Regional Conference on

"Path Breaking and High Impact Initiatives in Citizen Centric Services Delivery"

15- 16 September, 2016

Proceedings

GOVERNMENT OF INDIA

**DEPARTMENT OF
ADMINISTRATIVE REFORMS & PUBLIC GRIEVANCES**

सत्यमेव जयते

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Venue:

Assam Administrative Staff College

Guwahati, Assam

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Preamble

The Department of Administrative Reforms & Public Grievances (DARPG), Ministry of Personnel, Public Grievances & Pensions, Government of India (GoI) is the think tank of the Government on governance, public policy and public administration related matters. It researches the administrative and governance processes with a view to assessing their impact on the citizens, gaining an appreciation of the felt-needs and unmet gaps and gathering insights into possible alternatives and betterment measures.

Based thereon, it acts as the nodal agency for the Government in advocating and advancing, formulating and facilitating, mentoring and monitoring the governance-reform agenda of the nation, leading to positive transformation of increased efficiency of processes, enhanced effectiveness of public service delivery and improved governance at large.

It is highlight worthy in this context that at the initiative of and under the aegis of the DARPG, the Government instituted in the Year 2005, an award titled the "Prime Minister's Award for Excellence in Public Administration" for rewarding meritorious performance and outstanding contribution of civil servants in conceiving creative ideas and transforming them into sustainable, game-changing practices leading to improved efficiencies and enhanced effectiveness.

Further, with a view to promoting excellence in the implementation of e-Governance initiatives borne out of exemplary achievements in government process re-engineering, innovative use and exemplary replication of solutions based on Information & Communication Technologies (ICTs) etc. the Department has been recognizing, year after year, outstanding performance in citizen-centric service delivery through a Scheme of National Awards for e-Governance.

Responding in right earnest to the clarion call given by the Hon'ble Prime Minister for "Minimum Government – Maximum Governance" and in furtherance of its own mission to foster excellence in governance through administrative reforms and improvements in government processes, the Department has been taking the positive step of facilitating the States and Union Territories (UTs) to replicate the award-winning initiatives in Public Administration and e-Governance, so that the benefit of innovations, recognized as exemplary, excellent, exceptional, extraordinary and emulation-worthy, is available to the country as a whole, without the States and UTs having to reinvent the wheel, individually.

Towards this end, the Department has proactively initiated the progressive step of conducting Regional Conferences facilitating the States and UTs to gain first-hand knowledge of innovations and good practices in public administration, governance and public service delivery implemented successfully in various regions of the country, so that they could be adopted and replicated or adapted to specific requirements locally and gainfully used.

The Regional Conference is an enabling mechanism for the participating States and UTs, with the following objectives:

a. Serving as knowledge-exchange forum, experience-sharing platform and best-practice promoting vehicle for fostering good governance practices and citizen-centric service delivery.

b. Promoting meaningful confluence of interactions and insights, cross-fertilization of ideas and exchange of constructive views among the policy makers, public figures, peers, practitioners and professionals who may have championed and/ or facilitated the successful implementation of innovations in government processes, administrative reforms and public service delivery.

c. Encouraging mutual learning among the participating States and UTs on the successful and emulation-worthy innovations in public administration and governance from across the country which may have led to increased efficiency of outputs and improved effectiveness of outcomes.

d. Fostering mutual understanding and constructive cooperation among the States and UTs towards arriving at collective strategies and synergistic approaches on formulating and implementing administrative reforms and governance innovations in the areas of common focus and converging interest.

Pursuant to the above, the Documentation & Dissemination (D&D) Division of the Department organized a two-day Regional Conference on theme of "Path Breaking and High Impact Initiatives in Citizen Centric Services Delivery" on the 15th and 16th Sept. 2016 in the Assam Administrative Staff College (AASC), Guwahati, in association with the Department of Administrative Reforms and Training, Govt. of Assam. The focus of the Conference, in which twelve Eastern and North-Eastern States participated, was to showcase the benefits of computerized administrative processes and government functioning and how the innovations in public administration, novel use of ICTs and Mission Mode Projects (MMPs) are transforming governance, making it more accountable, transparent, streamlined, productive and effective.

The D&D Division, DARPG, GoI actively collaborated with the Govt. of Assam and crystallised a judicious mix of topical themes for presentations and panel discussions. The format of the Conference was drawn up with a view to encouraging the sharing of perspectives and experiences on the innovations in governance, in an interactive manner, so that the delegates derive optimal benefits.

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Schedule- Two-Day Regional Conference

Regional Conference on Path Breaking and High Impact Initiatives in Citizen Centric Services Delivery
15th -16th SEPTEMBER, 2016; VENUE: CONFERENCE HALL, AASC, GUWAHATI (ASSAM)
Day-1: 15th SEPTEMBER, 2016 (Thursday)

09.00-10.00:	Registration
10.00-11.00:	**Inaugural Session**
10.00-10.10:	Welcome Speech by Principal Secretary, Government of Assam
10.10-10.25:	Address by the Additional Chief Secretary, Government of Assam
10.25-10.45:	Address by Secretary, Department of Administrative Reforms & Public Grievances (DARPG), Government of India (GoI)
10.45-10.45:	Vote of Thanks by Joint Secretary, DARPG, GoI
11.00-11.30:	Tea

11.30-13.30: **Session-I:- Transformational e-Initiatives in Health and Education Sectors**
11.30-11.45: Presentation by Shri Umakanta Swain, Joint Commissioner GAA, Government of Odisha on e-Education
11.45-12.00: Presentation by Dr. Ashoke Kumar Roy, Project Director, Tripura State Aids Control Society, Tripura
12.00-12.45: Panel Discussion on e-Education and e-Health: Prof. S. N. Sarbadhikari, Project Director, CHI, NHP, MoHFW; Shri Dalip Kapur, Deputy Secretary, Department of Higher Education, Ministry of HRD; Shri Umakanta Swain, Joint Commissioner, GAA, Odisha; Dr. Ashoke Kumar Roy, Project Director, Tripura State Aids Control Society, Tripura; Dr. Ashok Babu, Mission Director, NHM, Assam; Shri Amit Saraf (E&Y); Moderator: Shri R C Jain, Secretary Education, Assam
12.45-13.30: Presentation by Ms. Monica Jasuja (MasterCard) and Shri Debarshi Dutta (MasterCard) on Big Data Analytics

13.30-14.30: Lunch

14.30-15.30: **Session-II:- e-Office and Centralized Public Grievance Redress and Monitoring System (CPGRAMS)**
14.30-14.45: Presentation by Smt. Rachna Srivastava, Sr. Tech Director, NIC, Shri Saroj Kumar Patro Scientist 'C', NIC on e-Office
14.45-15:00: Presentation by Dr. Meenakshi Mahajan, Sr. Technical Director, NIC on CPGRAMS

15.00-15.30: Panel discussion on e-Office and CPGRAMS: Smt. Rachna Srivastava, Sr. Technical Director, NIC; Shri Saroj Kumar Patro Scientist 'C' NIC; Dr. Meenakshi Mahajan, Sr. Technical Director NIC; Shri Vanlalringa, System, Analyst Directorate of information and communication Technology, Mizoram; Shri Debashish Goswami, Head, SeMT, Dept. of IT & Communication, Arunachal Pradesh; Moderator: JS (DARPG)
15.30-16.00: Tea
16.00-17.30 **Session – III:- Vision on Digital Transformation for Citizen Centric Delivery**
Panel Discussion on Digital Transformation: Shri K. D. Vizo, Commissioner and Secretary IT, Nagaland; Shri Rahul Singh, Secretary IT, Bihar; Shri Rajeev Ranjan, Director, Department of Revenue, Registration & Land Reforms, Jharkhand; Shri Atluri Rama Rao, ED, APFGC; Shri Amit Saraf (E&Y); Moderator: Shri K.D. Vizo, Commissioner and Secretary IT, Nagaland

Regional Conference on Path Breaking And High Impact Initiatives in Citizen Centric Services Delivery: Proceedings

Day-2: 16th SEPTEMBER 2016 (Friday)

09.30-11:00:   **Session IV: Initiatives/Reforms**

09.30-09.45:   Presentation by Shri J.D. Bhutia, Special Secretary (Tourism & CS), Government of Sikkim on Tourism Mission

09.45-10.00:   Presentation by Shri K. Bhutia, Secretary, Horticulture, Government of Sikkim on Sikkim Organic Mission

10.00-10:15:   Presentation by Shri V.K. Mantri, Additional Secretary, Programme Implementation and Evaluation Department, Government of Meghalaya on Integrated Basin Development Livelihood Programme

10.15-10:30:   Presentation by Shri Gopal Sadhwani, Deputy Secretary, Ministry of Tribal Affairs on Contemporary issue related to development of Tribal/Tribal areas

10:30-10:45:   Presentation by Dr. N. Vijaya Lakshmi , Managing Director, Mahila Vikas Nigam Patna on Gram Varta-Village Dialogue, A Women's Group Lead Initiative for Improved Health, Nutrition and Sanitation

11.00-11.30:   Tea

11.30-12.45:   **Session V: Initiatives in Tele-linking remote/inaccessible areas**

11.30-11.45:   Presentation by Shri Atluri Rama Rao, ED, APFGC, Andhra Pradesh Fibre Grid Corporation on Optical Fibre Grid Project

11.45-12.45:   Panel Discussion on Remote Area Connectivity and Accessibility: Shri R.K. Tondar, Director Department of Telecommunication; Shri Fakaruddin Ahmed, ACS, Joint Secretary (IT), Assam; Shri Atluri Rama Rao, ED, APFGC; Moderator- Shri K. D. Vizo, Commissioner and Secretary IT, Nagaland.

13.00-14.30:   Lunch

Regional Conference on "Path Breaking and High Impact Initiatives in Citizen Centric Services Delivery": Proceedings

Inaugural Session

Master of Ceremonies Ms. Tina Masood welcoming the dignitaries and delegates to the two-day Regional Conference on "Path Breaking and High Impact initiatives in Citizen Centric Services Delivery"

The Inaugural Session of the two-day Regional Conference on "Path Breaking and High Impact initiatives in Citizen Centric Services Delivery" was graced by the following dignitaries:

- Shri C. Viswanath, Secretary, Dept. of Administrative Reforms and Public Grievances, Govt. of India

- Smt. T. Y. Das, Addl. Chief Secretary, Govt. of Assam

- Shri Pawan Kumar Borthakur, Principal Secretary, Administrative Reforms & Training Dept., Govt. of Assam

- Smt. Smita Kumar, Joint Secretary, Dept. of Administrative Reforms and Public Grievances, Govt. of India

- Smt. Alpana Shukla Rao, Director (Documentation and Dissemination), Dept. of Administrative Reforms and Public Grievances, Govt. of India

- Shri Anjan Chakravarty, Director, Assam Administrative Staff College

Delegates representing the Eastern and North- Eastern States of Odisha, Bihar, Jharkhand, West Bengal, Assam, Arunachal Pradesh, Meghalaya, Mizoram, Nagaland, Sikkim, and other states including Himachal Pradesh, Rajasthan and Jammu, central ministries comprising policy makers, professionals and domain experts associated with path-breaking and high impact innovative initiatives in the domain of citizen-centric service delivery actively participated in the two-day Regional Conference. In addition, North-Eastern Council (NEC) and Ministry of

Development of North-Eastern Region (DoNER) were also represented in the Conference. The Inaugural Session was also attended by a cross-section of civil servants from Govt. of Assam, members of the faculty of AASC and, representatives of the press and media.

Lighting of the lamp by Secretary, Dept. of Administrative Reforms and Public Grievances (DARPG) Shri C. Viswanath, and other dignitaries on the dais

After the opening remarks by the Master of Ceremonies Ms. Tina Masood, the inaugural session commenced with the felicitation of the dignitaries with the traditional Assamese *Gamosa* and a bell-metal *Horai* by Director, Assam Administrative Staff College (AASC) Shri Anjan Chakravarty, and Addl. Director, Assam Administrative Staff College (AASC) Smt. Monidipa Borkotoki.

This was followed by the lighting of the lamp by the Secretary, Dept. of Administrative Reforms and Public Grievances (DARPG) Shri C. Viswanath and other dignitaries, marking the auspicious beginning for the Conference.

Thereafter, the Conference began with the dignitaries on the dais addressing the delegates.

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Welcome Speech

Shri Pawan Kumar Borthakur
Principal Secretary, Administrative Reforms & Training Dept., Govt. of Assam

Principal Secretary, Administrative Reforms and Training Dept., Govt. of Assam Shri Pawan Kumar Borthakur welcomed the dignitaries on the dais and the participants from the north-eastern and eastern states, experts from Delhi and different parts of the country to the two-day Regional Conference.

He highlighted that the Regional Conference by DARPG, GoI and the Govt. of Assam was organised to prepare plans to facilitate citizen-centric and accountable administration, redress of public grievances, transparency and Right to Information among other aspects. This is also a forum for discussion and dissemination of best practices that are being adopted by DARPG. He described the two-day Regional Conference on the theme of "Path Breaking and High Impact Initiatives in Citizen Centric Services Delivery" as important and timely.

He informed the participants that there were different sessions including Transformational e-Initiatives in Health and Education sectors, e-office implementation, Centralized Public Grievance Redress and Monitoring System (CPGRAMS) and Vision on Digital Transformation for citizen centric delivery. Therefore, many salient features and advantages of these initiatives would be discussed in their various dimensions, with focus on digital technologies and digital transformation.

He observed that digital technologies bring perceptible systematic changes in making procedures and processes practical, easy to enforce and follow, enhancing the role and involvement of citizens through participation in policy making and program implementation and making public delivery systems efficient and corruption-free.

Principal Secretary, Administrative Reforms and Training Dept., Govt. of Assam
Shri Pawan Kumar Borthakur delivering the Welcome Speech

The Regional Conference, he noted, also emphasises on Remote Area Connectivity. Realising the need to address the challenge of remote area connectivity and accessibility and eliminating the digital divide, the government has been prioritising the National Optical Fibre Network (NOFN). This Network is envisaged to bridge the digital divide by connecting 2.5 lakh Gram Panchayats by 2018 with 100 Mbps bandwidth, ensuring last-mile connectivity.

Shri Borthakur felt that there were a lot of aspects to discuss, share and learn from each other's experiences from different parts of the country. He added that it was a very good occasion for knowledge-sharing as the learning from the two days of deliberations would be a step further towards making the processes better for citizens. On behalf of the Govt. of Assam and the AASC, he once again welcomed all the officials of GoI, delegates and speakers to the Regional Conference.

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Deliberations in progress in the Regional Conference

Address

Smt. T.Y. Das
Addl. Chief Secretary, Govt. of Assam

Addl. Chief Secretary, Govt. of Assam Smt. T.Y. Das extended a warm welcome to all the guests from the north-eastern and eastern states, Delhi and from other parts of the country. She expressed her gratitude to DARPG for organising the Regional Conference on "Path Breaking and High Impact Initiatives in Citizen Centric Services Delivery" in Assam. She encouraged the participants to share ideas, learn from experiences and take the best practices home.

Smt. Das observed that the priority of good governance is to place the citizen at the centre of all government endeavours. She said all roads of the government must lead to the citizen. Despite having elaborate legal frameworks in place, a plethora of government institutions, rules of law and various codes, India doesn't rank high in terms of public satisfaction where government services are concerned. Public in India, as she highlighted, are willing to pay more and flock to private facilities like schools, hospitals, mobile service providers etc. despite having government facilities in place. She highlighted that while government jobs are the most sought after, ironically it is not the same case with government services.

Smt. Das informed the participants that as part of the larger understanding and effort to improve public services the Govt. of India brought in the reforms and rights legislations - Right to Information, Right to Education, Delivery of Public Services Act, and Food Security Act to name a few. However, there seems to be a wide gap between what the government has promised and what the government has delivered. There is still a long way to meet the public expectations especially if the well-governed countries in the world are taken for comparison. Sweden, she said, is known as the super model of Europe.

Addl. Chief Secretary, Govt. of Assam Smt. T.Y. Das addressing the participants

She strongly felt there is a need to meet public expectations in the light of the rising hope in public and the government has to hasten to meet these expectations. We have a plethora of courts but they are inaccessible to poor people in terms of costs. They remain choked with litigations and these disputes are very often borne out of poor governance. In many cases, the governance-deficit spurs activists to go in for Public Interest Litigations (PILs) which are nothing but social interest grievances. The RTI regime, the Citizens Charter, Governance reforms, Centralized Public Grievance Redress and Monitoring System (CPGRAMS), Digital India etc. are all part of the efforts of the government to make the government more accountable, more responsive, transparent and citizen-centric.

Smt. Das opined that the Conference would help in bringing out and popularising good practices which would provide citizen-centric services that fetch higher satisfaction to the public. In conclusion, she wished the participants fruitful deliberations in the two-day workshop.

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Addl. Chief Secretary, Govt. of Assam Smt. T.Y. Das addressing the participants

Address

Shri C. Viswanath
Secretary to the Govt. of India, Dept. of Administrative Reforms and Public Grievances

Secretary, Dept. of Administrative Reforms and Public Grievances (DARPG), Govt. of India Shri C. Viswanath expressed his pleasure and privilege to be present in the historic city of Guwahati blessed by Goddess Kamakhya. Assam, he said, is a very beautiful state with excellent natural landscaping dotted by tea gardens, rhinos, wildlife and such flora and fauna. He felt that it was good that the participants came out from their hectic and busy city lives and schedules to the AASC where for two days there would be discussions and deliberations and all of them would return more enriched and enlightened and would be able to do a much better job.

Shri Viswanath informed the participants that the Hon'ble Minister of State for the Ministry of Development of North Eastern Region, and Personnel, Public Grievances and Pensions, was very particular to conduct the Conference in Guwahati. He conveys his good wishes to this Conference.

Shri Viswanath set the context for the Conference touching upon various aspects of governance and governance reforms, ideas and innovations and awards and rewards. His speech set the tone for the deliberations and the panel discussions of the two-day Conference. The highlights of his address are as follows:

On Government and Governance

Setting the context of what a government is, the Secretary shared an anecdote from his childhood when as a four-year old, he asked his father who pays his salary. His father replied that the government pays the salary.

Secretary (AR&PG), Govt. of India, Shri C. Viswanath delivering his address

As a four-year old, he did not know what government meant and it became difficult for his father to explain what a government is. So, he showed a fat man who passed by their house everyday and told that he is the government and he pays the salary. This is because something that sustains them for one month has to be something big and fat. He highlighted how everybody thinks that government and governance are different and it is somebody else's job and not their job. He added government is a very amorphous entity and actually all of us put together are government.

- Quoting the political philosopher Jean-Jacques Rousseau's General Will, the Secretary informed that "people give their general will and entrust power, authority to a sovereign who exercises his power and there is a social contract." As long as the sovereign exercises powers as per the general will of the people, his authority is acceptable. Similarly, in modern governance, the representatives are elected and as long as they work towards fulfilling the needs and aspirations of the people, development and well-being of their citizens, their rule is acceptable and people continue to accept them as sovereign or government or authority. The day that they lose the confidence a new government steps in. This, he said, is the essence of governance.

- Good governance, citizen-centric governance and citizen-centric public service delivery which will be deliberated upon in the Regional Conference along with success stories, are all concepts that are very relevant for the well-being of any nation.

- What does the common man think of the government? The common man has a very different notion of the government - that it is routine, repetitive, filled with paper work, is rigid, highly centralised, hierarchical; has too many levels leading to delays, low accountability, low transparency; where form is more important than the substance and procedures are more important than the outcomes. These are all the perceptions about governance. The government servants too, after their retirement, realise that all that the common man thinks about them is 100 per cent true. The very same man who goes to a bank and shouts for delays in his pensions, does not realize what he does and how others

feel and suffer when he sits in his office and does not keep in view the common man's needs.

On Reforms of the government

- The Hon'ble Prime Minister gave the slogan, "reform, perform and transform," which basically calls for the transformation from system-centricity to citizen-centricity. All the procedures, rules and regulations are system-driven and if they are not administered in the right perspective, spirit and service-orientation, welfare and well-being of citizens suffer. There is thus a need to reform governance. The recent measures taken by the Govt. of India for reforming the system are as follows:

Secretary (AR&PG), GoI, Shri C. Viswanath interacting with the participants

- More than a thousand archaic laws have been repealed. Such anachronistic laws, rules and procedures lead to corruption. In fact, any personal interface has the possibility of leading to corruption, typically. Therefore, the effort of reforms in governance and citizen-centric public service delivery should be to reduce the interface between the government and the citizen. Each state is doing good work in this direction, which may not have been shared or publicized by them. These Conferences act as forums for sharing the best practices providing higher visibility for the states championing them and for other states to get inspired and facilitate replication and resultant reforms in e-governance.

- Simplification of procedures is another transformational initiative of the government. The Hon'ble Prime Minister urged that most of the forms that people fill should not be more than one page. Many a time, repetitive information is asked, unnecessary information is sought and it tends to make the form too long. The government is carrying out a very serious exercise to reduce the size of every form and make most forms online.

  In addition, there is a need for various manuals and codes to be revised and this is already being done by the government. The ministries have been asked to change their manuals and codes as they have become outdated. They are virtually pre-historic and were made during the British times for a particular purpose when the government was separate and by a different country and when the rulers and the governed were different. Improvements are also being brought about in licenses and permits and clearances at various levels are being made simpler.

- Many reforms in governance towards simplification and unification are also being introduced like doing away with the distinction between plan and non-plan expenditure, separate railway budget etc.

- Self-certification is another important measure of the government which has led to most of the offices doing away with affidavits and attestations and are going for self-certification. At a state or a district level, it is very difficult to find many gazetted officers and for a common man to get the signature of a gazetted officer is not easy unless they have acquaintances. So, self-certification is a major step that the government has taken.

- These are the various areas where reforms have been introduced in governance. However, India being very large, diverse and a pluralistic society, there is a need to have systems in place which are fast, cater to large numbers and which bring about uniformity in delivery of services. This is where e-Governance comes as a very major relief to the entire process of governance.

- There is a need to totally switch over to e-governance. The Hon'ble Prime Minister was strongly advocating the use of technology in governance as very vital and that it should be adopted by all and made wide use of.

- For example, ration cards is one area in which a lot of e-Governance has been introduced. As per the information of GoI, 100 per cent digitisation of all ration cards has taken place. More than 50 or 60 per cent have been seeded with Aadhar numbers. To quote an example, in Andhra Pradesh all ration cards have been seeded with Aadhar numbers. The advantage of seeding with Aadhar number is that a person from one district can take his ration even in a far-off district with the inter-operability feature in ration cards. The seeding also helps in bringing to light certain dealers indulging in malpractices and facilitates elimination of such entities from the system. So far, about 1.7 crore ration cards have been weeded out leading to a saving of nearly Rs. 10,000 crore in a period of just three years.

- Similarly, Direct Benefit Transfer (DBT) is another area in good governance. About Rs.13,000 crore savings have been recorded in Chandigarh, Pondicherry and Dadra Nagar Haveli as money is being directly transferred to the beneficiaries' accounts. This is one good initiative taken in the Public Distribution System with cooperation of all the state governments and the

good work is done by the states, building on the initiative coming from the Centre.

- The Jan Dhan Yojana too facilitated opening of 24 crore accounts, a major step towards financial inclusion.

- More than 1 billion Aadhar numbers have been allotted so far. Aadhar is a great revolution of India as opined by the High Commissioner of United Kingdom which could not be carried out there due to legal hurdles. Aadhar is a great enabler for many facilities like Direct Benefit Transfer (DBT), Pension Accounts etc. in the country.

- In case of pensioners and pensioners' welfare, Jeevan Pramaan is a scheme for the Pensions and Pensioners' Welfare where all pension accounts are being seeded with Aadhar. More than 80 per cent of pension accounts have been seeded with Aadhar numbers which would facilitate providing of digital life certificate every year. This is yet another advantage of Aadhar number and e-Governance facility, as mentioned earlier.

- Nowadays, the concept of government and governance has totally changed. For the first time, both at the centre and in the states, parties are coming to power based on the slogan of good governance. The people are attaching great importance to reforms in governance. Therefore, as representatives of government, all the officials need to really work hard and put together their efforts to achieve or realise the dreams of the people of this country.

- In this context, Bhavishya is a program of pension sanction and payment tracking system which is another scheme introduced for the pensioners. Under this, an individual's name would get entered into the Bhavishya database fifteen months before his/ her retirement. It then facilitates tracking all the pension sanctions, steps to be followed and clearances to be obtained. After retirement, it provides details on the pensions, pension payment orders, changes in the pension, etc.

- Thus, Bhavishya, Jeevan Pramaan, Anubhav are the novel schemes of the Dept. of Pensions and Pensions' Welfare. The positive change that is being noticed now is that the government is genuinely concerned even about the pensioners and pensioners' welfare. Similarly, the government has been evolving new schemes through use of technology and e-Governance for the benefit of youth, adolescents, children, women, pensioners etc. with a view to improving the welfare of each section of the community. Therefore, for all of us to be beneficiaries of citizen-centric governance, we need to be providers of good governance first.

- Similarly, in Andhra Pradesh, "*Mee Seva*" (in Telugu, *"Mee"= Your "Seva"= Service)* centres offer more than 80 services to the citizens. Every small village in the state has one Mee Seva centre run in a Public- Private Partnership (PPP) mode. People are provided a registered number and the time of service delivery and SMS alerts are sent to the citizens on the delivery of services like certificates on income, caste, property, exchange in land records, grievance redress etc. and the people go at the appointed times and avail the services.

- Another innovative initiative of the Govt. of India is the Centralized Public Grievance Redress and Monitoring System (CPGRAMS). The individuals can register a grievance either directly on CPGRAMS portal or if submitted in writing, it is immediately scanned and uploaded on the CPGRAMS portal so that on any given day, any department will be able to know the number of public grievances that pertain to them.

The Hon'ble Prime Minister himself monitors this initiative every month with all the Secretaries to the Govt. of India as well as the Chief Secretaries. Every month, one department is reviewed on public grievances. This highlights the importance the government is giving to addressing public grievances. This is the reason that in the last two years, the number of grievances received increased by five-fold. This shows the faith that people have in governance and the trust that action would be taken if they register their complaints on CPGRAMS. Every month, the Secretary, DARPG and the Hon'ble Minister talk to

at least 10-15 people to find if their grievance has actually been resolved. In cases where the grievances are not resolved, the departments concerned are contacted and directed to take action. This is how the CPGRAMS portal has become very important. Grievances pertaining to the states are also received on CPGRAMS which are then forwarded for necessary action at the local level.

- The response and the disposal from the states, however, have not been very encouraging. While the disposal at the GoI is about 97 per cent, it is just 14-15 per cent in the states. It is possible the states may be having their own grievance redress portals and addressing them in their own way.

- It is a request to all the participating states to give feedback to their respective states that all the grievances registered on the CPGRAMS portal are not to be assumed as grievances pertaining to central government (only) and that they have nothing to do with the states. It must be understood that the people who have grievances relate to the state and that is the reason it can be resolved by the state only. If it can be resolved by the central government, then it would not have been sent to the state government and the centre would take action to resolve it. In addition, it must be understood that if one registers a grievance on the CPGRAMS portal, then he/ she may have registered on the state portal or written in a physical form also.

On Ideas and Innovations

- There was a series of lectures called the "Transforming India" where the Deputy Prime Minister, Singapore spoke about the use of technology for development. It has been observed that despite sixty or more years of independence, the progress made in the country is no match to what is expected of us. India has the largest scientific and technically trained manpower in the world with Indians excelling in every field that they get into. However, the country has not leapfrogged the process of development. Although incremental changes are taking place in the country, it is not sufficient.

- A country like Malaysia got independence in 1957 but its development is much ahead than India. The Hon'ble Prime Minister is very particular that there is a need to transform, change and leapfrog the process of development. There is a need to totally revolutionise. A quantum jump is required in all the initiatives and programmes for the multi-dimensional growth of this country.

- As Hegel, the great philosopher pointed, "Ideas drive events and ideas make history." So, ideas are very important. All of us are full of ideas. However, people shy away from trying new ideas. Everybody wants to follow the golden path, the oft-treaded path, the known path and the path that is followed by the bosses and ancestors. This is how, typically individuals are trained and that is why perhaps, there is no trying of new ideas. For every 100 or 1000 ideas that are tried, 99 or 999 may fail but one will succeed. In fact, as Edison puts it, "Don't call them failures. Call them ideas that did not work." This in itself is a great learning.

Secretary (AR&PG), GoI, Shri C. Viswanath and other dignitaries on the dais

If one doesn't know what doesn't work, one day they will get an idea on what works. So, there is a need to think out-of-box. There is a need to think differently and unconventionally. As somebody pointed, there is a need to think unreasonably. Any idea that works and that makes the change is called an innovation.

- In today's context of public service delivery, incremental innovation may not be sufficient. Being slightly better than the past, won't work. There is a need for disruptive innovation and new markets. For example, Uber and Ola have done disruptive innovation. They don't own a car or a driver but they are providing a facility and made travel easy. These are the disruptions in the commercial field.

- When it comes to service delivery, Aravind Eye Care System stands as an example of disruptive innovation. The life of Dr. G. Venkataswamy, the founder of Aravind Eye Care Centre highlights his passion for curing blindness that has led to the Aravind Eye care System which transformed itself from 11-bed hospital capacity in Madurai to screening 32 million people so far.

- Inspired by the fast food chain McDonalds of the United States, the assembly line model was adopted in Aravind Eye Care System for conducting surgeries efficiently and effectively. The time taken for a single cataract operation is about 3.5 minutes. There is high skill. It may be noted that the experience of a government doctor is more than the private doctor on account of the many patients they see and the experience they gain. The skill of the doctors in the Aravind Eye Care System has similarly improved because of high volumes. Their operational efficiencies have improved on the strength of scale economies. In 1990s, they started making their own intraocular cataract lenses to reduce the costs. Today, they export the lenses to nearly 120 countries of the world.

- So far, 32 million people have been screened while four million underwent surgeries. The Aravind model is a self-sustaining model with the costs of the surgeries not posing a burden for the patients. Nearly 400,000 operations are carried out per year. It is low cost and high volume. The complication-incidence rate too is low. So, it is high quality, high volume and low cost. Importantly, they have reached out to new markets.

- What is disruptive innovation? Getting new markets and the markets which were not tapped earlier. The Aravind Eye Care staff go to the field, screen and enrol patients. It is not done for money but for passion and compassion. It is the inspiring leadership of Dr. Venkataswamy. So, there is a need for passion, compassion, leadership qualities and a will to do something for a change for the better.

  Infinite Vision: The Story of Aravind Eye Hospital, a video portrayed the journey of the Aravind Eye Care.

On Awards and Rewards

- The Civil Services Days is being celebrated every year on April 21 and the best practices in public administration are rewarded.

- The Hon'ble Prime Minister felt that the Civil Services Day was being celebrated every year but the improvement in good governance is sub-optimal in terms of its nature and extent. So, the system of awards and rewards needed a change and accordingly modifications have been done. It has also been decided to ensure that all the initiatives that are awarded are replicated. This task has been given to the Administrative Staff College of India (ASCI). Out of the 17 initiatives that have been awarded the Prime Minister's Awards for Excellence in Public Administration in 2015, 14 are being replicated by various states in the country. The Hon'ble Prime Minister strongly advocated the replication of the good work, as one of the criteria of giving the awards is the scalability of the initiative.

- In the case of awards for 2017, the Hon'ble Prime Minister suggested that a competition be generated. Accordingly, five Priority Programmes of the Government have been identified as five categories in addition to a category on

innovations in other sectors such as social, environmental, human development etc.

- DARPG has already sent letters to the Chief Secretaries of the states and the Hon'ble Prime Minister advised that the information be sent to all the states and districts to generate competition among them to ensure that the Priority Schemes / Programs are effectively implemented. The five Priority Programmes are:

    (i)   Pradhan Mantri Krishi Sinchayee Yojana

    (ii)   Deendayal Upadhyaya Gram Jyoti Yojana

    (iii) Pradhan Mantri Fasal Bima Yojana

    (iv)   Start Up India - Stand Up India

    (v)   e-National Agriculture Market (National e-Mandi)

    The thrust is on the farmers and hence three of the five Priority Programmes are in the domain of agriculture.

- In addition, there is another separate category for innovations in environment conservation, disaster management, water conservation, energy, education and health, women and child centric initiatives etc.

- The Hon'ble Prime Minister's idea is that every district selects one or more of the Priority Programmes for competing under the PM Awards. The district-wise chosen programmes should be communicated to DARPG by September 30, 2016. The period of consideration of the initiatives is April 2015 to December 2016. The Hon'ble PM would be reviewing it on a fortnightly basis as to how many states have selected how many programmes.

- The participants are requested to inform the respective Secretaries of the Administrative Reforms Departments and Chief Secretaries on the Scheme. There has already been a video-conference with the Chief Secretaries and 677 District Collectors informing about the PM Awards.

- In the innovation category, nominations are welcome from the states, state organisations, districts and any other implementing unit. In January 2017, a window of 15 days will be provided for nominations. They would be self-nominations and the awards will be given on April 21, 2017.

- **Discussion**

    ▪ **Dr. Purnima Chauhan, Secretary, Administrative Reforms, Govt. of Himachal Pradesh**

        It is very interesting to listen about the path-breaking initiatives. It really makes a difference. We really hope not to reinvent the wheel and learn from each other.

        Sir, can you please elaborate on the format of the innovation component of the Awards. There is a State Innovation Council in Himachal Pradesh which has branched out into six sectors. One of them is headed by me and it deals with the innovations in government sector. So, in the government sector, innovations can be across a gamut of activities. There is set criteria which include qualifying criteria followed by evaluation criteria.

    Shri C. Viswanath, Secretary (AR&PG), GoI

        It is generally given for innovations in environment conservation, disaster management, water conservation, energy, education and health, women and child centric initiatives etc.

The parameters for the various priority programmes would be communicated. As this award is for innovations, every criterion may not be listed. There would not be any format for innovation.

Innovation is unconventional, as it is doing something differently and in a novel way. The State is welcome to share the criteria it evolved.

Smt. Smita Kumar, Joint Secretary, DARPG, GoI

The applications would be taken online and a format is provided on the portal where states and districts would fill-up directly.

- **Shri K.D. Vizo, Commissioner and Secretary (IT), Govt. of Nagaland**

As far as Awards are concerned, there is lot of focus on disruptive innovation. There needs to be focus on incremental innovation too. In the last few years, it has been seen that 8 per cent of India's geographical size and 3 per cent of India's population had not benefitted when 12 categories of e-Governance awards were given. So, this year, we feel that focus has to slightly change towards the north-eastern region as well. For instance,

  o Nagaland is the first state with a state-run Data Centre. It is the first state to have its own portal.

  o Nagaland reached the Level-1 in the e-District Mission Mode Project (MMP) out of seven states in the country.

  o It is the only state in the north-east which has started Aadhar-based biometric attendance in the whole civil secretariat.
  o Nagaland is the first State in North Eastern Region to start the pilot project for National Information Infrastructure (NII).

  o The Nagaland e-Governance Society is the only e-governance society which has obtained the ISO certification.

But, it is found is that overall e-Governance performance is not being accorded the same recognition as disruptive innovation. We are interested and we have ideas. But, the north-east lacks funds for innovation. Only MMP Projects from the Ministries fit well into the system. So, this year, with encouragement, there may be representation from this geography in the 12 categories of e-Governance Awards.

Shri C. Viswanath, Secretary (AR&PG), GoI

I am glad you have taken lot of interest. As mentioned earlier, disruptive innovation means new markets. As you said, North-East is itself a large area which needs to be fully integrated into the whole process of development. This is the reason there is no clubbing of the North-East with the rest of the country in this year's PM's Awards for Excellence in Public Administration.

We are assessing 18 states of the country on one side although it is disproportionate and the Union Territories on one side and the North-Eastern states and the hill states in one category so that that there is a level playing field and due share and importance is given to this region which is one of the most important regions in the country.

Now, apart from Priority Programmes, there is also the category of innovations which recognizes good work done in any areas. The state departments can send nominations in the innovations category.

As far as National Awards for e-Governance is concerned, the Conference is scheduled to be held in Visakhapatnam in January 2017. The participating states are requested to send the nominations immediately and the date has been extended till September 20. I am

sure due weight can be given to North-East while finalising the National Awards for e-Governance.

- **Smt. T.Y. Das, Addl. Chief Secretary, Govt. of Assam**

There is discussion about Digital India and e-Governance. But one of the main challenges is the very poor service for internet connectivity in the region which is really hindering roll out of programmes whether it is the land reforms or computerisation of police stations and the region is finding it difficult to go ahead. There has been good progress in computerisation of land records and registration. But, we have not been able to integrate.

Shri C. Viswanath, Secretary (AR&PG), GoI

The representatives from National Informatics Centre (NIC) are here. They may kindly take a note. I request Smt. Smita Kumar and Smt. Rachna Srivastava, Senior Technical Director and HoD e-Office Project Division, National Informatics Centre (NIC), GoI to write to the Secretary (IT) about the problems expressed in the Conference and request representatives to make a visit to the region and take necessary action.

- **Shri Edwinson Swer, Director (Admin), North Eastern Council (NEC)**

As mentioned by the Addl. Chief Secretary on connectivity, it is not robust in North-East. There is a budget from every ministry/ department for development to this region. So, about 57 ministries/ departments have allocated budget. In terms of telecom, the budget is about Rs. 500-600 crore for the North-East region. I feel it is still not adequate taking into consideration the landscape and the terrain. We are taking steps whether optical fibre wires can be laid along power lines, so that all the districts of the North-East can be connected.

Delegates at the Regional Conference

Shri C. Viswanath, Secretary (AR&PG), GoI

I suggest that we organise a Conference on the various aspects like IT, Telecom which are of significance to the North-East. Next time and also in the various conferences happening in the North-East, there is a need to bring in these officers for interaction. Or, a special conference can be held on the theme "Communications in North East" covering all communication/transportation grids including road, rail telecommunications sponsored by DoNER where all the North-East states could be invited and the problems could be discussed and addressed.

- Utilizing the opportunity to encourage and inspire the participants on the aspect of recognition and rewards, the Secretary shared the achievements of the country in the Commonwealth Association for Public Administration and Management (CAPAM).

- India is an institutional member along with 56 other countries in this Association. CAPAM gives awards for excellence every year for innovation. This year, 6 out of 12 awards shortlisted among all the Commonwealth countries were from India. It is a matter of pride that India received awards in three out of four categories - for *"Lado"*- a scheme for preventing child marriage in Madhya Pradesh, which also received the PM Award in 2013-14, "Screening women for cervical cancer from Tamil Nadu", which also received in the earlier years the PM's Award and the overall Gold Award, and Revival of Sasur Khaderi, an initiative from Uttar Pradesh which focused on rejuvenation of water bodies. It is heartening that many states have applied for the awards, showcasing the good work done by them.

- Thus, there are many avenues and opportunities for good work to get recognised. Emulation worthy work is being done in Nagaland and many other states. So, it is important to keep in mind the several avenues and forums. It becomes a great incentive to the champions to do further good work and for others to emulate the good practices and replicate the good work, if their efforts win recognition and reward.

- In response, a participant from Bihar requested the Secretary to write to the states about the various avenues to create greater awareness in the states about the forums. The Secretary encouraged the states to get in touch with the DARPG by mail or social media and advised the officials to represent good case studies and success stories in innovation to the Dept. He agreed to write to states. He informed that officers are also being sent for training abroad to countries like Canada, Netherlands, Singapore and Malaysia etc. for taking interest in administrative reforms and for replicating best practices.

- Lastly, he once again highlighted that the National e-Governance Conference will be held in January 2017 in Visakhapatnam. He encouraged the officials interested in e-Governance to participate. He added that the Govt. of AP is investing sizeable resources for organising the Conference. He suggested that other states too could take more initiative in organising such Conferences as it is a way of showcasing the state and its strengths in governance reforms. The investment of resources on such conferences is certainly worth it. He also informed the delegates about the upcoming conferences of the Dept. in the months of November in Jammu and in December in Rajasthan.

- He felt that the conferences are useful as the officials get an opportunity to hear from the representatives of various Departments and the vice-versa. As it offers knowledge exchange and diffusion of proven practices in good governance, it's a good learning experience. He suggested the officials to encourage their subordinates and colleagues to take part in such conferences.

Concluding his speech, Shri Viswanath suggested that the participants resolve to go ahead with determination to create more disruptive innovations and see that the governance in the country at various levels improves in a geometrical progression and not in an arithmetic progression for the benefit of all concerned.

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13363/2016/O/o DIR(D&D)-DARPG

Vote of Thanks

Smt. Smita Kumar

Joint Secretary, Dept. of Administrative Reforms and Public Grievances, Govt. of India

The Joint Secretary, DARPG, Govt. of India proposed a Vote of Thanks, extending her gratitude to:

- The Secretary (AR&PG), GoI for his inspiring inaugural address and setting the context for the deliberations of the two-day Conference

- The Addl. Chief Secretary, Govt. of Assam and the Principal Secretary, Govt. of Assam for organising the conference and providing the required support

- The Director, AASC for the minute detailing and organising the Conference successfully

- All the faculty and staff of AASC and of the Administrative Reforms and Training Dept., Govt. of Assam for their efficient management and good logistics support

- All the participants from the States for participating in the Conference to make it rich in content and deliberations

- Representatives of the media

- The DARPG Team for conceptualising and organising the Conference

The Joint Secretary highlighted the need for focused interaction on the drawn-up themes and the resulting benefits for the various stakeholders. She expressed confidence that the deliberations would be truly fruitful and inspiring.

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Smt. Smita Kumar, Joint Secretary, DARPG, GoI proposing the Vote of Thanks

13363/2016/O/o DIR(D&D)-DARPG

Photographs

Delegates participating in the deliberations

Delegates at the section on Publications

Delegates participating in the deliberations

Delegates at the section on Publications

Regional Conference on "Path Breaking and High Impact Initiatives in Citizen Centric Services Delivery": Proceedings

Group Photograph of dignitaries and delegates at the Regional Conference

Session-I: Transformational Initiatives in e-Health and e-Education Sectors

Introduction

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e-Education and e-Health are two crucial initiatives of the Digital India programme that are aimed at providing economical, efficient and effective services to the citizens in far-flung areas of the country which have little or no access to physical or in-person modes of service delivery. In this context, the first Session of the Regional Conference focussed on the transformational initiatives in e-Health and e-Education sectors bringing forth the successful initiatives in these sectors being pioneered by the Indian states of Odisha and Tripura.

The session began with experience-sharing presentations by the representatives from Odisha (e-Education) and Tripura (e-Health) on the various initiatives that are being pioneered in the respective states. While Odisha has been making great strides in universalization of Primary Education and marching ahead in e-Education, the north-eastern state of Tripura has been a fore-runner in the application of Information and Communication Technologies (ICTs) in the domain of health, since 2003.

The Panel comprising the representatives from Odisha and Tripura, policy makers from related central ministries and a domain expert provided further inputs, ideas and insights into the strategies and approaches in the formulation and implementation of transformational initiatives in these sectors.

The second part of the session provided insights on another transformational theme that is driving the world- big data analytics. The experts dealt with digital commerce and advanced analytics and the huge potential they hold for the future across various verticals.

Panel Discussion on e-Education and e-Health

Presentation on e-Education in Odisha

Education is the first step to all the socio-economic development in the society.

Joint Commissioner, Gopabandhu Academy of Administration, Govt. of Odisha presenting on e -Education in Odisha

In Odisha, the domain of education is witnessing a rapid transformation, as highlighted by Joint Commissioner, Gopabandhu Academy of Administration, Govt. of Odisha Shri Umakanta Swain.

The state improved in terms of the literacy rate with an overall literacy rate (Census 2011) of 73.5% which is close to the national average of 74.04%. Education is being provided to children in the age-group of 6-14 years, which has been instrumental in improving the literacy rate. The various measures taken by Odisha in the domain of e-Education are as follows:

- The Right to Education (RTE) Act 2009 has changed the face of education. Odisha as a state has made great stride in the universalization of Primary Education.

- The Government of India's interventions to improve women literacy in the tribal pockets in the state and elsewhere in India facilitated improvement in Odisha as well. The male literacy stands at 75.95 per cent and female literacy at 50.97 per cent with improvements in the literacy levels of women in the most tribally underdeveloped parts in Odisha.

Shri Umakanta Swain is presently the Joint Commissioner, Gopabandhu Academy of Administration, Govt. of Odisha.

He is a 1987 batch Orissa Administrative Service (Group-A) Officer. Prior to his present role, he worked as BDO; Tahasildar; Sub-Collector; Addl. District Magistrate; District Project Director, Sarva Siksha Abhiyan; Executive Director and Odisha State Disaster Management Authority.

He completed his Masters of Arts in History from Utkal University.

13363/2016/O/o DIR(D&D)-DARPG

- The Right to Children to Free and Compulsory Education (RCFCE) Act, introduced in 2009 in the country guarantees free and compulsory education to all children in the age group of 6-14 years. It also guarantees education of a specified standard, hours of school time and days of school functioning, pupil teacher ratio and quality of teachers. Odisha has gone way ahead achieving compulsory and free education. Catering to the various provisions of the Act, Odisha is now a punishment-free zone and focuses on joyful learning.

- Odisha has also been successful in involving students in the School Management Committee (SMC) through which the students along with teachers, parents and community members participate in transforming education system and work towards achieving the set goals. The students have a say in the assessment of the quality of teaching that is being imparted.

- The differently-abled children are also being taken special care of by providing them with adequate aids and facilities.

- A well-developed school plan forms the basis of success, infrastructure and quality teachers and the same has been put in place in Odisha. Previously, the education sector suffered due to incompetent teachers. After the introduction of RTE, care has been amply taken to provide fully-trained teachers.

- In addition, Computer-Aided Learning (CAL) was introduced in Odisha in 2002, which forms part of the curriculum both in primary and secondary level. The objective of the programme was to make learning joyful and assessment a fun while providing equal opportunity for all students.

- Nearly, 496 schools covering 14 states have been equipped with CAL so far. They coordinate with each other in implementing the programme.

- E-Sishu Project is another initiative being implemented in Odisha, which tracks each child in the age-group of 6-14 years. The in-school children are tracked and provided necessary inputs so that they remain in the school. By tracking the out-of-school children, the authorities find the reason for dropping out and bring them back to mainstream education. In addition, it tracks the achievement level of children and takes corrective measures, thus improving the quality of education. The state not only ensures that education is provided but also quality is maintained so that it can provide a good life with better moral standards in addition to earning a livelihood.

- These are some of the many steps that the state of Odisha has been taking to achieve the set goals of providing quality education in the state while recording improvement across various parameters like student attendance rate, reduced absenteeism of teachers etc. In terms of the Gross Enrolment Ratio (GER), Odisha is at par with the other developed states of the country like Andhra Pradesh, Maharashtra etc.

- Under the Education Guarantee Scheme (EGS)/ Alternative and Innovation Education (AIE), the students are being tracked whether they are enrolling themselves for matriculation or whether they are going for higher education or pursuing other avocations.

- The Odisha Child Census has been tagging 52,000 revenue villages with the schools using unique Education Management Information System (EMIS) Code. 45,000 personnel were engaged in data collection from around 78 lakh households through door-to-door survey. In addition, a database of 10.5 million children (0-14 yrs) has been created using Intelligent Character Recognition (ICR) technology. There is a provision of a standard Child Code to each child to track them in subsequent years.

The Presentation, thus, highlighted the various steps taken by Odisha in the area of e-Education. The state envisages successful implementation of e-Education to usher in quality education and improved literacy.

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Presentation on e-Health in Tripura

Tripura has been pioneering the use of Information and Communication Technologies (ICTs) in e-Health through Telemedicine since 2002. Project Director, Tripura State AIDS Control Society, Tripura Dr. Ashoke Kumar Roy talked about the journey of Telemedicine, the journey so far and the way forward.

Project Director, Tripura State AIDS Control Society, Tripura Dr. Ashoke Kumar Roy presenting on e-Health in Tripura

- The first phase of telemedicine initiative began in Tripura from the year 2002 through five units. The second phase started off in 2007 with six units. The initiative, thus far, has been running successfully across the state.

- The application of IT has immensely helped the State in effectively tackling the problem of shortage of health specialists. In addition, superior real-time advanced medical help could be dispensed almost at the door steps at no cost to the beneficiary. The sustained connectivity has also helped health administrators in better supervision and monitoring of functioning of health institutions particularly in rural areas of the state. The telemedicine ecosystem consists of the Referral Centre and the Nodal Centre, which are connected through a 512 Kbps leased line of Bharat Sanchar Nigam Limited (BSNL).

- As part of telemedicine, Computerised Registration System, Tele-Ophthalmology, and Uniform Civil Registration System are being rolled out.

- In terms of the trends in telemedicine in Tripura, general medicine has been

Dr. Ashoke Kumar Roy has extensively worked in the field of health. As a Public Health Administrator, he has worked on situation analysis and formulation of corrective measures/strategies. He played key role in conceptualization of Telemedicine. As Advisor, Regional Resource Centre for NE States in Public Health, he undertook capacity building of the state & district officials in the region for evidence-based district health planning.

Dr. Roy has an MBBS, DPH and MPHA.

widely utilised by the patients in the initial years. Eventually, with the introduction of other specialisations, people are now able to avail telemedicine facilities across a wider range. It has been observed that the lack of specialists in orthopaedics and radiology has led to more people using telemedicine for consulting the Tele-medicine specialists in the recent times.

- Electronic Registration System is another initiative that has been introduced in 2003 in Tripura. It was initially started for the Out-Patient Department (OPD) Registration and then linked to the In-Patient Department in the Agartala Government College in Tripura. It is now planned to link it to the laboratories and radiology department. The advantage is that the data can be compared at any point of time.

- In addition, efforts are also on to popularise the Online Registration System (ORS) in Tripura, which is a framework to link various hospitals across the country for Aadhar-based online registration and appointment system, where counter based OPD registration and appointment system through Hospital Management Information System (HMIS) has been digitalized. The ORS is presently being implemented in AIIMS, New Delhi, Dr RML Hospital, New Delhi, Sports Injury Centre (SIC), New Delhi and NIMHANS, Bangalore. However, low publicity and utilisation by common people are matters of concern. It has been observed that, so far, only 30 appointments have been made in the Agartala Government Medical College. There is also a need for the community to be computer-savvy to utilise this service.

- Tele-ophthalmology, commissioned in 2007, is being provided to 44 out of the 58 blocks in the rural areas in Tripura under the Tripura Vision Centre, which is a comprehensive model for providing primary and preventive eye care in a decentralized manner using the benefits of ICTs integrated with the medical eye care solutions. The project is conceived and designed by the collaborative effort of the Ophthalmology Department, Indira Gandhi Memorial (IGM) Hospital, IL & FS Education & Technology Services Ltd. (ETS) and Aravind Eye Care System. Till March 2016, the project has screened 4.72 lakh patients across all the 44 Vision Centres. Cataract operations are being done and spectacles are being provided to the patients.

- As part of add-on services, one fundus camera has been procured and another one is yet to be installed for screening diabetic retinopathy (DR), a common complaint these days.

- Presently, there are 1,346 units functioning as registration units for births and deaths.

Way Forward

As the way forward, Tripura plans to implement Tele-radiology. So far, 20 hospitals across the state have been identified for the implementation of Tele-radiology. 13 out of these 20 are already providing telemedicine to the citizens.

In addition, there is also a need to improve the Online Registration System (ORS). The state is also trying to bring in Aadhar/ fingerprint-based HIV screening in the state. e- Hospital is another aspect that is being worked upon.

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Panel Discussion on e-Education and e-Health

Panel Discussion on e-Education and e-Health

Moderator
Shri R. C. Jain
Joint Secretary, Education Dept., Govt. of Assam

Panellists

- Shri Umakanta Swain
  Joint Commissioner, GAA, Odisha

- Dr. Ashoke Kumar Roy
  Project Director, Tripura State Aids Control Society, Tripura

- Dr. Ashok Babu
  Mission Director, NHM, Assam

- Shri Amit Saraf
  Director, Advisory Services – Health ICT, Ernst & Young

- Prof. S. N. Sarbadhikari
  Project Director, CHI, NHP, MoHFW

- Shri Dalip Kapur
  Deputy Secretary, Dept. of Higher Education, Ministry of HRD

Introduction

Shri R.C. Jain, Joint Secretary, Education Department, Govt. of Assam welcomed the panellists for the discussion. The Panel Discussion began with experience-sharing by the policy makers and the domain experts, setting the initial tone.

The Panel comprising the representatives from Odisha and Tripura, policy makers from related central ministries and a domain expert provided further inputs, ideas and insights into the strategies and approaches in the formulation and implementation of transformational initiatives in these sectors.

It was envisaged that the meaningful cross-fertilization of ideas and constructive views emerging from the Panel Discussion would promote further learning among the participating States and encourage them to initiate and/ or replicate the emulation-worthy interventions towards leveraging ICTs and Digital India provisions in the realm of human development.

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e-Health in Assam

Mission Director, National Health Mission, Assam Dr. Ashok Babu highlighted two of the e-health initiatives of the National Health Mission of Assam.

- One of the initiatives is the Mother and Child Tracking System (MCTS) which facilitates providing a set of comprehensive virtual services to pregnant women and children in the state. With nearly eight lakh pregnant women in Assam, the tracking mechanism provides alerts on the health, due dates and other information to various health functionaries to take necessary action. The continuous assessment of service delivery to pregnant women and children led to a drastic decline in the Maternal Mortality Rate (MMR) in Assam.

- The "Dial 108" service is another initiative of Assam that interlinks call-centres with ambulances for addressing emergencies. Nearly 3,000 people are attended to in a day across the state of Assam. In fact, Assam has the highest density of ambulances, helping saving of lives.

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Dr. Ashok Babu is presently the Mission Director, National Health Mission, Assam & Secretary, Dept. of Health & Family Welfare, Govt. of Assam.

Earlier, he worked as Dy. Commissioner & District Magistrate & Chairman, District Health Society in Dhemaji, Goalpara and Nagaon districts of Assam. He worked in various capacities in the Govt. of Assam as Asst. Commissioner, Sub- Divisional Officer (SDO) and Addl. Dy. Commissioner. He also worked as Asst. Commissioner, Customs & Central Excise in Govt. of India and as Medical Officer in Primary Health Centre under Govt. of Andhra Pradesh.

He completed his MBBS Degree.

e-Health Platforms in India

Director, Advisory Services – Health ICT, Ernst & Young Shri Amit Saraf provided the perspective on e-Health from a consultant's point of view. While highlighting the experiences of e-Health in various states and the overall challenges in the ecosystem, he touched upon the various e-initiatives of the Government of India.

- From the experiences of using ICTs in the area of health in multiple states, he observed that the key difference is the understanding of e-Health by various states.

- Quoting a few examples from the states, he highlighted that Maharashtra's e-Health model is based on simple IT solutions, with focus on solving real-life small problems like building an inventory of sorts of paramedical staff, biometric attendance for doctors, real-time data on the number of deliveries in a day, rule-based system for transfer of paramedical staff across the state etc. This led to the development of a plethora of applications which eventually helped the state to visualise and design their e-Health ecosystem. The state is now trying to integrate all the apps for communicating with each other.

  o In the case of e-Health in Andhra Pradesh, the state looked at an integrated system with an inward and an outward view, which takes care of human resource management, financial management, program management, performance management etc. and other elements of supply chain. Meghalaya too adopted a similar model.

  o In the case of Gujarat, there was already a large system that took care of broader hospital management. The state wanted to introduce interventions like telemedicine. Madhya Pradesh too started their e-Health journey with hospital management systems.

- e-Health is, therefore, a journey which many states have tried to undertake historically in their own different ways. When one looks at how the National e-Governance Plan was conceptualised, health was not included as a Mission Mode Project (MMP) to begin with. So, there was no clear mandate or guideline on how the states need to go forward. The states were free to drive the reform journey in the way they felt appropriate and they did it.

- The challenge, thus, is that we are not looking at green-fields as most of the states have initiated some process or the other. There is also a challenge to figure out a way which does not disturb the existing systems of the states; while there could be a standardised set of guidelines and a clear way forward as to how the health systems should evolve and how each and every state could be brought onboard that journey. This is the background in which e-Health is being looked at in general.

- As mentioned earlier, IT is being used by the states in multiple ways. But, the challenge is that the use has been quite dissociated; IT is not being used in a very integrated manner. For instance, with multiple databases like Aadhar, voter IDs, the various health insurance databases etc. beneficiaries are

Shri Amit Saraf is presently the Director in the Advisory Practice at Ernst & Young with a focus on the Health Sector and has more than 15 years of consulting and implementation experience. He has handled engagements for multiple public sector clients in India and abroad, and specializes in executing government transformation engagements. He has rich international experience and has worked in multiple countries.

Earlier, he worked with the Infrastructure Government & Healthcare Practice of KPMG. He had earlier worked with PwC, HCL Technologies and Steria.

He has an MBA (Information Management) from S. P. Jain Institute of Management & Research, Mumbai and B. Tech (Computer Science) from HBTI, Kanpur. He is Six Sigma Green Belt certified.

identified differently. So, the results vary. Also, the systems may or may not talk to each other.

- In this context, the government's Detailed Project Report (DPR) on e-Health tries to provide a framework which would outline the structure of an ideal ecosystem for the states. It details with the structure of the core systems which includes Hospital Information System, Citizen Portal, Supply Chain Management, Government Resource Planning and Integrated Public Health Solutions. The Centre is trying to allow the states to implement these at the state level. It has also taken a number of steps to try and make sure that there is commonality defined in terms of how the overarching systems should define e-health.

- In addition, the Integrated Health Information Platform (IHIP), an initiative of the Ministry of Health and Family Welfare (MoHFW) aims at developing a core common base where all apps can talk to each other and work in an inter-operable way. Similarly, there is the National Health Resources Repository (NHRR) coming up which again aims to be a single-source tool for all health resources present across the private and public providers.

On a concluding note, Shri Saraf said that the onus is on the policy makers and the domain experts to try and understand the broader picture and what they need to do individually to ensure the systems are developed which align with a common philosophy and can also talk to each other.

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Shri Jain, the moderator added that there is definitely a need to analyse the needs of the states as a whole in e-Health since several programmes are already going on in different states.

Director, Advisory Services – Health ICT, Ernst & Young Shri Amit Saraf discussing on e-Health platforms in India

e-Health Initiatives of Government of India

Project Director, Centre for Health Informatics (CHI), National Health Portal (NHP), Ministry of Health and Family Welfare (MoHFW), Govt. of India Prof. Sarbadhikari provided inputs on the various schemes of the Ministry of Health and Family Welfare (MoHFW) and highlighted the need for information dissemination to the people on the various initiatives.

- The MoHFW is trying to provide a National Identification Number (NIN) to all the health facilities in the country. It is like the Aadhar for the health facilities like big hospitals, medical colleges, clinics and so on. The implementation has begun with the public health facilities in the country and is being verified by the state governments. So far, 80 per cent of the verification is completed covering 2,70,000 public health facilities.

- As mentioned by Dr. Roy, there is lack of awareness in the people on the Online Registration System (ORS). Almost 80 hospitals are now being linked and efforts are on to integrate it. It is also expected that some of the private hospitals would be roped in and a mobile application would be developed.

- The country is yet to have a national e-Health strategy or policy which should be very robust borne out of consultation with all the stakeholders. One of the ways of achieving it is through the setting up of a regulatory authority, which is presently underway as the National e-Health Authority (NeHA). There has been a national level consultation with representatives from all the states and the bill for setting it up is being drafted.

- If one looks at the Digital India Initiative, *e-Kranti* is one of the pillars which deals with citizen-centric service delivery covering services like online medical consultation, online medical records, online medicine supply, pan-India exchange for patient information, etc. in e-Health.

- The Integrated Health Information Platform (IHIP) is being brought out to encourage an ecosystem for interchange of health information through standards-compliant modules, which would be recommended by MOHFW.

- There is also a plan for the state governments to start the Online Medical Consultation in a PPP mode. So far, eight states have been able to adopt it and some of them are running quite well. The National Health Portal is currently available in four regional languages other than English and Hindi and, is soon going to come out in all the regional languages listed in the Constitution.

- Due to low internet penetration, which is less than 30 percent across the country, services are being offered through a National Health Helpline (1800 180 1104) as the mobile penetration has gone beyond 80 per cent in the country. In addition, the process of integration of services is also being carried out.

Prof. Sarbadhikari highlighted that there is a need to communicate on the

Prof. S. N. Sarbadhikari is presently the Project Director, Centre for Health Informatics (CHI), National Health Portal (NHP), MoHFW, Govt. of India. He has 20+ years of experience in Health Informatics Education, Standards for Health Information Exchange and Health Professional Education.

He has been a Faculty (since 2010) and Fellow (2007-09) of PSG-FAIMER Regional Institute, Coimbatore. He designed and developed syllabus for various Master's courses in Health Informatics, Health Information Management, Biomedical Engineering & Bioinformatics, nationally and internationally. He has been a part of various Committees including Member- BIS Panel on "Smart Infrastructure", GoI, BIS Health Informatics Sectional Committee, MHD 17, GoI, to name a few.

various developments with the involvement of all the stakeholders. He felt that when people find a facility useful, they adopt it. It is like the Bluetooth technology which is being used for transferring images, music, videos etc. in the remote parts of the country with no electricity and less literacy because they find it very useful. So, the value-proposition has to be focused upon and there is a need for communication more often.

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e-Education Initiatives of Government of India

Deputy Secretary, Dept. of Higher Education, Ministry of HRD, Govt. of India Shri Dalip Kapur touched upon the major initiatives taken up by the Dept. of Higher Education in the domain of e-Education.

- The "Know Your College" portal was launched by the government which gives the details on the different colleges in the country. The portal is updated regularly with detail on lab facilities, intake, hostel, faculty etc.

- In the area of school education, a lot of capacity building is being done for state governments in IT.

- There is a National Mission on Education through ICTs (NMEICTs) which is a flagship programme launched in January 2009 which focuses on providing high quality e-Content, access-cum-computing devices and connectivity to all colleges and universities. So far, the Dept. has provided 1 Gbps connectivity to 438 Universities. It is aimed at providing connectivity to all the higher learning institutions in the country, by the end of next three years.

- The National Programme on Technology Enhanced Learning (NPTEL) has been providing e-Learning through online courses in various disciplines. The latest initiative has been the introduction of Massive Open Online Courses (MOOCs) through swayam.gov.in. A beta version has been launched through which more than 200 courses are made available. Students from ninth standard to post-graduation can enrol themselves and take courses in various disciplines any time and from anywhere. The University Grants Commission (UGC) too has modified its regulations which facilities individuals who take courses and examinations through this mode to be eligible for joining higher education.

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- In addition, the Dept. is launching 32 Direct-to-Home (DTH) channels in the country with focus on education. The best possible teachers from IITs, KVs etc. would provide lectures and the students can benefit immensely.

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Deputy Secretary, Dept. of Higher Education, Ministry of HRD, Govt. of India Shri Dalip Kumar presenting on e-Education Initiatives of Government of India

- **Discussion**

  - **Q: Shri Debashish Goswami, Head, SeMT, Dept. of IT & Communication, Arunachal Pradesh**

    In the domain of e-Health, database integration is being discussed. Arunachal Pradesh is also involved in the same process. The commonality of indicators essentially is where there are issues. In such a scenario,

i. Can there be a policy regarding the databases and commonality and can the National Identification Number (NIN) initiative be made available to the states which would help the State e-governance Mission Team (SeMT) and National e-Governance Department (NeGD)?

ii. Just like legacy data digitisation, can MoHFW create a fund/ budget for database itself?

- **A: Prof. S. N. Sarbadhikari, MoHFW**

  As mentioned, the National Health Policy is an immediate requirement which would come into place once the National e-Health Authority (NeHA) is in place. There is an immediate need for the Policy. It can be put to best use and funds may not be a problem. It may also be observed that health is a state subject.

  Shri Jain, the moderator added that Digital India initiative can also be made use of and funds may be availed through it.

Concluding the Session, he thanked the speakers and the panellists for their insightful presentations and experience-sharing on e-Health and e-Education. He requested all the states to use the information and benefit from the same.

Director (Documentation and Dissemination), DARPG Smt. Alpana Shukla Rao, Addl. Director, AASC Smt. Monidipa Borkotoki, and Joint Director, AASC Smt. Kajori Rajkhowa felicitated the speakers and panellists.

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Presentation on Digital and e-Commerce in India

It is the era of digital and e-commerce which has been revolutionising the way people pay for goods and services across the globe. In the light of the digital transformation, Head of Digital Payments, MasterCard, India and South Asia Ms. Monica Jasuja highlighted the various trends in digital and e-commerce in India.

- The evolution of commerce grew from the barter system to e-Commerce which has taken the world by storm. With a lot of growth of e-Commerce in the country, the potential for development is huge. The latest stage of evolution of commerce, which is being witnessed right now, is the m-Commerce.

- India is in the growth phase in which there are a lot of digital purchases happening. This is leading to a shift into the world of digital consumption which is eventually going to take over physical consumption including digital payments. There is a need for the payments to evolve and keep pace with the various landscapes; from cash, cheques, credit and debit cards to mobile payments, which is exploding today.

- e-Wallet is only a part of the puzzle that is coming up. There needs to be a

Head of Digital Payments, MasterCard, India and South Asia Ms. Monica Jasuja presenting on Digital and e-Commerce in India

Ms. Monica Jasuja presently leads the digital payments initiatives regionally at MasterCard.

She is at the forefront of bringing out innovative products and is an experienced product strategist. She worked across four geographical areas globally. She has firsthand experience in designing, developing as well as launching new products and specializes in digital payment initiatives to further the electronification of payments and help India progress as a less-cash dependent economy. Prior to her current role, Ms. Jasuja worked with PayPal as a Product Manager for Global Initiatives.

She has a Masters in Computer Science from University of Illinois, Urbana Champaign and a Bachelor's in Mathematics from Delhi University.

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focus on making mobile and contact-less payments available for everybody with a phone and not just for people who have smart phones. India, as is known, is a cash-dominant society. About 95 per cent of all transactions are in cash. The government is focusing on moving away from cash to a less-cash economy. There is a need to move away from cash transactions, which can happen only if there is a convergence in the way the payments are made. There is also a probability of leapfrogging to a world where there will be no plastic as transactions would majorly be on the mobile. This will be the potential of payments. India will thus be into such future.

- In India, although most of the people have a mobile phone, not everyone has a smart phone or data access. This is where the digital divide exists. India is the second largest country in the world in terms of smart phone growth and internet penetration rate. This only shows that if it continues along this path, it would obviously be the fastest mobile-growth country in the world. This, in turn, means that India is at the threshold of connected devices, working together in an ecosystem.

- If one questions why mobile, the answer is simple. It is because the mobile is available 24x7, there is an increase in mobile subscribers, increase in internet use, and lot of internet transactions are happening and lastly it is very simple to operate and use.

- As far as India and similar economies are concerned, there are already success stories like that of m-Pesa in Kenya. m-Pesa uses a non-smart phone for transactions and is a great example of a mobile wallet which has penetrated and existed in the grassroots for years and has been able to solve the financial inclusion puzzle. It is also a good example of how if done the right way, the financially included customers can see and use the power of the mobile for their everyday use.

- The airtime top-up and P2P transfer are the most widely offered use cases for mobile transactions in India. Now, payments banks are opening up in the

country and this is going to explode even further as it provides everybody with access to a bank account even faster on their mobile phone.

- In terms of consumer connectivity in the global digital landscape, there are presently 6.1 billion devices which are expected to touch 18 billion in the coming four years. The world is, hence, moving to a world of connected devices, which is no longer about a mobile phone but about a device which is not connected to internet or semi-connected, which would be able to do a payment. In addition, the Internet of Things (IoT) is expected to record the highest growth which simply means any device being able to be connected to the internet for the payment to happen. For instance, the car key may have the potential of making a payment. In the context of this trajectory, the sections of people with smart phones will now get access to multiple devices and each of these devices is expected to work together.

- As far as global digital payment volume is concerned, it stood at 0.7 trillion in 2013, which is a fraction of the overall traditional commerce in the world. It is expected to grow from 5 to 25 percent in the next 10 years. If one looks at the mode of transactions, 15 per cent are device-based contactless, 5 per cent are in app, 6 per cent are through browser.

- All these are important form factors for how payments are made, how frictionless they can be for users and how quick and safe they are for everyone to use and for them to be a part of a customer's everyday life. It also adds up to more connected consumers and devices. It is observed that the smart phone is the first shopping device. Although, most searches happen on mobile, the transactions happen on the computer, which means that there are still problems to be dealt with mobile payments. The smart phones will be the way people explore, search and look for products that other people are buying and they will be able to complete their commerce.

- The growing payment volumes are another important aspect to be touched upon. Without giving a lot, one can see the largest growth of payments in India because of strong focus on electronic payments. The role of the

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government and industry is very important and they are moving from just thinking about payments to a less cash India. This is resulting in the largest growth that has been registered for credit cards in 2015; where about 30 per cent increase has been recorded.

- The financial opportunity has never been greater for commerce in general which is now called as digital commerce because e-Commerce and m-Commerce are now "obsolete" terms. In the case of the growth story of e-Commerce in India, travel still accounts for the biggest chunk (61%) while non-travel related transactions account for the remaining 39%, of which e-tailing accounts for 76%. It is also expected that by 2020, e-Commerce is likely to double. In addition, the largest Venture Capital (VC) funding continues to be in the field of e-Commerce in India.

- As far as drivers to e-Commerce are concerned, the demand side is characterised by convenience, product range, discount price, nuclear families and urbanization, growing number of women customers, lack of brick and mortar retailers beyond large cities. The supply side is characterised by growth in internet penetration, growth in use of smart phones, venture capital funding, robust logistics infrastructure, varied payment options, growth demand from semi-urban and rural areas.

Ms. Jasuja concluded saying that if forces of innovation can be combined with existing system, a world class experience and innovation can be delivered within one's homes. She added that MasterCard, as driven by its mission, uses technology and expertise to make payments safe, simple and smart.

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Delegates participating in the deliberations on Digital and e-Commerce in India

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Presentation on Advanced Analytics for Providing Solutions

Data drives the world today. The governments and industries across the globe are focusing on data analytics for effective solutions and decision making.

Business Leader, VP, Advanced Analytics CoE, MasterCard Advisors Shri Amit Gupta highlighted how advanced analytics can help in effective solutions.

- Analytics is science of analysis which is backed by data which helps in providing decision making for both growth as well as optimisation.

Business Leader, VP, Advanced Analytics CoE, MasterCard Advisors Shri Amit Gupta presenting on Advanced Analytics for Providing Solutions

- The emerging trends in growth and profitability are in mobile, social media and Internet of Things. Big data and cloud facilitate searches across purchase behaviour on various parameters- social, locational, psychographic, and demographic and sentiment level information. All these, if combined, can give us deeper, richer and more meaningful experiences which will help us making effective decisions, the need of the hour.

- MasterCard, as a technology company, has transactional level data both for merchants and banks for every transaction. With more than 2.2 billion cards driving all the transactions across 200 countries in the world, there are 52 billion transactions per year for which there is information for every merchant, every industry, and every country and for every type of card. Similarly, MasterCard Advisors is a consulting arm of MasterCard, which helps in providing solutions across various industries (banks, merchants, governments etc.) for effective solutions. The solutions across various domains including retail, hotels, airlines etc. has been helping effective decisions in optimising the costs and saving a lot of money on advertisements.

Shri Amit Gupta is presently Business Leader | VP, Advanced Analytics CoE, MasterCard Advisors.

He has ten years experience in Analytics, Consulting and Sales. He has the experience of setting up, building and growing new business teams across Financial Services and Payments Vertical in companies like MasterCard, American Express etc. He worked across different sectors devising strategies and building solutions on customer growth strategy, consumer spending trends, new product innovation, geographic expansion, etc. He specialises in leveraging data and business analytics to drive critical business solutions for global giants.

He has an MBA from IIM Lucknow.

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- The transformation of big data into actionable insights happens at three different levels- descriptive, predictive and prescriptive, which would be useful for prioritising campaigns in advance. From a customer's perspective, this information can help in understanding new customers, loyal customers, how to engage and retain customers which is very important as every organisation spends lots of money on acquiring, retaining and engaging customers in a big way. At an overall level, the data will help in providing insights across multiple factors-market intelligence, business intelligence, customer intelligence, location intelligence and operational intelligence.

- While there are multiple solutions like market insights, local market intelligence, media solutions, customer data enhancement, customer loyalty, merchant affinities, geo-location insights, test and learn, destination insights etc. using power of data is really helpful for tourism. This has been helpful for various governments, specially the Ministries of Tourism across the world in understanding domestic as well as cross-border tourism, both inbound and outbound.

- For instance, in the case of India, data from the Ministry of Tourism has been used to understand the countries from which people are coming to India. It may be noted that India receives 8 million visitors every year from USA and UK followed by Bangladesh and Sri Lanka. It has been observed that the total spend by UAE and UK is more than 50 percent of the total spend by other countries in India.

- Similarly, the data of Goa has been analysed and it has been observed that it has only 1.4 per cent spend share among the other major beach destinations of Asia Pacific. Such indicators highlight the focus areas for the government to develop tourism, in this case, in Goa.

- Hence, there can be focus on creating insights across multiple states in India as well as in the country to provide the right insights.

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- **Discussion**

  Commissioner and Secretary (IT), Govt. of Nagaland Shri K. D. Vizo pointed out the need for improvement of the distribution systems in the North-East. He highlighted that e-Commerce has recently come to the North-East, which has become a huge hit with various things being available at cheaper rates and also in dealing with the high prices of the illegal immigrants-run local grocery shops. However, the goods are not home-delivered and the customer is asked to come and collect from a place in their city or town.

  Responding to the query, Ms. Monica Jasuja informed that they do handle logistics providers for eliminating some of the obstacles of service delivery but they do not offer solutions for logistics *per se*. She added that they are working with logistics providers so that e-Commerce delivery can happen in time with frictionless payments and with a lot of trust in the context of the trust-deficit among the e-Comtailers. This can help in finding the best way of solving the last mile logistics issues in the north-eastern states. Help can also be provided through the use of mapping with other available data.

At the conclusion of the session, Asst. Director, AASC Ms. Nandini Sharma felicitated the speakers.

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Session II: e-Office and CPGRAMS

Introduction

e-Governance has emerged as an enabler of administrative reforms duly leveraging of technology, thus proving to be the present and future of the country. "Digital India," a game-changing programme launched in 2015 by the Hon'ble Prime Minister, has provided further fillip to the e-Governance initiatives in the country. It has been facilitating governments, both at the centre and states, for introducing and embracing e-Governance measures for effective and efficient citizen-centric service delivery.

e-Office and Centralized Public Grievance Redress & Monitoring System (CPGRAMS) are two initiatives that have been a great leap forward in the domain of e-Governance in the country. The Session on e-Office and CPGRAMS focused on the revolutionary changes these initiatives have brought into the system of governance and grievance redress, with presentations on the theme followed by a Panel Discussion.

Smt. Smita Kumar, Joint Secretary, DARPG, as the moderator, set the context for the Session. She informed the participants that DARPG is the nodal agency for both e-Office and CPGRAMS, developed by National Informatics Centre (NIC). She highlighted that both these are very much tested, available and already being used by some of the states and central ministries. Hence, she suggested that the states consider implementation of these initiatives in their own administration and governance processes.

Joint Secretary, DARPG Smt. Smita Kumar setting the context for the Session on e-Office

The Session focused on the practical aspects of how states can start off with implementation, its prerequisites, and bottlenecks in the process. The Presentations were followed by a Panel Discussion.

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Presentation on e-Office

Sr. Technical Director, National Informatics Centre (NIC), Govt. of India Smt. Rachna Srivastava provided an introduction to e-Office and explained the prerequisites and various other aspects for implementing e-Office.

Its salient features are as follows:

Sr. Technical Director, National Informatics Centre (NIC), Govt. of India
Smt. Rachna Srivastava presenting on e-Office

- e-Office is a Mission Mode Project (MMP) under the National e-Governance Programme of the Government.

- The product is developed by National Informatics Centre and aims to bring in more efficient, effective and transparent inter-government and intra-government transactions and processes. The product is built as single reusable system by bringing together independent functions and systems under a single framework to enhance transparency, increase accountability and transform the government work culture and ethics.

- e-Office Product Suite comprises:

  - **File Management System (e-File)** which automates the processing of files and receipts. This includes creation of files (electronic and physical), movement of files in the workflow, tracking of files and their management.

  - **Knowledge Management System (KMS)** acts as a centralized repository of various documents such as acts, policies and guidelines.

Smt. Rachna Srivastava presently heads the e-Office Project Division, NIC.

Earlier, she headed the Software Development Unit providing development support to several projects including Limited Liability Partnership Project, Shram Suvidha Portal and All India Survey on Higher Education Project. She started her career in NIC and provided training to NIC technical officers in technologies.

Smt. Srivastava completed her MCA from JNU and Mathematical Statistics from Hindu College, Delhi University, New Delhi.

- o **Collaboration and Messaging Services (CAMS)** for internal collaboration and messaging.

  o **Leave Management System (e-Leave)** automates the leave application and approval process.

  o **Tour Management System (e-Tour)** automates employee tour programmes.

  o **Personnel Information Management System (PIMS)** manages employee records and the output of PIMS is e-Service Book.

  o **Property Return Information System Management (PRISM)** for electronic filing of Asset and Liability Declaration, in accordance with the Lokayukta Act 2013 of Government of India.

  o **Smart Performance Appraisal Report Recording Online Window (SPARROW)** for electronic filing of Performance Appraisal Report (PAR) as per the defined channel of submission.

- The e-Office Product is available in various versions, as listed below. Each of these versions offer specific features of the component of e-Office, as detailed in the Presentation.

  o e-Office Lite (e-File)

  o e-Office Lite (SPARROW)

  o e-Office Lite (e-Leave, e-Tour)

  o e-Office Premium Lite

- Presently, e-Office has been implemented in more than 200 departments out of which 122 are in central government (ministries and departments, attached/ subordinate offices/ PSUs etc.) and 82 in state governments (secretariats, district administration, other departments/PSUs etc.). Andhra Pradesh is one of the states which has implemented e-Office 100 per cent in secretariats of all the 13 districts. In addition, Bihar and Arunachal Pradesh secretariats have implemented e-Office. Around 20 states are in the forefront of implementing e-Office.

- Highlighting the pre-requisites for e-Office implementation, Smt. Srivastava gave a brief description of the various steps in the process:

  a) **Hosting of e-Office Application**
     o For Central Government implementations, the hosting is done at National Data Centre.

     o For State implementations, hardware and software provision at State Data Centre (SDC) is to be made as per e-Office Deployment Guidelines.

     o NICNET/ NKN/ SWAN connectivity must be present at all locations where e-Office will be implemented.

  b) **Skill Set**
     o All e-Office users need to have basic knowledge of computer and Internet browsing.

  c) **Additional Pre-requisites**
     o GoI/ NIC e-mail IDs- All users must have GoI/ NIC email IDs for login into e-Office product.

     o Digital Signature Certificates (DSCs)- All e-Office users must have DSCs For signing noting and drafts in electronic files,

- o Setting up of a central e-Office Central Helpdesk is critical for getting technical clarifications pertaining to product usage.

- o Setting up of Training Centre for about 30 persons (30 nodes) at the department for providing continuous training .

d) Workstation/Desktop/Client
- o Every user of e-Office will need to have an independent Workstation/Desktop/Client with recommended requirements.

e) Network
- o LAN connectivity to each user/ each desktop to be provided in addition to the other recommended requirements.

f) Scanners
- o The user will be required to analyze volumes of incoming receipts per day along with travel time to the scanners for all users that are using that particular scanner.

g) Software
- o The NIC recommends certain requirements for setting up the software, as highlighted in the [Presentation](#).

- **Process of getting e-Office Product suite from NIC:**

- **a) Intent to use e-Office:** Firstly, the states/ departments should furnish an intent to use e-Office. The User Department may register their demonstration request at http://eoffice.gov.in/. Alternatively, they can send their demonstration / discussion request at eoffice-pmu@nic.in along with the details of organization.

- **b) Demo:** A demonstration programme on e-Office Product will be organized for user department, on the basis of request received

c) Project Assessment: User Department may submit e-Office Project Assessment Template to NIC e-Office Project Division which helps in preparation of financial proposal for implementation of e-Office at User Department as per e-Office Standard Costing Model. Whenever the e-Office Product is hosted in State Data Centre (SDC) or Local Data Centre (LDC), the user department may refer to e-Office Deployment Guidelines and provide the necessary hardware and software infrastructure at SDC or LDC.

d) Internal Approval: Based on the e-Office Assessment Template, Infrastructure Readiness and place of hosting provided by user department, NIC will take internal approval for e-Office Implementation at User Department.

e) PI and Project Proposal: National Informatics Centre Services Inc. (NICSI) will issue Proforma Invoice and Project Proposal to User Department for implementation of e-Office.

f) Fund Transfer: Acceptance of the project proposal and transfer of required funds to NICSI, for the execution of the e-Office implementation.

g) Project Commencement: User Department will submit e-Office Commencement Certificate to NIC/ NICSI on date of creation of e-Office Production Instance.

h) Project Completion: User Department will submit e-Office Completion Certificate to NIC/ NICSI after completion of six months period from date of creation of e-Office Production Instance.

- o **Phases in e-Office implementation**

- **a) Pre-project phase:**
  - o This involves the constitution of e-Office Governance Structure to implement e-Office in the organization.

- This is followed by filling up of Master Data Templates for feeding into the systems the current state with respect to office and people. In addition, the User Department is required to submit infrastructure details in prescribed format.

- Based on the e-Office infra-proficiency template received from user department, an Infrastructure Gap Assessment Report (IGAR) will be generated, which primarily aims at highlighting the shortcomings in the infrastructure currently available at user department. Specifically, the infrastructure 'gaps', i.e. non-availability/ augmentation of workstations, scanners etc. are highlighted based on which a sound procurement plan can be made by the user department.

- This is followed by creation of GoI/ NIC email IDs to login into e-Office using Light Directory Access Protocol (LDAP) Authentication.

- The next step involves the procurement of Digital Signature Certificates (DSC) required for digital signing the note sheet and draft for approvals (DFA) in File Management System (e-File). It can also be used as a mode of authentication for logging in to e-Office along with GoI/NIC eMail IDs

b) **Planning phase**
- The e-Office environment setup would be carried out at Data Centre for all Central Government e-Office implementations which are to be hosted at National Data Centre (NDC) by e-Office System Administration Team.

- The e-Office environment setup will be done by the identified System Administrator(s) of State Government for all State Government e-Office implementations which are to be hosted at

NDC. The e-Office System Administration Team of NIC will provide necessary support as and when required.

- NIC e-Office Project Division will also provide necessary training on e-Office Product Server Administration, Management and Maintenance to the System Administrator(s) identified/ hired by the user department.

- This is followed by registration of domain name for all e-Office implementations which are hosted at NDC by NIC e-Office Project Division. Whenever the e-Office Product is hosted at SDC or LDC, the DNS will be registered by user department themselves.

- In addition, there needs to be Capacity Building Programme (CBP) for smooth, successful and sustainable implementation of e-Office product at user department. The NIC e-Office Project Division will organize CBP for the user department in various categories.

c) **Prepare phase** involves deployment of roll out team at user premises, training and handholding for department users and DSC readiness with application.

d) **Implementation & Support phase** involves trial run of application, going live, on-site technical support and off-site technical support.

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- **Discussion**

  The presentation was followed by a discussion where the representatives of various participating states discussed their issues and challenges

  ▪ Firstly, it has been enquired that whether e-Office can be used through the Wi-Fi network.

    Smt. Srivastava explained that though it can be used over Wi-Fi, the security and confidentiality of the documents could be an issue. The data of e-Office is of paramount importance and it cannot be risked. She suggested that it is always better to use the software through LAN or VPN.

  ▪ On a query on recruiting staff for implementing DSCs, Smt. Srivastava suggested recruiting staff through NICSI.

    The representative from Bihar, a state which is already implementing e-Office, shared issues like manpower, time-taking process to make minor modifications and also the issue of using Hindi fonts in the application has been brought to the notice of NIC in addition to challenges in using Digital signatures. Smt. Srivastava clarified that the issue of changing the language into local language can be taken care of and cited the example of Kerala where Malayalam is being used across for all the documents. She extended her support to resolve this issue. On the other issues, Smt. Srivastava assured to interact with the department officials.

On a concluding note, Smt. Smita Kumar added that digitization is sometimes taken as a major constraint in the implementation of e-Office. Quoting an experience from a recent Workshop, she highlighted the high speed at which large documents could be scanned and added and that digitization does not happen at one go. She also touched upon the aspect of training the manpower for effective implementation of e-Office.

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Introducing the session on CPGRAMS, Smt. Smita Kumar informed that Centralized Public Grievance Redress & Monitoring System (CPGRAMS) is a web-based portal which facilitates lodging of grievances by citizens on the various departments/ ministries. She pointed that 20 Departments have been identified that constitute 75 per cent of grievances received and are being examined for the reforms required vis-à-vis root causes of grievances. She pointed out that the analytics of the data would provide the insights for good governance. She called for the states to start using the state instances of CPGRAMS taking into consideration the remarkable insights they provide. She added that it acts as a pointer on how services are delivered as there is complete transparency in understanding how grievances are raised, settled and their status.

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Smt. Smita Kumar setting the context for the Session on CPGRAMS

Presentation on Centralized Public Grievance Redress & Monitoring System

Sr. Technical Director, National Informatics Centre (NIC), Govt. of India Dr. Meenakshi Mahajan provided insights into the Centralized Public Grievance Redress System (CPGRAMS), its functioning at the centre and states.

The salient features of her Presentation are as follows:

Sr. Technical Director, National Informatics Centre (NIC), Govt. of India Dr. Meenakshi Mahajan presenting on CPGRAMS

- Centralized Public Grievance Redress & Monitoring System is a web-based portal that aims at providing citizens with a platform for redress of their grievances. Any citizen can lodge their grievance online through this application against any government organization. The lodged grievance will go to the ministry/ department/ state government concerned and immediate action will be taken. With the help of this system, the departments with highest grievances are being given the top-most priority. The DARPG, GoI is the nodal agency for monitoring the entire process.

- Mainly, three stakeholders are involved in CPGRAMS. They are as follows:
  i.   Citizens- They lodge the grievance and view the status of the grievance
  ii. Ministry/ Department- Receives the grievance and takes action on

Dr. Meenakshi Mahajan is presently the Sr. Technical Director and Head of NIC Unit, DARPG. She manages and maintains CPGRAMS, the web-enabled application for public grievance redress.

Earlier, she headed the e-Governance Standards Division and was involved in formulation of e-Governance Standards under MeitY. She joined NIC in 1993 in the Training Division and was involved in designing, structuring and conducting of training on ICT Awareness and e-Governance. Designed Special Training programmes to cater to specific training needs of ministries/ departments.

She has Ph.D from Dept. of Computer Science, University of Delhi, Post Graduation in Operations Research, Univ. of Delhi and Graduation in Mathematics from Miranda House, University of Delhi.

the grievance and/ or transmits it to the next-level offices. They would also monitor the disposal of grievances.

iii. DARPG, the Nodal Agency and apex organizations including the President's Secretariat, Prime Minister's Office and Directorate of Public Grievances monitor the grievances received by them. DARPG monitors all the grievances received.

- **Objectives of CPGRAMS:**

  With the aim of providing efficient and speedy redress of public grievances, the objectives of CPGRAMS are:

  i. To facilitate (citizens):
  - o Online lodging of grievances
  - o Viewing status and keeping track of the grievance(s) lodged
  - o Provision of reminder and feedback

  ii. To facilitate (Nodal /Apex Organizations):
  - o Online forwarding of the grievance received to the ministries/ departments concerned
  - o Online monitoring of grievance disposal

  iii. To facilitate (Public Grievance Officers):
  - o Online forwarding/processing of the grievance received
  - o Online disposal/ closure of grievance

- **Grievance Flow**
  The grievance of the citizen goes directly to the ministry concerned which would take necessary action to redress the grievance and the action-taken report is passed on. In case the grievance does not pertain to a particular ministry/ department, then it cannot be passed on to the ministry concerned directly. Presently, there is no horizontal transfer of grievances. So, it can either be sent back to the citizen in the case where the grievance is received

from the citizen, or, it has to be sent back to the nodal agency which has sent the grievance. The nodal agency/ apex organization would then pass it on to the ministry concerned. In some cases, if the grievance does not pertain to a particular ministry, then it is passed on to the subordinate offices.

- The Public Grievance Redress Portal has the following interfaces for the stakeholders involved:
  - o Citizen – The citizens use http://pgportal.gov.in to lodge/ monitor grievances
  - o DARPG (the nodal Agency)/ Apex Organizations to monitor the redress action of the public grievances
  - o Ministries & Departments– They use http://pgportal.gov.in/cpgoffice to manage the Grievances and send ATRs through CPGRAMS

- Dr. Mahajan explained the working of CPGRAMS through screenshots providing an overview of lodging grievances and redress.

  There is a common form on the portal where the citizens can provide their mobile number and e-mail ID in order to receive regular updates/alerts at different stages on the action taken to redress the grievance. There is a provision for attachment and uploading of relevant documents.

  The officers at the Ministry/ Department level can login and distribute the grievances among the departments concerned depending on the nature of the same. Once actions are taken by the sub-offices, they send back the report to the Ministry. The action taken report is then stored against that particular grievance ID. The citizen can then see the status of the grievance by using the grievance ID.

- There is also a mobile app for CPGRAMS. The number of grievances lodged have drastically increased in the year 2016 compared to that of the previous years because of the greater awareness about the Public Grievance Redress

Portal. The number of grievances that has been redressed is almost proportional to the ones received.

- In addition to CPGRAMS at the central level, there are also state instances of CPGRAMS. Some of the states like Jharkhand, Haryana, Punjab, Mizoram, Odisha, Puducherry and Meghalaya are using a kind of decentralized database for their respective states, developed by NIC under the umbrella of CPGRAMS. So, the information is not available on the grievances received and redressed, at the central level. In case of the other states, information is directly available from CPGRAMS.

- **Discussion**

  - The representative from Bihar informed that the state of Bihar promulgated the Right to Public Grievance Redress Act where all the grievances which can be addressed under this Act have been listed and also the level at which it would be addressed. The software maps the extent at which a particular grievance could be redressed. The grievance can be lodged by a citizen either in an online or offline mode. Once it is received, the authority concerned feeds the data into the software, thus avoiding manual interpretation and resulting in greater transparency. So, it was suggested that this feature be incorporated into CPGRAMS.

    This point was appreciated by Dr. Mahajan and she assured to take the suggestion forward for incorporating it in CPGRAMS.

  - There was another suggestion on having a web service to interact between the databases of CPGRAMS and the state redress databases and other state databases. The data structure may be shared with the states where web services can be returned either at state end or NIC's end so that the data is pulled and pushed instantaneously.
    Responding to this, Dr. Mahajan said that there is already a provision that allows the states to pull the data from CPGRAMS. Citing Maharashtra's

example- it has a grievance redress system and *"Aaple Sarkar,"* the state's public service delivery platform, the state wanted the grievances pertaining to the state coming from CPGRAMS to be pushed to it. Accordingly, a web service has been provided.

Smt. Smita Kumar added that all the states which have their own grievance redress system are being asked to integrate with CPGRAMS through web servers and were asked to share the tracking status. The integration of web servers is hence possible. The participating states were requested to integrate their state portals with CPGRAMS portal. This is because many of the complaints that are received pertain to the states and they have to be passed on to the states. For the states which do not have their own systems, there are state instances of CPGRAMS and mapping could be done to the Right to Public Services portal and so on.

- The State of Odisha has the Chief Minister's Grievance Redress System which is not integrated with the grievance redress system of the districts. Suggestion has been sought on how to integrate these systems as a whole and whether CPGRAMS can extend help in doing the same.

  Dr. Mahajan pointed out that CPGRAMS is also covering the grievances at the block level. If the grievances are related to the state's departments, it can be filed under the State Grievance Redress portal or can be filed in the district's grievance redress portal or can be lodged directly into CPGRAMS. The Chief Minister's Grievance Redress System can then create an inventory of all the grievances which can be incorporated in the CPGRAMS.

- Responding to a query on blocking petty grievances at the block level as it is being monitored by PMO, as is the case of Nagaland, Ms. Mahajan reiterated that the grievance redress is the priority of the PMO and hence no grievance should be blocked.

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Regional Conference on Path Breaking And High Impact Initiatives in Citizen Centric Services Delivery: Proceedings

Panel Discussion on e-Office and CPGRAMS

Panel Discussion on e-Office and CPGRAMS

Moderator

Smt. Smita Kumar
Joint Secretary, Dept. of Administrative Reforms & Public Grievances
Govt. of India

Panellists

- Smt. Rachna Srivastava
  Sr. Technical Director, NIC

- Shri Saroj Kumar Patro
  Scientist 'C' NIC

- Dr. Meenakshi Mahajan
  Sr. Technical Director NIC

- Shri Vanlalringa
  System Analyst, Directorate of Information and Communication Technology, Mizoram

- Shri Debashish Goswami
  Head, SeMT, Dept. of IT & Communication, Arunachal Pradesh

Introduction

Smt. Smita Kumar moderated the Panel Discussion on e-Office and CPGRAMS. It was envisaged that the meaningful cross-fertilization of ideas emerging from the Panel Discussion would promote further learning among the participating States and encourage them to initiate and/or replicate the emulation-worthy interventions of leveraging ICTs and Digital India for improved governance.

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Panel Discussion on e-Office and CPGRAMS

e-Office and CPGRAMS in Mizoram

System Analyst, Directorate of Information and Communication Technology, Govt. of Mizoram Shri Vanlalringa highlighted the progress of e-Office and CPGRAMS in the state of Mizoram, the implementation challenges and the approaches adopted.

- Mizoram started e-Office from 2013 through a bottom-up approach, which did not yield the desired results with challenges of unavailability of SDC.

- In 2016, the approach has been revised to top-down approach.

  Two to three departments have been involved in the exercise which includes the Dept. of Urban Development & Poverty Alleviation, Dept. of ICT and the Office of the Governor.

  The plan is to have 136 users as of now with a target to go live by November this year.

- Known in Mizoram as Mipui Aw (translates as Voice of the People), it is the state portal for CPGRAMS. Since its inception in 2012, 201 grievances have been received and 99 percent of them have been resolved in Mizoram.

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e-Office in Arunachal Pradesh

Head, SeMT, Dept. of IT & Communication, Govt. of Arunachal Pradesh Shri Debashish Goswami shared the experiences of e-Office is as follows:

- e-Office was launched in Arunachal Pradesh on 16th August, 2016 with the aim of designing a simplified, accountable, responsive, effective and transparent electronic system. It has been envisaged to involve all the Govt. departments of the state as beneficiaries with the Dept. of IT & Communication, Govt. of Arunachal Pradesh as the nodal agency and NIC, Govt. of Arunachal Pradesh as the implementing agency.

- In terms of the costs, the e-Office is cost-effective, manageable and extremely efficient with a total cost of implementation of Rs. 150.59 lakh, which includes application, hosting charges, laptops for training, manpower etc.

- The e-Office in Arunachal Pradesh has been implemented with a top-down approach within the stipulated deadline under the efficient leadership of the Secretary, Dept. of Information Technology & Communications.

- Taking into consideration the resistance and the challenge of legacy data digitization, the exercise was carried out in two phases. In the first phase, the Departments with the maximum number of files and processes- Dept. of IT, Dept. of Personnel and Dept. of Administrative Reforms were included. The second phase would cover the remaining departments.

- DSCs for 66 user licenses from three departments have been received and used. 934 DSCs are being procured for remaining users.

- Practical training was conducted by NIC in August 2016. In addition, a practical orientation program for senior bureaucrats was conducted in the same month.

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Shri Debashish Goswami is presently the Principal Consultant/ Head SeMT Arunachal Pradesh, and is a senior IT Consulting & Business Strategy expert.

He has 14+ years experience in leadership roles, specializing in PMO for leveraging Operations/ Process Management & Technology Transformations/ Transitions. He worked as Senior System Analyst (Scientist - 'C') at e-Office Project Division, NIC. He has a total of 20 years of experience in IT & ITES with 4 Years of experience in educational institutions like APTECH, ET&T, STG etc. in course curriculum design and development for National Institute of Open Schooling (NIOS). He has 16 years of experience in government sector of ICT and serves as the technical advisor on the DARPG panel for revision of Central Secretariat Manual of e-Office procedure (CSMeOP).

Smt. Rachna Srivastava informed the participants about Digital Signature Certificates in view of the woes and troubles faced by the states in adopting it. She informed that e-Sign has been integrated with SPARROW and e-Office. She suggested that the state departments adopt the e-Sign. She informed the participants that it is as simple as doing a monetary transaction. Details of Aadhar and a mobile registered with Aadhar have to be provided followed by the acceptance of authentication through a PIN sent to the mobile. The content is then digitally signed by the e-Sign providers. She added that biometric authentication is also available. She pointed that the interested departments could get into a MoU with the e-Sign service providers.

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Smt. Smita Kumar thanked the speakers and the panelists for their insightful presentations and she requested the participants to make use of the available services and implement the initiatives in their states.

At the conclusion of the session, the Joint Director, AASC Smt. Kajori Rajkhowa felicitated the speakers and panellists.

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Smt. Smita Kumar concluding the Session on e-Office and CPGRAMS

Session III: Vision on Digital Transformation for Citizen Centric Delivery

Panel Discussion on Digital Transformation

Panel Discussion on "Digital Transformation"

Moderator
Shri K.D. Vizo
Commissioner & Secretary (IT), Govt. of Nagaland

Panellists

- Shri Umakanta Swain
  Joint Commissioner, GAA, Odisha

- Shri Rahul Singh
  Secretary (IT), Govt. of Bihar

- Shri Rajeev Ranjan
  Director, Dept. of Revenue, Registration and Land Reforms, Govt. of Jharkhand

- Shri Atluri Rama Rao
  Executive Director, Andhra Pradesh State Fibernet Ltd.

- Shri Amit Saraf
  Director, Advisory Services – Health ICT, Ernst & Young

Introduction

Citizen-centric service delivery has been the focus of the e-Governance initiatives in the country. Leveraging technology, the central government has introduced many innovative initiatives thus ushering in an era of effective governance. With Digital India as a game-changing programme launched in 2015 by the Hon'ble Prime Minister, the country is all set to transform itself into a digitally empowered society and knowledge economy.

The state governments too are playing a proactive role in introducing and implementing initiatives that are revolutionizing governance and are forging ahead in e-Governance and m-Governance. Digital transformation is now seen as a welcome change to meet the new age challenges and to move towards citizen-centric, service-oriented governance.

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Vision of Digital Transformation of Nagaland

Commissioner and Secretary, Dept. of IT, Govt. of Nagaland Shri K.D. Vizo, the moderator of the Session, set the context of Digital Transformation for Citizen Centric Delivery through his Presentation on Digital Transformation for Citizen Centric Delivery in Nagaland.

He highlighted the key role of Dept of IT, Govt. of Nagaland in transforming the state into a modern State by improving transparency, efficiency and ensuring cost-effective public service delivery to the citizens.

Nagaland is witnessing a paradigm shift in governance and all other spheres of life. Information Technology and electronic media are enabling a knowledge–led economy. The world is now looking up to India to drive the global economic growth and India is looking towards east to open eastern corridors towards South East Asia to promote economic growth. The Department of IT&C is fully aware that it is the right time to take the State of Nagaland to the next higher level and make the State "the land of e-Governance", through extensive use of ICT based technologies. The State is now occupying a unique position in the IT core infrastructure development in North Eastern Region. The State is also witnessing a paradigm shift in governance and all other related spheres. Some of the achievements by the State include:

o Nagaland is the first state in India to take up the State Portal and State Services Delivery Gateway (SP&SSDG) core infrastructure project.

o It is also the only State in India where the State IT Department is running the State Data Centre without engaging private Data Centre Operator (DCO).

o The State is acting as Service Centre Agency (SCA) for running Common Service Centre (CSC).

o Nagaland is the first State in North Eastern Region to start the pilot project for National Information Infrastructure (NII). The pilot would be commissioned in Peren District by October 2016.

o Nagaland reached the Level-1 in the e-District Mission Mode Project (MMP) out of seven states in the country.

o The Nagaland State e-Governance Society (NSeGS) has achieved the ISO certificate in quality management system for implementation of e-Governance projects for the overall benefit of the citizens.

o It is the only state in the north-east which has started Aadhar-based biometric attendance in the whole civil secretariat.

Riding high on the achievements, Nagaland has also prepared a 20-point vision, as mentioned in the Presentation, for further transforming the services fir citizen centric delivery in Nagaland:

i. To make Nagaland an IT hub through setting up of world class Business Process Outsourcing (BPO) / Knowledge Process Outsourcing (KPO) for North Eastern Region and South East Asia. The state has already received approval for a 400-seat BPO, the biggest in North-East region which would start operations in the next two months.

ii. To provide high-internet bandwidth to every village panchayat.

iii. To transform Nagaland into a digital society with transparency and accountability as the drivers.

iv. To enable all government departments to have e-Office to promptly deliver services to citizens through online system.

Commissioner and Secretary, Dept. of IT, Govt. of Nagaland Shri K. D. VIzo setting the context for "Digital Transformation"

v. To bring about a comprehensive IT literacy initiative throughout the State.

vi. To generate direct and indirect employment for at least one lakh local youth in IT and e-Governance related activities by the year 2030.

vii. To promote knowledge economy and increase the Gross Domestic Product (GDP) of the State through the use of ICTs and IT enabled services.

viii. To promote electronic financial transactions using virtual bank branches operating from customer activated terminals, smart phones and other electronic accessories.

ix. To ensure cyber security, information security, prevention of data corruption and fraudulent practices.

x. To promote telemedicine, telemarketing, and market supply chain through networking for retailers, distributors, warehouses, transporter, manufacturers, material suppliers etc.

xi. To ensure digitization of all records and promote use of demographic database for determining age and sex composition, income levels, distribution of resources, regional disparities, incidence of diseases, life expectancy etc.

xii. To train various departments, schools, colleges, entrepreneurs and general citizens in IT related matters for improving their skills to meet the challenges of knowledge economy and promote economic growth.

xiii. To make the State a major software exporter in South East Asian Region and make Nagaland one of the richest states in the Country.

xiv. To promote high bandwidth data applications and electronic services to rural areas through Common Service Centres (CSCs).

xv. To integrate all Government Departments on a single platform through enterprise architecture and enable modern electronic systems like e-Cabinet, e-Legal, e-Education, e-Mobile classroom, e-Hospital, e-Dashboard, Single window e-Business, e-Naga Village etc.

xvi. To strengthen core infrastructures like State Data Centre, State Wide Area Network, e-District, National Information Infrastructure (NII), CSCs etc.

xvii. To strengthen networking infrastructure using terrestrial, wireless, aerial OFC and satellite technologies.

xviii. To enable centralized electronic integrated security systems using electronic equipments such as electric field perimeter protection system, micro-wave co-axial cable system, vehicle identification system, biometric system, electronic scanner system, electronic explosive detection system, electronic jammer system, CCTV surveillance system with centralized common control, IP based surveillance system, advanced video analytic system etc.

xix. To bring up a world class e-Governance Academy in the State to cater to the needs of North Eastern States and South East Asian Countries.

xx. To encourage research related works in IT sector for the youth by bringing up a robust Research and Development facility.

The state is tying up with Estonia, one of the high ranking e-governance performers in the world, for assisting in e-Governance reforms.

The political leadership has been supporting the vision this kind of IT and e-Governance revolution in the state. A video portrays the journey of Digital

Transformation of Nagaland. Shri Vizo then requested the other members on the panel to share the inputs on digital transformation in their respective states.

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It was envisaged that the meaningful cross-fertilization of constructive ideas emerging from the Panel Discussion would promote further learning among the participating States and encourage them to initiate and/or replicate the emulation-worthy interventions towards leveraging ICTs and Digital India for better administration, governance and public service delivery.

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Digital Transformation in Bihar

Secretary, Dept. of IT, Govt. of Bihar Shri Rahul Singh, through his Presentation, provided a brief overview of the digital transformation and the facilitating framework for citizen centric services in the state. The state of Bihar aims at creating and transforming the state into a knowledge economy through a three-point strategy, as follows:

- To create a robust IT infrastructure to bridge the digital divide that separates the citizen in urban areas from those in rural areas.

- To make Bihar an investment destination for IT/ITES/EHM (electronic hardware manufacture) industries and accelerate the development of the state.

- To make Bihar the frontrunner state in good governance through Information and Communication Technologies (ICT) enablement.

The key projects that have been initiated to achieve the targeted goals are as follows:

i. **Core Infrastructure**
The approach is to create a robust form of infrastructure. The Bihar State Wide Area Network (BSWAN), as part of the Mission Mode Project (MMP), is now being implemented with a redundant power supply and a redundant connectivity. So, there is an active-passive dependency in the network. There is also continuity in power supply. There is solar power which is the actual back bone and wind energy, an add-on.

Secondly, the State Data Centre (SDC) is very crucial for the security, as it is applicable for the data collected from the citizens. It hosts the

applications in secure environment. Thirdly, Bharat Net – it is the single most revolutionary step that has been taken up in the country in the last few years. It is one of the most robust connectivity projects taken up in the world as it ensures connectivity by making use of a very low bandwidth. The aim of this project is to reach every citizen of the villages either through cable or through Wi-Fi hotspot creation.

ii. **Business Conducive Environment**
The State of Bihar has designed the Industrial Policy, 2016 aligning it to the envisioned objectives. The Policy focuses on reimbursement of stamp duty, exemptions for land conversion fees, interest subventions, subsidies, incentive packages etc.

iii. **Citizen Centric Services**
In the area of Citizen Centric Services, Bihar has come out with an innovative interface in the absence of any significant backend computerization. Most of the states have introduced Right to Public Services and similar initiatives, which provide a platform where citizens can actually submit applications for acquiring services. So far, nearly 13 crore services have been delivered through this platform in the past five years. At present, 51 services are being delivered through the Bihar Right to Public Service platform.

iv. **Skill Development**
This is targeted at building skills in the various sections of the population in the state. Various projects are being undertaken under the Capacity Building and Skill Development like Bihar Kaushal Vikas Mission, CDAC Centres etc.

Explaining the way forward, Shri Singh informed through his Presentation that the near term projects like World Class IT Tower in Patna, upgrading of existing Software Technology Park, free Wi-Fi Hot Spots, an IT-incubation Centre of 100 seats, Bihar ESDM (Electronic

System Design & Manufacturing) Policy, as part of the industrialization in the state, are proposed to be completed in the next one year.

Mr. Singh, then, highlighted the various facets of citizen services, the salient features of which are as follows:

- Every citizen centric application will require three components, which would have different strategies:
  o There shall be a backbone to run it, i.e., SWAN, SDC, intranet etc. which may later on use the NOFN (National Optic Fibre Network) when it becomes operational
  o There shall be a proper application which can run on the infrastructure
  o There shall be a mechanism to allow the citizens to access the applications

- The governments have managed to create infrastructures like SWAN, SLAN etc. In the next step, to facilitate citizens to avail the servces, citizen facilitation centres, Citizen Service Centres (CSC) etc. have been started. Due to various challenges, in most states, except the south Indian states like Andhra Pradesh and Karnataka and to some extent Rajasthan, CSCs did not actually work the way they were meant to be; the reason being the aspect of applications. Any application has two components – front-end through which the world interacts. e-District and NIC's Service Plus are few examples of front-end applications. The other part that is missing is the back-end which requires a detailed study of the requirements of the departments and the interfaces through which the citizens interact. There is a need to take these points into account and an exercise of business engineering has to be carried out and a lot of processes need to be done away with. In the absence of these, most states have carried out automation of receipts of commercial taxes, excise etc.

- Explaining the way forward, he pointed out that Direct Benefit Transfer (DBT) is an easily achievable task for most states which can easily be done. Bihar too is working on it and hopes to have its own DBT framework very soon.

- Touching on the aspect of having multiple apps or having a single ERP, Mr. Singh indicated that the time has come to think of ambitious programmes. He expressed that there is a need to study the functioning of each of the departments and focus on internal resource planning and optimization of resources in addition to studying the interfaces where there is friction between the department and the public at large and then rework everything. He explained how the Treasury can become a virtual office with all the processes happening online. In addition, once all the applications are housed in the SDC, data mining can be done which helps businesses as well as facilitating prediction of various entitlements of citizens and approach them accordingly for the various schemes.

Shri Singh concluded his presentation highlighting the vision of Bihar.

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Secretary, Dept. of IT, Govt. of Bihar Shri Rahul Singh presenting on "Digital Transformation in Bihar"

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Digital India Land Records Modernization Programme in Jharkhand

The Digital India Land Records Modernization Programme (DILRMP) was launched by the Government of India in August 2008 with the aim of modernizing management of land records, minimizing the scope of land/property disputes, enhancing transparency in the land records maintenance system and facilitating shift eventually towards guaranteed conclusive titles to immovable properties in the country.

Director, Land Records, Govt. of Jharkhand Shri Rajeev Ranjan highlighted the various measures taken in Jharkhand under DILRMP while bringing forth the innovative initiatives that have been taken. He categorized the digital transformation for various categories like government services, monitoring system for service delivery etc. while highlighting the challenges in the government system.

Firstly, he drove home the point that the idea for the digital transformation should be sustainable. This should be followed by organization restructuring to achieve digital transformation, as it is a journey into the future. Thirdly, there is a need for skilled manpower to support the process of digital transformation. In addition, there is a need for disaster recovery system that would support in times of data loss and other exigencies.

The salient features of the Digital India Land Records Modernization Programme (DILRMP), as highlighted in his Presentation are as follows:

- An overview of DILRMP provides that:
  - In Jharkhand, digitalization of land records in 135 Circles out of total 264 Circles has been done so far.
  - The integration between registration and revenue offices is working in six districts for the last six months.

  - o   In terms of connectivity, V-SAT is to be installed in 129 revenue offices.

  - o   Online *"Lagan"* is smoothly working in 42 Circles in three districts.

  - o   In terms of training and capacity building, 845 revenue officials have been trained by the State ATI in the last one year.

- Some of the new initiatives that have been taken up by the state of Jharkhand are as follows:

- **Online "*Lagan*"**

  Earlier, *Lagan* was collected manually by the revenue officers from door to door and a manual receipt was provided to the citizens against collection. This was time-consuming and involved a greater element of cost. To avoid this problem, the Department of Revenue, Registration & Land Reforms, Govt. of Jharkhand, has taken an initiative for online payments of land revenue in the state to collect the Lagan/Malgujari/Land Revenue. The citizens can now pay the lagan online by using mobile apps or web browsers.

- **Integration between Registration, Revenue and Municipal Area**

  Under this initiative, once a property is registered, the data will automatically be transferred to the Revenue Officer and will reflect the mutation status of that particular property. The Registration & Revenue Department and Ranchi Municipal Corporation came forward to have an integration to keep track of the transfer of properties. The Urban Local Body (ULB) can keep a track of all properties being sold/ purchased within its

municipal area. This helps the ULBs to have better revenue generation so as to provide better services to its citizens.

- **Pushing Certificates into the Digital Locker**

The Dept. of Revenue, Govt. of Jharkhand, as Issuer Department, generally issues two types of documents – a bid document and a society form registration document. The State has been successful in uploading all the society registration documents in the digital locker. There are 42 sub-registrar offices in Jharkhand that have been taken under the digital locker. A biometric system has been installed in each of the sub-registrar offices for use by the citizens. The sub-registrar office opens the digital locker for the citizens who do not have the same and thereafter, his/her documents are uploaded.

Mr. Ranjan's [Presentation] explained the methodology of the above services through screenshots. He also highlighted the successful running of the Pragya Kendras (CSCs) in Jharkhand.

He pointed that the training and capacity building of the manpower, smooth network connectivity can help modernize management of land records. In addition, he focused on minimizing the scope of land/ property disputes and the need to enhance transparency in the land records maintenance system and moving eventually towards guaranteed conclusive titles to immovable properties in the country.

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Director, Land Records, Govt. of Jharkhand Shri Rajeev Ranjan presenting on Digital India Land Records Modernisation Programme

Remote Area Connectivity and Accessibility in Andhra Pradesh

Executive Director, Andhra Pradesh State Fibernet Ltd. Shri Atulri Rama Rao provided insights into the innovative optical fiber connectivity in Andhra Pradesh.

- The step towards digital transformation was initiated sometime around 2012-13 by the Govt. of India in the name of NOFN. It conceived undertaking underground fiber to connect all the Gram Panchayats and villages. The timeframe suggested for project completion was 4-5 years.

- In the new State of Andhra Pradesh, this project, started about 9 months back, has been completed and the delivery of services has already begun. A lot of migration is happening from the villages to the urban areas because of unemployment, lack of facilities for education and health. To deal with this situation, the Hon'ble Chief Minister of Govt. of Andhra Pradesh envisaged taking fiber network to the homes of the people and delivering citizen centric services at their door step.

- Accordingly, laying of aerial fibre over 23,500 kilometres has been completed. This aims at providing at triple play services, around150 channels of IP TV, 15 Mbps internet connectivity to the households and land line telephones within the network of AP Fiber net. These services are available to the households at a very nominal cost of Rs. 149/- per month.

- The Govt. of AP has also developed e-Content for the schools. This will be available for all the schools across the State from the next academic year. This is aimed at increasing the quality of education. Similarly, in the field of medical and health, 21 per cent of the services can be delivered online with the help of digital equipments like digital thermometer, digital stethoscope, and digital blood pressure meter etc. under the concept of e-PHC. With the help of fiber net, the PHCs can get connected with reputed hospitals which enable the patients to interact with the doctor directly.

- In addition, with the provision of internet connectivity to the private enterprises, they are exploring options of setting up their establishments in the villages, which otherwise were concentrated mostly in towns and cities. This would also decrease the levels of unemployment.

- The state of Andhra Pradesh is setting up ATMs in every village in consultation with some of the banks. This, in turn, will generate additional employment as people can be recruited as security guards to those ATMs. In addition, there is also option of citizen service delivery centres, which would be potential avenues for employment. These are the various services that are being provided through the fiber net.

Shri Atluri Rama Rao is the Executive Director of the Technical Wing, AP State Fibernet Limited.

Prior to joining AP Fibrenet, he served as the Executive Director of the AP Power Generation Corporation, Hyderabad. He also served as the Sr. Manager/ DGM/ Addl. General Manager in the AP State Financial Corporation. He is a recipient of many awards and accolades for his innovative steps in the AP Fiber Grid Project.

Shri Rama Rao completed his M. Tech (Computer Science) from Osmania University and B.E. from Bangalore University.

Taking cue from AP's model of aerial fiber which has been run through 3.75 lakh poles covering 23,500 kilometers across 13 districts of AP, the BharatBroadband Network, which earlier conceived the underground cable network across the 2 lakh GPs of the country, has decided to go aerial and complete the project by 2018. This would help in the speedy implementation.

- Highlighting on the concern of leaving the fiber at GP without forward integration, Shri Rama Rao said that there is a need to ensure that the services are delivered to citizens through appropriate applications.

- On a concluding note, Shri Rama Rao shared a success story of the first use case where a specially-abled person from Mori, a remote village in AP communicated to a specially-abled person in Chicago using Skype, thus highlighting the use of technology at the door-step of a common man, at an affordable cost.

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Executive Director, Andhra Pradesh State Fibernet Ltd. Shri Atluri Rama Rao presenting on Remote Area Connectivity and Accessibility

e-Governance Initiatives in West Bengal

Principal Consultant & Head, State e-Governance Mission Team, Dept. of IT, Govt. of West Bengal, Shri Abhishek Roy highlighted the various IT initiatives that are being implemented in West Bengal.

- In terms of IT interventions in the area of payment gateways, all the Out-patient Department (OPD) bookings in West Bengal are being made through SMS. Earlier, a citizen had to pay Rs. 2 to access an OPD service. The real challenge was how to pay this amount because it was difficult for the citizens to visit the hospital and stand in the queue to pay this amount. Earlier the payment gateway charge for entire banking was Rs. 15 and then it had been reduced to Rs. 5. People still travel around two kilometers to pay bills physically in order to save Rs. 5. To tackle this problem, the NIC, Govt. of West Bengal initiated an integrated payment gateway service where all the government hospitals in West Bengal are doing the OPD booking through SMS. A time of 30 minutes has been allocated within which 40 people will be assigned with the capacity of 20-30. There are no payment gateway charges.

- He suggested covering those services under digital transformation where smart phones or data connectivity are not required. Unstructured Supplementary Service Data (USSD) based services could be a good idea to make use of, for payments.

- Govt. of West Bengal has conceptualized the Radio Frequency Identification Device (RFID) based prepaid taxi management service. Under this system, prepaid taxi booths have been installed. Once a taxi is booked in the booth, a taxi will be allocated and then at the exit, the taxi number and the receipt number are noted. Whenever a taxi enters the bay, an inventory gets created automatically. This inventory ensures that taxis are not allowed to take passengers of their choice. They are bound to take the passengers through a system generated queue. Passengers can also book the taxi through mobile

phones. This service would be replicated in all the major locations of the state like railway stations, airports etc. to cater to around 20,000 taxis per day.

- West Bengal has an inventory of the citizens which has been segregated district wise. In 2011, the state has conceptualized a SMS-based service for disaster management. So, when there is a disaster in a particular district, citizens from that specific district only are informed. The inventory of the citizen data is updated every six months, with more features being added during updates.

- The state has also initiated an SMS-based eve-teasing management system. Under this system, SMS will be directed to a police officer in the field and the officer reverts either through an SMS or through an immediate visit. The action taken will be communicated to the complainant. An automated SMS would also be sent to the higher authorities.

- In addition, a mechanism can be implemented where traffic violations could be communicated immediately to the drivers through SMS.

- The state has also started a fair price medicine shop in 2011. Under this system, e-Prescriptions are generated which are accepted in all the fair price shops. The success of the initiative triggered Govt. of India to take up the Jan Aushadhi project.

- As a way forward, it has been planned to:
  ○ Set up a Centres of Excellence in Kolkata which will not only help in making predictive analysis but will also help in restoration of affected systems and also for cause detection in forensic reports.

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- o Design a transport system which can be used for all types of transport. It will provide information to the passengers that at what time the next bus will be available.

- o Physical data capturing in police recruitment where the data will be captured through sensor during the physical activities and will be uploaded in the server directly.

- o A market based SSDG has been planned where the open data will be provided which can be used by the private players to build up apps and other services.

- o Increase the services of e-District to 60, which is presently offering around 32 services

- In addition, improvements for the SWAN infrastructure, SDC, and analytics-based policy making are some of the other initiatives on the anvil.

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Principal Consultant & Head, State e-Governance Mission Team, Dept. of IT, Govt. of West Bengal, Shri Abhishek Roy presenting on e-Governance Initiatives in West Bengal

Digital Transformation in India

Director, Advisory Services – Health ICT, Ernst & Young Shri Amit Saraf shared his belief that there are a lot of innovations across the length and breadth of the country where ICT is made use of, to benefit the citizens.

On what has changed in digital transformation now, Shri Saraf pointed that in mid 90s the focus was to put some information system in place by making use of basic IT systems. As the progression happened, the idea shifted to make use of IT to make life simpler for the citizens.

In the present era of digital transformation, there is focus on using IT to simplify governance. The focus is on how to make 'e' of e-governance as 'each and every aspect' of governance, which can be termed as digital transformation. He added that e-Governance should be participative.

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Discussion

- As is the case of Bihar, Himachal Pradesh also doesn't have an online platform for the Public Service Guarantee Act. The e-District online platform is being used which doesn't have timelines for service delivery but has nearly 113 common services which are notified by about 20 departments. Accordingly, a clarification was sought whether the same mechanism is being followed in the state of Bihar.

  Responding, Mr. Singh explained that Himachal Pradesh is creating the front-end through e-District Phase II. The unique aspect is that the revenue records have been converted into hypertext and some data has been transcripted from Hindi to English. But, the front-end application cannot be a substitute because it cannot transform the state administration inventory.

- On how Bihar has been using the available data related to citizens for providing health related benefits taking the privacy issues into consideration, Mr. Singh responded that Bihar is trying to understand the needs of health benefits of citizens and then the information/ benefit will be provided to that particular citizen, since health related information may not be allowed to be shared as per the government guidelines. He added that it is easy to reach out the citizens by sharing the process of the benefits they are already entitled to.

- On the query raised on relevance of USSD technology India after five years, Mr. Abhishek Roy responded that the main aim of using this technology is to reach the under privileged people though there are some challenges in using USSD as it is not very user- friendly. But, it has been observed that people having smart phones may not have the data connectivity. Even after 5 years, this technology plays an important role because many people may not be very comfortable with the smart phones.

- On a clarification on the recruitment policy to be followed for the 400 seat BPO proposed in Nagaland, Mr. Vizo clarified that the Nagaland State e-Governance Society has a tie-up with a private company and is planning to recruit 25 persons this year. The Dept. of IT has decided to extend infrastructure support in terms of office space, power supply etc. The Govt. of India has set a benchmark of filling up 100 seats within a period of one year. The salary will be as offered by metro cities like Delhi, Mumbai or Hyderabad. This will ensure the continuous inflow of manpower in the BPO. The state is also looking at recruiting the local individuals who have been employed elsewhere so that they can come back to their home state.

- On the revenue model adopted by AP for offering affordable Internet and its sustainability, Shri Rama Rao responded that there are 1.1 crore households, 60,000 offices, 10,000 schools and 6,000 PHCs in AP. He added that the enterprises can pay Rs. 999 to get 100 Mbps internet connectivity and a telephone. These enterprises can act as additional income-generating sources by providing the facilities to the demand driven areas at a very nominal cost.

- It has been pointed out that monetization is a major issue within the system of data analytics. In the context of digital transformation, there is a fear that one may try to generate revenue by selling sets of data collected by the State. Mr. Rahul Singh stressed that the State Data Centre collects the citizen data which is highly sensitive and hence it is its responsibility to safeguard the data and not to monetize it.

- The AP Fiber net project was appreciated. The north eastern states had shown their interest to replicate the same model by laying down fiber network from block to GP level. Mr. Rama Rao encouraged them by saying that the BBNL has already planned to facilitate the entire project and has assigned topmost priority to the north-eastern states. Mizoram had already undertaken a visit to Andhra Pradesh to study the model and requested AP to provide the consultancy services for the implementation, with the funding from BBNL.

It has been observed that there may be a lot of initiatives going on across the country every year. But because of digital illiteracy, it is not always possible to propagate the message to the citizens. A request emerged to put forward and share the success stories on digital literacy, to bridge the digital divide.

On a concluding note, Shri Vizo thanked all the panelists for their valuable inputs. He also appreciated the presence of the participants and the officials from DARPG, Govt. of India who contributed constructively to the deliberations. He added that IT and e-Governance are going to be an integral part of our lives and hence there is a need to keep engaged with these aspects.

At the conclusion, the Joint Director, AASC Smt. Kajori Rajkhowa felicitated the panellists.

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Shri K.D. Vizo concluding the Session on Digital Transformation

Session IV: Initiatives/ Reforms

Presentation on Sikkim Organic Mission- Organic Farming: Back to the Roots

Background

Setting the context for the session on Sikkim's Organic Mission and Tourism Mission, Secretary, Horticulture, Govt. of Sikkim Shri K. Bhutia highlighted organic farming as a traditional, desirable way of farming by using on-farm produced inputs including organic manures, bio-fertilisers, and seeds.

Secretary, Horticulture, Govt. of Sikkim Shri K. Bhutia presenting on Sikkim Organic Mission

The use of chemicals is completely avoided following the National Organic Program guidelines, 2003. There is not only benefit in terms of the production but also in terms of maintaining soil health, producing chemical-free food benefitting human health, and, providing chemical-free air and water and, conservation of biodiversity in the country.

It was a difficult journey from 2003 to 2015 when it was initially conceptualized by the Hon'ble Chief Minister, for Sikkim to get completely transformed into an organic state.

There were a lot of hindrances in the form of resistance from academicians, politicians and other circles. But, the government played an active role in the transformation of the entire state into an organic state. With the strong will power, and visionary leadership of the Chief Minister who has been at the helm from the last 23 years, the state could achieve the target of transforming itself into an organic-farming one.

If one looks at the geographical area of Sikkim and the cultivable area, it is very small. The population of Sikkim is about 6.1 lakh and net area sown is 77.17 lakh hectares. Sustaining the food requirement of the state and also getting into a healthy competition with other states were the challenges. But then, it was decided to innovate and implement organic farming in the state by way of which it is benefitting the tourism of the state. This way the government has tried and is succeeding in sustaining the ecology of the state. The Session highlighted this

process of transformation of Sikkim into an Organic-farming state and how it has been linked to development of tourism in the state.

The session on Organic Mission and Tourism Mission also threw light on how organic farming is being used by Sikkim and other states in the country in developing tourism.

Today, more than 20,000 hectares are under organic farming in the country. Out of this, Sikkim's share is more than 20 per cent.

If one looks at the scenario of the world, Cuba is the only country which is an organic-farming country in the world, perhaps borne out of compulsion due to sanctions, which could be termed as a blessing in disguise. In the case of Sikkim, the transformation to organic farming is absolutely voluntary. The entire state has opted for organic farming which is the first of its kind in the country.

- Sikkim is one among the 26 biodiversity hotspots of the world. The population of Sikkim is close to 6.10 lakh while the tourist inflow is twice the population of the state in Sikkim. The net cultivable area is 77.17 lakh hectares.

- With rich biodiversity, Sikkim has more than 4,000 flowering plants, close to 480 ferns, 700 medicinal plants and more than 500 varieties of orchids.

- In the book "Tours in Sikkim and the Darjeeling District" by Percy Brown published around 1800, Sikkim was described as a small kingdom. But, in terms of vegetation, he said that it can represent the entire world. This is the level of the richness of biodiversity in Sikkim which also needed to be conserved. This could be achieved only through a transformation to organic farming.

- In 2003, Sikkim conceptualized organic farming, the same year when the country developed a national policy on organic farming. As one revisits the

concepts of Organic Farming, the International Foundation for Organic Agriculture Management (IFOAM), which provides an international guideline for organic farming and from which the national guidelines are arrived at, highlights that:

  o Organic agriculture is a production system that sustains the health of soils, ecosystems and people.

  o It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects.

  o Organic Agriculture combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved.

- In terms of certification, Sikkim followed the third-party certification which is exactly as per the National Programme for Organic Production (NPOP) guidelines. This facilitates the organic products to be exported to anywhere in the world. So, the basic principles of health, ecology, fairness and care (endorsed by IFOAM) have been taken into consideration at the time of process of transformation into organic state.

- Although the companies producing fertilizers, pesticides and chemicals provoked the farmers, politicians and other technical people against the organic farming practice, it has been proved to be beneficial across many sectors – such as improvement of parameters in terms of biodiversity, productivity, minimising use of water, sustaining the ecosystem etc. It has also been observed that there is no significant decrease in the productivity of any particular crop due to organic farming.

- Another innovative step in organic farming is the use of cows for providing horticultural fertilizer, manure production, bio-pesticides, bio-fungicide etc.

A recent study in Gujarat found 5,000 compounds in the urine of Gir cows with more than 2,500 of them having medicinal values which also serve as bio-pesticides and bio-fungicides. One litre of cow urine mixed with four litres of water eradicates flies and fungal diseases. Realizing this significance, the Sikkim government has been trying to provide cows to farmers under the Dairy Entrepreneurship Development Scheme.

Accordingly, if every house had two or more cows, there would not be a need to use chemicals.

- Thus, in the year 2003, the historic Declaration was made in the State Legislative Assembly to transform Sikkim into a fully organic state. Some of the important policy decisions that followed included:

  o Sikkim stopped receiving the Government of India quota of chemical fertilizers from 2005.

  o Sikkim formulated the Organic Policy.

  o Sikkim was the first state in the country to ban the entry of chemicals legally, treating it as a punishable offence.

  o Sikkim enacted the Agricultural, Horticultural input and Livestock Feed Regulatory Act, 2014.

- In terms of infrastructure, a lot of infrastructure has been created including:

  o Seed and soil testing laboratories

  o Seed production units

  o Mobile soil testing vans

  o Bio fertilizer production unit

  o Ginger processing unit

  o Tissue culture Lab

  o Automated Green house for planting material production

  o Rural and Vermi- compost units for on farm manure production

- As highlighted in the presentation, Sikkim Organic Mission has been an article of faith. A convergence was brought in, of various departments and units for making the vision into a reality:

  o Gram Panchayats in the states organized special Gram Sabhas to create awareness.

  o All the Centrally-Sponsored Schemes under horticulture, agriculture and animal husbandry were implemented in convergence with rural management and MNREGA.

  o Organic regulatory inspectors (ORI) have been deployed at boarder check post to check the inflow of chemicals into the state.

  o The Forest Department imposed ban on burning of bio-mass, in accordance with the NPOP guidelines.

  o The Trade License Act was amended with the word "chemical fertilizers" being substituted with "inputs of organic origin", prohibiting the sale of chemical inputs.

o   Similarly, the Transport Department prohibited transport chemical fertilizers and pesticides.

o   The Education Department included a chapter on 'Organic Farming' in the 5th standard course curriculum of government schools

Way Forward

- The state looks forward to 2018 when all the organic products produced in Sikkim would be processed, certified, packed and branded and sold outside Sikkim

- The state identified gaps as follows:
  o   Empowering farmers through FPO

  o   Production of marketable volume with consistency

  o   Processing, labeling and brand positioning

  o   Creation of sustainable supply chain system

- The progress made in organic farming has been beneficial to the various stakeholders in Sikkim including:

  o   Farmers- improved soil health, access to healthy food, organic certification and premium price for the farmers, institutions

  o   Setting up of the first National Organic Farming Research Institute (NOFRI), first Sikkim State Organic Certification Agency (SSOCA) and a Horticultural College

  o   Support received from the GoI under various schemes

The Presentation also highlighted the various accolades that Organic Sikkim received and the immense value it added to the Brand Sikkim. In addition, 25 per cent increase in tourist inflow has been observed from 2014 to 2015.

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Presentation on Sikkim Tourism Mission

In continuation to the Presentation on the Sikkim Organic Mission, Special Secretary (Tourism & CS), Govt. of Sikkim Shri J.D. Bhutia in his Presentation "Integrating Organic Farming & Tourism: Treading a New Path in Sikkim" highlighted the ways in which organic farming can facilitate the development of tourism in Sikkim and in other states.

Special Secretary (Tourism & CS), Govt. of Sikkim Shri J.D. Bhutia presenting on Sikkim Tourism Mission

- Since organic farming is the mainstay of the economy of the future in Sikkim, it has been decided to link it up with tourism initiative. Agro-tourism is one of the new brands that would be promoted in the future in Sikkim. It can be considered by other north-east states that share similar hilly terrain. There can be cross-learning on this aspect.

- With majority of the area covered by forests in Sikkim, the Forest, Environment and Wildlife Management Department (FEWMD) is the implementing agency of the Sikkim Biodiversity Conservation and Forest Management Project.

- 11 Ecotourism zones have been identified across the 4 districts of the state, which are being developed as independent destinations and categorized based on their core features.

- The opportunities are plenty for tourism development across various areas like home stays/ hotels, product processing centres, fairs and festivals to name a few.

- From baseline information to innovation and product improvement, the process of agro-ecotourism development involves various steps like stakeholder involvement, product and package building etc.

- The critical success factors begin with community participation and capacity building and goes on to other aspects like project sustainability, organisational setup and maximising of tourist satisfaction.

- The tourism initiative is currently in the development stage with various activities like capacity building and training, product and package

development and enterprise development and management in progress. It is targeted to open up the zones for tourists by November- December 2016.

Thus, Sikkim is making strides as a totally organic state and a promising destination for agro-ecotourism. In the process, Sikkim has won many accolades including its Khangchendzonga National Park being adjudged as the 1st UNESCO Heritage Site from India in the mixed category. Sikkim has also pioneered in publishing volumes on Organic Farming documenting the core concepts and the processes of transformation to an organic farming state.

The session ended with a slogan, "What we leave behind for our future is our responsibility. Act Responsibly. Go Organic." This was followed by a short sharing of experiences by some of the participating states on organic farming.

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- **Discussion**

  - **Smt. Dr. N. Vijaya Lakshmi, Managing Director, Mahila Vikas Nigam, Patna** Bihar is promoting organic farming in a very big way. In 2011, it achieved a world record in paddy production through a combination of organic farming and system of rice intensification (SRI) methods. There are a lot of schemes that are promoting organic farming.

    Dr. Purnima Chauhan, Secretary, Dept. of Administrative Reforms, Govt. of Himachal Pradesh
    Himachal is one of the first states to ban polythene and also provided an end to end solution. A market was created for the polythene where the PWD purchases the polythene at Rs. 4 per kilo and it was then mixed with bitumen to make roads.

- **Amit Gupta, Business Leader | VP, Advanced Analytics CoE, MasterCard Advisors**

  Tourism is growing by 25 percent in Sikkim and there are the tremendous opportunities. Is there a comprehensive plan targeting the right audience and marketing? How do you think Sikkim with such amazing flora and fauna can become the centre of tourism growth in India? These are pertinent aspects that need to be paid attention to, for the State to reap further benefits.

  Shri J.D. Bhutia, Special Secretary (Tourism & CS), Govt. of Sikkim

  IT is the biggest enabler. We want to pick up the various sentiments of the people once they visit Sikkim and we are looking critically at the tools that are available like social media. There is scope for development if we can tie up with some of the IT initiatives of NIC or other departments of Government of India, where we can pick up various trends and sentiments on the tourists' aspirations and needs when they visit an eco-friendly place like Sikkim with its rich flora and fauna and rural life.

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Regional Conference on "Path Breaking And High Impact Initiatives in Citizen Centric Services Delivery": Proceedings

Presentation on Integrated Basin Development Livelihood Programme in Meghalaya

Meghalaya, which translates from Sanskrit as "abode of clouds," was formed in the year 1972. The area of the state is 22,429 square kilometres spanning the districts of Khasi Hills, Garo Hills and Jaintia Hills.

It has a population of about 30 lakh and the density of population is 132 per square kilometre. The people of Meghalaya are simple and peace-loving.

Addl. Secretary, Programme Implementation and Evaluation Dept., Govt. of Meghalaya Shri V.K. Mantri giving a presentation on Integrated Basin Development Livelihood Programme

Addl. Secretary, Programme Implementation and Evaluation Department, Govt. of Meghalaya Shri V. K. Mantri touched upon the concepts of Integrated Basin Development Livelihood Programme (IBDLP) which can be termed as high impact initiative for citizen-centric service delivery.

The state of Meghalaya has plenty of mineral resources, coal mines, abundant rains, numerous water bodies, rich biodiversity, thick forest cover and human capital with good literacy rate, good understanding of nature; the paradox however is that almost half of the households of Meghalaya live below poverty line. This was the basis for the conceptualisation of the Integrated Basin Development Livelihood Programme (IBDLP), the state flagship programme with a comprehensive approach to change lives, ensure livelihood security and inclusive growth through sustainable use of natural resources.

IBDLP has been recognised by various awards and recognitions including the Skoch Award in 2015 and being featured as a good practice in the Good Practices Resource Book 2015 published by UNDP, to name a few. The salient features of IBDLP, as highlighted in the Presentation, are as follows:

- Under IBDLP, the idea is to transform the beneficiary into a development partner. The very concept of beneficiary involves a relationship with the government and denotes aspects like hierarchy, passivity, dependence, low accountability, supply-driven and subsidy schemes. On the contrary, in the case of development partner there is equality, both the parties being active, inter-dependence, high accountability, demand-driven and nil subsidy.

- The simple livelihoods of the people like pig and chicken rearing are being conceptualized to be up-scaled to enterprises to improve the livelihoods and their quality. In addition, IBDLP provides the tools and frameworks for facilitation of smoother convergence across various domains.

- IBDLP thrives on knowledge management with an experienced team for documentation and communication. There are publications in local languages, short videos on various livelihoods opportunities, movie night shows in villages to create awareness and inspire the villagers. There is a lot of dependence on knowledge and hence IBDLP has a lot of knowledge partners, technical partners and financial partners.

- The IBDLP follows the value chain approach. Generally, every department concentrates on the production and the downstream and upstream linkages are ignored. But, in this case, the entire value chain is taken care of, from the top to the bottom; from inputs to the markets. Multiple livelihood opportunities are also looked at which are clubbed into clusters. Presently, there are about 54 cluster plans.

- Thus, Entrepreneurship Development, Natural Resource Management, Good Governance and Knowledge Management constitute the four pillars of IBDLP. The institutional structure of IBDLP is at three levels- state (policy level), district and block (implementation level). There is the Meghalaya Basin Development Council (MBDC) at the policy level which is chaired by the Chief Minister. The Chief Secretary and all the Principal Secretaries are members of the MBC. At the implementation level, there is the Meghalaya Basin Development Authority (MBDA) chaired by the Chief Secretary and at the district level, there is Basin Development Unit chaired by the Deputy Commissioner, with heads of the line departments as the members. This institutional structure makes the convergence easy.

- In every block, there is an Enterprise Facilitation Centre (EFC), the front-end of the IDBLP at the grassroots level, where the demand-driven approach happens. Individuals visit these centres based on the awareness created by the field-level officers. The staff at EFC assist and provide information on the various livelihoods matching individuals' interest, through videos. This is based on the philosophy of Steve Jobs, "People don't know what they want until you show it to them." In the next step, individuals are registered as

partners and are divided into groups and then a dialogue with the partners takes place. This is followed by exposure trips to various villages across the country after which bank linkages are provided to the partners to start their businesses.

- The key highlights, of IBDLP thus far, include:
    - 11 Basin Development Units (BDUs) in 11 Districts
    - 39 EFCs across 39 administrative Blocks
    - 1.29 lakh people registered as partners out of the 30 lakh population of the state
    - 52,000+ partners trained in different sectors aimed at integrated value chain development
    - 40,000+ partners now moved into various livelihood activities
    - 8 Partner NGOs supporting implementation on the field

In addition to throwing light on the IBDLP initiatives, a few success stories were shared. One among them is the case of viability gap funding, which facilitated building of a bridge across the River Simsang in Garo Hills in Sikkim. This bridge, the longest suspension foot bridge in Meghalaya, is significant as it is the only link connecting people of the several surrounding villages with Williamnagar, the district headquarters which provides health, education and livelihoods.

Also, Mr Mantri highlighted the readymade framework available for carrying out External Aided Projects (EAPs) through IBDLP, which can cater to livestock, agriculture, etc. There are four such projects including the projects on Human Capital Development, Meghalaya Livelihoods and Access to Markets Programme (Megha-LAMP) and the upcoming Community-Led Ecosystem Management Project (CLEMP) and Multipurpose Reservoir Project in partnership with World Bank.

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Presentation on Contemporary Issues Related to Development of Tribal/ Tribal Areas in India

According to Census 2011, the population of Scheduled Tribes in the country is 10.45 crore, which is 8.6 percent of the total population. In terms of the human development indicators like literacy and education, there is huge variation between the tribal population and the general population.

Deputy Secretary, Ministry of Tribal Affairs Shri Gopal Sadhwani presenting on Contemporary issues related to development of Tribal/Tribal areas

There is huge variation in the literacy rates of tribals (59%) vis-à-vis the general population (73%). The same is the case with the health indicators as well with a substantial difference between the ST population and the others.

In this context, there is a need to address the concerns in the education and health areas, for the ST population, as highlighted by Deputy Secretary, Ministry of Tribal Affairs Shri Gopal Sadhwani.

- The Ministry of Tribal Affairs is a critical gap filler. All the central ministries, state governments are to pool their resources and come forward to facilitate the raising of the status of the scheduled tribes.

- Based on an analysis of the ST population, it emerges that the North- East states have the highest proportion of ST population in the country (more than 40%).

- Seven states (Chhattisgarh, Gujarat, Jharkhand, Madhya Pradesh, Maharashtra, Odisha and Rajasthan) constitute 47.30 per cent of STs of the country.

- In terms of ST livelihood, predominance is seen in the primary sector with about 80 per cent engaged in agricultural practices.

- The Ministry of Tribal Affairs is working out a list of priority districts in all the states with more than 50 per cent of ST population and LWE affected.

- The priorities of the Ministry are as follows:
  - Priority 1A:

    14 LWE affected districts having >50% ST population

  - Priority 1B:

    80 districts having >50% ST population

  - Priority 2A:

    7 LWE affected districts having >25% but <50% ST population

  - Priority 2B:

    62 districts having >25% but <50% ST population

  - Priority 3:

    Remaining 14 LWE affected districts having <25% ST population

- The primary focus of the Ministry would be on education in the coming years according to the revised guidelines based on the human development indices of the tribal population.

- This implies that more than 50 per cent of the allocations would be to education, especially for building senior secondary and higher secondary schools which are less in grama panchayats and villages among other initiatives. There would also be about 22 per cent allocations for health.
- The issues and concerns related to education of STs include high dropout rate, out of school children, vacant post of teachers in tribal areas, low

learning outcomes, shortage of secondary / senior secondary schools and colleges with science stream, malnutrition and anemia of ST students, hygiene and sanitation. These need to be addressed in all sincerity.

- Shri Sadhwani highlighted the various Educational Schemes for tribals through his Presentation.

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Presentation on Gram Varta-Village Dialogue- A Women's Group Lead Initiative for Improved Health, Nutrition and Sanitation in Bihar

Gram Varta (*"Gram"*= Village; *"Varta"*= Dialogue) is an initiative from the state of Bihar which, tries to enable change through dialogue and mobilisation of women. It is basically a participatory learning and action approach to mobilise women through Self Help Groups (SHGs) to improve family health, nutrition, water, sanitation and hygiene (WASH) in Bihar, as highlighted by Managing Director, Mahila Vikas Nigam Patna Dr. N. Vijaya Lakshmi.

Managing Director, Mahila Vikas Nigam Patna Dr. N. Vijaya Lakshmi presenting on Gram Varta

- The goal of Gram Varta intervention is to promote health, nutrition, water, sanitation and hygiene (WASH) through a participatory learning approach and a behaviour-change communication model, as highlighted.

- The objectives of the Initiative are to:
  - Sensitize women and the wider community including field level workers on malnutrition, health, water and sanitation and gender issues.
  - Support community for improved household behaviour and practices related to key health, nutrition, water and sanitation indicators.
  - Increased uptake of quality health, nutrition, and water and sanitation services.
  - Increased accountability of community level service providers

- The journey of Gram Varta began in 2011 as a pilot project in Maner Block in Patna District which showed huge improvements in the findings in comparison with the baseline findings across various parameters like

Dr. N. Vijaya Lakshmi is presently Secretary, Animal and Fish resources Department. Govt. of Bihar. She holds the additional charge as Managing Director, Women Development Corporation.

She worked in various capacities in Govt. of Bihar and Govt. of India. She provides conceptual guidance and supervises programs aimed at Women empowerment in the state including providing strategic inputs and advocacy support to the state government in designing and rolling out programs for overall empowerment of women. She has many publications to her credit in popular journals and many awards for her outstanding initiatives.

She has a Ph.D. in Management from IIT Delhi and M.Sc Zoology; M.A Anthropology.

households with safe (filtered) drinking water, use of household toilets, weight of children in the households etc.

- Inspired by these findings, the Gram Varta has begun full-fledged implementation and is presently operational in 19 districts out of 38 districts in Bihar covering 85 blocks, 1,226 Panchayats, 85,000 SHGs and a population of 59,10,300.

- In terms of the process, the intervention follows four phases of the Participatory Learning and Action (PLA) cycle that are the hallmark of the intervention. All the activities are carried out by women themselves in groups with the help of facilitators, who are community members drawn through SHGs.

- Each group meets twice a month and each facilitator is responsible for an average of 500 population. The facilitators use manuals to guide their meetings and make use of interactive methods of communication like games and storytelling. The process flow, typically, is as follows:

- In the first phase, there is introduction of life cycle approach using stories and pictures for understanding under-nutrition and the links between early conception, low birth weight, child under-nutrition and poor growth and development. In the second phase, groups discuss strategies to address prioritised problems. The facilitators support groups in allocating responsibilities for their implementation and follow-up. At the end of the phase, a community meeting is called to share the identified problems and strategies for implementation. In the third phase, groups implement their strategies and periodically review progress, with the help of facilitators. In the last phase, groups jointly evaluate progress and success in the implementation of their strategies

- The initiative has been running successfully with the support of the human resources deployed at various levels. The strengths of Gram Varta are:

    o It has been leveraging the existing platform of women's SHGs thus providing for low operational costs and sustainability.
    o The integrated approach that recognises the importance of gender and social inclusion
    o It strengthens, capacitates and ensures retention of knowledge through the local resources.
    o Since female literacy is still low, the use of interactive tools like power walk, role plays etc. helps to engage communities

- In terms of outcomes, the Gram Varta has been instrumental in capacitating families and communities to take control and responsibility for improving their health and nutrition outcomes on the one hand, as well as improving the access of reach and responsiveness of the community level services. A study carried out on the Gram Varta participants and non-Gram Varta participants showed better awareness and improved indices across various parameters like health, sanitation among the former.

- In terms of challenges, knowledge diffusion from the Gram Varta participants to non-participants is very less. Participation of service providers like ANM, ASHA, AWW was very poor in Gram Varta meetings except at a few places where the training took place in Anganwadi Centres. In addition, it has been difficult for the facilitators to ensure the participation of males in the meetings. Lastly, although the meeting has increased demand generation, lack of supply (both in Health/ ICDS system) in some places created conflicts between facilitators/SHG groups with the service providers.

Gram Varta was shortlisted as a finalist in the CAPAM Awards in the citizen-focused innovation category. The session concluded with a short video, "Voices from the Field," which showcased the Gram Varta initiative.

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Smt. Nandini Sharma, Asst. Director, AASC felicitated the speakers of the Session.

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Session V: Initiatives in Tele-linking Remote/ Inaccessible Areas

Introduction

Realising the need to address the challenge of remote area connectivity and accessibility and bridging the digital divide, the GoI has been prioritising the National Optical Fibre Network (NOFN). It is envisaged that it would facilitate connecting 2.5 lakh Gram Panchayats by 2018 with 100 Mbps bandwidth, ensuring last-mile connectivity. Against this background, the Session on Remote Area Connectivity and Accessibility dealt with the dissemination of the best practices from the state of Andhra Pradesh, while discussing on the connectivity issues in the North-East.

Setting the context, Commissioner & Secretary (IT), Govt. of Nagaland (Moderator of the Session) Shri K.D. Vizo, presented an overview of NOFN connectivity in North-East and the related issues and challenges while providing certain possible alternative solutions for enhanced and robust connectivity in the region.

The North-East constitutes to 3.1 per cent of the total population of India and about 8 per cent of the total area of the country. The NOFN is an initiative by the Govt. of India and is being monitored and administered by the Department of Telecom (DoT). The Bharat Broadband Network Limited (BBNL) is the executing agency of the project. There are other implementation partners like the BSNL, RailTel and other players. The total project cost is approximately Rs. 72,778 crore. The ultimate aim of the project is to provide (last mile) connectivity in the rural areas.

The process of connecting the rural areas has begun in the North-East region. There are different types of technologies that are used- terrestrial and satellite, which have their own advantages and disadvantages. In terms of challenges of connectivity, landslides and power outages deserve mention. There is a need for improvement of infrastructures in the states in the region.

Shri Vizo indicated the need for having a High Altitude Platform Station (HAPS) to eliminate such challenges and ensure robust connectivity. He pointed out that the cost of the satellite is about Rs. 1,324 crores (1/55th of NOFN cost). Similarly, the HAPS costs about Rs. 331 crores (1/220th of NOFN) approximately. So, it is a strongly felt request to the Govt. of India that a separate satellite be launched for the North-East. Alternatively, he suggested that the Govt. of India could be requested to install two HAPSs for North-East. This is expected to be a low-cost solution in addition to other technologies like wireless point-to-point and point-to-multi-point technologies.

He also informed that the pilot phase of the National Infrastructure Network (NIN) is in progress in Nagaland under which all the villages in the state are being connected wirelessly. In addition, the aerial Optical Fibre Cable (OFC) is another option that may be considered for connecting rural areas in hilly regions.

Shri Vizo then requested Shri Atluri Rama Rao, ED, APFGC to share his experience.

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Presentation on Optical Fibre Grid Project in Andhra Pradesh

Executive Director, Andhra Pradesh State Fibernet Ltd. Shri Atluri Rama Rao shared his experience of the Optical Fibre Grid Project in Andhra Pradesh, which has been a forerunner in providing connectivity in the rural areas of the state and it is a success story worthy of emulation by other states. He detailed the process framework, the challenges and shared other information on successfully providing connectivity in the state.

Executive Director, Andhra Pradesh State Fibernet Ltd.Shri Atluri Rama Rao presenting on Optical Fibre Grid Project in Andhra Pradesh

- At present, Andhra Pradesh has completed the laying of overhead cables in the entire state. The state, after bifurcation, has much less resources. However, the

Chief Minister envisioned improvement of the GDP and Happiness Index in the State. Accordingly, it has been proposed that every household be provided with suitable internet bandwidth and a telephone under the Optical Fibre Grid Project.

- In terms of average internet connection speeds, India ranks 114 globally, providing 2.8 Mbps speed in the urban and semi-urban areas. It is a challenge for policy makers to ensure penetration of broadband in rural India.

  About 38 per cent of the villages are not connected in the State. Taking into consideration this scenario and the availability of funding for rural infrastructure under the NOFN, AP decided to connect the State through aerial cables for faster completion of the project with concomitant

Shri Atluri Rama Rao is the Executive Director of the Technical Wing, AP State Fibernet Limited.

Prior to joining AP Fibrenet, he served as the Executive Director of the AP Power Generation Corporation, Hyderabad. He also served as the Sr. Manager/ DGM/ Addl. General Manager in the AP State Financial Corporation. He is a recipient of many awards and accolades for his innovative steps in the AP Fiber Grid Project.

Shri Rama Rao completed his M. Tech (Computer Science) from Osmania University and B.E. from Bangalore University.

improvement in connectivity and productivity. Accordingly, five grids - water, road, power, gas and fibre - have been announced. Under the fibre grid project, the services - telephone, television and internet would be provided at an affordable cost of Rs. 149; the price being Rs. 999 for private enterprises and business plans. The reach expected is 1.3 crore households, 60,000 schools, 6,000 Primary Health Centres (PHCs) and 10,000 government offices and a number of private enterprises.

- According to the NOFN plan, 61,000 kilometres of cable is to be laid underground in the state. The total estimate of the project is about Rs. 4,700 crore out of which Rs. 3,800 crore is provided by the Central Government. The time frame of execution is 2-3 years. The network model comprises 65 per cent ring and 35 per cent tree topology. As on date, 5,000 kilometres of underground cable has been completed.

- Taking into consideration the huge costs/ timelines involved in the Bharat Net program of the Govt. of India, the Govt. of AP chose the aerial route of Optical Fibre. The estimated coverage is 22,000 kilometres of Aerial Optical Fibre Cable network infrastructure across the 13 districts of Andhra Pradesh. The aerial network would be set up on the electrical poles. The delivery is expected to happen before 2017. The project is planned in a dual phase approach. Phase I would be done through aerial fibres and in Phase II, it would be done underground, which would mean 100 per cent redundancy.

- In a span of nine months, laying of aerial fibre in 23,000 kilometres has been completed. This aims at providing at least 15 Mbps broadband connection to households and at least 100 Mbps on demand to offices, at highly affordable prices. The basic package would be Rs. 149/- for triple play services. It enables provision of a host of other services such as Cable TV/IPTV, landline telephone, videos on demand, content & cloud services etc. There are other content providers who are setting up their services in the Data Centre to provide low-cost entertainment and educative information.

- About 3.75 lakh of electrical poles have been identified to create a network which has the state, district and mandal rings. The network capacity is 1.3 Terabytes. The GIS Mapping of 3.75 lakh electrical poles and around 2,500 substations has been done in one week's time at zero-cost using existing manpower equipped with hand-held devices. The manpower included electricity department employees, and MGNREGA employees. The state-of-the-art Network Operations Center of this project has been set up at Visakhapatnam. There are content servers like Google, Yahoo etc. for making information available within the state's data centre.

- The low cost of providing services is one of the significant features of the project. It is economically viable from the perspective of revenue generation through high volumes. In other words, as numbers increase, revenue increases. The second is generation of content through content providers and parent servers within the data centre through intranet which would bring down the utilisation of internet bandwidth. Similarly, there would be an "AP Cloud" which includes all the government applications. This also would save the utilisation of bandwidth.

- In the remote areas where Wi-Fi would not be reaching, which is about 3 per cent in the state, the hard-wired fibers are being used. All the services in the state would be provided through the AP Fibre Grid Project network using the AP State Data Centre and AP Cloud. For instance, to minimise frequent visits to doctors, an e-Health program has also been provided. Under the telemedicine initiative, there would also be medical access points in every village and the patients' parameters are transmitted to the hospitals and necessary actions taken.

Shri Rama Rao concluded his presentation with a short video on the AP Fibre Grid Project which portrays rural connectivity and offering of services.

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Panel Discussion on Remote Area Connectivity and Accessibility

Panel Discussion on Remote Area Connectivity and Accessibility

Moderator

Shri K.D. Vizo
Commissioner & Secretary (IT), Govt. of Nagaland

Panellists

- Shri Atluri Rama Rao
  Executive Director, Andhra Pradesh State Fibernet Ltd.

- Shri Rakeh Kumar Tondar
  Director, Department of Telecommunication, Govt. of India

- Shri Fakaruddin Ahmed, ACS
  Joint Secretary (IT), Govt. of Assam

Introduction

Commissioner & Secretary, Govt. of Nagaland Shri K.D. Vizo moderated the panel discussion on Remote Area Connectivity and Accessibility. The Panel Discussion began with experience-sharing by the policy makers, thus setting the tone.

It is envisaged that the meaningful cross-fertilization of views emerging from the Panel Discussion would promote further learning among the participating States and encourage them to initiate and/or replicate the emulation-worthy interventions towards leveraging ICTs and Digital India for human development.

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Remote Area Connectivity in India

Director, Department of Telecommunications, Govt. of India Shri R.K. Tondar provided insights into the various initiatives by the Department of Telecom (DoT) in terms of NOFN and providing connectivity across the country. The salient features of his presentation are as follows:

- There are three established media to provide connectivity in rural and urban areas:
    - Optical Fibre Cable (OFC): It is reliable and has high bandwidth capacity
    - Radio: Where OFC is not economical and medium bandwidth requirement exists
    - Satellite: Costliest and deployed in remote and hilly areas

- The remote areas in the country can be segregated as Left-Wing Extremism (LWE) areas and hilly areas. In LWE areas, DoT has a scheme to install mobile tower for 2G coverage. It is to install 2,199 towers in ten states in 88 districts in the country. This project is almost complete and less than 50 towers are yet to be commissioned.

- In the case of development of North-East Region (NER), DoT has three plans mainly,
    - Comprehensive Telecom Development Plan
        - Extends mobile connectivity to the 9,190 uncovered villages
        - Seamless connectivity along the National Highways
        - Augmentation of optical fibre connectivity for districts

    - In addition, another Scheme focuses on augmenting optical fibre connectivity from District Headquarters (DHQs) to Block Headquarters (BHQs) to increase the capacity and reliability.

- o BharatNet/NOFN – BHQs to Gram Panchayat (GP) connectivity

- o Alternatively, international connectivity (10 Gbps) to North-East through Bangladesh

- The National Optical Fiber Network (NOFN)/Bharat Net project is planned to connect all Gram Panchayats (approx. 2.5 Lakh) in the country. This is to be done through optimal mix of underground fibre, fibre over power lines, and radio and satellite media for providing broadband connectivity by all categories of service providers on non-discriminatory basis.

- The aim is to provide high speed broadband connectivity to all GPs under Bharat Net in three phases:

- o Phase-I : Fibre connectivity (linear configuration) to 1 lakh GPs is targeted by March, 2017

- o Phase-II : Remaining 1.5 lakh GPs using an optimal mix of underground fibre, fibre over power lines, radio and satellite media by December, 2018

- o Phase-III : A state-of-the-art network including fibre between districts and blocks; and, for the 5G services and Internet of Things era, underground OFC in ring architecture is planned to be completed by 2023

- As on 10.09.2016, the status of Bharat Net is as follows:
  - o Optical Fibre Cable (OFC) has been laid in 58,658 GPs

  - o Connectivity has been provided in a total of 9,105 GPs

  - o Optical Fibre Cable(OFC) has been laid in 1,34,173 km

Shri Tondar concluded his presentation with a gap analysis of connectivity. He highlighted the impact of broadband penetration quoting the World Bank Report of 2009 that every 10 percentage points of broadband penetration, developing economies grew by 1.38 per cent. In addition, a key finding in the Report by Indian Council for Research and International Economic Relations (ICRIER) of 2012 points that the Indian States can be expected to grow by 1.08 per cent points for every 10 per cent increase in the number of internet subscribers.

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Shri R. K. Tondar is presently working in the Department of Telecommunications, Govt. of India, in the Policy Cell and deals with issues related to broadband policy, BharatNet/ National Optical Fiber Network (NOFN), Wi-Fi and Digital India programme. He has 17 years of experience in telecommunications and IT in various capacities in BSNL and DoT.

He also worked in telecom development cell and dealt with matters related to telecom connectivity of uncovered villages, connectivity of islands of Andaman and Nicobar and Lakshadweep and rural telephony.

He is a Bachelor of Engineering (Electronics) from NIT, Raipur, Chhattisgarh.

Internet Connectivity in Assam

Joint Secretary (IT), Govt. of Assam Shri Fakhruddin Ahmed provided an overview of the status of internet connectivity in Assam and highlighted the challenges and way forward.

- In the context of north-eastern states, the seven states have hilly regions, which make it difficult for laying cables.

- The Assam government is focusing on providing internet connectivity to all the households in the next five years. In addition, under the Digital Assam initiative launched by the government, connectivity has been given the topmost priority.

- The NOFN has been laid to nearly 500 GPs in Assam in the first phase. The rest of the 1,500 villages would be completed by March 2017. It is aimed to complete the rest of the villages in the state by December 2017. However, the picture is unclear on the way forward, in terms of technology and other aspects, for connectivity from GP level to the individual villages.

- The state is also contemplating to provide internet connectivity to every household. One GP has already been selected to carry out a pilot project of providing internet to all the households. In the next stage, it would be replicated across all the districts of Assam.

- The main aspect is the funding. The north-eastern states are not economically sound and hence cannot afford technologies. However, there is a need to connect some of the regions to a satellite-mode platform.

- In the case of mobile connectivity, there is 66 per cent of mobile penetration in the State. Some remote areas still do not have proper connectivity due to installation problems like terrain and power.

On a concluding note, Shri Fakhruddin pointed that in addition to technology, there is a need to have a policy for funding from the central government for going ahead.

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The Panel then moved on to an interaction with the participants and clarified queries on the topics discussed.

- **Shri Edwinson Swer, Director (Admin), North Eastern Council (NEC)**
  As seen in the video on Optical Fibre Grid of Andhra Pradesh, the aerial cables are being connected through transmission lines. Do you have a challenge of span length there as is the case that has been observed in the North-East?

  What is the approximate cost per kilometre?

  Shri Atluri Rama Rao, ED, APSFL
  Generally, in the terrain in AP, the span length is 60-70 metres. There are also places where it is 120 metres. The cables are available and one has to increase the strength in the cable so that sag will not happen. If it goes beyond 80-100 metres, then in the normal All-Dielectric Self- Supporting (ADSS) cable that is being used, there is a likelihood of sag coming in. So, there is a need to use slightly better ones. Accordingly, two types of cables were ordered, looking at the span lengths.

  The winches are another aspect to be taken care of. So, areas have to be segregated and accordingly cabling done.

In terms of costs, 24 kilometres ADSS cable along with accessories costs about Rs. 41,000 per kilometre. It is nearly Rs. 58,000 for the longest span.

▪ Can there be a policy or a guideline for the North-East that it can consider only overhead cable keeping in view the challenges of the terrain?

Shri R.K. Tondar, Director, Dept. of Telecommunications, Govt. of India

There are two schemes- as mentioned earlier, the All-Dielectric Self-Supporting (ADSS) cable and other is Optical Ground Wire (OPGW) where more than 150 KV lines are used for inter-district connectivity. This is the only solution which can improve the network in the north-east. GoI does support such projects with the cooperation of the state government, as they own the assets.

There is a need for coordination between the state government and the DoT.

In the open projects, the use of overhead cable is also allowed. All the state governments are requested to do some exercise on the mapping of the electric poles so that the overhead optical fibre cable can be laid. This is particularly beneficial in the hilly and remote areas where underground cable lying is very difficult. There are many technologies available and one has to choose the suitable one.

Shri Atluri Rama Rao

There needs to be a specific design depending on the terrains. This is the reason data is collected and there has to be a network map before the commencement of the project so that the rings when designed should be a combination of all these. Otherwise, the cost of the project would go up.

In the case of AP, 22,500 kilometers of cable including the electronics, 2,500 sub-stations and the full-fledged data centre with all the required equipment cost about Rs. 330 crore against the central government's project of 61,000 kilometres underground cabling at Rs. 4,700 crore.

The NOFN project is now reoriented after the success of AP. About 13 states visited AP, understood the process and realised that there is speedy implementation and less cost implication. So, BBNL has been requested to not just fund for laying fibre at the GP level and leave it but there has to be a delivery to users like the households, schools, health centres, government offices and the private enterprises. Otherwise, if left at the GP level, the service may not get delivered to the end user.

▪ On a request for having a satellite hub in the North-Eastern Region in the wake of the earthquakes and other challenges, Shri Vizo reiterated that the cost of satellite is about $200 million which is about 1/55th of the cost of NOFN. The High Altitude Platform System (HAPS) is about $50 million which is about 1/220th of the cost of NOFN. This technology can be a very good option for the North-East region.

Responding to this, Shri Tondar added that though the cost of satellite cost is lesser than NOFN cost, there is a need to look at the cost of the bandwidth availability. An exercise is being carried out by BBNL in collaboration with IIT Mumbai where mapping of all the GPS across the country is being done to determine where satellite connectivity is required and where radio connectivity is required, based on the population and terrain data. This will take care of the connectivity issue in the NOFN project.

On a concluding note, Shri Vizo requested Shri Tondar to recommend for the aerial overhead cable in a big way for the North-East Region.
Shri Vizo, then thanked the speaker and the panelists for their insightful inputs.

He also expressed his gratitude, on behalf of the North-Eastern states, to DARPG for creating such a platform and the participants for making the Conference, a success.

Asst. Director, AASC Smt. Nandini Sharma felicitated the speakers of the Session.

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Shri K. D. Vizo making the concluding remarks

Conclusion

Valedictory Session:

On a concluding note, Ms. Tina Masood proposed the Vote of Thanks, expressing gratitude to:

- ♦ The Secretary (AR&PG), GoI for his encouragement to the Conference and inspiring inaugural address setting the context for the deliberations
- ♦ The Addl. Chief Secretary, Govt. of Assam for her guidance in organizing the Conference
- ♦ The Principal Secretary (Admn. Reforms & Training), Govt. of Assam for his advice and support
- ♦ The Joint Secretary, DARPG for her enabling role and value-addition to the two-day proceedings
- ♦ The Director (DARPG) and the Director (AASC) for their initiative, cooperation and help in organizing the event successfully
- ♦ The delegates from the states for their active participation and sharing of their experiences
- ♦ The speakers and panelists, including the representatives from the central ministries, MasterCard and E&Y, for their insightful presentations
- ♦ The Officers and Staff of AASC for their efforts contributing to the success of the Conference

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