one lakh tourists every year. The place was for long grappling with the issue of availability of drinking water.

**Namsai is predominantly a tribal District with population of around one lakh and was identified an aspirational District by NITI Aayog in 2018. It has a very high rural population with 85% living in 178 villages.**

## **NEED FOR AN INTEGRATED SOLUTION FOR DRINKING WATER**

Potable drinking water availability was one of the major issues concerning the District with only 14% population getting piped drinking water. The rural people mostly depend on hand pumps, dug wells, streams & rivers for daily water requirement. The surface water, and sub surface water are infested with chemical and bacteriological impurities. High iron content is also a major issue. The solution was a State-of-the-art multi-village piped water supply scheme for 10 villages covering 1,289 households.

**Namsai the Gateway to many tourist destinations like Golden Pagoda, Parsuram Kund, Myodia which enjoys a very high footfall. Around one lakh pilgrims visit Holy Parsuram Kund every year.**

Funding - Rs. **32.49** crore.

Location of Project - Marua village in Chowkham Block.

Capacity - The water treatment plant has a design capacity to cater **21,695** populations with **2.70** Million Litre per day. Currently covering **10** villages with **1,289** households.

Infotainment Park- Facilities of cafeteria, restaurant, sit-out, jetty in river, parking place, water fountains, emporium and amphitheatre.

## **AN INSPIRING MODEL**

Taking cue from the success of the Marwa water supply project, many small low cost river-line eco tourist huts, way side amenities have now been established by local youths and entrepreneurs in the District.

## OUTCOMES

Solar power operated water supply project.

Green and renewable energy source to minimize operational costs.

Automation in pumps and valves to ensure need based usage.

Automated water quality analyser.

In-house water testing laboratory.

Highly efficient multistage solar powered submersible pumps.

The facilities in the infotainment park are managed by local youths generating employment.

Vocal for local- the Namsai project has become platform to showcase local traditions, culture, cuisines, crafts, handloom, etc. which generate livelihood options to local entrepreneurs, artists and artisans.







# **SUSTAINABLE** DIGNITY AND PRIDE

DANTEWADA, CHHATTISGARH

**Dannex, an innovative venture in Dantewada District is making women financially independent and earning them respect in their community.**

**B**lessed with bounties of nature and abundance of forest, the traditional means of earning livelihood for the tribal population of Dantewada region have mostly been agriculture, horticulture and minor forest collection. These traditional means were hardly sufficient to sustain a family, causing poverty, social dilemmas and health problems.

**There was an urgent need to innovatively approach the multiple needs to engage people in sustainable livelihood activities, market their traditional skills and to train people to adopt modern way of approaching markets and seeking linkages for profit.**

Some of these initiatives till now were aimed at making their earn more, providing them market access and making the people adopt modern way of doing business.

## **DANTEWADA NEXT**

In a situation of adverse developments worldwide due to the pandemic, the Administration introduced a whole new means of sustainable earning to the people of Dantewada by a new initiative called Dannex (Dantewada Next), a garment making unit.



## STEPS TAKEN

Tribal women in the region are gifted artisans and can learn skills quicker.

Training of women for using the industrial sewing machines and stitching, by professional trainers was conducted.

The first fully functional garment factory was inaugurated in Haram village on 31st January 2021, with 130 industrial machines in a well-designed modern campus.

## CHALLENGES

Non availability of skilled manpower

Huge operating cost

Migration of trained staff

Higher lead time of products

## SOLUTIONS

Market leaders were called to visit Dannex.

Professionals started volunteering for training and collaboration.

Further expanded to 3 more locations in quick succession.

Administration stepped in to sponsor the capital cost on machines and infrastructure.

With innovative ventures at the doorstep, migration of workers is almost nil in the District now.

Market leaders in garment industry came forward to invest in the venture.

Dannex has entered into a long term MoU with established brands.

Works on a TOT (Train Operate Train) module which ensures regular skill enhancement of the workers.







## FINAL OUTCOMES

The venture started with 130 operators and four production lines. Today, 17 lines employ 750 people with 17 different design productions.

Per day output has increased from 600 to 4,200 apparels.

Almost 92% of the manpower engaged are women.





# **SETTING BENCHMARKS** IN HOSPITAL CREATION

NARAYANPET, TELANGANA

Using advanced programming software for real-time need mapping and providing solution at speed and scale hand.

The patients of Narayanpet in Telangana traditionally relied on Mahbubnagar, the nearest town, for advanced medical care. It involved a journey of more than an hour. There was provision of only basic healthcare in Narayanpet and infrastructure and equipment to deal with emergency situation was mostly absent.

## TECHNOLOGY BEST EMPLOYED FOR HEALTH FOR ALL OUTCOME

Normally, the gestation time for creation of new infrastructure is long and tedious. But pandemic changed it all. With innovative technology and a committed Administration, steps were taken to create cutting edge critical medical treatment centres in Narayanpet, Telangana under the Corona Safe programme.

### CHALLENGES

Due to lockdown and travel issues, supply of essential equipment and human resource was hampered largely.

## THE QUICK TURNAROUND AND INSTALLATIONS

- There was a single 100 bedded District hospital and bare minimum network of 2 Community Health Centres (CHCs) + 11 Primary Health Centres (PHCs) catering to the medical needs of the District. To address the lacunae, medical infrastructure in the form of two 10 bed ICU & modular 100 bed hospital project was created.
- The project and all its components were executed within 90 days.
- The creation of these modular structures not only met the immediate COVID response needs, but also created a new maternal child care unit for the District.





## CORONA SAFE PLATFORM

The infrastructure is linked to the programming software CoronaSafe. The program involves real-time smart, GIS based intuitive dashboards with technology mapping of health care. Dashboards are connected to patient health monitors promoting better COVID analytics, paving way for the District Administration to respond better to emergencies & pandemic management.

The Information Technology/Geographic Information System enabled COVID mapping/ management strategies enabled the District to have better treatment tracking options for the patients of the District.

Post pandemic, the infrastructure is being utilised fully serving the health needs of neo-natal, maternal & critical care patients, reducing the need to travel long distances for better treatment.

With new modular hospital in place, the public health system has begun to respond with technological efficiency to meet the growing needs of the public making treatment available and accessible.







# RISE OF THE YOUNG MINDS

BASTAR, CHHATTISGARH

## Yuvoday, a success story from the tribal heartland

The energy of the young can be channelised on either ways. Neglect can lead them to a destructive path, a little hand holding and guidance can help every youngster to bloom and use their unlimited energy for constructive things.

This positive story of engagement of the youth comes from Bastar, a left wing extremism-affected District of Chhattisgarh which has many pockets which are inaccessible for even the Administration to reach.

It was observed that the lack of penetration of welfare schemes was leading to a trust deficit between the Administration and the local population. The youth of the region have either migrated out of Bastar or have ideologically shifted towards extremism. Lack of employment opportunities and the slow pace of development had eventually affected stakeholders in the community. Tourists, tribal population, women and children were feeling the heat of this unfortunate situation.



## THE SUNRISE

Yuvoday is an innovation that has bridged the gap between the Administration and the public by channelizing the power of youth towards development in every field.

People in the region lacked knowledge around nutrition. Malnutrition has been a perennial problem leading to diseases and early deaths. There was a lack of understanding and thus mistrust of Government Schemes.

Yuvoday positively transformed the existing Governance machinery in Bastar by institutionalizing a community of youth-powered volunteers who ensured door-to-door delivery of Government schemes, community mobilization, nutrition counselling, etc.



## FINAL OUTCOMES

Now, with over **5,000+** community of young volunteers from Bastar, Yuvoday is one of the largest volunteering initiatives in the country which works on the drive of volunteers to contribute to the development of their village and District. This movement is being carried in partnership with UNICEF.

This innovation has impacted different aspects of lives of the locals, including efforts to remove vaccine hesitancy among tribal population, education, health, institutional delivery among others.

## THE SUNRISE

Traditionally, the Indian army used to receive just a handful of applications from Bastar. Yuvoday held massive campaigns for convincing the youngsters to apply for army recruitment and special coaching for medical and engineering entrances have helped many tribal students to clear entrance examinations.







# TAP WATER IN THE MOUNTAINS

CHAMOLI, UTTARAKHAND



## UNIQUENESS AND SUCCESS

Chamoli, a border District of Uttarakhand, is spread over a difficult mountainous terrain and remains snow bound in winters. Access to water has always been a challenge for the residents with a daily trek to the nearest waterpoint as a part of life.

With this background, Jal Jeevan Mission (JJM) was launched in the District on 15th August, 2019 to enable Households, Schools, Anganwadi Centres, Gram Panchayat buildings, Health centres, Wellness centres and community buildings in the villages to have Functional Household Tap Connection (FHTC) by the year 2024.

Fully aware that the sustainability and success of the mission was dependent on Jan Bhagidari, people participation was integrated as a major component. Starting with a low base of 29.3% households in District Chamoli of FHTC coverage, today, Jal Jeevan Mission has provided FHTC coverage to 88.24% households in the District. Despite the challenging terrain, topography and adverse climatic conditions causing frequent hazards and limiting the working conditions, District Chamoli has achieved second rank in Uttarakhand in the implementation of Jal Jeevan Mission.



### **Governance frameworks to support Jal Jeevan Mission in the District.**

Governance model: The work on augmentation of available water sources in the villages and grey water management is done in an integrated form with drinking water schemes.

The programme is being supervised by the State Water and Sanitation Mission (SWSM) and in the Districts by the District Water and Sanitation Mission (DWSM)

#### **The functions of DWSM:**

- Finalize District Action Plan (DAP) to provide tap water connection to every rural household.
- Provide administrative approval of in-village water supply schemes.
- Engage Implementation Support Agencies (ISAs) to handhold GPs/ Jal Samitis.
- Implement IEC campaigns, etc.

#### **Capacity building mechanism for HR deployed in the implementation:**

- Planning and building eco-system for reforms.
- Project Management and Financial Management.
- Building capacity of Village Administration to check:
  - Water Resource Planning and Project Management.
  - Water Quality and O&M of water supply systems.

### **Transparent display of progress (Physical and Financial) at Village level**

**Functioning Public grievance redressal mechanism through [ejalshakti.gov.in](http://ejalshakti.gov.in)**

#### **Technology driven governance architecture:**

**Financial governance:** Funds are made available to concerned division through PFMS online including the payment to contractors.

**JJM Mobile Application:** This application provides information relating to all aspects of JJM, including beneficiaries, water quality, contamination, funding, action plans and it also allows citizens to rate their experiences.





# COVID-19 RESPONSE

Headache



Sore Throat



Diarrhea



## Know Your Covid19 Result

## Consent

Enter Mobile

Submit

**Disclaimer:** Although every care is being taken to ensure the accuracy of the data while updating on the portal. District Administration is not responsible for any inadvertent error that may have crept into the information being published on NET/portal. This result is being provided for informational use only and should not be used for any legal use hence cannot be sued in any of the court.



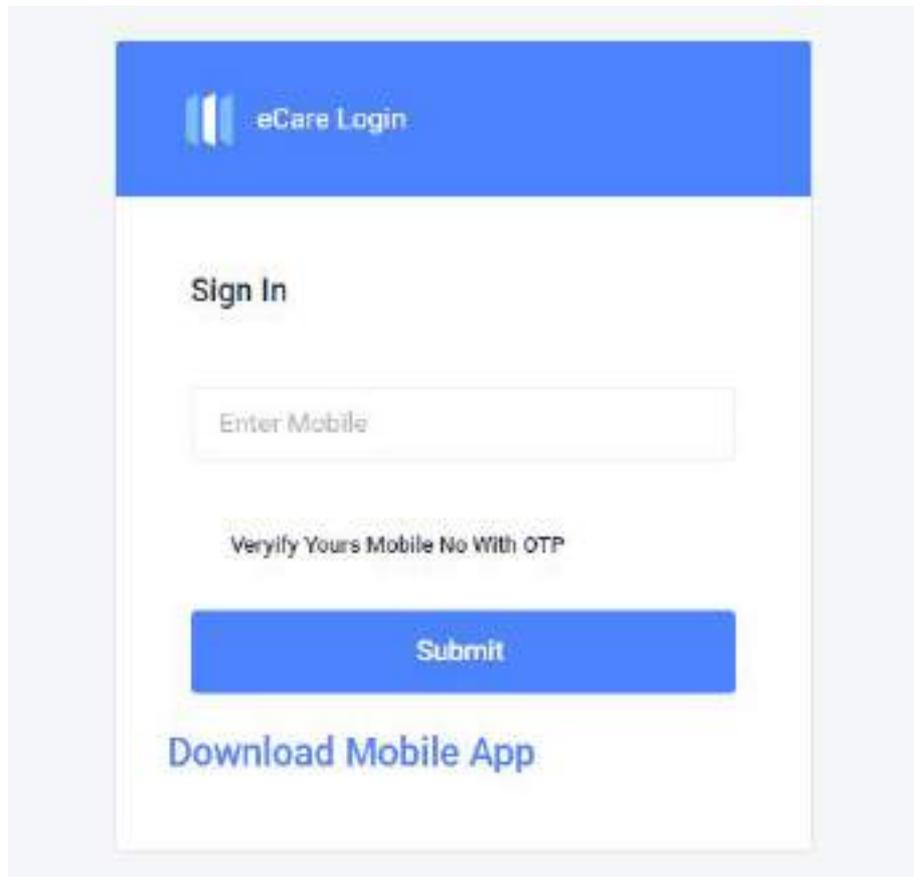
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# WINNING THE COVID BATTLE

KURUKSHETRA, HARYANA



**e**Care Kurukshetra offers a one stop solution for COVID-19 patient management. The app and web portal facilitates the medical team and Administration to have a detailed view of the current COVID situation prevailing in the District with respect to patients in different facilities and the response of health care infrastructure. The consolidated database of all patients in the application streamlines various other processes that are running in the District to support the pandemic management, such as COVID Control Room, a dedicated call center for COVID-19, tracing and monitoring of patients, etc.

The existing management structure of information through WhatsApp and eMails proved to be a tedious job, one that was inconsistent and plagued with incomplete records. The lack of timely access to critical data led to delay in decision making and slowed down the response management.

- **Result declaration:** Potential high risk COVID 19 patients had no systematic way to get their results in time. Thereby to reduce the susceptibility and vulnerability of others, a robust solution was the need of the hour.
- **Record management:** The existing record management system, which required manual data entry, proved to be wasteful in terms of time and bandwidth for the medical teams. The current application works to resolve this.
- **Monitoring:** Previously records were managed and shared in different formats which proved to be a major hurdle in conducting regular reviews and monitoring. The current application provides data and information in a unified format.
- **Treatment journey:** The application/website provides real-time visibility of each patient's journey from testing to treatment.







# PRATYEK GRAM ME EK TALAAB

EAST CHAMPARAN, BIHAR

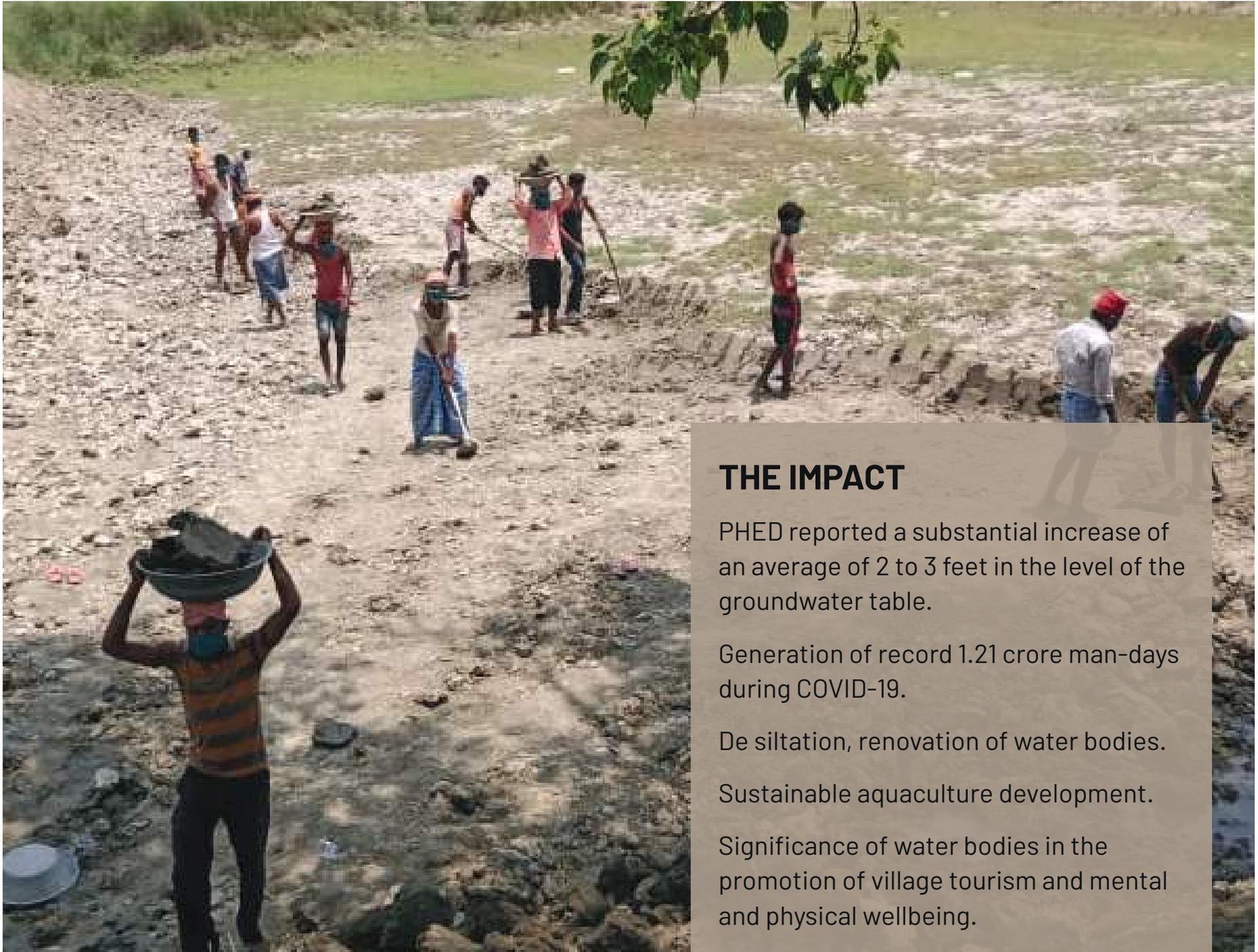
**P**ratyek Gram Me Ek Talaab is a Sustainable Water Conservation Strategy executed through Mass Participation in East Champaran. It was set in motion to create employment opportunities based on the skills of the migrant labourers, who lost their livelihood due to the COVID-19 pandemic. One of the other objective of this innovation was to create, rejuvenate, and beautify sustainable community assets in Panchayats. Furthermore, it will minimize the damage/loss due to natural calamities like floods and droughts, while creating livelihood opportunities by encouraging sustainable agriculture and pisciculture practices.

**For proper Governance and Implementation of this innovation, the following things were done:**

- Identification of beneficiaries through extensive data reporting.
- Distribution of job cards in quarantine camps.
- Geo-tagging and GIS mapping of water bodies.
- Renovation and beautification of 315 ponds were started at once, with all the COVID-19 protocols followed.
- Afforestation and plantation on water bodies.
- Public awareness campaigns –RUN FOR PEACE.

**Furthermore, the authorities adopted a multi-pronged approach for better conservation of water, including:**

- Rejuvenation of Dhanauti river.
- Beginning of water sports at Motijheel.
- Rainwater harvesting structures were set up at most of the public buildings.
- Soak pits/ recharge pits in rural areas.
- Check dams/ new water ponds.
- Removal of Encroachment in water bodies.
- Protecting the Rain Magnets of Champaran, another notable effort to conserve water was the Guardians Tree Campaign. The key objectives of this campaign were:
  - Protection and Conservation of 6,500 older and larger trees.
  - Community ownership and protection drives.
  - App-based identification and ownership.
  - Raising the depleted groundwater table, generating work and employment, developing new concepts that promote tourism, offer rejuvenation, and more. These initiatives and efforts made a substantial positive impact on the community and environment of Champaran.



## THE IMPACT

PHED reported a substantial increase of an average of 2 to 3 feet in the level of the groundwater table.

Generation of record 1.21 crore man-days during COVID-19.

De siltation, renovation of water bodies.

Sustainable aquaculture development.

Significance of water bodies in the promotion of village tourism and mental and physical wellbeing.



The innovation did not just help conserve water and make it available in the affected areas, but it also set benchmarks for Sustainability and Replicability for others. A few of these benchmarks are stated ahead:

- Development of ponds as revenue-generating models - recreation spots.
- Mass participation in water awareness, protection, conservation, and maintenance of water bodies.
- Empowerment and execution through PRIs.
- Providing livelihood activities through pisciculture and aquaculture.
- Nutritional security for villagers.







# **INNOVATIONS DRIVING TRANSFORMATION**

GADCHIROLI, MAHARASHTRA

There are various innovations and Government initiatives that supplement the community at Gadchiroli. But some of these marked a notable difference in the lives of people while helping conserve the forests and eco-systems at large.

Fulora, an innovative program, was designed to achieve the Foundational Literacy and Numeracy (FLN) in Zila Parishad School for Grade II to Grade VIII. The objectives of the project are to develop the reading and writing competencies and numeracy skills of the students and build the capacities of teachers for adopting Activity-Based Learning in the classroom. The project is currently being implemented through Chief Executive Officer, Zila Parishad, Gadchiroli.

In this project, children are taught through activities for providing conceptual clarity. Then taken onto a specially designed Fulora workbook and at last, teaching is done through their syllabus textbook. In the beginning, training of master trainers was conducted in activity-based learning, and later, these master trainers trained the remaining teachers. In the third step, Bal Bhavan, a repository of teaching-learning material was developed in all schools and a baseline test was conducted to understand the existing scenario of FLN in the District.

#### **The four main pillars of the Fulora project**

1. Activity-Based Learning and Bal Bhavan
2. Extensive Monitoring

3. Parents' engagement through School Management Committee
4. Periodic Assessment of students

Using these pillars, the District aims to achieve foundational literacy and numeracy, and the results are already pouring in.

### **THE IMPACT:**

The project is benefitting about 32,645 students and 1,925 teachers from 380 schools.

It has enhanced the linguistic and numeracy skills and also there is a long-term impact of the project in combating left wing extremism.

There is a 10% decline in the number of students who cannot identify and read Marathi.

There is a 15% increase in the number of students who can perform division.

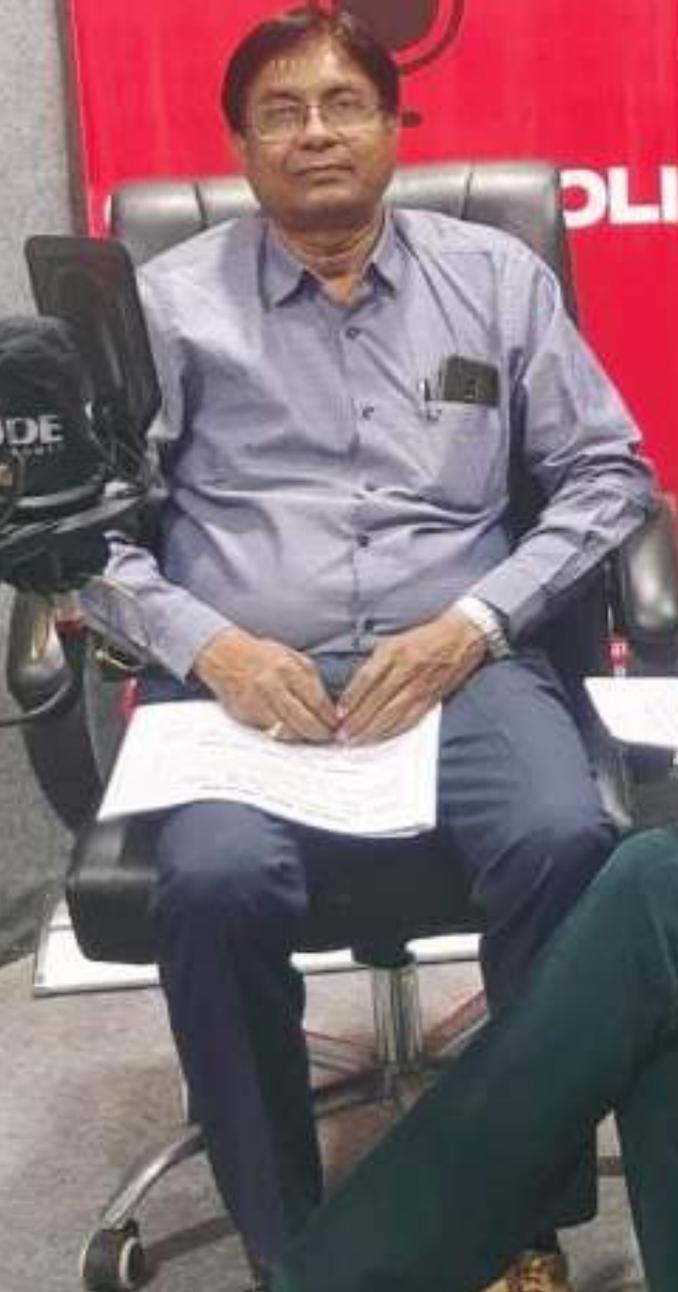


These Ekal Centers will be equipped with an administrative facility, a banking facility, a storage facility, and a training facility. Also, these centers will be enabled with backward and forward linkage, making them a complete and sustainable ecosystem to undertake any activity in relation to Minor Forest Produce (MFP).

जिल्हाधिकारी कार्यालय, गडचिरोली



DLI





This project ensures sustainability and tribal proximity to the forest, along with its complete use for livelihood.

The Gadchiroli Live, an app-based radio, is another innovation developed with the objective to connect and provide all the necessary information from the Government to the residents of the District.

Using the radio app, the District Administration is using three different channels (1) Suchana (2) Samvaad (3) Gyanganga, to broadcast information related to weather, Government schemes, natural calamities, and Government instructions, notifications, educational and health-related content.

Implemented through the office of District Collector, Gadchiroli, the project aims to:

- Empower Gram Sabha in activities related to Minor Forest Produce and other forest management related activities
- Train, educate, and build capacities of Gram Sabhas in relation to activities of Minor Forest Produce
- Develop infrastructure to support activities in regard to Minor Forest Produce
- Elevate the income of Gram Sabhas through the provision of Ekal Centers and Capacity Building and Training activities.







सत्यमेव जयते

भारत सरकार,  
कार्मिक लोक शिकायत और पेंशन मंत्रालय,  
प्रशासनिक सुधार और लोक शिकायत विभाग

**Government of India,  
Ministry of Personnel, Public Grievances & Pensions,  
Department of Administrative Reforms & Public Grievances**