Uninterrupted • Unputdownable • Unstoppable

CELEBRATING 200th MAGAZINE ISSUE SINCE 2005

>> SPECIAL FOCUS ON
COVID-19: Governance Challenges & the Way Forward
Highlighting the Efforts of Governance Leaders in India to Tackle Corona

>> FEATURING
India’s first Virtual National Energy Summit organised by Elets Technomedia and presented by Greenko Group
TSIIC is identifying and developing potential growth centers in the Telangana State, and other infrastructure facilities.

**Industrial Parks**

TSIIC developed 152 Industrial Parks.

**Land Allotment**

TSIIC has allotted land to about 129 industries to an extent of 395.20 acres with an expected investment around Rs.2590.75 crores and provided direct and indirect employment to nearly 15216 persons during the F.Y.2018-19.

**Core Functions of TSIIC**

- Identification of potential sites for Industrial areas.
- Acquisition/Allotment of lands for Industrial Parks.
- Providing infrastructure facilities in Industrial Parks/IT Parks/Biotech Parks/Textile & Apparel Parks/SEZs with its own engineering division.
- Allotment of land/plots/sheds for various Industries.
- Identification and development of infrastructure projects under PPP mode.

**Important Industrial Parks Developed/ Maintained by TSIIC**

- Hitech City, Madhapur.
- K. RAHEJA IT PARK - MIND SPACE, Madhapur.
- FINANCIAL DISTRICT, Nanakramguda.
- Biotech Park, Karkapattla, Medak.
- Medical Devices Park, Suthanapuri.

Aero Space SEZ, Adibatla.
- Genome Valley, Shamirpet.
- IT Park Madikonda.
- Kakatiya Mega Textile Park, Warangal.
- Mega Food Park, Buggapadu.
- Textile Park, Madikonda.
- Textile Park, Kallem.
- TIF MSME Green Industrial Park, Dhandumalkapur.
- Micro Industries Park, Rairacpet.
- Defence & Composite Cluster, Ibrahimpatnam.
- Multistorey Industrial Park, Chandanvelli.
- Plastic Park, Manikonda.
- LED Park, Sivagar.
- Hard Ware Park, Shamshabad.
- e-City, Raviryal, Ranga Reddy.
- EMC, Maheshwarapur.
- GIP Jedcherla, Mahaboobnagar.

**Achievements**

Received award for implementing best practices of IT-Pass and EODB.

**Telangana State Industrial Infrastructure Corporation Limited**

(A Govt. of Telangana Undertaking)

6th Floor, "Panorama Bhavan", Fateh Maidan Road, Basheerbagh, Hyderabad 500 004, Telangana, India.
Tel: +91-40-2323 8290, 2323 7625, Web: tslic.telangana.gov.in
200 reached, far more to go...

eGov magazine has been playing a key role in presenting the journey of India’s transforming governance. eGov is India’s first magazine on e-Governance and has been on print for 17 years uninterrupted. The legacy of eGov has been much appreciated by the government leaders, policymakers and industry leaders. With this, the eGov magazine is celebrating the launch of its special 200th issue.

E-Governance in India is on the rise and new technologies are being introduced to effectively empower the governance. It is not wrong to say that governance is really challenging in a country as diverse and as populous like India. Hence, technological interventions and a shift from traditional to digital systems come to aid. However, looking at the Indian scenario, e-Governance has grown significantly. Especially with the onset of the Centre’s Smart Cities Mission, the technological infrastructure in the country has developed manifolds and enabled governments to operate digitally with more productivity and efficiency. And, one of the best examples is the Corona outbreak wherein the technology posed as an ultimate resort. The integrated infra, online platforms, mobile apps, etc. were the key factors strengthening the government’s efforts to fight the pandemic.

In this special 200th issue of the eGov magazine, we have brought in light various aspects of e-Governance including challenges faced by government leaders in managing the COVID situation; policymakers’ perspective on how technology is powering the present-day governance; resilience of Indian cities and how smart cities are enhancing disaster preparedness; how industry leaders are contributing in strengthening India’s digital infra; an exclusive report of India’s First Virtual Energy Summit and much more.

The special 200th issue of eGov is an effort to showcase the transformation of e-Governance scenario in the country and how the Government of India is gearing up to inculcate advanced technologies to empower the governance mechanism and improve citizen engagement enhancing the overall system.

DR RAVI GUPTA
Editor-in-Chief, eGov magazine, and Founder Publisher & CEO, Elets Technomedia Pvt Ltd
Our Publications and Initiatives
35 - GOVERNANCE
In Times of Coronavirus

07 Atul Chaturvedi
Secretary, Department of Animal Husbandry & Dairying, Ministry of Fisheries, Animal Husbandry Dairying, Government of India

11 Dr Neeta Verma
Director General, National Informatics Centre (NIC)

15 Dr Rajendra Kumar
Principal Secretary, MSME Department and Director, Entrepreneurship Development and Innovation Institute, Tamil Nadu, Government of Tamil Nadu

62 Avinash Mishra
Advisor, NITI Aayog

69 Dr BRK Pillai
Commissioner (Command Area Development and Water Management), Ministry of Jal Shakti, Department of Water Resources, River Development & Ganga Rejuvenation, Government of India

81 Moloy Bora
CEO, Guwahati Metropolitan Development Authority

83 Hitesh Vaidya
Director, National Institute for Urban Affairs (NIUA)

31 - COVID-19 SPECIAL FEATURE
Lessons from ‘Be Bold’ which tackled HIV, can be an answer to COVID-19 crisis

40 - SPECIAL STORY
India's United Front Against COVID

45 EVENT REPORT
India’s First Virtual National Energy Summit Ends on a High Note

90 Kerala Skilling Up
TECHNOLOGY REBOOTING SCENARIO
ICT will be a Game Changer in the Animal Husbandry and Dairy Sector

The Department of Animal Husbandry & Dairying is bringing in technological innovations like using genomics which is helpful in increasing productivity through breed improvement and other related aspects. Hence, considering emerging technology in the sector with reference to traceability, breed improvement, disease prevention, better food and water availability to the livestock is going to drive the sector’s growth,” says Atul Chaturvedi, Secretary, Department of Animal Husbandry & Dairying, Ministry of Fisheries, Animal Husbandry & Dairying, Government of India, in an exclusive interview with Souvik Goswami of Elets News Network (ENN).
Kindly give us an overview of the Department of Animal Husbandry & Dairying.

The Department of Animal Husbandry & Dairying has been recently formed by Government of India by separating it from the Ministry of Agriculture. This was done to bring the sector in further focus. The Animal Husbandry and Dairy sector has a huge potential not only in terms of increasing farmers’ income but also ensuring livelihood and food security in the country. Therefore, the whole focus is on how we can contribute to the growth of the country’s economy and increase farmers’ income through various initiatives that can be supported or facilitated by Government of India.

As per you, special attention has to be given to the industry. Is that the need of the hour?

This sector is growing at the compound annual growth rate of more than eight percent since the last five years. If this is compared with the compound annual growth rate of Agriculture (crop) sector, which includes Horticulture sector, then Animal Husbandry and Dairy sector has a lot more potential.

Do you think that National Livestock Mission (NLM) is a game changer for the sector?

The National Livestock Mission launched in 2014 encompasses a 360 degree growth in the livestock sector. The Mission was launched to ensure that we address all the aspects of reducing the input cost and make the cost of production competitive. If we achieve competitiveness and reduce input cost, the profit margins among the farmers would increase, and profit margins of the businesses for those who are aspiring to invest in the sector would rise.

This input cost efficiency is the key to the growth of the sector. Initiatives taken by the department to bring down input cost and to make the cost of production competitive are playing a crucial role to bring about growth in the sector. This will not only drive investments by cooperatives and private sector into the sector but will also lead India towards becoming the world leader in exporting food products from the livestock sector whether it is milk, other dairy products, or meat.

“"The National Livestock Mission launched in 2014 encompasses a 360 degree growth in the livestock sector. The mission was launched to ensure that we have all the aspects of reducing the input cost and to make the cost of production competitive."  

Do you think Information and Communications Technology (ICT) is going to play a major role in the success of this flagship programme and build a comprehensive ecosystem for the livestock and dairy industry?

In September 2019, our Honourable Prime Minister launched the national animal disease control programme from Mathura. This programme has two major aspects: (i) vaccinating 537 million animals of five species for disease like Foot and Mouth Disease (FMD) twice a year; and (ii) tagging each and every animal with a unique ID number. This tag or Pashu Aadhaar contains a unique number on the body of animal which can be read in the form of barcode. The unique ID numbers will be fed to a platform named as Information Network for Animal Productivity and Health (INAPH) which is managed by the National Dairy Development Board (NDDB).

In this particular portal all the information regarding the animal such as the name of the species, its
productivity, lineage, health condition, symptoms in case of diseases would be uploaded. So, once you have this unique ID related to a particular animal with all its details available online then this can be a game changer in terms of traceability of the animal and animal products like meat, milk or other dairy products.

This unique ID number can be traced through the Blockchain technology once a product is linked to a particular animal. Therefore, if we get the dairy products or meat packaged with a unique ID number printed on it the consumer can use the same to know every detail about the animal from which the product has been extracted. It gives credibility to the livestock products and also ensures the traceability.

The process of tagging has already started and we will be allotting unique numbers to 537 million animals across the country in the next one to two years. Hence, Pashu Aadhaar is going to be a reality very soon.

There are a lot of other things on the technological front like using genomics, which is helpful in increasing productivity in terms of breed improvement or other related aspects. Hence, emerging technologies in the sector with reference to traceability, breed improvement, disease prevention, better food and water availability to the livestock are going to drive the sector's growth.

What are the challenges from the farmers’ perspective when it comes to deploying more technology?

With farmers getting used to smartphones, WhatsApp, video streaming, and more, they are no more stranger to the technologies that are being made available to them at their doorstep in terms of using them and getting benefit out of it. Technology is now easily being adapted by the farmers across the country, whether it is related to crop production or dairy production. Therefore, I don’t think it is a major challenge for the farmers.

Can you shed some light on the Rashtriya Gokul Mission?

Rashtriya Gokul Mission was launched in 2014 when the new government took over. This was primarily launched to increase the productivity of indigenous population of cows and buffaloes in the country. In terms of the productivity increase of cattle 3 factors play major role: (i) Health through vaccination and disease reduction; (ii) Fodder availability for the cattle at affordable prices with high nutritional value which is being taken care by the National Livestock Mission; and (iii) the breed improvement which is primarily being addressed by the Rashtriya Gokul Mission.

There is a need to increase the reach of artificial insemination across the country. Presently, artificial insemination coverage is 30 percent countrywide and our target is to reach 100 percent of the cattle population which can breed by the end of five years. In order to help the cause, in September 2019, the Prime Minister launched the National Artificial Insemination programme under which resources are being made available to the farmers at their doorstep. This particular service is being 100 percent funded by the central government.
The target is to cover over 600 districts which have coverage of less than 50 percent in terms of Artificial Insemination. Rashtriya Gokul Mission is primarily a programme of breed enhancement in which we are not only looking at increasing the coverage of Artificial Insemination but also ensuring production of better quality of semen through high-grade merit bulls.

Further, to enhance breed, latest technologies like embryo transfer and in-vitro fertilisation (IVF) are also being used. Experiments using such technologies for further improvement have been carried out and recently we have achieved a record of almost 56 pregnancies in six months out of one Gir donor cow. This idea of technology to increase the productivity can turn out to be beneficial in addition to the traditional breed enhancing techniques like pedigree selection and progeny testing.

When we talk about enhancing entrepreneurial skills of the farmers, what all have been done yet and what more has to be achieved?

As far as the entrepreneurial development in this sector is concerned, in the last five years, the compound annual growth rate of more than eight percent shows that this particular business is prospering in terms of productivity increase. In terms of milk production, the sector is registering a growth of almost over six percent. Therefore, a whole lot of entrepreneurs are there in the sector already.

While the crop cultivation gives the return in three months to six months, depending on the crop, but in livestock sector the working capital invested starts giving returns by the end of the day. Any farmer who in addition to crop cultivation is engaged in livestock farming or dairy farming never commits suicide because they have a daily income which they generate out of livestock. We are trying to redesign our schemes in such a way that we get a good number of entrepreneurs in the community to ensure fodder availability for dairy farming or breeding.

In addition to that, we are running various programmes for entrepreneurs who are trying to do business in the industry in which they will be given loans with reduced interests that would result in more private stakeholders joining the sector.

What is the Ministry’s vision when it comes to using innovation technology for the growth of the animal husbandry sector in the next five to 10 years?

Innovation, research and development are the key factors to ensure development of any sector. In September 2019, we launched our Startup Grand Challenge where we identified six major problems in the livestock sector.

We will give awards to selected startups coming up with solutions and will also handhold them through incubation support, assistance in finding equity funding and help them to grow their businesses further.

Additionally, we are also trying to build a special component in our programmes where we will fund any innovation or research and development initiatives not only by the government institutions but by privately-owned startups and institutes as well.
NIC STRENGTHENING INDIA’S E-GOVERNANCE AMIDST CORONA CRISIS

Since the Corona outbreak across the world has brought governments, industries, economy, education and even social lives of people at a halt, technology has shown the ray of hope to keep the systems running and surf through the tough times. And, considering the Indian scenario, National Informatics Centre (NIC), an attached office of the Ministry of Electronics and Information Technology (Meity), Government of India, has been thrusting the engine of governance from the Centre to the State and to the Local levels by empowering India’s e-Governance through advanced technologies.

Dr Neeta Verma, Director General, NIC, throws light on the initiatives taken by NIC to strengthen the Indian e-governance amidst the Corona in an interview with Souvik Goswami of Elets News Network (ENN).

DR NEETA VERMA
Director General, NIC
India and the world are going through one of the most challenging times due to the Coronavirus crisis. Governments across the globe are on their toes now, especially rendering services to the citizens during the lockdown. How NIC is spearheading the technology transformation and upholding the spirit of e-governance in these difficult times for various government agencies in India?

As the technology partner of the government, our objective at NIC has always been to provide technology-driven solutions for Central and State governments in various aspects of development. We established a nationwide state-of-the-art ICT infrastructure exclusively for the government departments for internal communications, program management and online delivery of government services as well as citizen engagement. This infrastructure comprises High-Speed Secure Network, Data Centres, Government Cloud, Messaging & Video Conferencing services pan India.

Over the years, we have built several digital solutions to support the government at various levels from Centre to States to District Administrations. Through our technology-enabled services and platforms for the government, we have successfully created a digitally-enabled ecosystem which is helping them continue their work during the lockdown due to COVID-19 pandemic. Services such as Video Conferencing are significantly contributing to the functioning of the government departments and organizations. During the last one month of lockdown period, NIC has helped in organizing over 55,000 video conferencing sessions across 2,00,000 users. The Supreme Court of India is also managing its work through video conferencing and has directed other courts to make use of video conferencing for court hearings. This is ensuring that the judiciary is functioning amidst the crisis and is addressing important matters on a day to day basis.

Similarly, the Direct Benefit Transfer (DBT) system has facilitated the easy transfer of benefits directly to the bank or post office accounts of the citizens. NIC has been working as the technology partner to the Direct Benefit Transfer (DBT) system, which is expediting the release of relief amount to beneficiaries of various schemes, launched by the Central and State governments. The governments are leveraging this platform for providing financial assistance to the poor to sustain the lockdown period. It is noteworthy that in the first two weeks of April, DBT has facilitated over 10 crore transactions amounting to Rs 19,000 crore transferred under 200 plus government schemes and initiatives.

Under the ambit of digital India, we have built various platforms such as Public Distribution System, eOffice, eHospital, eChallan, eVahan, Sarathi, eCounselling, eCourts & eWay Bill to name a few. These platforms and services built under various government programmes and schemes are always helping us connect with the citizens and the government irrespective of any crisis or challenges we may experience.

Can you highlight some of the IT systems built specifically to help the government to fight against COVID-19?

**Aarogya Setu app**

Aarogya Setu App launched recently, is a mobile application aimed to connect our health services closely with the people of India, in our collective fight against COVID-19. Aarogya Setu empowers people with better information on the potential risk of infection, self-assessment tools and contextual advice. Aarogya Setu joins Digital India for the health and well-being of every Indian. The app will augment the government’s initiatives in proactively reaching out to and informing the users the potential risk of infection, best practices and relevant medical advisories pertaining to the containment of COVID-19 pandemic. Aarogya Setu is available on both iOS and Android. The app is currently available in 12 languages. It already has close to 9.8 crore downloads.
Pass Issuance System for movement during lockdown

NIC has helped as many as 21 State governments in setting up e-pass issuance systems to help citizens in essential services to move out or in case of an emergency during the lockdown period. Over 35 lakh e-passes have already been processed using these systems. These passes can be stored in Smartphones as well as can be accessed through SMSs on feature phones. Low Code/ No Code Platform of NIC – Service Plus has enabled many state governments in quickly putting up end to end automated pass issuance systems without writing any piece of code.

Systems to help Monitoring & Management of Pandemic

NIC has built a number of systems for the Central government departments as well as state governments to monitor and manage different aspects of pandemic right from the dissemination of Information, advisories, guidelines to quarantine management, surveillance, hospital management, COVID tests, Telemedicine, Tele-education, etc. Similarly, the mobile app ‘Kisan Rath’ is developed to facilitate the transportation of agricultural produce.

What are your priorities for NIC in 2020?

These are unprecedented times and various organizations with different competence have come together to help each other and the country at large. I firmly believe that technology holds the promise of delivering better services to citizens with much ease. As the government has implemented many eGovernance solutions, this has brought in a major shift towards embracing a digital ecosystem in the government. This has further led to tremendous growth in the generation of data related to various aspects of Government functions and services. Understanding that data generation has also led to a surge in the demand of advanced data analytics, NIC in partnership with NICSI has established a Centre of Excellence in Data Analytics (CEDA) which is providing quality data analytics services to the government departments in different domains. I am sure CEDA will contribute immensely to the government’s data-driven initiatives.

Artificial Intelligence Technologies have also demonstrated a lot of potential in governance and citizen services. To explore potential use cases of AI technologies in the government, we have set up the Centre of Excellence for Artificial Intelligence (CoEAI). CoEAI is exploring technologies and tools in different aspects of AI such as machine learning, deep learning, text analytics, computer vision as well as conversational AI and building prototypes to demonstrate the use of these technologies in future e-governance applications. I am glad that some of their prototypes have already been rolled out in government programmes. In the days to come, our aim is to partner with many more departments and build a proof of concepts for innovative applications of these emerging technologies for governance & citizen services.

The current COVID-19 situation has changed the way government offices work. To ensure everyone’s safety, we had the challenge of isolating ourselves and working remotely. I believe this has brought in an opportunity to
work towards innovating and developing safe and secure ‘Work from Home’ solutions. Although the government officials currently have access to video conferencing services, emails and SMS, a lot more can still be achieved. Considering our pan-India presence and building IT solutions for the governments, we should focus on developing safe and secure work from home solutions for government offices pan India.

How do you see the evolution of e-governance in India?

With the availability of high-speed internet and increasing affordability of smartphones, there has been a significant shift in the way government services are offered. We are now experiencing a whole lot of functionalities in our existing service which are focused on improving the overall user experience. Aadhaar, Direct Benefit Transfer and Digital Payments have helped in transforming more and more citizen-centric services into a faceless, cashless and paperless modes. Use of emerging technologies such as Blockchain, Natural Language Processing, Machine Learning, Deep Learning, Conversational AI, etc., shall introduce a lot of innovation in enhancing the user experience and reach of the government services to the citizens of India in Urban & Rural alike.

Last one month of Lockdown across the nation to contain the spread of Coronavirus has demonstrated the power of Digital India. Video conference platforms and work from home solutions have helped many businesses to continue to deliver amidst the lockdown. Governments have also been able to continue their work. Besides video conference, NIC’s eOffice platform is helping the government officers to work from home in a seamless & secure manner. Within the last month of lockdown, 31,000 government officials have worked on eOffice and created 50,000 e-files. There have been over 10 lakh transactions on files. Tele-education is another domain which has picked up a lot of momentum.

Not only students in higher education are having their classes online, but also their exams are being conducted online. School education has demonstrated how children in primary classes have been able to leverage digital platforms for their classes across the country. This has clearly demonstrated the digital readiness of citizens and businesses to embrace more and more government services online. This has also demonstrated penetration of stable telecom and broadband infrastructure across the country. Faceless, Cashless & Paperless government services will be the new normal.

“Through our technology-enabled services and platforms for the government, we have successfully created a digitally enabled ecosystem which is helping them continue their work during the lockdown due to COVID-19 pandemic. Services such as Video Conferencing are significantly contributing to the functioning of the government departments and organizations. During the last one month of lockdown period, NIC has helped in organizing over 55,000 video conferencing sessions across 2,00,000 users.”

How do you define the importance of eGov magazine in India’s e-governance journey?

eGov magazine has been extremely successful in covering different dimensions of technology applications in government for a long time. Its coverage is quite comprehensive, right from the national perspective to IT applications in State governments, District Administrations to Local Bodies. It is an important platform with a wide spectrum to share experiences by the government, industry and academia on eGov policies and implementations. I would like to compliment the entire team of eGov for their commendable efforts in making it a leading magazine in the eGov space.
COVID-19 crisis has been a hard blow on the economies worldwide. Focusing on the Indian economic slump, micro, small and medium enterprises (MSMEs), startups, and other small businesses have suffered huge losses resulting in shutting down of many such businesses during the lockdowns. Although, the Government has announced various schemes, relief packages, waivers and more but certainly, the course of events amidst the lockdowns has brought in light the under-preparedness of small businesses to sail through such crisis, especially considering lack of apt technology. However, Tamil Nadu has taken some major steps to support startups and other small businesses in an effort to make them technology-driven enabling them to function remotely. Talking on such initiatives by the State and how Tamil Nadu has been working on the ease of doing business, Dr Rajendra Kumar, IAS, Principal Secretary, MSME Department and Director, Entrepreneurship Development and Innovation Institute - Tamil Nadu, Government of Tamil Nadu addresses a webinar organised by Elets Technomedia.
Dr Kumar commenced his address by highlighting the current scenario saying, “Currently we are passing through a difficult situation professionally, socially, economically, and at every level.” A profound change can be seen due to the impact of COVID on people’s personal and professional lives, he added.

Talking on the theme of the webinar he said, “The impact of lockdowns due to the COVID outbreak has been severe on the businesses. However, due to the relaxations, we see a little business has started coming in. We see MSMEs have been very adversely affected as they do not have a lot of resources, money and support to sustain through such crisis.” Although the pandemic has adversely affected businesses worldwide it has also opened up a lot of opportunities in the times to come, he mentioned.

OPPORTUNITIES FOR GROWTH AMIDST COVID CRISIS

Addressing the growth opportunities amidst the COVID crisis, Dr Kumar told that many countries are moving their supply chains and production units from countries like China which poses as a great opportunity for India to take over the market.

"India would be a major beneficiary of this shift in supply chains and production lines and this provides the MSMEs with a huge opportunity to return in the game. Firms coming out of China will take India as a benefitting resort and the states need to be prepared to take in such investments and utilise the opportunity optimally. This will also require the government to make MSMEs more competitive and enable them to have a position in the global market", said Dr Kumar.

Dr Kumar mentioned three-step preparation for the MSMEs and other private and government businesses to be able to take the opportunity. Firstly, the government and private players need to become competitive and show the capacity to be at the forefront of technology and prepared to take advantage.

"Secondly, there is a need to modernize the systems, supply chains, and processes as we are not ready yet but we need to look at the opportunity in new technologies and update our systems and processes bringing them at par with Industry 4.0 concept. Thirdly, we need to have better-skilled workforce to have a qualitative addition so that we can make the best use of the opportunities from foreign investments", told Dr Kumar. He added, "We must see the longterm future of the economy which I feel is very bright and be prepared for it."

Speaking on the government’s initiatives, Dr Kumar said, the Government has already announced a number of initiatives to support MSMEs. Also, RBI has announced for providing loans to MSMEs and also moratoriums regarding repayment of their existing loans and more. Such initiatives have helped the MSMEs but as the lockdown has extended and more support from the govt is expected, he added.

TAMIL NADU STRENGTHENING BUSINESSES

Describing Tamil Nadu’s efforts to help businesses establish and flourish, Dr Kumar said, “In Tamil Nadu, we have been very supportive to the needs of MSMEs. We are meeting with them and making efforts to help them to the most extent as possible, especially during this time of crisis.”

Adding on to the initiatives by the State, he said, “In my department, to ease the pressure on MSMEs, in Tamil Nadu in 2018 we launched a single-window system which aimed at providing all the approvals online at one single portal based on a single composite online form. The entrepreneurs, businesses owners need to fill the form, submit the documents required in one go and wait for the approval which will be sent online in next 20-30 days.” This removed the process of taking approvals from different departments in a traditional pen-paper manner which was tedious and time taking, Dr Kumar added.

"Now, this legally mandates the departments to give approvals to the entrepreneurs online. This was a major step taken under ease of doing business", he said.

"Moreover, we have different schemes in the State to offer subsidies to the MSMEs for various projects like on power tariff, bank loans, and more. For all this, we have moved online and we did this in 2019. So, in today’s time, the entrepreneurs can sit at home and avail benefits provided by the Government”, told Dr Kumar.
Many countries are moving their supply chains and production units from countries like China which poses as a great opportunity for India to take over the market. India would be a major beneficiary of this shift in supply chains and production lines and this provides the MSMEs with a huge opportunity to return in the game. This will also require the government to make MSMEs more competitive and enable them to have a position in the global market.

Speaking on technology aspects, Dr Kumar said, “We are providing support to all businesses remotely, as we had used technology to strengthen our systems and make them enable enough to minimise physical human intervention.”

Further, he said, “Last year, in January, we had Global Investors Summit and MSMEs were able to attract more investments as compared to previous years and technology has played a major role in making them able to do it.”

Elaborating on the support extended from the authorities to strengthen startup and business culture, Dr Kumar said, “We brought Business Act in 2018 in Tamil Nadu and in that, first of all, we re-engineered all the process in all the departments especially in terms of giving approvals. All the processes have been simplified and powered by advanced technology to reduce time, energy, and improve accuracy and productivity.”

He further added, “We are the only one in India to run Innovation Voucher Programme (IVP) which is run in big countries like the US, UK. Under this, we are providing grants and support to innovative ideas and products. We also help them to bring their products to market and following that, they are also eligible for further grants through our other schemes for growing their businesses.”

Dr Kumar, wrapping his address, concluded by saying, “As a State, Tamil Nadu is fully geared up to welcome investments from abroad.”
Govt should Mandate the use of technology & digital methods: Dr Santhosh Babu

In this time of crisis when the whole nation is in a lockdown state, advance technological measures are the solution to keep operations ongoing. Be it work from home, monitoring of quarantined cases, online education, or more, everything that comes to aid during this time of COVID19 crisis is powered by technology. And, there is a need to mandate digital interventions and technological methods of functioning by the Government of India, says Dr Santhosh Babu, former Principal Secretary IT to the Government of Tamil Nadu and CMD of Tamil Nadu Handicrafts Development Corporation, in a live webinar organised by Elets Technomedia.
Dr Babu, during the webinar, emphasised on the significance of technology, especially at this hour of crisis. He said that technology has given a makeover to our government systems which earlier used function on the basis of physical file movements that made the process slow and tedious. Also, the level of productivity was way less compared to the present day.

While addressing the webinar, Dr Babu said that almost all the functions in a government office can be made online, leaving out a few. He further said that the government had also realised the fact and has been regularly putting in efforts to revamp the existing systems using the new technologies. The Centre and the State have invested huge sums of money to upgrade the existing infrastructure to improve governance. Today, we have new software, applications, more bandwidth, and apt technology and we need to implement it to all the offices and systems for enhancing our functioning. And, I am quite confident that post-COVID-19, the government will be upgrading to better systems and technology, he added.

E-GOVERNANCE IN TAMIL NADU AND TAMIL NADU HANDICRAFTS DEVELOPMENT CORPORATION

Talking about the governance in Tamil Nadu, Dr Babu said, we have almost every office tech-enabled. Taking the example of the Tamil Nadu Handicrafts Development Corporation, he said that we won the National Award for e-Governance in 2018, he added. Detailing the implementation of the technological solution at Poompuhar, he said that all four pillars – administration, marketing, design, and production were targeted and digitised. This led to every aspect of the governance within Poompuhar becoming online.

Working from home concept should not be just because of the COVID-19 crisis but the government must focus on such models otherwise as well, said Dr Babu, when asked about work from home model implemented during the lockdown. Further, Dr Babu highlighted the transformation of Tamil Nadu Handicrafts Development Corporation Limited saying that the office used to work in a traditional pen-paper manner which was time-consuming and tedious. A simple process of taking permissions and approvals used to take 30 to 40 days. This was because the files were used to be couriered and then sent back with the approval. After shifting the same process online, the time was reduced to a few hours or sometimes only a few minutes, added Dr Babu.

Moreover, talking about further developments he said, they introduced websites and software applications for the handicraft showrooms which further streamlined the work. The move resulted in connecting all the 24 centres we have in India. Dr Babu also told the attendees that to tackle the pilferage, which was happening more often, over 100 CCTV cameras were installed and all the centres were monitored. Today, there are no pilferages.

Dr Babu highlighted that conducting reviews of the showrooms and production centres was another issue which used to take a lot of time. To resolve it, 25 iPads were provided to the officials at different centres and through video conferencing reviews are being done. This saves time, money and energy, added Dr Babu. Also, to help the accounting staff, Tally was introduced to minimise the manual preparation of balance sheets and other accounting records.

We also tied up with e-commerce websites for improving sales of the handicraft products. Also, an initiative, www.tnartisaan.com was launched to provide a platform for all the artisans to upload their creations on the website for selling online, said Dr Babu. Adding on to the upgrades he said, “We have also launched a Design Research & Development Centre (DRDC) for 3D design and printing technology, virtual reality and augmented reality etc. We are about to launch India’s first virtual reality handicrafts showroom.

EMERGING TECHNOLOGIES FOR EGOV

Talking about the emerging technologies Dr Babu said, the Chief Minister of Tamil Nadu introduced Centre for Excellence for Emerging Technologies at the Tamil Nadu e-Governance Agency (TNeGA) for which the government also hired domain experts and is also collaborating with startups for technological requirements of various departments. Additionally, the government has also sanctioned a Blockchain Backbone for Tamil Nadu which is a Rs 40 crore project, he added.

Dr Babu said that a system is being created where a common database is being prepared wherein a specific number (Citizen
Number) will be given to every individual and all the related information about that individual will be integrated with that specific number. This will enable "Predictive governance" where all documents and certificates that a citizen requires as per his life cycle will be transmitted to the 'Citizen Vault', the moment a departmental database invoked the citizen number.

The state Family database will capture 7-8 parameters to identify the right person ranging from the individual's name's spelling, to names associated like mother's name father's name and more.

Detailing on the resourcefulness of the database, he said, all departments can only add on to this database, and not create a new basic entry of a citizen. This will enable departments to add further data about the individual, this integrating all documents of different departments at the citizen vault. Therefore, every individual will be having a digital space to keep all their essential documents be it government IDs or certificates, degrees and more, he added.

"For instance, when a baby is born, a citizen number will be generated and the birth certificate will be added to the vault by the healthcare facility. After six months when the baby will be eligible for vaccination, an automated SMS will be sent to the parents notifying them about the same and a google map link displaying nearby 5-10 healthcare centre having the vaccination facility", Dr Babu explained.

He said such databases will shun the need for citizens' to go to government offices for regular work or for getting permissions, licenses and more. Services will be available online just a click away. Another example of the emerging technology for e-Governance could be drones as they are very useful in surveillance work, delivery, public announcements, mapping and more.

INDIA'S SHIFT TO TECH-ENABLED GOVERNANCE IN THE PAST 25 YEARS AND THE WAY FORWARD

Personally, I feel, there is a massive transformation from 1995. Although in the past 25 years a lot of developments have taken place as the national eGov plan came in, Digital India, IT infrastructure like the SDC, SWAN, SSDGs, State Portal etc are in place. However, we need to proactively move with the technology so that we are updated, said Dr Babu.

Further, he said, on software, we are moving but in case of hardware, it takes time. We also need to look at what other big countries are using and such hardware can be implemented for better productivity, Dr Babu added. Moreover, he said, there is a need to work on the concept of single 'sign on' so that a citizen should 'sign in' to a single government portal and then can move to any department as required.

Government of India is introducing e-office everywhere but it is not mandated as of yet, therefore people have a choice and many of them opt for traditional methods which seems convenient as they are used to it but are very slow and less on productivity, Dr Babu said.

ROLE OF IT IN FIGHTING COVID-19

There are a lot of people who are moving out either for serving in emergency services or the exempted services or are in need to leave the city as someone at their homes in hometown is not well. So, for such cases, Tamil Nadu has introduced e-passes, Dr Babu said. Moreover, the availability of PPEs must be known to all already instead of going shop to shop. Therefore, IT can come as an aid here, he added.

Further elaborating on the topic he said, for education also digital platform can help in the continuation of studies and skill development during this time of lockdown. Also, the government can use technology to help monitor the inventory of healthcare stuff, monitor compliance of lockdown, movement of commodities, supply chain monitoring of medical instruments, medicines, PPEs and more.

Considering the lockdown situation today, the digital systems in the government offices had made it possible for us to serve the people. Therefore, “I certainly believe that the Government of India should mandate the use of technology and digital interventions”, said Dr Babu. However, the mandate should not be because of the COVID-19 situation but otherwise, as it is the way forward to a faster and more productive future of the governance. 
Telangana’s e-governance measures are aimed towards easing lives of citizens: GT Venkateshwara Rao

Telangana wants to focus on m-Governance which is one level ahead of e-Governance, for even better service to the citizens. Therefore, as a part of this, we have launched ‘T App Folio’ our m- Governance mobile platform. The usage is slowly increasing and daily transactions through this Governance platform are in the range of 10,000 transactions a day, says GT Venkateshwara Rao, Commissioner (Electronic Service Delivery), Special Commissioner (e-Governance) and MD, Telangana State Technology Services, IT Department, Government of Telangana in an exclusive interview with Sudheer Goutham of Elets News Network (ENN).
Tell us about your latest initiative for the citizens of Telangana?

We have taken several initiatives in using emerging technologies for better service to the citizens of Telangana. One such initiative is for the pensioners. The pensioners of both State, as well as Central Government, have to file Annual Life Certificate every year and the current method is the subsidiary one in which they have to go to a bank or Mee-Seva centre to do a Bio-Metric attendance. To ease this process for them, we have come out with this solution wherein they can file Annual Life Certificate by uploading a selfie through a smart phone. For this we have used three different technologies – Artificial Intelligence (AI) based liveness detection, Big Data and Machine Learning demographic and Deep Learning based image comparison. Using a combination of three emerging technologies is unique and first of its kind in the country. Even globally there are very few examples of this nature. This has created interest in some states and some central Government departments.

How many lives you have touched with this newest Technology?

The Pensioners’ Life Certificate through selfie, is useful for about 2,70,000 pensioners of Telangana, who can submit Life Certificate by just clicking a selfie within the comfort of his/her home. As of now, about 32,000 pensioners have used this. We believe that given its convenience more and more pensioners will use this solution.

Tell us about the other m-Governance and e-Governance initiatives and the vision ahead.

The first example is T App Folio which was explained earlier. This kind of complete end to end m governance platform is not there in the entire country.

Another inactive is T- Wallet which is a Digital wallet. In the last two-and-a-half years, almost Rs 6,000 crore amount of transaction has been done through this T-wallet app.

Heading towards the real digital revolution, what are the challenges you are facing and what are the steps are you taking to overcome from them?

There are always challenges, particularly when we implement new technologies. However, the positive side of our state is the leadership. Our honourable IT Minister is extremely proactive to try new things and likewise, the Principal Secretary of IT is always open to new ideas and the objective is to serve the citizens well. Budget is a challenge and I think we will overcome them in a gradual manner and with the collaborative approach with different departments.

Throw some light on ‘T App Folio’ how it covers the digital Initiatives of Telangana Government.

Three years back, the Government had decided that it should move to m-Governance as today mobile is the way to go. T App Folio provides all the certificates. As of now, we have 200 plus services including the pensioner’s life certificate which I have also mentioned earlier. And the idea is that we can add more than 100 services every year.

The overall idea is that we should move as many services as possible on to m-Governance ‘T App Folio’ so that the citizens have three options online, Mee Seva on assistance mode and those who are tech-savvy to explore on ‘T App Folio’.

As of now, we are witnessing almost 10,000 transactions per day through the ‘T App Folio’ which is fairly a good number.
‘WORK FROM HOME’
TO BE NEW NORMAL IN POST COVID ERA: SINDHU GANGADHARAN

To curb the menace of COVID-19 pandemic is one of the major challenges for the governments worldwide and somehow technology has posed as an effective tool to tackle the crisis. Apart from being an enabler for the governments, technology has been helping the private firms to surf through the drooping economy crisis due to the lockdowns. To sustain the crisis, ‘Work From Home’ is a new culture that the corporate world has adopted and companies have been gearing up with advanced tech, collaboration tools, and more to make remote working as productive as the regular office. The pandemic has certainly given an opportunity for the firms to make the remote working a new normal in the post COVID scenario. Talking on the subject and highlighting how tech will be a gamechanger in the post COVID scenario, Sindhu Gangadharan, Senior Vice President and Managing Director, SAP Labs India interacts with Elets Technomedia in an email interview edited by Adarsh Som of Elets News Network (ENN)

Sindhu Gangadharan
Senior Vice President and Managing Director, SAP Labs India

Due to the lockdown, people are moving to online platforms. So, is video conferencing the new-gen work scenario? Can virtual coworking be a perfect replacement of the traditional office environment?

The industry is adapting to the new normal of remote working and companies have re-aligned their infrastructure to enable their employees to acclimatize to the situation. In the current scenario and to prepare for the future of work, online collaboration tools and video conference platforms is the perfect solution. I believe this culture will continue in the post COVID economy as companies will already be equipped to manage a virtual environment. Many industries, for example, the IT industry operating in crowded metros, might notice that a work from home leads to higher productivity as it reduces long commute hours and provides a better work-life balance for employees. While virtual coworking may not completely replace the traditional office environment, businesses will better understand the benefits of remote working, and will likely be open to adopting a mix of office-based and remote work more fluidly. This flexible approach
to remote work also becomes popular in expanding the gig economy where employees are hired as and when required, in accordance with the market demands.

**Do you think such technology like collaborative tools is the new business area where investors should invest, and startups should focus? Or, is it a temporary thing which will see a drop once the situation returns to normalcy?**

Innovation and investment in collaborative tools and solutions are not new, but there has been an increase in demand. The need for these tools was always there, but the specifications have evolved. Today, the requirement is for a more secure platform which doesn’t compromise sensitive information and can accommodate a larger number of people without compromising on the quality. As many companies move to a virtual setup and business models becoming more agile, technology will be a gamechanger. Going forward, there will be more innovations in the way we deploy technologies - be it artificial intelligence, machine learning or IoT solutions. Startups need to keep an eye on these new areas of growth and opportunities.

**Large organizations can sustain themselves in this crisis but startups and MSMEs may face difficulty in survival due to COVID-19. What would you like to advise these aspiring startups and entrepreneurs who have just started?**

There is a reason why startups sustain through testing situations; it is their ability to mix innovation and creativity to come up with cutting-edge tools, and their agility to adapt to new business situations. Startups too are witnessing the consequences of the pandemic with low cash flow, bleak sales pipeline and the pressure to retain talented resources. However, those that manage to sustain will benefit once the crisis blows over. My advice to startups and upcoming entrepreneurs during this time is to be positive, boost the morale of the employees, and be mindful of their spending. Times are tough for everyone. For companies or individuals, there is no guarantee of success or an obstacle-free path, we need to do what’s in our control to the best of abilities and things will fall in place eventually.

---

**SAP LABS AT THE FOREFRONT IN FIGHTING COVID-19**

At SAP Labs, we are committed to serving our communities and society at large. SAP has always been at the forefront in responding to crisis situations impacting the society and community we operate in. Across the globe, different entities of SAP are in the forefront to support during this time. In India, SAP is doing numerous things to extend a helping hand. To highlight a few:

- **Our offices in Bengaluru and Gurgaon, India, have opened their kitchens to provide meals for poor migrant workers unable to provide for themselves during these difficult times. In collaboration with Rise Against Hunger and NASSCOM Foundation, Government of Karnataka, SAP is distributing packed meals to 17,000 daily-wage earners and homeless people every day in April and will continue till May 3.**
- **Additionally, in partnership with the United Nations Development Program (UNDP) and NASSCOM Foundation we are providing public hospitals with equipment like masks, ventilators and sanitizers. Also, collaborating with HelpAge India, we are supporting elderly people with healthcare needs.**
- **We are also working with the Karnataka Government and industry bodies to see how we can, through our technology expertise, offer meaningful intervention to this crisis. One such example is with IISC and TIFR to help scale predictive simulation models to infer the impact of non-pharmaceutical interventions.**

“Many industries like the IT industry operating in crowded metros, might notice that work from home leads to higher productivity as it reduces long commute hours and provides a better work-life balance for employees. While virtual coworking may not completely replace the traditional office environment, businesses will better understand the benefits of remote working, and will likely be open to adopting a mix of office-based and remote work more fluidly.”
For the startups in these challenging times, Marketing and communications become the source of optimism for the entire organization. It is important that startups understand this and activate their marketing and communication engine to the maximum and carry out effective positioning of the brand through thought leadership articles, hosting webinars or podcasts across the digital mediums. Client listening and client nurturing are two aspects that organizations of different size and form are exploring and startups should adopt the same to stay relevant during, and the post-COVID times.

How are you engaging with your employees in this difficult situation? Do we foresee budget cuts, layoffs in future?

SAP has always fostered a flexible work culture and hence this situation which has mandated work from home is not new to our employees. At SAP, we use the best collaboration tools to provide ease of remote working through applications for communication and group work. We are constantly communicating with our employees via emails, video calls, conducting virtual fun and well-being programs and group sessions to keep their mood positive. Globally, employees are engaged and are sharing recommendations on how to work from home effectively. We have also introduced SAP Come Alive initiative which delivers online fun, wellness and motivational programs - ranging from Zumba, Yoga to virtual music contest. Employees are chatting regularly with virtual coffee sessions and are also participating in volunteering programs. Recently, we have also announced a new digital learning initiative offering innovative, interactive educational content to support students, professionals and anyone wishing to continue to learn during this challenging time. The award-winning open SAP platform provides massive open online courses (MOOCs) to anyone interested in learning about leading technologies, the latest innovations and the digital economy. We put employees at the centre of everything we do, we hold our valued employees in our hearts. We are fully committed to ensuring the health, safety, and well-being of our employees. This is our top priority in order to maintain the business continuity needed to provide the support and service for the customers who rely on SAP.

What will be your message to the fellow citizens?

COVID-19, in rapid time has shaken the society, shifted the pattern of our social interactions and behaviours and created several new norms that will stay with us for a long time. In times like this, there is always a tendency to magnify negativity and highlight sufferings. It is therefore very important that each of us try and focus more on news about human resilience and positivity, stay strong, calm and innovative. Always look at the bright side of any situation. There are a lot of sad stories out there, but there are an equal number of positive stories and news which we need to pay a lot more attention to them. Also, this is the most appropriate time for us to collaborate and support each other. Lend a helping hand wherever possible. There are several out there who need our help. Be patient, proactive, responsive and educate people around healthy habits and the importance of staying home. Collective and immediate action is the need of the hour and it is critical for everyone to step forward and help the ecosystem as much as they can during this time of crisis.
The world today is going through an unprecedented time. The COVID-19 outbreak has led to a completely new orientation about all aspects of services, supply chain, manufacturing, logistics and retail etc. It has also led to new employee management and engagement paradigm. There is a strong need advocated by management professionals to reengineer the operations and business models. The possibility of redistribution of global wealth as a consequential impact of the epidemic might become a reality in the future, writes Dr. Lovneesh Chanana, vice president, government affairs, Asia Pacific and Japan, SAP.

Dr. Lovneesh Chanana
Vice President, Government Affairs, Asia Pacific and Japan, SAP.
The first of a kind unique public health and related efforts by the Indian Government have indeed been path-breaking and led to a completely new path of reshaping India’s digital agenda. The next wave of digital agenda for organizations and governments is likely to cover a new set of products and services catering to new dimensions of business, governance combined with technology capabilities. For example, one definite impact could be that most processes will now require remote capabilities, there could be rostering of the workforce, work from home may become a new normal and we will surely see a digital upsurge in the coming years. Maintaining a track of citizen and customer pulse digitally may soon become a competitive differentiator.

That brings us to the dimensions of change which will shape the digital governance agenda going forward. The dimensions of change are likely to be categorized by four aspects namely - Unification and Integration; Collaboration; Stakeholder maturity and awareness; and Increased and diversified penetration of emerging technologies.

UNIFICATION AND INTEGRATION

The new-age digital agenda will be characterized by unification and integration of data and functional silos. The process of technology as a horizontal will now gain acceleration.

Talking about the Government, we have now got the experience of multi-stakeholder unified management of a public health disaster and crisis management has been the binding thread to this integrated planning and execution. The supply chain integration during the crisis across the Ministries and organization has led to the potential of process integration. Going forward, this is likely to become a benchmark in the functioning of Government in normal times too. One Government and data-based decision making will be asked for more than ever before. Need for backend data integration for citizen-facing decision making is likely to guide the policy decisions.

Also, experience management for citizens as a result of this integration will become the guiding factor. Use of technology to offer and manage the experience in an integrated manner leading to real-time actionable feedback will become a necessity and policy planning will need to take care of this. The need for experience management as a discipline in academia and research is likely to gain recognition. In short, there will be a need for integrated communities.
COLLABORATION

The Government - Industry collaboration may change in nature from being voluntary and optional to mandatory. We are now witnessing the evolution of new government-industry synergies and approaches to collaboration. The willingness of each stakeholder group to reach out to the other is likely to continue. During the crisis management, the experience of speed and effectiveness of a coordinated government-industry response is likely to set the foundation for the emergence of new integrated missions wherein the Government and industry work together with the clearly identified scope and outcomes. The role of industry associations is going to widen in terms of structuring and facilitation of such engagements. In fact, if one observes closely, this has already begun, though a structured approach is yet to evolve. The structure may shift from a current awareness-based role of industry to a practitioner’s one.

MATURITY AND AWARENESS

Life went digital overnight with the lockdown and highlighted two areas of concern viz., access to digital and maturity of awareness about digital. The importance of source verification before forwarding social media content is relevant now more than ever. The multiple social media platforms are likely to continue and hence the challenge of jumbled up sources of information is going to become even more complex.

The issues of privacy, security and fake news will drive the awareness agenda and gradually the case for digital education may soon gain firm ground.

EMERGING TECHNOLOGIES

We are now able to leverage and explore a number of potential cases of emerging technologies. Drones are being used for surveillance and sanitization. Artificial Intelligence is being used for predicting hot spots for COVID-19 spread, Sensor-based sanitization, GIS-based mapping and management dashboard integration, realtime decision making are some of the examples. This has indeed pushed the cyber-physical agenda into the next orbit and the acquired maturity will surely lead to more and more application of emerging technologies.

To summarise, few action items for catering to renewed expectations in the post COVID era have been listed below:

- Government agenda needs to be accelerated. Initiatives like the national data analytics platform need to be strengthened.
- To ensure the real-time dashboarding, the backend operations covering Government to Government (G2G) and Government to Employee (G2E) applications need to be digitized. The comprehensive financial management system of Andhra Pradesh is a good reference point for the same.
- Horizontal replication of project experiences needs to be mandated to ensure quick turnaround of new projects.
- Industry participation in project conceptualization needs to be mandated.
- ‘Digital Awareness’ needs to be incorporated into the academic, technical and skilling curriculum.
- The cyber-physical mission needs to be augmented and strengthened.
- A horizontal component of technology needs to be mandated in all future policy prescriptions.

It might be difficult to see the light at the end of the tunnel in these times, but I am certain that there will be a ‘new normal’ and we will surely see a digital upsurge in the coming years.

The next wave of digital agenda for organizations and governments is likely to cover a new set of products and services catering to new dimensions of business, governance combined with technology capabilities. For example, one definite impact could be that most processes will now require remote capabilities, there could be rostering of the workforce, work from home may become a new normal and we will surely see a digital upsurge in the coming years.
Innovation at SAP

At SAP, innovation is more than just developing top-notch software; it's creating technologies that open up new possibilities. We provide a working environment that promotes free thinking, bold ideas, and collaboration. Of course, having the resources and expertise of a major global organisation helps too.

- More than **100 development locations** across the world to drive solution innovations
- **20 SAP Labs** lead global research and development to drive core product innovations
- **7 SAP Innovation Centre Network Locations** are pioneering disruptive technologies and unconventional ideas to identify new game changing solutions
- **17 SAP Co-Innovation Labs** enable project based co-innovation with our partners

![Image](https://via.placeholder.com/150)

>€3.6 spend on R&D

700 patents granted and validated

28% of employees work in R&D
THE COVID EFFECT
The world is going through one of the worst health, social and economic crisis ever which is touted as a threat to humanity itself. The COVID-19 has claimed over 1.5 lakh lives, has infected more than 24 lakh people globally and still shows no signs of abating. Governments worldwide are putting in collective efforts, brainstorming solutions and investing huge sums to strengthen their healthcare facilities. Certainly, there is a need for stronger executions with effective planning to control not just the pandemic but save lives and economy to keep systems running. Amidst this havoc, a question arises, is there a need for an unconventional approach, Do we need a public movement or a campaign to empower common man to fight for himself? Addressing the cause write Adarsh Som and Sanghamitra Mohanty of Elets News Network (ENN).

Lessons from ‘Be Bold’ which tackled HIV, can be an answer to COVID-19 crisis

The world is going through one of the worst health, social and economic crisis ever which is touted as a threat to humanity itself. The COVID-19 has claimed over 1.5 lakh lives, has infected more than 24 lakh people globally and still shows no signs of abating. Governments worldwide are putting in collective efforts, brainstorming solutions and investing huge sums to strengthen their healthcare facilities. Certainly, there is a need for stronger executions with effective planning to control not just the pandemic but save lives and economy to keep systems running. Amidst this havoc, a question arises, is there a need for an unconventional approach, Do we need a public movement or a campaign to empower common man to fight for himself? Addressing the cause write Adarsh Som and Sanghamitra Mohanty of Elets News Network (ENN).

ASOK KUMAR G.
Additional Secretary and Mission Director, National Water Mission Government of India.
One campaign which played a crucial role in the fighting, controlling and reducing the incidence of another virus—HIV in the then State of Andhra Pradesh is the ‘Be Bold’ campaign of 2006-2008 period, which had caught the attention of world bodies like UNAIDS. The Be-bold campaign was started by G Asok Kumar, the present Additional Secretary and Mission Director-National Water Mission, Government of India, when he was the Project Director of Andhra Pradesh AIDS Control Society (APSACS). Recently, reminiscing about the success of this campaign and its significance in times of COVID-19, G Asok Kumar took to twitter saying, “Testing, Tracking (and Counseling) the infected, Treatment and Stigma-Reduction were the four pillars on which the successful ‘Be Bold’ campaign was based. It was followed in Andhra Pradesh in 2006-2008 to fight HIV/AIDS. The same path can also lead us out of the COVID-19 issue.”

SIGNIFICANCE OF ‘BE BOLD’ IN TIMES OF COVID-19 PANDEMIC

Many steps of the ‘Be Bold’ campaign can be relevant in the fight against the Covid-19. Increasing awareness and testing, and motivating people to behave responsibly based on the results are crucial in the fight against COVID-19. Also, considering the fact that social distancing is the best form of prevention, a public movement like ‘Be Bold’ could be a medium to target individuals and make them responsible for themselves.

One campaign which played a crucial role in the fighting, controlling and reducing the incidence of another virus—HIV in the then State of Andhra Pradesh is the ‘Be Bold’ campaign of 2006-2008 period, which had caught the attention of world bodies like UNAIDS. The Be-bold campaign was started by G Asok Kumar, the present Additional Secretary and Mission Director-National Water Mission, Government of India, when he was the Project Director of Andhra Pradesh AIDS Control Society (APSACS). Recently, reminiscing about the success of this campaign and its significance in times of COVID-19, G Asok Kumar took to twitter saying, “Testing, Tracking (and Counseling) the infected, Treatment and Stigma-Reduction were the four pillars on which the successful ‘Be Bold’ campaign was based. It was followed in Andhra Pradesh in 2006-2008 to fight HIV/AIDS. The same path can also lead us out of the COVID-19 issue.”

SIGNIFICANCE OF ‘BE BOLD’ IN TIMES OF COVID-19 PANDEMIC

Many steps of the ‘Be Bold’ campaign can be relevant in the fight against the Covid-19. Increasing awareness and testing, and motivating people to behave responsibly based on the results are crucial in the fight against COVID-19. Also, considering the fact that social distancing is the best form of prevention, a public movement like ‘Be Bold’ could be a medium to target individuals and make them responsible for themselves.

The ‘Be Bold’ campaign was launched with an aim to “translate awareness into action/(behavioural change), reduce stigma and discrimination against affected people”. Be bold was the message and testing was the medium. People were encouraged to Be-Bold to come out and test to know their HIV status and modify their behaviour accordingly. Those tested positive for the HIV virus were counselled to behave responsibly to prevent further transmission of the virus and to utilize the health services provided to save from infections due to their reduced immunity levels. Those tested negative were advised to use safe practices and avoid getting infected.

Leading the testing campaign, Dr YS Rajasekhara Reddy, the then CM of AP, his cabinet colleagues, Speaker of the assembly underwent the HIV tests publically, triggering off a fivefold increase (from 5 lakhs to 24 lakhs) in the number of tests during the campaign period (compared to the same period prior to the campaign). This massive testing helped to uncover many positive cases. They were tracked and confidentially counselled for safe practices which helped to contain new infections. They were also brought under the medical care of those medical professionals who were Bold to treat these HIV positive people. Bold Doctors clubs were constituted in every district and their names listed in a directory so that the HIV positive people could go to them Boldly to get the medical help.

‘Be Bold’ campaign had general as well as targeted messaging which were non-judgmental and positive in nature, mainly against the stigma and discrimination that got associated with HIV. The targeted messages motivated families to Be Bold to take care of their family members suffering from HIV; Doctors to Be Bold to treat HIV infected patients; Teachers to Be Bold to teach HIV positive students; and the Youth to Be Bold to accept HIV infected people as friends. The campaign also influenced the youth to Be Bold to deny the negative peer pressures and not to fall for unprotected sexual practices. 1097- A toll-free number was launched to help people to know more about HIV/AIDS, its causes, symptoms and treatment.
Such a campaign for improving the situation not only at the individual level but at the city level, state level and even countrywide is possible, reflecting on the four pillars mentioned by G Asok Kumar. However, there is a need to upscale the approach considering the massive impact of the pandemic and the fear in the minds of people. ‘Be Bold to fight COVID-19’ should be abetted by five pillars - Prevention, Tracking, Testing, Quarantine, and Stigma Reduction.

Prevention and containment are the best ways to slow the transmission of Coronavirus. Government of India, having realized that, has implemented a nationwide lockdown to break the chain of transmission. ‘Be Bold to fight COVID-19’ can be propagated among the people requesting them to stay home and contribute their bit in the global fight against the viral pandemic. The campaign can be powered by social media platforms, webinars, television channels, advertisements, etc. and can become a medium to engage people in various activities to help people stay home. For instance, platforms like TikTok, Instagram can effectively be used to throw challenges to people which can further be followed, liked and shared as a fun activity. Also, as the original ‘Be Bold’ campaign, targeted messages can be sent to people to spread positivity to calm the fear among people.

‘Be Bold to fight COVID-19’ should be advocated in global forums and followed worldwide to aid the humanity and inculcate a feeling of togetherness among every person irrespective of the country, class, colour, religion, race, sex as the crisis is for everyone.

The campaign mainstreamed the fight against HIV involving all wings of Government, civil society, and people. Initiatives like the “0/7 initiative” to prevent HIV transmission from Mother to Child; drive for behavioural changes among sex-workers to increase condom usage, etc. were also part of the Be Bold campaign. The crowning glory of boldness was when over 8000 people living with HIV/AIDS congregated openly at Silparam, Hyderabad on December 7, 2007. This is the largest gathering ever of HIV positive people in the world and a great morale booster for those who gathered there.

The successful and effective execution of the campaign was so good that it was considered by UNAIDS as one of the best interventions in the fight against HIV/AIDS. G Asok Kumar, the man behind the campaign, was invited to make a presentation on the ‘Be Bold’ campaign at the International AIDS Society’s Annual Conference in Mexico City in August 2008. ‘Be Bold’ campaign resulted in a significant reduction of incidence of HIV cases and also of stigma and discrimination against HIV affected people. Due to awareness spread through the movement, mother to child transmission in the state of Andhra Pradesh also slumped. Moreover, off-take of medicines and treatment increased which resulted in a perceivable reduction in HIV affected cases.
Testing is a significant step in the fight against COVID-19 because it helps to identify the carriers of the virus.

Tracking those tested positive and tracing their contacts is essential to slow down its transmission. And, the Government has been proactive in devising strategies and using technology to track the COVID-19 outbreak. ‘ArogyaSetu’ mobile app, a COVID-19 tracker application, was recently launched by the Government. Taking the efforts by the Government forward, ‘Be Bold to fight COVID-19’ can be helpful in spreading awareness to the remotest corners of the country and making people aware of the usage and significance of ArogyaSetu app. Its technology can be integrated with a messaging service so that if any COVID-19 positive patient is in near proximity, an alert can be sent to even those old aged poor people without smartphones.

Isolation or Quarantine is also essential to prevent the spread of the virus. However, a lack of understanding regarding quarantine among people has triggered a fear psychosis in the minds of people. ‘Be Bold to fight COVID-19’ can be a lighthouse to disperse accurate and correct information. The campaign can include organizing activities, talk sessions on various topics in the quarantine centres or isolation wards while ensuring social distancing to make it easier for people to sail through their quarantine period. The campaign can further initiate video conferencing sessions for motivating people to do music and similar activities which can disperse positivity among people. Local artists, magicians, comedians can be contacted to prepare videos or do live shows on video calls and more. ‘Be Bold to fight COVID-19’ can act as an effective platform to make people realize the significance of quarantine and de-stigmatize it.

Stigma Reduction is the need of the hour as it is commonly observed that many people have been critical of medical personnel engaged in treating COVID-19 patients residing in their localities, suspecting them as Coronavirus carriers. There have been cases where people have thrown stones at doctors and nurses; landlords pushing doctors and nurses out of their rented accommodations and even violence against these corona warriors. This shows the unsupportive and uncivilized behaviour of people against those who are the actual frontline warriors against the viral pandemic. People are afraid to get tested due to the fear of isolation in society. Hence many people have hidden their travel history and symptoms to avoid COVID-19 test. There are instances where people have committed suicide when they were tested positive for the COVID-19. There is an urgent need to address these unfounded fear among people and the best way out could be spreading positive awareness. Hence, ‘Be Bold to fight COVID-19’ can be a tool to empower people by sharing accurate and correct information regarding the pandemic, strengthen them by imparting knowledge about the infection and quarantine practices. Measures taken during the HIV/AIDS Be Bold campaign can be used to reduce stigma about COVID-19 in society. Targeted messages can be used for spreading positive attitude to reduce discrimination.

THE WAY FORWARD

The five pillars of the ‘Be Bold to fight COVID-19’ campaign are not only the very basis of the campaign but also can act as a roadmap to tackle the COVID-19 crisis. Ensuring prevention, advocating testing, active tracking, helping people in quarantine by casting out fear of isolation and promoting togetherness for stigma reduction can lead us out of the pandemic situation.

The ‘Be Bold to fight COVID-19’ campaign should be scaled up to the global levels. Taking the Global Climate Strike initiated by Greta Thunberg as an example, ‘Be Bold to fight COVID-19’ should be advocated in global forums and followed worldwide to aid the humanity and inculcate a feeling of togetherness among every person irrespective of the country, class, colour, religion, race, sex as the crisis is for everyone.
It is a hard reality that more than three lakh lives are lost worldwide. The economy is drooping and is going through one of the worst phases. People are losing jobs and with it their capacity to buy shrinks. Many businesses couldn’t make it through the lockdown, especially the small ones. Migrant workers baffled due to lockdowns struggling to reach back home. For many, the government aid like ‘Shramik Special Trains’ were their rides but many walked hundreds of kilometres and not every one of them could make it. Amidst all this havoc due to an unprecedented crisis - COVID-19 outbreak, governance has been challenging as never before, writes Adarsh Som of Elets News Network (ENN).
**OVER STORY**

Since the onset of the viral pandemic, the Government of India has been proactively working on enhancing the healthcare infrastructure. Throwing light on the healthcare scenario in Andhra Pradesh, PV Ramesh, Additional Chief Secretary to the Chief Minister, Government of Andhra Pradesh said, “We have set up five state-level hospitals with beds and the essential equipment. We have set up the highest testing capacity for testing more than 8,000 people a day and further, it will get increased to 15,000.” Adding on he said, “We have recruited more doctors, nurses and other healthcare staff to strengthen our medical response. We have reached out to every household for helping them with the essentials and given the guidelines for preventing themselves from this virus.”

**ROLE OF SMART CITIES MISSION IN SUPPORTING GOVERNANCE DURING CRISIS**

How a pandemic can distort the entire functioning of a city is evident at present. And, this put the disaster preparedness of...
Indian cities in question. Addressing this, Durga Shanker Mishra, Secretary, Ministry of Housing and Urban Affairs (MoHUA) said, “We need to take a lesson from the COVID crisis, effective use of technology to transform cities and strengthening our infra can enhance our preparedness and make us more resilient.”

Kunal Kumar, Joint Secretary, MoHUA and Mission Director, Smart Cities Mission, talking on how Smart Cities have been supporting the government to fight COVID said, "There is a four-quadrant approach - Information - on what, how, when, where, why and all about the pandemic; Communication (two-way) - which includes civic bodies communicating to people and people are communicating to authorities as well; Management - managing the situation with the help of Integrated Command and Control Centres (ICCCs), monitoring lockdown, tracking people under quarantine and more and; Preparation for future - This is where we work on data collection and improving city’s resilience towards such disasters."

ROLE OF TECHNOLOGY

In this time of crisis when the whole nation is in a lockdown state, advance technological measures are the solution to keep operations ongoing. Be it work from home, monitoring of quarantined cases, online education, or more, everything that comes to aid during this time of COVID-19 crisis is powered by technology. And, there is a need to mandate digital interventions and technological methods of functioning by the Government of India, says Dr Santhosh Babu, former Principal Secretary IT to the Government of Tamil Nadu and CMD of Tamil Nadu Handicrafts Development Corporation (Poompuhar).

Looking at how technology has been a great enabler, the Government developed AarogyaSetu mobile application to track COVID patients in near proximity. The app has been helpful in identifying potential cases. Describing AarogyaSetu app, Abhishek Singh, President, NeGD and CEO, MyGov said, "Those who are registered with the app and are risk-free or not in near proximity of any COVID positive patient, their data is not shared with the Government server. However, if in case the person is in near proximity to a COVID patient, their data is shared to the Government server and alerts are sent and active tracking is done via Bluetooth." And, the shared data is also removed from the server after a few days, he added.

“A huge push has been given to the MSME Sector by the Government of India. Madhya Pradesh CM is also taking measures to help MSMEs to surf through the crisis. We are seeing this situation as an opportunity for the startups, local bodies and local homemade companies. Especially the sectors wherein we have been using goods imported from foreign companies as the focus is now on the indigenous companies and their products.”

Dr Santhosh Babu

Abhishek Singh
As the functions in the entire country halted following the announcements of the lockdown by the Prime Minister, ensuring food grains to all was a mammoth task, said Arun Kumar Singh, Additional Chief Secretary to the Government of Jharkhand, Department of Food, Public Distribution and Consumer Affairs. Acknowledging the scenario in Jharkhand, he said, as many as 263 lakh people are being provided ration under the National Food Security Act. Also, essential commodities like food grains, vegetables, groceries are being home delivered to over 73,618 families, he added.

A bigger issue that popped up was of the migrant workers. These people were stranded in big cities with no jobs due to lockdown, no money and even no shelter for some. Explaining the issue considering Jharkhand, Arun said, “We have set up ‘Daal Bhaat Kendras’ for distributing food to the poor and the needy. With the help of community kitchens, we are making it possible to feed a big number of people.” He also informed that there are 805 community kitchens which are operating and serving people amidst the crisis and over 2,11,248 people have benefited from such community kitchens.

SUPPLY CHAINS MANAGEMENT

Commenting on how supply chains have been managed during the crisis, Dr B Janardhan Reddy, APC and Secretary, Agriculture and Cooperation Department, Telangana said, “As many as 300 vehicles were used to collect vegetables from 12 centres in the State and supply the same to people.” He said leveraging technology to strengthen the supply chain management has been beneficial, especially in present times. “Telangana is the only state where online crop monitoring is done. We have a complete database of what crops are grown in which parts of the state, who is the farmer and how much is the produce”, he added.

EFFECT OF COVID ON MSMES

Dr Rajendra Kumar, Principal Secretary, MSME Department and Director, Entrepreneurship Development and Innovation Institute, Tamil Nadu, talked about the effect of Coronavirus on underprivileged and those in need.” She highlights that food is the most basic requirement and authorities must focus their approach on ensuring food to all. Especially to those migrant labourers who are stranded in different states with no money,
businesses. He said, “The impact of lockdowns due to the COVID outbreak has been severe on the businesses. However, due to the relaxations, we see a little business has started coming in. We see MSMEs have been very adversely affected as they do not have a lot of resources, money and support to sustain through such a crisis.”

However, speaking on the revival of the MSMEs Dr Kumar said, “India would be a major beneficiary of the shift in supply chains and production lines from China and this will provide the MSMEs with a huge opportunity to return in the game. Firms coming out of China will take India as a benefitting resort and the states need to be prepared to take in such investments and utilise the opportunity optimally. This will also require the government to make MSMEs more competitive and enable them to have a position in the global market.”

Addressing the issue, P Narahari, Commissioner, Urban Administration & Development, Government of Madhya Pradesh said, “A huge push has been given to the MSME Sector by the Government of India. Madhya Pradesh CM is also taking measures to help MSMEs to surf through the crisis. We are seeing this situation as an opportunity for the startups, local bodies and local homemade companies. Especially the sectors wherein we have been using goods imported from foreign companies as the focus is now on the indigenous companies and their products.”

CORONA - A CHALLENGE, AN OPPORTUNITY AND A LESSON

Finally, looking at the menace of COVID outbreak and the manner in which Centre, states, local governments, smart cities and private firms responded to the situation, it can be inferred there is a lot already learned and a lot to be learned. Our preparedness, though inappropriate but when paired with smart strategies and proactive approach resulted in avoiding the scale of damage other countries have suffered.

The crisis has emerged out as a challenge, as an opportunity and as a learning. On this note, Dr Kajal, Director ULBs, Government of Uttar Pradesh, said, “Those areas, state or countries that have earlier experienced pandemics have responded quickly to the situation as they have lessons from their past. We should also be learning from it and preparing ourselves in a better manner to avoid any more damage in future in such cases.”
India has been implementing effective strategies to curb the menace of COVID-19 crisis and as of yet, the situation here is better as compared to many of the world’s developed countries. Also, India has won appreciations from countries worldwide for the effective and strong response against the Coronavirus. However, the honour is not only because of the Centre’s strategies but their effective execution by the States and the local governments at the grassroots level has played a crucial role, writes Adarsh Som of Elets News Network (ENN). To know about the action plans of the local governments, especially those working at the district levels, Elets Technomedia organised a series of webinars and invited various policymakers, district authority leaders and city leaders to speak on their efforts to fight against COVID-19 pandemic.
Commenting on the State’s dire condition, Nidhi Choudhary, District Collector and District Magistrate, Raigad said, “Mumbai and Pune, two major districts of Maharashtra, are the prominent hotspots in the state.” The district administration had been focusing on spreading awareness among the villagers especially because as the cases increased in Pune, a lot of people started coming back to their homes in Raigad, added Nidhi. Speaking on how Raigad ramped up their healthcare infra and prepared to tackle the worst, she said, “In Panvel, we created a 120-bed dedicated COVID hospital, a district COVID healthcare centre, a 350 bedded private hospital and another 200-bed facility, as it is not far from Mumbai so in case of any emergency we can
Following the list of Maharashtra and Gujarat is Delhi, the national capital. Numbers show a devastating image and heavy impact of Coronavirus in the city. Delhi has 9,333 COVID positive cases and the number of deaths accounts to 129. Despite, the high number of Corona positive cases, the recovery rate in the capital is evident to show the effectiveness of strategies implemented by the local governments.

Tanvi Garg, District Magistrate, New Delhi, in a webinar with Elets, spoke on how Delhi is tackling the pandemic. Tanvi said, “Many preventive measures have been launched by the government to curb the infection. We are regularly giving the instructions and making public announcements on avoidance of mass gatherings and strict following of social distancing in the national capital.”

Adding on to the initiatives taken, she said, “Firstly we set up the Triage facility at IGI Airport for screening vulnerable and asymptomatic passengers. Also, we set up a paid quarantine facility at the airport. We have over 600 passengers in quarantine that had shown symptoms of infection but only five of them have tested positive. All the other passengers will be discharged after the tests. The government is aiming to restrict the Coronavirus patients from entering the national capital.”

Tanvi Garg

Describing the situation of the capital, Dr Rashmi Singh, Additional Commissioner, North Delhi Municipal Corporation (NDMC) said, “We need to focus on the social security aspect of urban governance.” Moreover, she spoke about a paradigm shift which is required as COVID will stay among the population for a long time and there is a need for people to learn to live with it. Rashmi said, “Adaptation is the key in times of COVID. And we need to think about different vulnerabilities as well.”

SOME RENOWNED MODELS

Amidst India’s stand against the Coronavirus outbreak, some models and strategies adopted by a few districts won appreciations across the nation. The innovative use of technology; smart strategies to keep supply chains functioning; measures to stop black marketing and ensuring apt benefit to the farmers; out of the box initiatives to ensure cooked food to the poor; ration to all in need and groceries and other essentials at the doorsteps of the

Nitin Sangwan

Nitin Sangwan, Deputy Commissioner, Ahmedabad Municipal Corporation and CEO, Smart City Ahmedabad, speaking on strategies implemented in the city to curb the COVID menace, said, “We increased our testing manifold. Through this move, we can also detect asymptomatic cases. We have 30 teams which are working on a daily basis and testing around 500-700 samples a day.” Further, he said that a multipronged strategy is used for the house to house survey. In one day, as many as one lakh houses have been covered. Medical checkups are being conducted by the officials and a database is prepared accordingly.

Nitin Sangwan

K K Nirala

K K Nirala, District Collector, Ahmedabad said, “We have over one crore population in the city and Ahmedabad is one of the largest cities in the state. Considering the present situation, our first priority is to fight COVID pandemic and the rest is secondary.” Talking about the initiatives taken on the technology front and how social media has played an important role, Nirala said, “We are the first district to make the permits online to facilitate people. Moreover, a significant step has been taken wherein mobile ATM service has been started in the city for the convenience of the people...Social media has provided a very effective platform for the Government to communicate the steps being taken, essential announcements, and also it is easier to get the public’s reaction. This is a two-way communication that is beneficial for taking apt steps.”

K K Nirala

Looking at the statistics of the Corona effect in the country, Gujarat is the second-most affected state in India. As per the Centre’s data on May 17, the total number of Corona positive cases in the State is 10,988 with the pandemic claiming 625 lives. However, Gujarat authorities are on their toes and taking strict measures to prevent the virus from further spreading. As the state is continuously working on upgrading its healthcare system and using apt technology to ensure lockdown norms are being adhered to, the hard work has resulted in 4,308 people recovering from the disease. The State capital - Ahmedabad is a major hotspot. The State capital - Ahmedabad is a major hotspot.

Addressing a webinar with Elets, K K Nirala, District Collector, Ahmedabad said, “We have over one crore population in the city and Ahmedabad is one of the largest cities in the state. Considering the present situation, our first priority is to fight COVID pandemic and the rest is secondary.”

K K Nirala

shift the patient to hospitals with advanced facilities in Mumbai,” And, as there was a plan to have healthcare facilities available for non-COVID patients as well, the tehsils other than Panvel, had clinics and hospitals running for non-COVID patients and fever clinics for the COVID patients, Nidhi added.
people; were a few highlights of these successful models. Elets got a chance to discuss a few of those models during the webinars.

AGRA MODEL

One of the most talked-about and also recommended by the Centre was the ‘Agra Model’. Overall, the State of Uttar Pradesh has been proactive in utilising technology to aid their stand against the pandemic. However, Agra has been leveraging technology, smart city initiatives to strengthen their efforts to aid people amidst the crisis.

Arun Prakash, Municipal Commissioner, Agra Municipal Corporation and CEO, Agra Smart City discussed their model in a webinar with Elets. Prakash, while addressing the webinar, informed that the civic body has developed ‘Smart Health Centre’ under the Smart City Mission that helps in spreading awareness about various Dos & Don'ts amidst Coronavirus situation. The move involves a briefing of 3-5 mins regarding the Coronavirus which is being given to every patient that reaches out to the health centre for the general consultation or for a specific checkup.

Talking about the essential supplies like groceries, Prakash said, Agra District Administration and Agra Smart City joined hands to ensure doorstep delivery of the groceries by developing an Online Information Portal for the citizens. The portal will be operated from the Integrated Command Control Centre (ICCC). The authorities launched weblink for the citizens to access the portal – http://agrasmartcity.in/EssentialItemSupplier.aspx. Also, the authorities tried and fixed prices for various essential items. Further, a tie-up has also been done with Zomato and Big Bazaar to deliver grocery at the doorstep. The civic body identified 10 vendors per ward to execute the strategy, he added.

Detailing on more initiatives by the city administration, Prakash said a ‘Cooked food bank’ has been constituted which collects cooked food packets from various NGOs and distribute the same to the people in need. Through the initiative, the bank has distributed around 5000 packets.

Agra authorities have developed a Lockdown Monitor app to keep a check on the movement of people throughout the city, said Prakash. The app is developed with the help of Secura, official vendor of the surveillance system for the authorities, under its CSR initiative. Elaborating about the application Prakash said, the app detects groups, crowd, and close proximity of people. Identifying any of which an alert is instantly generated to help the authorities to strictly maintain social distancing in the city. The app alerts Police personnel on the ground to take necessary action immediately. Hence, this initiative of crowd analytics is an apt solution so that the lockdown may achieve effectively.

Pilibhit district of UP was also one among those shown commendable efforts in containing the viral spread. Vaibhav Shrivastava, Collector and District Magistrate, addressing a webinar, said one of the important steps we took was to prevent people from crowding in mandis. To achieve that we started door-to-door delivery of vegetables to the people directly. “We used the Government’s portal ‘Supply Mitra’ for carrying out the home delivery of vegetables.” Also, a fixed rate list was provided to vegetable vendors. Further, he mentioned about how social media is being used to provide telemedicine services and spreading awareness among people.

BHILWARA MODEL

Bhilwara model was another successful approach towards containing the spread of the Coronavirus. Rajendra Bhatt, Collector and District Magistrate, Bhilwara addressed a webinar by Elets and discussed a few key points on their approach.

He said, “We implemented the lockdown much before the Centre implemented it nationwide. The Chief Minister, Ashok Gehlot was briefed about the move beforehand.” Elaborating on the steps taken by the district authorities he said, "Sealing of the district borders was one of the immediate measures we implemented." In addition, public transport like buses, cabs, and others in the district was also brought to halt. Further, wherever positive cases were found, those areas were mapped. And those areas where more cases were found were labelled as COVID-19 hotspots and were also mapped as well, he added.

Moreover, a team of 2300 workers was constituted which conducted a door-to-door survey covering all the residences in the district including the urban and the rural areas. The survey was aimed to identify the potential COVID-19 cases so that those found can be quarantined under medical supervision, said Bhatt.

Talking on the efforts to aid people during the lockdown, he said, the authorities have set up a war room for effective implementation of the initiatives and regular monitoring of the movement in the
Moreover, “We are taking slum areas very seriously. We have community transmission of the viral pandemic, he added. has also started conducting random testing to prevent can be further referred to dedicated hospitals.” The corporation for primary attention to any suspected case which if needed we also started fever clinics in every nook and corner of the city facilities in health centres or isolation centres. Apart from these, serious cases. For mild to medium cases, we have dedicated Bhoobalan said, “We have established COVID care centre for cases in the city, he added.

immediately.” The result is that, as of now, there are no active suspected cases, isolated them, and sealed the area proactively conducted house to house searches, found suspected cases, isolated them, and sealed the area immediately.” The result is that, as of now, there are no active cases in the city, he added. Bhoobalan said, “We have established COVID care centre for serious cases. For mild to medium cases, we have dedicated facilities in health centres or isolation centres. Apart from these, we also started fever clinics in every nook and corner of the city for primary attention to any suspected case which if needed can be further referred to dedicated hospitals.” The corporation has also started conducting random testing to prevent community transmission of the viral pandemic, he added. Moreover, "We are taking slum areas very seriously. We have established fever clinics near the slum areas. We are also doing ground research and strict monitoring to ensure all suspects including asymptomatic or symptomatic, are identified and isolated", Bhoobalan added.

Narayanpet district in Telangana also stood one among the districts successfully battling the pandemic. Hari Chandana Dasari, District Collector and District Magistrate, Narayanpet said, "We decided to close down our borders even before the lockdown started." The authorities deployed police officials at the village borders so that people don’t move in and out, she added. Moreover, to strictly prevent the movement of vehicles and people across the borders, “We requested our neighbour districts to arrange migrant camps and also urged the Government of Maharashtra, our neighbouring state, to see that people don’t migrate out”, she added.

“We have onboarded all our local representatives, we have spoken to the Sarpanches, all the ward members and explained to them diagrammatically, showed them how the virus spreads and how precautions need to be taken in villages”, she said. Describing the supply of essentials to the people, Dasari said, “We have roped in SHG women for doorstep delivery of the vegetables, fruits, meat, milk, groceries and other essentials. We have also provided them with 14 vehicles for the purpose.” Talking about how technology has posed as a great enabler for the civic body, Dasari said, "We have a Geo-tagging app which is developed by NRSC. Hence, using the app we have started geo-tagging the houses of those under home quarantine." Also, “We have also developed a digital platform called T-Consultant to connect the non-COVID patients in need of medical attention with the doctors. The people can connect using their smartphones, laptops with the doctors on the digital health platform without coming out from their homes amidst the lockdown", she added.

SPECIAL STORY

Tumkur is one of those districts which are done controlling the pandemic and are now free from COVID. However, the authorities are in a continuous effort to maintain their COVID-free status. T Bhoobalan, Municipal Commissioner, Tumkur City Corporation, spoke on the status achieved. Highlighting the proactive approach of the civic body towards the crisis, he said, "We had taken all the steps for preventing, mitigating and treating the pandemic before it started spreading in India. We proactively conducted house to house searches, found suspected cases, isolated them, and sealed the area immediately." The result is that, as of now, there are no active cases to them diagrammatically, showed them how the virus spreads and how precautions need to be taken in villages", she said. Describing the supply of essentials to the people, Dasari said, “We have roped in SHG women for doorstep delivery of the vegetables, fruits, meat. milk, groceries and other essentials. We have also provided them with 14 vehicles for the purpose.”

Talking about how technology has posed as a great enabler for the civic body, Dasari said, "We have a Geo-tagging app which is developed by NRSC. Hence, using the app we have started geo-tagging the houses of those under home quarantine." Also, “We have also developed a digital platform called T-Consultant to connect the non-COVID patients in need of medical attention with the doctors. The people can connect using their smartphones, laptops with the doctors on the digital health platform without coming out from their homes amidst the lockdown", she added.

CUMULATIVE EFFORT

Only a few examples of the numerous successful efforts by the districts pan India have been covered in this piece of writing. The discussions with district and city leaders displayed how a cumulative effort has been the driving force for India to successfully curb the COVID menace. “United we stand, Divided we fall” and in the present time is very much required. India will see the fourth phase of the lockdown and this is evident enough to know how the governments are taking bold decisions to save lives and pushing hard to take the country out of the COVID crisis. eGov

SPECIAL STORY

Hari Chandana Dasari

T-Consultant is developed by NRSC. Hence, using the app we have started geo-tagging the houses of those under home quarantine. Also, “We have also developed a digital platform called T-Consultant to connect the non-COVID patients in need of medical attention with the doctors. The people can connect using their smartphones, laptops with the doctors on the digital health platform without coming out from their homes amidst the lockdown”, she added.

T-Consultant is developed by NRSC. Hence, using the app we have started geo-tagging the houses of those under home quarantine. Also, “We have also developed a digital platform called T-Consultant to connect the non-COVID patients in need of medical attention with the doctors. The people can connect using their smartphones, laptops with the doctors on the digital health platform without coming out from their homes amidst the lockdown", she added.

Talking about how technology has posed as a great enabler for the civic body, Dasari said, "We have a Geo-tagging app which is developed by NRSC. Hence, using the app we have started geo-tagging the houses of those under home quarantine." Also, “We have also developed a digital platform called T-Consultant to connect the non-COVID patients in need of medical attention with the doctors. The people can connect using their smartphones, laptops with the doctors on the digital health platform without coming out from their homes amidst the lockdown", she added.

CUMULATIVE EFFORT

Only a few examples of the numerous successful efforts by the districts pan India have been covered in this piece of writing. The discussions with district and city leaders displayed how a cumulative effort has been the driving force for India to successfully curb the COVID menace. “United we stand, Divided we fall” and in the present time is very much required. India will see the fourth phase of the lockdown and this is evident enough to know how the governments are taking bold decisions to save lives and pushing hard to take the country out of the COVID crisis. eGov

Talking about how technology has posed as a great enabler for the civic body, Dasari said, "We have a Geo-tagging app which is developed by NRSC. Hence, using the app we have started geo-tagging the houses of those under home quarantine." Also, “We have also developed a digital platform called T-Consultant to connect the non-COVID patients in need of medical attention with the doctors. The people can connect using their smartphones, laptops with the doctors on the digital health platform without coming out from their homes amidst the lockdown", she added.

CUMULATIVE EFFORT

Only a few examples of the numerous successful efforts by the districts pan India have been covered in this piece of writing. The discussions with district and city leaders displayed how a cumulative effort has been the driving force for India to successfully curb the COVID menace. “United we stand, Divided we fall” and in the present time is very much required. India will see the fourth phase of the lockdown and this is evident enough to know how the governments are taking bold decisions to save lives and pushing hard to take the country out of the COVID crisis. eGov
COVID-19 was an unprecedented crisis that has been hard-hitting on humanity. Along with precious lives, the pandemic has also taken huge numbers out from the economy. Various government sectors, organisations, private firms, have suffered huge losses due to the lockdowns imposed to break the chain of transmission of the Coronavirus. The power sector is one among those. Due to the closure of industrial establishments, a sudden fall in the power demands across the country has been observed. Highlighting the power sector scenario amidst the COVID crisis and in post-COVID times, Elets Technomedia organised India’s first Virtual National Energy Summit on May 12, 2020 and presented by Greenko Group.
The Summit comprised four sessions addressed by an eminent speaker panel. The virtual summit saw discussions encircling the power sector scenario at present and the way forward. How a sudden slump in demands, caused due to lockdowns, have distorted the energy economy? What are the challenges being faced by discoms? What steps are the power generation companies and power distribution companies taking to stabilize the situation? Which sub-sectors like solar power, wind power, hydro, thermal, etc. have been affected the most by the crisis? How are power companies trying to convert the crisis into an opportunity? To what extent, the India power sector is prepared to meet the huge demands post-lockdown withdrawal? These were the major questions which set the core agenda of the Summit.

However, the panel vividly discussed renewable energy as the future of the power sector. How clean energy will be powering the future? The discussions also highlighted the potential and future of electric mobility, EV charging infrastructure, challenges and the way forward in the EV domain. How in IT and advanced technologies like smart metering, smart grids etc. are transforming the energy sector, was another key topic emphasised in the Summit.

PRE-INAUGURAL SESSION

The speaker panel in the Pre-Inaugural session had a policymaker and domain experts to address the agenda of the Virtual National Energy Summit. The session was moderated by Dr Ravi Gupta, Founder and CEO, Elets Technomedia and Sudheer Goutham, Senior Assistant Editor and Bureau Head, Elets Technomedia, Elets Technomedia hosted the session.

Ajitabh Sharma, Principal Secretary, Energy Department, Chairman, DISCOM, RRECL and REDCL commenced the session talking about the impact of COVID on the power sector. He said that the demands have contracted more than 30 percent in Rajasthan. Due to this our revenue has contracted to more than 50 percent.

Speaking on the impact of COVID on the renewable energy sector, Sharma said, "The issue we are facing is of the supply of panels and other raw materials as they were being imported from China for a long time and due to COVID outbreak it has stopped. This has hampered the deadlines majorly." The government intervention is required to shift the focus on domestic production of raw materials, he added.

Addressing the topic of smart metering and use of advanced technology, he said, “We need to extensively go for smart metering. It is time we should be working on remote technologies and we should be able to control things sitting at war rooms or control rooms and not to go on-site for each and everything.” Unless one scales tech interventions, the initiative does not come up, he added.

Describing a serious issue of the theft of electricity and how smart metering and tech measures can help the issue, Sharma said, “In the agriculture sector the theft of electricity persists. We have provided our ground staff all the protection instruments and have asked them to follow the standard operating procedure (SOP) while talking to consumers and making them understand the
seriousness of the act. However, to resolve this is not enough. It is high time we need to focus on smart metering so that such incidences can be stopped."

Sharma said, "Moreover, in the current scenario, putting forward the projections for the discoms is a difficult task so it is raising issues regarding the deviation settlement mechanism. Hence, in 2-4 months the deviation range will also vary so the state regulators have to think about that as well."

On renewable energy, "Our state policy talks about different technologies that we are heading to for the first 100 EV charging stations based on solar power. So, if some company is wanting to place a solar plant in Jaisalmer and utilise the power generated in Udaipur or Jaipur. In such a case we have relaxed the carrying charges and more relaxations have been given by the government to promote renewable energy."

Sunil S Chavan, Joint Managing Director, Maharashtra State Electricity Distribution Company Limited commenced his address in the pre-inaugural session acknowledging the slump in energy demands. Chavan said, "Electricity demands have come down. I have a consumer base of 37 lakh of which 30 percent are agrarian consumers. In February, the demand was 22,000 MW which has dropped down to 17,800 MW by the month of May." My 60 percent revenue comes from industrial consumers and due to lockdowns industries are shut. In normal times, the revenue generated on a monthly basis was Rs 600 crore. Whereas in the present times, the revenue has dropped to roughly Rs 228 crore which is nearly a 50 percent slump, he added. "However, after the announcements by the Centre to allow the industries to reopen, we are in talks with various industries convincing them to resume so that the revenue gets back on track", Chavan said.

"Keeping in mind the farmers, we started with a high voltage distribution system (HVDS). We are giving a continuous supply of power and we are convincing them and sensitizing them so that our recovery position improves", added Chavan. Further, he said, "However, residential consumption has gone up during this time. But, the income level of all the consumers has come down so it will take time to bounce back. Hence, I feel the government should work for economic stabilisation as it is much needed."

Back ing the words of Ajitabh Shama on the need to stop the theft of electricity, Chavan was of the view that technological interventions like smart meters can be an aid to this issue. Talking on smart metering, he said, "Smart metering is the only tool to prevent theft and use energy more judiciously. Human engagement for meter reading should be reduced to most possible. However, the energy audits are being conducted to know the supply and demand data and to prevent the electricity theft, he added. Moreover, Chavan said, "In Maharashtra, the area under us, we are using Automatic Meter Reading (AMR) but still for many
consumers, third party agencies are being hired to collect meter readings."

Talking on renewable energy, Chavan said, "In Aurangabad region, our solar power generation is up to 50 MW." Also, we are sensitizing gram panchayats and private owners for giving land for solar plants. We are giving roughly Rs 30,000 per acre per year as a lease rent, mentioned Chavan.

Chavan said, "Maharashtra Electricity Regulatory Commission (MERC) has come up with a new tariff because of a new user-friendly structure and they have fixed the tariff for the next 5 years. I think using these initiatives the power sector, overall, can be improved."

Kelly Mermuys, Country Manager, 3E India speaking on renewable energy said, "We have developed a software which monitors the solar power plants. With the help of this, we can guide the power companies on the basis of demands and supply dynamics." Citing an example, Kelly said, "If someone has a solar plant and wind energy plant then we can get all that connected to a single digital platform. The digital platform collects essential data and allows the company or the individual owner to know about the dynamics and of the renewable power. Also, the company can remotely monitor the plant and control the performance of the plants. This is very important especially in times like this, COVID scenario."

Talking on the development in power sector scenario in India said, "The issues on smart metering, digitisation and all other tech-related issues persist but a major issue is of the money." Stating the examples of how India is heading towards upgrading its power sector she said, "There is a partnership with Europe and India focusing on renewable energy. And, we are also working with Telangana grid operators for making the grids smarter and for tapping the potential for smart energy and renewable energy in the state." This is important as when there is less demand from the smart grid, it can shift accordingly.

So we are working on a pilot where the companies can work on producing their open energy so that the grids are less affected. Also, looking at options for creating energy islands from where the supply can be directed, said Kelly. "With such things we are looking forward to showcasing the tech that is there and builds more awareness", she added.

Adding on Kelly said, "Awareness is very important. Money is a big issue but if you have a good idea and the technology is there then one can always find a way to find money. So, I think it is a matter of starting a good pilot and showcasing solutions and tech and then investments can be fetched."
INAUGURAL SESSION

The inaugural session had Ajay Mishra, Special Chief Secretary, Energy Department (Thermal, Hydel and Renewable Energy sources), Government of Telangana as the keynote speaker.

Mishra addressing the core theme. Acknowledging the effect of COVID on the power sector he said, "These uncertain few months are crucial for all of us and it means a paradigm shift in the way we do business, in terms of the power sector. Due to the lockdown and only domestic and essential services in operation, the power demands have come down by 25-35 percent. We see that in such a situation, the cost of electricity goes up and due to this discoms bear additional burden."

In order to extend a helping hand to the power industry, "In some states, depending on the government, different reliefs have been passed like waiving of late payment fees, flexible payment plans and more. The industry has suffered in the last one and half months and it's going to take a long time to recover." There is a need for the industry players, government bodies and domain experts to brainstorm out of the box solutions. Also, there is an urgent need to change prediction models, considering the present scenario and to develop an effective plan to cope up with the crisis which is a major challenge ahead for policymakers, private industry leaders and experts in the power sector, he added.

Adding on to the hardships faced by discoms during COVID times, Mishra said, "The potential of many state governments is not very encouraging financially. As you are aware that tax revenues have come down drastically in many states. So, states are also facing difficulties in supporting the discoms. For more than 80 percent of the discoms, the help should come from the government as they do not have any savings."

Adding on the present scenario, Mishra said, "Predictions model will have to undergo a change. The power mix of renewables and non-renewables also need a makeover." He added, "The supply chains have been affected despite our best efforts. There is a shift in sourcing material and sourcing people gradually." Speaking on the post-COVID scenario, he added, "One of the major lessons we learnt from the lockdown is that there is an ongoing shift from globalisation to localisation." Elaborating on the same lines he said, "Now there is a need for us to have skill development and resourcing locally."

Talking on the revival of the sector and preparing for the rise in demand post lockdowns, Mishra said, "There will be no negative impact on the captive power generation. Wherever it has been permitted or wherever it is existing. This is because the plants will be producing electricity. The industry is not running to its full capacity. What does it do as an alternative? These captive power plants have approached the governments to take the electricity. It will be some kind of an effort in the days to come. How to resolve this, because it is out of the legal context. But, then the government will have to play a role in that."

Moreover, Mishra said, "Next is the issue of ‘must run’ status. This ‘must run’ status is likely to be modified in the days to come. When our energy demand itself has come down and it is not likely to rise up like before, then those plants to come up in future may have to comply with proportionate cuts and not a ‘must run’ status."

Acknowledging the holistic viewpoint on the present scenario, Mishra said, not all is negative and disheartening about the pandemic. "We have witnessed significant improvement in Air Quality Index (AQI) throughout the country. This is a clear indicator of what was contributing to the pollution. Partly industries and partly transport. For industries, they need to reform pollution control norms."

Adding on he said, "I am quite confident that in the coming times, the demand for EVs will rise. Technology issues related to batteries and charging infra are there but I think things will stabilize in times to come."

Answering a question asked by Kelly on power mix and local skilling in Telangana, he said, "In our context, we are not likely to see new plants coming up for thermal and hydropower sectors but more will be coming up in the renewable energy sector. Considering the demand we need to see when it raises to feed accordingly."

TECHNOLOGIES IN ENERGY SECTOR DURING AND POST-COVID ERA

Saurabh Kumar, Managing Director, Energy Efficiency Services Limited commenced his address saying “Renewable energy, smart grids or smart metering is very relevant in the present times. We have found practical aspects of it. We are doing smart metering in Uttar Pradesh and Haryana. In UP we have almost a million meters installed 95 percent of those meters, we have been able to provide apt billing to the consumers.” Kumar
added, "Look at the stats of non-smart meters in UP and collection has gone down to almost zero. In UP and in NDMC area of Delhi the average increase in revenue is Rs 300 per meter per month. This is highly significant."

Moreover, Kumar said, "There are two aspects, first is the billing efficiency that we have in the country. It's 83 percent. The second is the agriculture subsidy which is Rs 90,000 cr that has been given across the country. If we look at the data of 7-8 states prominent in agriculture, the average cost of supply to agriculture is upwards of Rs 6.5 which means even that subsidy does not give you enough to recover your cost."

Further, speaking on the power consumption by the agriculture sector, Kumar said, Maharashtra has nearly about 40 lakh agricultural connections and they are highest in terms of agricultural consumption. And as per the last regulatory commission order, the cost of supply to agriculture is Rs 7.48. The state gives them the subsidy of Rs 3 per unit, therefore, Rs 4.48 is uncovered losses. Some of it is recovered but most of it is lost. "What we are proposing is that we are putting together decentralized solar plants where the land has been given by the gram panchayats for use without any rent on it. We are providing them solar at Rs 3 per unit for 25 years which is exactly equal to the government subsidy", Kumar added.

Adding on the proposal, Kumar said, "We have these lands where we are putting small solar stations, there is enough space to keep a battery system there. What we are further proposing is that at a tariff of Rs 3.87 per unit for 25 years, I can replace all the streetlights, the gram panchayat lights with energy efficiency and also I will provide them clean power at the same tariff."

Considering the tariff of Rs 5.51 that they get for the streetlights and there are 1.5 million of them. As of them, they are losing Rs 80-90 crores by supplying lights to gram panchayats. They can turn this around at a Rs 3.87 tariff, he added. "Hence, such problems need to be plugged and this is the right time for us to be slightly more innovative and we have to be more open about things and renewable energy is certainly the way to work", said Kumar.

Chintan Shah, Director (Technical & Finance), Indian Renewable Energy Development Agency (IREDA), while addressing the Summit said, "In the time of COVID pandemic we have seen that everything has been shut down to prevent the virus from spreading. Offices are operating remotely and work from home has now become a norm. We have to realize that all of this was possible because of two things - Telecommunications and Electricity. Hence, the power sector needs reforms in planning and execution as in future also if required the lockdowns can occur and operations will be carried remotely. Our conventional approach needs tweaking of the learnings from the COVID pandemic."

Further speaking on the changes needed in the power sector to
prepare for the times to come, Shah said, "Now instead of demand as a basis of planning, redundancy should be the focus. Moreover, we need to work on localised power generation facilities as we will be working on redundancy. Hence the question is not of consumption now but of round the clock power." Renewables can be the resort, in this case, he added.

On learning from COVID crisis, he said, "We need to take learning from the COVID, the movement of goods is limited to essential services so we need to create more capacity at local levels and push local products. This will also prepare us for such a crisis in future."

Dr Arup Kumar Mishra, Director, Assam Energy Development Agency spoke on using clean fuel and renewable energy as much as possible. He said, “The hilly areas and riverine areas have the potential for wind energy and we are working for the cause.” Also, the works are being carried on rooftop solar plants and a floating solar plant as well, he added.

Commenting on shifting the public transport to cleaner energy he said, “One more thing I would like to highlight, I think public transportations like buses, which can be, must be shifted to renewables and cleaner fuels.”

Answering a question on the post-COVID scenario and how it will be different from the present, he said, “Post-COVID is going to be very different. More and more such webinars and online Summits will be taking place in the future. For a state like Assam which is a hilly state, the issues here are peculiar. However, looking at the demand and potential, solar energy will be our mantra for the next five years.”

Yogesh Kumar, Nodal Officer - Smart Meters and General Manager, Department of Energy, Uttar Pradesh expressed his views on smart technology, metering and how technology has been an enabler for the authorities in times of COVID crisis. He said, “Technology is very useful especially in times like corona as no human has to go to the site for a meter reading. But there are glitches sometimes. We can read the meter, the bill is generated but in the collection part we are lagging so there is a need to sensitise people to pay their power bills online.”

Adding on the topic, Yogesh Kumar added, “Smart meters are very useful during this time. However, we need to install them on a mass scale. We have already installed 10 lakh smart meters as of yet. Of the total, we only faced issues in 2,500 meters.”

Kelly, in this session, described a brief on 3E India. While presenting a slide show on use of technology in the power sector and digitisation she said, "Digitization is essential and is needed in these times of COVID." Highlighting on the domain that 3E covers she said, “We are working in solar and wind sectors. We are working on storage, smart grids, and more.” At present, we are working in Telangana in the renewable sector, she added.

Dr Arup Kumar Mishra

Yogesh Kumar

Kelly

P Bala Kiran

P Bala Kiran, CEO, Smart City Thiruvananthapuram and Director Kerala Tourism addressing the final session of the summit, talked on smart city initiatives. He said, “E-mobility, energy security and renewable energy have been very important in the smart city projects.”

Elaborating on initiatives taken in Smart City Thiruvananthapuram, Bala Kiran said, “We have taken up two components - first e-rickshaws and e-autos. The tender has been completed and the e-rickshaws and e-autos will be playing on Trivandrum Smart City. However, due to the Coronavirus outbreak, there has been a delay.

“Trivandrum has 100 wards. Out of which nine wards are under the area based development (ABD). In these wards, we will be working on solar rooftop projects. The tenders for the same had already been completed and the work had already begun. We believe that after taking out power for domestic usage we would be left with surplus power which we will be feeding back to the discom”, said Bala Kiran.

Speaking on the e-mobility, he said, “Kerala is an energy sufficient state. The government has come up with an order for all the government vehicles to be shifted to electric vehicles.”

Adding on EVs he said, “We have a target of 10 lakh EVs. The government has come up with details on how registration and other formalities for EVs will be done. The problem which we are facing is not of procurement but of charging infrastructure. However, 130 locations have been identified for the same.”

FUTURE OF CLEAN & GREEN ENERGY AND E-MOBILITY IN URBAN LANDSCAPE - SMART CITIES, METROPOLITAN CITIES - SOLAR, WIND ENERGY, EV INFRASTRUCTURE, E-VEHICLES
The Entire world is experiencing the panic and chaos of COVID-19 pandemic. Despite facing all the challenges and tough scenarios, India is spreading vibes of humanity, hope and empathy towards fellow citizens all over the world with its unique strength emerged from “Unity in Diversity” showing best results in combating COVID-19. Though separated by social distancing and lockdown, Mission for Elimination of Poverty in Municipal Areas (MEPMA) extended handholding support to the poor and vulnerable through collaborative teamwork of over 9000 field personnel, 2.3 million networks of Self Help Group (SHG) women to combat the fight against COVID-19, and by donating around Rs 1 crore to COVID-19 relief funds.

MEPMA has implemented various awareness, relief and preventive measures to not only aid people psychosocially and economically, but also to monitor the health status & wellbeing amid this pandemic. This report showcases the efforts put in by MEPMA to reach out to the grassroots of the community with its awareness, relief and combat measures of COVID-19. To know in-depth about the efforts taken by MEMPA, Arpit Gupta of Elets News Network (ENN) interviewed G S Naveen Kumar, IAS, Mission Director, MEPMA. Edited by Adarsh Som.
How is MEPMA carrying out awareness programme propagating correct and accurate information on COVID-19?

MEPMA’s firm belief in “Prevention is Better than Cure” led to the engagement of more than 9,000 field-level personnel in organizing widespread awareness activities at ward levels to prevent and contain the spread of COVID-19 pandemic. We are sensitizing people to strictly practice Preventive Guidelines issued by the World Health Organisation (WHO), Government of India, Ministry of Health and Family Welfare (MoHFW), and the state’s health department. We motivate people to follow practices such as, frequent hand washing, social distancing, avoiding gatherings and psychosocial care for senior citizens, residents of shelter for urban homeless amidst lockdown.

Apart from the people of Andhra Pradesh, we also observed the Prime Minister’s initiatives like ‘saluting the frontline warriors’ and ‘light the lamp of unity’ with the residents of Shelter for Urban Homeless and Shelter Management.

Please throw some light on the role of SHGs behind the success of MEPMA’s initiatives in times of COVID-19?

The Government of Andhra Pradesh is taking every necessary step to safeguard the health and lend support to the poor amid the spread of COVID-19. As a part of these relief and control measures, the Chief Minister of Andhra Pradesh, YS Jaganmohan Reddy took an initiative to distribute three masks per individual in the state. The CM entrusted the task of stitching these protective masks to the Self Help Group (SHG) women under MEPMA in the urban areas to support the Government’s preventive measures. Also, the project of “masks production” in turn adds to the livelihood of SHGs amid the lockdown. Under MEPMA, as many as 13,000 SHG tailors are working round the clock in 34 production centres established in 100 clusters with a target of producing four lakh protective masks on a daily basis. The project has not only supported the people of the state to protect themselves against the pandemic but also helped SHG women earn an income of Rs 500 or more per day. As many as 21 lakh masks have been distributed as of now.

How is MEPMA supporting and helping frontline corona warriors?

In this crisis, MEPMA supported our frontline warriors in the fight against COVID-19 by supplying Personal Protective Equipment (PPEs) sets, protective masks, hand-wash liquids and sanitizers produced by the SHG women across the state. Seventy SHG women members in five municipalities, trained by DM & HO, stitched and supplied nearly 11,992 PPE sets to the front line warriors to fight against COVID-19 in the State of Andhra Pradesh.

Shouldering the social responsibilities amid COVID-19, our SHG women are engaged in stitching masks, making sanitizers and hand-wash liquids to combat the pandemic. Till now, 12,472 SHGs produced 21,40,887 masks, 36,447 litres of sanitizers, 8,912 litres of phenyl and soap oil and 400 litres of lizol and supplied them to frontline workers, in Shelters for Urban Homeless (SUHs) and for private orders at minimal prices. This work is going on endlessly in all MEPMA production centres. These activities, on one hand, helped in ensuring the safety of “frontline warriors” and the public at large, while on the other hand, aided SHG women to earn their livelihood in this time of crisis.

G SNAVEEN KUMAR
IAS, Mission Director, MEPMA
What steps MEPMA is taking to aid the farmers in times of crisis?

The effect of COVID-19 crisis is evident on farmers who are stuck in between transporting and marketing the yield. To extend support to the farmers, the Government of Andhra Pradesh is focusing on delivering fruits like bananas, mangoes etc., to each and every household through MEPMA in the urban areas. This initiative not only saves farmers from the crisis but also helps the SHGs to earn a livelihood and the people to combat COVID-19 by improving their immunity.

These fruits are procured by MEPMA from the agricultural markets as per the indent. The SHGs are taking up the work of selling them at ward level to reach out to people at their doorsteps. As of now, 8,034 resource persons procured 1,700 tonnes of bananas directly from the farmers and sold them at ward level. At present, the Government is focusing to deliver approximately 2 kg mangoes per household per week. Accordingly, MEPMA is in the process of raising the advance indent for mangoes and also figuring out more efficient mechanisms to deliver to reach out every doorstep.

How is MEPMA extending a supporting hand to stranded labourers and urban homeless amidst the lockdown?

Amid the nationwide lockdowns implemented by the Government of India due to the COVID-19 pandemic, MEPMA strengthened its permanent shelter for urban homeless and established new temporary shelters to create a roof over homeless, migrant workers from other states and stranded people across the State of Andhra Pradesh. Apart from the already existing 82 permanent shelters for urban homeless functioning in 53 ULBs, MEPMA established 140 temporary shelters in convergence with district officials creating shelter for approximately 6,725 people and arranged 114 medical camps for the welfare of the residents. With the support of NGOs and other sponsors, the poor in the shelters are being served healthy and hygienic food three times a day along with fruits and health drinks like raagi malt and buttermilk at tea time. MEPMA along with the district officials timely identified the homeless and poor migrants and shifted them to shelters or quarantine after in time performing health tests. On one hand, we are ensuring the safety of the residents by inculcating the practice of frequent hand wash and other hygiene practices by facilitating sanitizers and protective masks made by SHG women. While, on the other hand, we are monitoring the strict implementation of social distancing among the residents even at the times of lunch and at night. To boost mental wellness, MEPMA and Shelter Management ensured practice of yoga/meditation/gentle exercises as a part of the daily routine of the residents.
“Shouldering the social responsibilities amid COVID-19, our SHG women are engaged in stitching masks, making sanitizers and hand-wash liquids to combat the pandemic. Till now, 12,472 SHGs produced 21,40,887 masks, 36,447 litres of sanitizers, 8,912 litres of phenyl and soap oil and 400 litres of lizol and supplied them to frontline workers, Shelters for Urban Homeless and for private orders at minimal prices. This work is going on endlessly in all MEPMA production centres.”

MEPMA has also collaborated with UNICEF, kindly share how is the collaboration helping the people of Andhra Pradesh to keep themselves safe and sail through this hard time?

To reach out to the grassroots of the community on COVID-19 pandemic, MEPMA in collaboration with UNICEF organized online training sessions for over 9,000 field personnel in various districts. These are connected to 2.3 million SHG women with the right information, right action, skills & psychosocial care to eradicate the COVID-19 cases in Andhra Pradesh. These trainings benefitted 80 lakh people in the State not only on good health and well-being but also on inculcating the habit of hygiene practices by WASH techniques. Further, MEPMA also prepared strategies to reach out the unreached on Menstrual Hygiene and Wash Techniques with a vision of promoting personal and menstrual hygiene management.

What is the status of the door-to-door survey of COVID-19 spread in the state? How is MEPMA contributing its bit to it?

In view of escalating cases of COVID-19 infected and suspects in the State, the Government of Andhra Pradesh constituted a team of ward secretary, volunteers, MEPMA resource persons, ANM and Asha workers to conduct a rapid door-to-door survey to verify foreign returnees and to check the health status of the people. Shouldering up social responsibility, MEPMA resource persons and health resource persons actively participated in the rapid survey at the grassroots level to contain the spread of COVID-19 in the state.

How is MEPMA helping the authorities for home delivering the essential commodities?

Spreading the vibes of humanity and kindness amid the chaos & panic of COVID-19, the members of SHGs and their federations are extending support to the poor and the needy in slums by serving them self-cooked hygienic food. MEPMA facilitated SHG women have set up sale points at ward level to ensure access of vegetables and fruits in the view of lockdown. In Red Zone areas, they are distributing packed vegetables and groceries to the people at their doorsteps. At present, 6,437 SHG members are involved in delivering grocery orders at doorsteps of people in the Red Zone areas and have delivered groceries worth Rs 4.2 crore as of yet.

What is AWESOME?

MEPMA is proposing to establish one of its prestigious projects “AWESOME” (Andhra Women Entrepreneurs through Social Mentoring & Empowerment), an elegant shopping mall in Visakhapatnam, Vijayawada and Tirupathi and on e-commerce platforms with a strategy to double the revenue of SHG Womenentrepreneurs by filling the gaps with expert solutions in quality enhancement, escalating marketing opportunities and creating branding standardization for SHG products in the next two years. A team consisting of a professor and ten graduates of IIM, Lucknow and IIM Visakhapatnam and industrial experts in supply chain management, marketing, quality control and finance are brainstorming on the project. The main motto of this project is to create direct employment and market for 2,000 plus SHG Women per mall by tapping the untapped market.
The world is facing one of the worst crises – the COVID-19 pandemic. As countries worldwide are taking stringent measures to fight the viral pandemic, India is no different. As a matter of fact, India’s proactiveness and bold decisions like the imposition of a countrywide lockdown have been much appreciated across the globe. Hence, the country is in a fairly good position considering the condition of many developed countries. These efforts have been successful as the implementation was done at the grassroots level and for this, the coordinated approach of the Centre, states and the local governments has to be accredited. Considering the above-mentioned fact and to know more about the initiatives taken by the district authorities of Jhansi, Arpit Gupta of Elets News Network (ENN) interviewed Andra Vamsi, District Magistrate, Jhansi. Edited by Adarsh Som,
What was the roadmap strategy adopted by the Jhansi administration to curb the COVID-19 menace?

The guidelines issued by the Government of India played a major role for us in constituting an effective strategy to fight the viral pandemic. As per the Centre's guidelines, we strictly enforced the lockdown in the district and one of the major challenges we faced was ensuring the lockdown norms are being adhered to. Further, we are ensuring that the supply of groceries, food grains, vegetables, fruits, milk and other essential commodities is being taken care of. We are ensuring no person starves for food, water or any other essential item in the district. Moreover, the strategy included upgrading our medical facilities and infrastructure and enhancing our preparedness for COVID-19 cases in the district at present and for the future as well. Our mantra has been, "Overpreparation and ruthless enforcement".

How are the district authorities ensuring that the lockdown guidelines are being followed?

With imposing lockdowns, the idea is to stop non-essential movement completely to break the chain of transmission of Coronavirus. However, the guidelines do allow movement of essential goods like medical supplies, grocery items, milk, grains, etc. and people who are involved in containment of COVID-19 crisis. Moreover, the movement of relief material for distribution to those who are in need is also exempted.

To ease the movement during the lockdown, passes are being issued from the ADM office and since April 2, passes are only being issued online through the e-pass system.

In the wake of the lockdown, there are 42 points where barriers have been set up to restrict the inter-city movement. Each of these points is manned round-the-clock by a team consisting of a magistrate, a doctor, police squad of sub-inspectors, and two constables. Any person who needs to enter the district borders is checked by the doctor on duty.

All the doctors are private professionals who are providing their services voluntarily. Within the city and towns also, police have been deployed so that no non-essential movement can take place.

How did the district administration address the issue of migrant labourers?

As Jhansi is a major road and railway junction, the arrival of migrant workers in huge numbers was another big challenge for the administration to handle. As many as one lakh people arrived by trains, buses and even on foot. Of the total, around 20 percent of the migrants were from Jhansi rest were from the neighbouring districts.
On arrival, they were first screened at the railway station, bus station and the district borders. Two dedicated teams of doctors and paramedics each were deployed at the railway station, Jhansi bus station, Jhansi- Datia border and Mau Ranipur bus stop for this purpose. The teams worked round the clock. During this exercise, we identified seven people who had symptoms and they were admitted in the District Hospital. The patients were provided with proper treatment and were released once they were completely fine. However, no sample tested positive for Corona.

We gave them the option to stay back in Jhansi in the temporary shelters created for them. A few people selected to stay but a majority of them were from Madhya Pradesh and wanted to reach back home. Hence, after the medical screening, they were facilitated to the neighbouring districts of Madhya Pradesh viz. Chattarpur, Tikamgarh, Niwadi, Shivpuri, Panna and Ashok Nagar and a few were from Uttar Pradesh as well.

All the persons who arrived in Jhansi by train have been enlisted with the help of DRM office, Jhansi. Similarly, people who arrived in Jhansi after March 25, by bus have been enlisted with help of ARM, ARTO and CMO staff. The lists of all these people were shared with the district magistrates of the respective districts those people travelled to.

As many as 20,000 people in the rural and urban areas have been checked by the medical teams. All these people are under Home Quarantine for a period of 14 days. For this purpose, four teams each in the eight Blocks and 12 teams for the city are on duty currently.

How is the supply of essential commodities being ensured to people amidst lockdown?

In essentials, the items included are groceries, grains, milk, medicines and a few FMCG goods. For groceries, we have developed a three-tier system at mandi level which ensures there is no crowding at the mandis and also at the local grocery shops.

We are constantly putting in efforts to ensure the supply of milk. Also, the daily collection of milk in rural areas is being taken care of.

Considering the other essentials, we have allowed neighbourhood shops to remain open for the public but they are being allowed to operate only if they ensure that social distancing is followed. In addition, in coordination with the UP Vyapar Mandal, Jhansi, a list of shops and traders who can home deliver goods has also been shared via various media channels and social media platforms.

For medicines, there are 64 pharmacies which we have listed and their contact numbers have been circulated among people via various media channels and social media platforms so that people can get the medicines home-delivered whenever in need. For facilitating home delivery of cooked food, private companies like Zomato Pvt. Ltd., Daakiya Delivery and even other small outlets have been given permissions.

Now the system of Grocery supply is totally decentralized across the city and all town areas.

Moreover, from April 1, as per the directions, Fair Price Shops (FPS) have started distribution of Monthly Quota of ration ensuring that social distancing is not being compromised. At each FPS, an officer has been appointed to ensure fair distribution and ensure social distancing and sanitisation of hands of the ration cardholders.
What is the status of community kitchens in Jhansi?

There are as many as 106 community kitchens, at present, working throughout the district. Of the total, 22 community kitchens are being run by the administration and 84 by NGOs. Currently, around 18,000 persons are being daily fed by these Community Kitchens. Up till now, more than 1,50,000 food packets have been distributed by these kitchens. When the migrants reached Jhansi, the district authority ensured that each person was provided with food and water. Community Kitchens have been a lifeline for those who have suffered the most economically during this lockdown. We have a dedicated cell within the Integrated Control Room that has been set up to coordinate the activities of Community Kitchens and NGOs.

Considering the fact that the lockdown has brought hardships for daily-wages workers, how is the district administration planning to compensate for the loss?

As per the announcement by the Chief Minister, Rs 1000 per month compensation is being given to registered labourers through DBT. 5,402 registered labourers have so far benefited from the move. Similarly, in urban and rural areas, people who are economically weak and have suffered the most due to loss of livelihood during the lockdown are being identified. As of yet, 21,758 have been identified and registered while the amount has been transferred in the bank accounts of 17,954 persons. All the MPs, MLAs, Ward Members, Gram Pradhans and even the political parties have been asked to identify such people so that no one is left out.

How are the authorities tracking and tracing the potential COVID patients and those under quarantine?

A massive House to House Mapping exercise has been completed in the district. The aim was to map each person who has a history of travelling to a foreign country and has arrived in the district after March 12. Also, for those who arrived in the district from the other states after March 23. Apart from this, any other person who showed symptoms of COVID-19 was also identified and checked by the medical teams. For this, in Jhansi, a unique approach was followed. The city was divided into four sectors and a Deputy Collector was made in-charge of door-to-door mapping in each of these sectors. Along with this, the municipal councillors, municipal tax collectors, basic education teachers, secondary education teachers, Hydel Department linemen, civil defence volunteers, religious leaders, Vyaapar Mandal, beat reporters from the press, ration shop dealers were also asked to prepare a list of people who have come from outside. In the rural areas too, apart from the Rural Development Department, ASHAs and Fair Price Shops were also given the task of identifying such persons.

Around 20,000 such people have been identified and all of them have been put under home quarantine for 14 days. Outside all such houses, a poster is placed which states the time till which the occupants are under home quarantine.

Please brief about the healthcare facilities in Jhansi and medical preparedness in the district.

We have enough medical facilities to tackle COVID-19 pandemic. Out of the above mentioned medical facilities – MLB Medical College Jhansi has been designated as L-2 level dedicated hospital; District Hospital Jhansi and CHC Badagaon have been designated as L-1 level hospitals for the treatment of COVID-19 patients. Apart from this, two
“As per the announcement by the CM, Rs 1000 per month compensation is being given to registered labourers through DBT. 5,402 registered labourers have so far benefited from the move. Similarly, in urban and rural areas, people who are economically weak and have suffered the most due to loss of livelihood during the lockdown are being identified. As of yet, 21,758 have been identified and registered while the amount has been transferred in the bank accounts of 17,954 persons.”

private hospitals - Lifeline Super speciality Hospital and Heart Centre and Chiranjeev Hospital have been designated as L-1 hospitals with a combined capacity of nine beds for isolation.

Moreover, two private hospitals Raghvendra Hospital and Kamla Hospital are being prepared to be converted into L-1 level facilities with a combined capacity of 20 beds for treatment purposes. In addition, Army Hospital and Divisional Railway Hospital have also been made ready for the treatment of COVID-19 patients. Besides this, five private hospitals which have a combined capacity of 50 beds for isolation have also been put on notice and can be taken over at a notice of 12 hours when in need.

We have a quarantine facility of 120 single-occupancy rooms at MLB Para Medical Training College, Jhansi to quarantine suspects of COVID-19 or close contacts of confirmed cases. It is being scaled up to accommodate 1,500 persons. This facility will be used as a quarantine facility for doctors, paramedics and support staff as well as the officials, police personnel and frontline corona warriors.

Considering sanitization and fumigation, each and every house and premises in the city is being fumigated by a team of sanitation workers. Also, public places like bus stands have also been fumigated. Medical college and district hospitals are also regularly sanitised by Nagar Nigam, ULBs, CMO office and Gram Panchayats.

What is a COVID-19 control room that the authorities are using in Jhansi?

The control room is a technology-powered facility which has been of great help to us especially in tracking, tracing, and monitoring. We have launched a helpline - 0510 2440521 - which is operated from the control room. The helpline is functional 24x7 for any kind of emergency, query from the citizens. The facility has also been the backbone of all medical & relief operations as well as monitoring the movement of people and vehicles amidst the lockdown.

In your opinion, what is the way forward?

As of yet, there are nine active cases in Jhansi district and we are actively working to prevent it from further spreading. Furthermore, the way forward would be to ensure that no person with Coronavirus remains undetected, house to house mapping for identification of symptomatic persons has been done. All such persons have been visited at their home by a medical team. There is obviously no epicentre at this moment but in our analysis, any future epicentres will be in the places where people have come from outside and hence a containment plan is in place and various teams are also geared to do this exercise. While the lockdown is underway, the entire district machinery is focused on ensuring that the supply of essential goods is provided to the citizens. Ensuring people who can’t afford food and essential goods, keep getting food and help from the Government. Moreover, the facilities at L-1, L-2 hospitals are kept ready to handle an outbreak of COVID-19 within the district. The coordination with the neighbouring districts of Madhya Pradesh will be crucial once the lockdown is lifted as the reverse migration of people will start. Teamwork is the only way to handle this crisis. Team Work of the Entire Society. Let’s get rid of COVID-19!
WATER & SANITATION
Conserve Each and Every Drop of Water Fall on the Earth

In the past few decades, rivers in India are depleting drastically due to various factors like over-extraction, deforestation, pollution from point to non-point sources, and climate variation. Major rivers are rapidly shrinking, not even reaching the oceans for many months of the year. Also due to encroachment of water bodies in both rural and urban areas we are facing problems like depleting groundwater, flash floods, water scarcity, and heavy migration from water scarce places, says Avinash Mishra, Adviser (WR & LR), NITI Aayog, in an exclusive interview with Nisha Samant and Sreetama Datta of Elets News Network (ENN).

Avinash Mishra
Adviser (WR & LR), NITI Aayog
What is the present scenario of the groundwater depletion in India? Which states are under the maximum threat of groundwater depletion?

Groundwater is widely dispersed but an important source of water for agriculture, industries and domestic uses. It has huge contribution in directing our country towards the path of self-sufficiency in food grain production. Trends suggest that due to population pressure, expansion of agriculture and industries in the coming years, groundwater utilisation is likely to increase manifold. Presently, the annual replenishable groundwater resource in India is 432 BCM. The Total Annual Ground Water Extraction of the entire country for the year 2017 has been estimated as 248.69 BCM.

The overall stage of ground water development in the country is 63 percent. The stage of ground water Extraction is very high in the states of Delhi, Haryana, Punjab and Rajasthan, where it is more than 100 percent, which implies that in these states the annual ground water extraction is more than annual replenishment through rainfall. In the states of Himachal Pradesh, Tamil Nadu, Uttar Pradesh and UTs of Chandigarh and Puducherry, the stage of ground water Extraction is between 70-100 percent. In rest of the states / UTs the stage of ground water development is below 70 percent.

Apart from the domestic usage, which are the other areas or industry sectors which require major water usage? What is your suggestion in terms of judicious water usage in industries and agriculture?

Agriculture is the largest user of freshwater in India- about 89 percent of the total withdrawals leaving little water to meet the growing demands of other sectors like two percent of Industries and nine percent for domestic and ecology. In case of Industries, the water intensive industries which are worst affected by water shortage are Food & Beverages, Textile and Paper & Paper Products.

India has water use efficiency of 1.9$/m³ which is 0.3$/m³ for agriculture and 29.3$/$m³ for industries. In other words the water use efficiency in India is just 38 percent in contrasts to other developed countries having irrigation water use efficiency of about 50 percent to 60 percent.

This calls for the measures to increase water use efficiencies in all the sector of country. Agriculture sector should go for Micro-irrigation, use of waste water and other water saving techniques like agro climatic cropping and crop diversification, whereas industries should look into the possibilities of Zero water discharge and recycle and reuse of the waste water in the industry itself. Apart from this, Industries can undertake the following:

- Taking up water audits regularly for industries efforts for water harvesting, recharge, and treatment.
- To adopt the best practices in industrial production with water saving techniques as prevalent globally.
- To promote new innovative technologies of water saving and management like rainwater harvesting, watershed management, desalination, water auditing and accounting across water intensive sectors through projects, workshops, conferences and training programmes.
- Ensuring the water allocation pertaining to industrial sector in the reservoirs and waste water

According to a recent report of NITI Aayog, the requirement of water would increase manifold by 2030. How should we, (all stakeholders, including Government, industry and citizens) prepare for the situation within this decade?

Due to increasing population in the country, per capita annual availability of water which
was 1,816 cubic meter in 2001, got reduced to 1,544 cubic meter in 2011 which will reduce to 1,140 cubic meter in the year 2050. Any situation of availability of water less than 1,000 cubic meter per capita is considered by international agencies as scarcity conditions.

By 2030, the country’s water demand is projected to be twice the available supply, implying severe water scarcity for hundreds of millions of people and about six percent loss in the country’s GDP. In this case, every stakeholder has to work up to prepare for this situation. Some of the interventions for industries are explained above and other interventions which can be taken up are:

- Recycle and reuse of waste water- In our country which is generating 140 BCM of waste water annually, we need to augment water availability and encourage the use of waste water by creating more capacity to treat waste water.
- Improvement in Water use efficiency.
- Desalination of Sea water in sustainable manner.
- Minimise distribution loss by establishing leak proof, efficient water distribution network/mechanism.
- Promote water metering to reduce wastage.
- Create awareness for optimum usage. E.g. reduce operating pressure, using six litres toilet cistern flush with suction technology, dual pipe system.
- Use of new scientific techniques such as remote sensing, sensor technology, hydraulic/hydrologic modelling, Artificial Intelligence etc.
- Efficient and transparent water governance.

**What are the methods of groundwater recharging or rainwater recharging?**

All the water conservation methods somehow result in groundwater recharging. Particularly construction, desilting and restoration of lakes, ponds, tanks and farm ponds can help in doing the groundwater recharge. Rooftop rainwater harvesting and using the same water for groundwater recharge can also create lot of impact.

**What are some of the schemes and policies being drafted by NITI Aayog to ensure better water management in every level and by every stakeholder?**

The management of water being the major issue in the country, we have initiated a yearly exercise and prepared Composite Water Management Index which is to instill the spirit of competitive and cooperative federalism among the states. This is perhaps first of its kind exercise in the world in which we have collected data on 28 key indicators for water across the states of the country and ranked them according to their efforts in water management.

Along with this we have also launched a Compendium of Best Practices in Water Sector so that states can learn about the prevailing best practices and adopt them according to their topography.

In order to accelerate the pace of Micro irrigation development in the country, NITI Aayog has assisted in the development of Hybrid Annuity model with Public-Private-Partnership (PPP) to provide water to every field. It has been circulated to all states for replication and adoption as per the local needs.

NITI Aayog has also developed an action plan to revitalise the rivers in India. The Action Plan envisages the methodologies of Revitalisation of Rivers in India, various measures to be taken, convergence of various on-going schemes under the various central Ministries.

We have also prepared a strategy paper on the flood management in India which includes the recommendations for better management in India. NITI Aayog is also in process of framing the strategy for flood management for next three years in India.

Along with this we are also working for cleaning of river Yamuna and we are in process of framing an integrated hybrid annuity model for solid and liquid waste management in India.

**Along with water scarcity, water pollution is another major challenge. What is your advice to curb the same?**

Water pollution is a serious problem in India as almost 70 percent of its surface water resources and a growing number of groundwater aquifers are contaminated with biological, organic, inorganic and toxic pollutants. As per the recent assessment by the Central Pollution Control Board of
India (CPCB, 2018), there are 351 polluted river stretches in the country (up from 302 in 2015) with 45 of them critically polluted.

The estimated polluted riverine length in India is 12,363 km, about five times the length of the Ganga main stem. Estimates show that out of all the freshwater that is withdrawn, only 44 percent is actually consumed and remaining 56 percent with highly deteriorated quality is released to the environment as urban waste water, industrial effluents and agricultural drainage.

More than 38,000 million liters of urban wastewater goes into major rivers, water bodies and even percolates into the underground every day. Over and above there are massive industrial effluents and the raw sewage from rural areas, and polluted waters from agricultural fields and livestock rearing, which is generally much larger as compared to domestic and industrial effluents - no estimates are available for these sources of pollution.

Rapid urbanisation, industrialisation, and intensification of agriculture through higher use of inorganic fertilizers and pesticides and with only limited infrastructure and capacity for water treatment (presently only 37 percent of total wastewater is treated) will further increase the degradation of the resource. The conditions shall become extremely challenging if adequate measures are not put in place as per the existing global standards and the polluting outputs from agriculture are reused and recycled through a circular agricultural economy. The biochemical oxygen demand (BOD) which should be around 5 ppm is nowadays 10 ppm or more in certain stretches of rivers and thus, marking the water in these stretches below the bathing standards.

We need to be seriously concerned and the sewage which is directly flowing into the rivers should be avoided. We have to increase the number of sewage treatment plants and have to work on the integrated solid and liquid waste management in the country.

There are many industrial units which are directly discharging the industrial wastes into the drains which are joining the river system. All the industries should be asked to implement Zero Discharge policies and if not they should be fined appropriately. India is land where rivers are worshipped and addressed as mother. Therefore, there is high need of maintaining the purity according to these standards.

What is your message for the readers of eGov magazine?

Water management is not only the responsibility of central or state governments. This responsibility trickles down to every individual of the country. Behaviour of an individual makes a lot of difference. If I am washing my clothes then the same wastewater should be used somewhere in the washroom, while brushing teeth, taps should not be kept open. Similarly, we should make sure that not even a single drop of water should be wasted. While using the washroom, we should make use of the two-flush system and sensitise others towards its usage. As in coming future, water availability is going to be our biggest concern. We should try to conserve each and every drop of water fall on the earth. The rainwater harvesting should be introduced as the compulsory norm in new constructions tank, pond like small water body should be constructed in each and every garden, every corner of the city and wherever it is possible.
Need for effective Water Management in India Amidst COVID Outbreak

Water is a precious resource, and India is a country where ineffective management of water has made the country water-stressed. Adding on to the issue, the coronavirus pandemic has worsened the situation as people living in areas of limited or no availability of water feel the pinch amidst a nationwide lockdown, writes Avinash Mishra, Advisor, NITI Aayog.
EFFECTIVE WATER MANAGEMENT: A NEED

Today, the global village is struggling with a fatal pandemic affecting over four lakh people in about 160 countries across the globe. Undoubtedly, the spread of coronavirus is dangerous as the death toll is continuously rising, but one should also remember that the world has struggled recently with a number of disasters including bushfires of Australia, the heatwaves of India, typhoons in Japan and floods in China, which also took a heavy toll on lives and caused a huge economic loss. With the changing climate, natural disasters have become more frequent and intense and, therefore, the world needs to be prepared to face this change.

WATER: IN INDIAN SCENARIO

Water is a resource which is vital for the existence and sustenance of mankind. Still, for millions of people water is a cause of constant worry, with limited access or no availability of water. In relevance to such rising disasters and pandemics, the availability of water resources and its management becomes more important and urgent. In India, the rapid population growth and the rate of economic activity have already stressed the water resources. Presently, we are facing twin problems of supplementing the supply of water during the crises and preparing the country for any such outbreaks in the future. For any of this kind of assessment, we need to understand where we stand right now. About 81 percent of the rural households in India do not have individual piped water supply and about a billion people are living with water scarcity at least for one part of the year. The dependency of our nation on the groundwater is exceedingly high and this can be further grasped by the fact that 85 percent of rural India’s drinking water supply is derived from groundwater sources. Along with this, poor water infrastructure adds to the challenge of supplying quality water to households as around 35-40 percent of water gets lost in public supply each day through pipe leaks and bursts.

The capacity to manage waste which is very necessary to control any kind of pandemic is also abysmally poor. India generates approximately 61,948 MLD of sewage against the treatment capacity of 23,277 million litres daily (MLD) which is 37 percent of the wastewater generated only. Moreover, the installed sewage treatment plants either do not run at maximum capacity or do not comply with standards prescribed. Therefore, there is an urgent need that our water management and sewage system infrastructure be strengthened to make them disaster and pandemic proof.

With the launch of ‘Jal Jeevan Mission’ and ‘Swachh Bharat Abhiyan’, India has taken a few steps for creating an infrastructure of piped water supply including strengthening of solid and liquid waste management systems. However, there are countries which have invested in water management and created a robust infrastructure to deal with such unforeseen events. Some insights from such countries can help the country to learn and practice corrective measures while building a nation more disaster and pandemic ready.

EFFECTIVE WATER MANAGEMENT: LESSONS FROM ABROAD

India, as a country, has a large water resource base including surface water bodies and groundwater resources. To ensure the sustainability of water resources while augmenting the sources of water supply and managing the demand for water is the need of the hour.

SINGAPORE’S STUNNING WATER CONSERVATION SYSTEM: A LIGHTHOUSE

WATER: IN INDIAN SCENARIO

Water is a resource which is vital for the existence and sustenance of mankind. Still, for millions of people water is a cause of constant worry, with limited access or no availability of water. In relevance to such rising disasters and pandemics, the availability of water resources and its management becomes more important and urgent. In India, the rapid population growth and the rate of economic activity have already stressed

T

EFFECTIVE WATER MANAGEMENT: A NEED

Today, the global village is struggling with a fatal pandemic affecting over four lakh people in about 160 countries across the globe. Undoubtedly, the spread of coronavirus is dangerous as the death toll is continuously rising, but one should also remember that the world has struggled recently with a number of disasters including bushfires of Australia, the heatwaves of India, typhoons in Japan and floods in China, which also took a heavy toll on lives and caused a huge economic loss. With the changing climate, natural disasters have become more frequent and intense and, therefore, the world needs to be prepared to face this change.

WATER: IN INDIAN SCENARIO

Water is a resource which is vital for the existence and sustenance of mankind. Still, for millions of people water is a cause of constant worry, with limited access or no availability of water. In relevance to such rising disasters and pandemics, the availability of water resources and its management becomes more important and urgent. In India, the rapid population growth and the rate of economic activity have already stressed

T

EFFECTIVE WATER MANAGEMENT: A NEED

Today, the global village is struggling with a fatal pandemic affecting over four lakh people in about 160 countries across the globe. Undoubtedly, the spread of coronavirus is dangerous as the death toll is continuously rising, but one should also remember that the world has struggled recently with a number of disasters including bushfires of Australia, the heatwaves of India, typhoons in Japan and floods in China, which also took a heavy toll on lives and caused a huge economic loss. With the changing climate, natural disasters have become more frequent and intense and, therefore, the world needs to be prepared to face this change.

WATER: IN INDIAN SCENARIO

Water is a resource which is vital for the existence and sustenance of mankind. Still, for millions of people water is a cause of constant worry, with limited access or no availability of water. In relevance to such rising disasters and pandemics, the availability of water resources and its management becomes more important and urgent. In India, the rapid population growth and the rate of economic activity have already stressed

T

EFFECTIVE WATER MANAGEMENT: A NEED

Today, the global village is struggling with a fatal pandemic affecting over four lakh people in about 160 countries across the globe. Undoubtedly, the spread of coronavirus is dangerous as the death toll is continuously rising, but one should also remember that the world has struggled recently with a number of disasters including bushfires of Australia, the heatwaves of India, typhoons in Japan and floods in China, which also took a heavy toll on lives and caused a huge economic loss. With the changing climate, natural disasters have become more frequent and intense and, therefore, the world needs to be prepared to face this change.

WATER: IN INDIAN SCENARIO

Water is a resource which is vital for the existence and sustenance of mankind. Still, for millions of people water is a cause of constant worry, with limited access or no availability of water. In relevance to such rising disasters and pandemics, the availability of water resources and its management becomes more important and urgent. In India, the rapid population growth and the rate of economic activity have already stressed

T

EFFECTIVE WATER MANAGEMENT: A NEED

Today, the global village is struggling with a fatal pandemic affecting over four lakh people in about 160 countries across the globe. Undoubtedly, the spread of coronavirus is dangerous as the death toll is continuously rising, but one should also remember that the world has struggled recently with a number of disasters including bushfires of Australia, the heatwaves of India, typhoons in Japan and floods in China, which also took a heavy toll on lives and caused a huge economic loss. With the changing climate, natural disasters have become more frequent and intense and, therefore, the world needs to be prepared to face this change.

WATER: IN INDIAN SCENARIO

Water is a resource which is vital for the existence and sustenance of mankind. Still, for millions of people water is a cause of constant worry, with limited access or no availability of water. In relevance to such rising disasters and pandemics, the availability of water resources and its management becomes more important and urgent. In India, the rapid population growth and the rate of economic activity have already stressed
Singapore’s diversified sources of water commonly known as ‘Four National Taps’ is an ideal practice for India, collecting every drop of water in the local catchment, importing water from a neighbouring country, reclaiming and reusing wastewater and desalinating seawater.

**KOREA’S COLOSSAL WATER MANAGEMENT: AN EXEMPLARY APPROACH**

Furthermore, the gradual transformation of the water sector in the Republic of Korea is another scintillating and remarkable learning which can be implemented in the country. Korea with only 18 per cent piped water connections in 1972 managed to provide 24x7 piped water supply to all households today with complete wastewater treatment, establishing purification centres and 24x7 real-time monitoring of water from the source to faucets through Seoul Water-Now System. Not to mention but the Republic of Korea was one such country which contained the spread of coronavirus in its early stages. There is no proven link to the fact that the robust water management system can have an impact on the spread of the pandemic. However, the need to wash hands frequently during a pandemic relies on robust infrastructure with uninterrupted water availability and the routine of sanitation and hygiene.

**BRILLIANCE OF BRITISH IN WATER METERING: A LESSON**

As a long term measure to make the country water secure, we have to create a balance between water supply and demand by curbing extra demand and supplementing supply. Water Metering can act as a tool to curtail the wastage of water. We can learn from the UK which is a world leader in water metering technology that enhances the way their residents can adjust their water usage using online databases. These smart meters give citizens an inside look at how their water is being used and how much water is utilised. This allows households to understand where their water consumption is used the most and alerts them if there are any substantial increases which could signal a leak or other problem. The UK also provides incentives for homeowners to install water-saving technologies and smart water appliances to promote overall water conservation and efficiency in uses.

**THE WAY FORWARD**

The water distribution losses are important, yet underestimated when counted as a threat in a water-scarce country. Indian utilities face huge distribution losses on account of leakages, unauthorised connections; billing and collection inefficiencies. Reducing non-revenue water (NRW) losses have considerable benefits from efficient management of water resources to revenue-generating water utilities. The city of Al Ain in the Emirates of Abu Dhabi (United Arab Emirates) has managed to reduce its NRW levels from as high as 45 percent to 10 percent within one year with the help of technological interventions including real-time hydraulic modelling, automated water balance calculations, installation of flow and pressure monitoring instruments and noise loggers for automatic leakage detection. One may argue that these technological interventions are time ahead for Indian utilities but the successful cases of Hubli-Dharwad Municipal Corporation in Karnataka and Jamshedpur Utilities and Services Company (JUSCO) in Jamshedpur has proved that Indian utilities can also deploy certain technical measures to reduce distribution losses from 50 percent to seven percent and 36 percent to 10 percent respectively. Moreover, hand-holding services have been available from the International authorities like International Water Association which has identified four basic leakage management activities which can be undertaken by water utilities to reduce distribution losses, namely – pressure management; active leakage control; speed and quality of repairs and pipe asset management; maintenance and renewal.

Apart from this, we have to amplify our capacity to treat and reuse the wastewater. There is a need to bring focus on the treatment of pharmaceutical residues in wastewater treatment and strengthen the monitoring of wastewater from medical facilities in an effort to address the spread of the deadly coronavirus. It is important that such water is disposed of in drains connected to a sewer or a septic system in soakaway pits only.

Besides this, in order to avoid any eventual environmental accident or a secondary disaster, we have to monitor the state of the environment closely and make a timely assessment of any potential impact. This kind of pandemic has challenged the existing system of water supply and management in our country but again it has also given us the reality check and time to think about the changes which we need in our policies, infrastructures and overall framework.
The Indian subcontinent has recently faced one of the major water crises and the situation has not been improved much. In 2019, a quarter of the country was drought-hit and almost 50 percent was struggling with drought-like conditions. As per Composite Water Management Index, a report released by NITI Aayog in 2018, major Indian metropolises like Delhi, Chennai, Hyderabad, Bengaluru are heading towards “zero-day” in terms of groundwater levels. To know in-depth about the gravity of the situation Nisha Samant from Elets News Network (ENN) interviewed Dr B. R. K. Pillai, Commissioner, (Command Area Development and Water Management), Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti, Government of India.
Water scarcity has been a major challenge for both the urban as well as rural population. What are some of the pertinent factors associated with the issue which everyone must know about?

First of all I do not agree with the perception that India is suffering from water scarcity. India is facing water stress, not scarcity. There is a need for us to understand the issue more clearly. Water scarcity gives an impression that the total water availability has declined and today we have less water being made available by the nature, which is insufficient to meet our needs. But, this notion is not supported by statistical facts. Every year India gets enough water by way of precipitation – estimated to be around 4000 billion cubic meters (BCM) against present requirement of about 700 to 800 BCM – and there are no facts which indicate that this situation has altered or likely to alter in the near future. On the other hand, water stress can be encountered in a situation where even with sufficient quantum of naturally available water people are unable to use it as reliable resources – optimally and sustainably – to meet their annual water demands. And so is the case with present India, which is water-stressed and not water scarce.

As per you, there is no water scarcity but water stress. Can you elaborate on it?

Water scarcity would be an act of God, but water stress is mostly manmade. The water stress that we are facing is because of the increasing population and also because of our inability to develop and manage water resources for raising supplies at the same pace at which population driven demands are growing. The major challenge thus relates with our capacity to develop and manage water resources in a manner that brings balance between demands and supplies. This balance can be brought about by decreasing demands or by increasing supplies or by seeking both interventions. Of course, the balancing of demand and supply is needed at the micro level – i.e. in different geographical location and at different points of time – which is not easy because of the acute spatial and temporal variation in India’s rainfall pattern.

For better understanding, we need to closely look at India’s present as well as emerging demand and supply trend. We will realize that the continuously deteriorating condition is not merely a case of persistently increasing demand with nearly stagnated supplies, but a much more complicated case of increasing demand with simultaneously declining supplies. India’s growing population is bringing immense pressure on limited land resources impacting both surface and ground water sources. Large scale encroachment of lakes, ponds and other water bodies has dented the surface-water supply capacity of sizable numbers of small population clusters. Large scale deforestations along with other alterations in the catchment characteristics have brought significant changes in the hydrological regimes of both small and large rivers. Diminishing water bodies together with wide-spread impact of other human actions – such as loss of vegetation, paving of ground surfaces, leveling of ground slopes, infringing of flood plains, construction of multiple basement structures, etc – have also dented the ground-water supply capacity of the entire nation.

The problem of water stress that we face today is essentially because of the stated omissions and commissions of past as well as of present times. It would be meaningless to link this problem with the notion of natural scarcity because then we will be accepting the present condition as fait accompli. Countries like Israel and Singapore face much harsher condition than any part of our country in terms of total water availability or even per-capita water availability. But these nations, and also several other nations, have overcome such problems through better management of their limited water and land resources.

What can be efficient water management mechanisms that need to be followed for overcoming present day challenges, and at what levels?

In terms of the broad water-resource management context, I think there are two types of challenges. The first challenge is about managing the deficit, i.e. dealing with a condition where water demand is much more than the supply. Second one is the challenge of surplus management, where supply is
in far excess of our capacity to handle it. These twin challenges – which in extreme cases are referred as droughts and floods – have space and time linkages, and hence their solutions are to be strived at micro levels. But we mostly tend to assimilate the issue at the macro level – of a State or the Nation – and often draw erroneous conclusions. At macro level we may even find that total demand is matching the total supply, but at micro levels the story would be entirely different. Also, the challenge of surplus management is in no way of lesser concern in terms of social, economic or environmental consequences. In fact, under the emerging scenarios of climate change, possibly the issues of flood may acquire very serious proportions in near future. However generally the challenge of deficit management seems to draw more attention, hence we will talk more about it.

The deficit management can be handled in two viable ways, one is known as supply-side management and the other is demand-side management. For ease of understanding, let us take the simple case of a village that faces issues of deficit management. We can find a solution by either decreasing the total irrigation demand of the village – say by switching over to less water intensive crops – or by somehow increasing its irrigation supplies. Prima facie the demand-side solution, in comparison with supply-side solution, could be easily implemented at lower and simpler levels. The total water demand of village can be reduced by interventions that are exclusively from within the village, and even isolated efforts of individual farmers will have cumulative effect in improving the total village demand. In comparison, the supply-side solutions may not be that simple. The village that has exhausted its own supply potential will have to seek enhancement of its share from external sources. This, even by discounting high costs entailed in additional infrastructure, may not be easy under the prevailing heightened conditions of regional and sectoral completions for water. Of course improvement in the supply potential of existing village sources – involving better operation and maintenance of irrigation tanks, canals, groundwater harvesting structures, etc – can also be sought, but it will have varied impacts depending upon the quality of community participation. Any isolated effort for increasing individual supplies – say by way of deepening of bore well or excess drawl from canal – will only lead to an adverse impact on cumulative supply of the village.

The stated example points out that demand-side solution can be effectively implemented at smaller or even individual levels. Thus every individual farmer who has switched to micro irrigation practices – be it drip or sprinkler – is contributing for improving the overall rural water demand. Same is the case with urban water demand as even small savings in individual household demands will significantly improve the municipal demand. On the other hand, even minor improvements in supply management – involving tanks, check-dams, water courses, groundwater harvesting, groundwater budgeting etc – will require community participation at the level of water user associations or gram panchayats. Obviously management of large supply-side projects will require synergy of efforts at a much higher level, involving the State or even multiple States.

The deficit management can be handled in two viable ways, one is known as supply-side management and the other is demand-side management. For ease of understanding, let us take the simple case of a village that faces issues of deficit management. We can find a solution by either decreasing the total irrigation demand of the village – say by switching over to less water intensive crops – or by somehow increasing its irrigation supplies. Prima facie the demand-side solution, in comparison with supply-side solution, could be easily implemented at lower and simpler levels. The total water demand of village can be reduced by interventions that are exclusively from within the village, and even isolated efforts of individual farmers will have cumulative effect in improving the total village demand. In comparison, the supply-side solutions may not be that simple. The village that has exhausted its own supply potential will have to seek enhancement of its share from external sources. This, even by discounting high costs entailed in additional infrastructure, may not be easy under the prevailing heightened conditions of regional and sectoral completions for water. Of course improvement in the supply potential of existing village sources – involving better operation and maintenance of irrigation tanks, canals, groundwater harvesting structures, etc – can also be sought, but it will have varied impacts depending upon the quality of community participation. Any isolated effort for increasing individual supplies – say by way of deepening of bore well or excess drawl from canal – will only lead to an adverse impact on cumulative supply of the village.

The deficit management can be handled in two viable ways, one is known as supply-side management and the other is demand-side management. For ease of understanding, let us take the simple case of a village that faces issues of deficit management. We can find a solution by either decreasing the total irrigation demand of the village – say by switching over to less water intensive crops – or by somehow increasing its irrigation supplies. Prima facie the demand-side solution, in comparison with supply-side solution, could be easily implemented at lower and simpler levels. The total water demand of village can be reduced by interventions that are exclusively from within the village, and even isolated efforts of individual farmers will have cumulative effect in improving the total village demand. In comparison, the supply-side solutions may not be that simple. The village that has exhausted its own supply potential will have to seek enhancement of its share from external sources. This, even by discounting high costs entailed in additional infrastructure, may not be easy under the prevailing heightened conditions of regional and sectoral completions for water. Of course improvement in the supply potential of existing village sources – involving better operation and maintenance of irrigation tanks, canals, groundwater harvesting structures, etc – can also be sought, but it will have varied impacts depending upon the quality of community participation. Any isolated effort for increasing individual supplies – say by way of deepening of bore well or excess drawl from canal – will only lead to an adverse impact on cumulative supply of the village.

The deficit management can be handled in two viable ways, one is known as supply-side management and the other is demand-side management. For ease of understanding, let us take the simple case of a village that faces issues of deficit management. We can find a solution by either decreasing the total irrigation demand of the village – say by switching over to less water intensive crops – or by somehow increasing its irrigation supplies. Prima facie the demand-side solution, in comparison with supply-side solution, could be easily implemented at lower and simpler levels. The total water demand of village can be reduced by interventions that are exclusively from within the village, and even isolated efforts of individual farmers will have cumulative effect in improving the total village demand. In comparison, the supply-side solutions may not be that simple. The village that has exhausted its own supply potential will have to seek enhancement of its share from external sources. This, even by discounting high costs entailed in additional infrastructure, may not be easy under the prevailing heightened conditions of regional and sectoral completions for water. Of course improvement in the supply potential of existing village sources – involving better operation and maintenance of irrigation tanks, canals, groundwater harvesting structures, etc – can also be sought, but it will have varied impacts depending upon the quality of community participation. Any isolated effort for increasing individual supplies – say by way of deepening of bore well or excess drawl from canal – will only lead to an adverse impact on cumulative supply of the village.

The deficit management can be handled in two viable ways, one is known as supply-side management and the other is demand-side management. For ease of understanding, let us take the simple case of a village that faces issues of deficit management. We can find a solution by either decreasing the total irrigation demand of the village – say by switching over to less water intensive crops – or by somehow increasing its irrigation supplies. Prima facie the demand-side solution, in comparison with supply-side solution, could be easily implemented at lower and simpler levels. The total water demand of village can be reduced by interventions that are exclusively from within the village, and even isolated efforts of individual farmers will have cumulative effect in improving the total village demand. In comparison, the supply-side solutions may not be that simple. The village that has exhausted its own supply potential will have to seek enhancement of its share from external sources. This, even by discounting high costs entailed in additional infrastructure, may not be easy under the prevailing heightened conditions of regional and sectoral completions for water. Of course improvement in the supply potential of existing village sources – involving better operation and maintenance of irrigation tanks, canals, groundwater harvesting structures, etc – can also be sought, but it will have varied impacts depending upon the quality of community participation. Any isolated effort for increasing individual supplies – say by way of deepening of bore well or excess drawl from canal – will only lead to an adverse impact on cumulative supply of the village.

The deficit management can be handled in two viable ways, one is known as supply-side management and the other is demand-side management. For ease of understanding, let us take the simple case of a village that faces issues of deficit management. We can find a solution by either decreasing the total irrigation demand of the village – say by switching over to less water intensive crops – or by somehow increasing its irrigation supplies. Prima facie the demand-side solution, in comparison with supply-side solution, could be easily implemented at lower and simpler levels. The total water demand of village can be reduced by interventions that are exclusively from within the village, and even isolated efforts of individual farmers will have cumulative effect in improving the total village demand. In comparison, the supply-side solutions may not be that simple. The village that has exhausted its own supply potential will have to seek enhancement of its share from external sources. This, even by discounting high costs entailed in additional infrastructure, may not be easy under the prevailing heightened conditions of regional and sectoral completions for water. Of course improvement in the supply potential of existing village sources – involving better operation and maintenance of irrigation tanks, canals, groundwater harvesting structures, etc – can also be sought, but it will have varied impacts depending upon the quality of community participation. Any isolated effort for increasing individual supplies – say by way of deepening of bore well or excess drawl from canal – will only lead to an adverse impact on cumulative supply of the village.

The deficit management can be handled in two viable ways, one is known as supply-side management and the other is demand-side management. For ease of understanding, let us take the simple case of a village that faces issues of deficit management. We can find a solution by either decreasing the total irrigation demand of the village – say by switching over to less water intensive crops – or by somehow increasing its irrigation supplies. Prima facie the demand-side solution, in comparison with supply-side solution, could be easily implemented at lower and simpler levels. The total water demand of village can be reduced by interventions that are exclusively from within the village, and even isolated efforts of individual farmers will have cumulative effect in improving the total village demand. In comparison, the supply-side solutions may not be that simple. The village that has exhausted its own supply potential will have to seek enhancement of its share from external sources. This, even by discounting high costs entailed in additional infrastructure, may not be easy under the prevailing heightened conditions of regional and sectoral completions for water. Of course improvement in the supply potential of existing village sources – involving better operation and maintenance of irrigation tanks, canals, groundwater harvesting structures, etc – can also be sought, but it will have varied impacts depending upon the quality of community participation. Any isolated effort for increasing individual supplies – say by way of deepening of bore well or excess drawl from canal – will only lead to an adverse impact on cumulative supply of the village.

The deficit management can be handled in two viable ways, one is known as supply-side management and the other is demand-side management. For ease of understanding, let us take the simple case of a village that faces issues of deficit management. We can find a solution by either decreasing the total irrigation demand of the village – say by switching over to less water intensive crops – or by somehow increasing its irrigation supplies. Prima facie the demand-side solution, in comparison with supply-side solution, could be easily implemented at lower and simpler levels. The total water demand of village can be reduced by interventions that are exclusively from within the village, and even isolated efforts of individual farmers will have cumulative effect in improving the total village demand. In comparison, the supply-side solutions may not be that simple. The village that has exhausted its own supply potential will have to seek enhancement of its share from external sources. This, even by discounting high costs entailed in additional infrastructure, may not be easy under the prevailing heightened conditions of regional and sectoral completions for water. Of course improvement in the supply potential of existing village sources – involving better operation and maintenance of irrigation tanks, canals, groundwater harvesting structures, etc – can also be sought, but it will have varied impacts depending upon the quality of community participation. Any isolated effort for increasing individual supplies – say by way of deepening of bore well or excess drawl from canal – will only lead to an adverse impact on cumulative supply of the village.
construction, and operations of interstate river valley projects – requiring cooperation of multiple State Governments, or the direct intervention of an empowered Central Government.

The investments in the water resources sector have been declining over the past many years. Do you agree that days of large river valley projects are over?

As I just said, we may still be required to develop more numbers of large river valley projects after exhausting full potential of demand-side improvement and small-scale supply projects. So it would be wrong to say that days of large river valley projects are over. In fact there is an utmost urgency for completing many of the long-pending projects where huge amount of money stands invested. Moreover, the river valley projects that are in operation may yet need substantial investment for completing command area development works, repair and maintenance of age-old dams and canals, modernization of canals with lining or replacement with pipelines, restoration of reservoir capacities that are lost because of siltation and creation of extra capacities wherever permissible. And, also recall what I said about possible compounding of flood issues with the emerging climate-change effects.

Some more new dam-reservoirs, as part of viable river interlinking projects, will have to be developed in near future for managing not only the water-deficits encountered during droughts, but also surplus-water in times of floods. I would also like to say that time has come for us to move beyond ‘large-dam versus small-dam’ debate. These options can no longer be seen as polar opposites, as each one of them would be needed to overcome India’s present and the unfolding water crisis.

The water resource is a multi-disciplinary subject matter. How well are we able to handle this in India? What will be your suggestions for further improvement?

Water resource management is a complex multi-disciplinary subject. Most of us often view it from the technical – i.e. water engineering – perspective. Qualitative engineering is an essential requirement, but not the sufficient condition for effective management of water resources. For achieving an effective and sustainable outcome, water resource management also needs to be integrated with economic, social, and environmental perspectives. Another mistake is in treating water in compartments of sources – e.g. surface water and groundwater – without appreciating the fact that same rain water appears as surface or ground water and moves from one source to another many a times as part of river-basin hydrology. Similarly we mishandle water in compartments of uses without appreciating possibilities of its multiple uses – e.g. domestic waste water can be used for industrial purposes, or industrial waste water can be used for irrigation purposes etc. Last, but not the least serious omission, is about our failure to develop and manage ‘water resources’ and ‘land resources’ in an integrated manner with river basins or sub-basins forming the planning unit. These omissions are amply complex and not easy for me to explain in a short time. Yet I am pointing out these so as to underline the fact that present water crisis calls for holistic handling of India’s water resources, which will require specialized knowledge, in-depth understanding of issues, and synergy of mitigation-efforts. Moreover, a course correction can happen only within a proper institutional framework, which will have to be created with matching structural reforms.

What is your most important message for our readers?

I would like to conclude with two important points. Firstly, the management of water essentially pertains to domain of ‘Strategic Management’ needing the country to become proactive rather than being reactive to every fresh crisis. In reactive mode we overcome one crisis, but also often end-up laying seeds of many new crises. With a proactive strategy, the planners and policy makers of the State and Central Governments will foresee the future, and prepare accordingly.

Secondly, the water which is naturally available as annual resource is of stochastic nature. The word ‘stochastic’ (Greek for ‘able to guess’) underlines random variability – something which can be analyzed statistically but not predicted precisely. Hence, besides striving for the creation of a robust water infrastructure, we should also develop capacity for resilience against unavoidable droughts and floods.
Inn

MAY 2020

The Largest Portal on e-Governance in Asia and the Middle East

Connect with us on

egov.elets

eGov Magazine

eGov_elets

eletsvideos

SHUBRATA – A TRAIL BLAZING SANITISATION INITIATIVE FOR SOCIAL TRANSFORMATION

In March 2003 a headline in the Deccan Chronicle newspaper read ‘Loo and Behold!’ in big bold letters. This extraordinary story had documented how lives of lakhs of people had changed forever in Andhra Pradesh’s Nizamabad district—thanks to an initiative by the district administration which undertook the gigantic task of building more than one lakh toilet-cum-baths for the poorest of the poor in the district. In the words of the programme’s architect Asok Kumar G., Shubrata had brought in “a kind of social reversal”. “The poor now have a facility which the better off do not,” he was quoted as saying. Seventeen years later, the Indian Administrative Service officer of the 1991 batch recalls how this unique initiative, which was perhaps the first in the country in terms of scale and reach, proved to be a blessing for the people of Nizamabad.

Started in 2002, many years before the Swachh Bharat Mission and Atal Nirmal Gram Yojana were even conceived, Shubrata as a local initiative to improve quality of life of the poor in the then Andhra Pradesh’s Nizamabad district, is a shining example of what effective leadership with earnest efforts and right intent can achieve. A brainchild of Asok Kumar G. of 1991 batch IAS, who is known for his out-of box thinking, the sanitation drive resulted in construction of over 1.2 lakh pucca toilets in 6 months in 2002! He is currently serving as the Additional Secretary and Mission Director, National Water Mission and Executive Director (Projects), National Mission for Clean Ganga.
“Shubrata was a part of my initiative as the District Collector to improve ‘the quality of life’ of the people in Nizamabad. The quality of life envisaged good health, drinking water, education and entertainment for all.”

According to Asok Kumar G., Shubhrata was conceived and launched on 1st June 2002. By 30th June 2002—in just one month—100,500 Individual Sanitary Latrines (ISLs) were sanctioned; and markings for construction were done on ground. By 31st December 2002, 105,500 latrines sanctioned were completed and were being put to use.

Shubrata—An Innovative Approach to Governance

So, in a country where government schemes often get stuck in the bureaucratic maze how did this dynamic officer managed to get it completed in record time of just six months? “Shubrata was my own potpourri scheme—combining central government’s Total Sanitation Programme (TSP) and state government’s sanitation programme to provide a subsidy of Rs 350 for every Below Poverty Line (BPL) family in the rural areas for construction of Individual Sanitary Latrines (ISLs). I proposed to give 200 kgs of rice from ‘the Food for Work programme’ in addition to cash subsidy on completion of ISL. Under TSP 1,44,444 ISLs were sanctioned to the district,” says the IAS officer.

The beneficiaries were encouraged to take up a “bath-cum-latrine” structure to get twin advantage of having a bathroom and a toilet. This found a positive response from the women who were feeling shy about the invasion of their privacy every day when they were forced to go out in the open for defecating and taking bath. A detailed estimate accommodating these two structures was prepared and pamphlets printed in Telugu and Urdu (local languages) by the Rural Water Supply (RWS) department. The cost of each structure worked out to be about approximately Rs 2,100.

At the village level, the scheme piggybacked on the state government’s Janmabhoomi programme to hold scheduled gram sabhas in all the villages. “Nodal teams formed were asked to identify eligible people Below Poverty Line (BPL) to sanction ISLs and to get the work started. Printed pamphlets giving technical and other details of the scheme were distributed in every gram sabha. Panchayat secretaries (the government officials at the village level) were made responsible for the implementation of the programme,” Asok Kumar G recalls.

This carefully crafted strategy worked out well, as by the time 17th round of Janmabhoomi was over on 10th June 2002, about 49,000 ISLs were sanctioned in the district. By 30th June, 100,500 ISLs were sanctioned and their markings done on ground.

The Strategy to Overcome Challenges

Before embarking on the programme, brain storming sessions were conducted with all those concerned with this program in the Collector’s chamber. A detailed plan of action was prepared working out the resource and technical requirements and identifying various bottlenecks that are likely to come up in executing the programme. Strategies to tackle these were discussed.
Some of the major challenges identified during this process included shortage of rings, pans, etc; inadequate number of masons to take up the works; and exploitation by masons/ring makers/material suppliers due to the spurt in demand. However, according to the IAS officer, “Motivating people to take up the work was the biggest challenge.”

“To motivate people, women were primarily targeted. They were made to feel the necessity of protecting their self-pride (Atma-Gauravam) and privacy. A meeting was called on 8th June 2002 with all the NGOs working with the UNICEF-assisted School Sanitation Programme. NGOs were asked to take up the campaign in the 200 villages where bore, toilets and compound wall were constructed,” Asok Kumar G adds.

Additionally, the ANMs and health supervisors of the Health Department, and Angan Wadi workers were asked to take up the campaign as hygiene and sanitation has a direct bearing on their job. Mandal Resource Persons (MRPs) of the Education Department were also asked to motivate the villagers during their rounds in the villages.

Ensuring Transparency and Accountability
The Shubrata scheme also pioneered a new way of involving general public in government initiatives to ensure transparency. "Nationwide tenders from the manufacturers of cement and toilet-pans were invited. This helped in reducing the rates of ceramics pans from about Rs 250-300 to Rs 120-150 range. The short-listed companies were asked to display the (8) selected models coded A,B,C to H in every MDO office so that villagers could select the pan of their choice. This cafeteria approach was for transparency and to give beneficiaries the chance to make their own choice," says Asok Kumar G.

The selected models of the pans were to be delivered at the site in good condition, so that beneficiaries were not burdened with the cost of transportation and any broken pans while transporting through the kutch, uneven village roads (about 8,000 broken pans were replaced). Cement companies also agreed to reduce the rate of the cement to be used in this project.

Reducing the Cost of Project
One of the biggest bottlenecks of the scheme was the shortage of rings and the paucity of masons to take up construction in such large numbers. To overcome this challenge, MDOs/MROs were asked to identify all the Tapi Mestries (people who can make concrete structures) in the mandal and request them to supply rings in the range of Rs 40-60. To avoid breakages and reduce cost of transportation, masons were encouraged to come to villages itself to cast the rings and cement bricks. The heavy demand for moulds and masons created a healthy competition for their services. Many villages offered them free accommodation and food to come and stay in their villages till completion of the work.

This in-situ casting of rings helped in reducing cost and to sustain the momentum in the villages. In the mandals bordering other districts/states, the people were asked to procure rings and get services of masons from the neighbouring districts/states. People in Bhiknoor, Domakonda procured materials from Medak district, those of Kammarpally/Morthad from Karimnagar district, those from Balkonda/Nandipet from Adilabad district and Bodhan/Madnoor/Jukkal from Maharashtra state.

Monitoring Mechanism
Every alternate day, starting from 3rd June, 2002 teleconference or wireless conference was conducted by the Collector with the Nodal Officers/MROs/MDOs. (Those were the days when cell phones were not available
and internet was a luxury.) In these conferences detailed information as to the number of sanctions given (beneficiaries SC, ST, Others & Total), stages of completion (pit, wall, roof levels, total completion) was collected, analyzed and problems sorted out.

Special meetings with Nodal Officers and MDOs were also held to get regular feedback and to give them technical guidance. From day one, emphasis was placed on proper documentation and record maintenance to ensure transparency. Number coding format was specified and all data computerized from the beginning. A register was opened for opened in each mandal, with pages dedicated to each beneficiary. In it the photos of the beneficiary, weekly progress of work, materials supplied, payments made, remarks of the inspecting officer etc were recorded.

On completion, the photo of the beneficiary, along with the ISL was pasted. The entire data was computerised and a copy mirrored in a central database in the collectorate. Press and NGOs were encouraged to critically monitor and comment on the implementation. Collector would ask feedback from the callers who used to phone-in to the weekly "Dial Your Collector" (DYC) programme held by him every Monday mornings. DYC was an extremely popular innovation started by the Collector in 2001 August to receive grievances and feedback on administration directly from the public on every Monday. This programme was attended by the district level officers of all departments.

**Impact**

Shubrata programme evoked tremendous response from public. The successful completion of the campaign was due to the overwhelming participation of the people. This picked up as a people's movement, with total involvement of leaders of all political parties, elected representatives, caste elders, NGOs, voluntary organisations, press and media and above all, the womens’ self help groups.

The availability of good toilets in BPL houses triggered demand in other sections (non-BPL) of the society. They were also forced to construct toilets in their houses. In some villages, volunteers stood with sticks to deter people from doing open defecation in the fields.

Technical studies conducted by independent agencies during the implementation of the project and after one/two years of the completion of the project showed over 87% utilisation of these toilets and a remarkable reduction of water borne diseases in the district. The participatory drinking water management and the increased usage of toilets had a significant salutary effect in the health profile of the people. On public demand, another 70,000 ISLs were sanctioned which were completed in due course of time.

Assuming a daily output of 1 kilogram of solid waste from an average family of five members a day, due to the over 100,000 ISLs constructed, the environment was saved from pollution of 100 tonnes of human excreta per day!

A team, under the leadership of a Director, Rural Development Department of Government of India, visited the district in 2003 to assess the programme and acknowledged its success. Perhaps this may be the first time such a large number of individual sanitary latrines were built in such a short time anywhere in the world.

As a mark of their appreciation, the loving people of Nizamabad district were magnanimous to rename a historical lake near Nizamabad city as “Asok Sagar” after Asok Kumar G, the man behind this unique initiative.
URBAN SPECTRUM
As the Coronavirus pandemic hits India and the world, many industries and businesses are set to suffer huge losses. The tourism sector is already among the worst-hit sectors, especially because of the lockdowns being implemented in many countries, restricting flights and other modes of transportation.

However, to keep people safe, measures like lockdown are of utmost importance to contain the viral outbreak. The Government is gearing up measures to sustain the travel and tourism industry, write Avinash Mishra, (Advisor) and Sharmistha Sinha from NITI Aayog.
COVID: A HARD-HIT ON TOURISM

TAKEAWAYS FROM MEASURES IMPLEMENTED ABROAD

Globally, countries have rolled out a number of progressive policies and measures to provide assistance and confidence to the Travel and Tourism industry. In Singapore, stimulus plans include - waiving license fees for hotels, travel agents and tour guides, providing salary support through ‘Workforce Singapore’ of up to 70 percent of fixed monthly salaries (capped at $2000 a month per employee), a temporary bridging loan programme for cash flow support, rebates on aircraft landing/parking charges/rental rebates for shops and cargo agents at Changi, and a point-to-point support package for taxis and private hire car drivers. Further, it has created a job support scheme with one-off wage support to help enterprises retain their workers. To further enable cash flow, it enhanced its Enterprise Financing Scheme-SME Working Capital Loan as well as implementing a corporate income tax rebate for Year of Assessment 2020.

RBI has reduced the repo rate, which will reduce the loan interest rates by at least 0.75 percent. The Central Bank has also allowed people to defer payment of interest in cash credit loans for at least three months, and there is no EMI payment for three months on term loans to help the tourism industry. The Government of India has also announced to amend the EPF regulations to include ‘Pandemic’ as the reason to allow the non-refundable advance of 75 percent or three months of wages, whichever is lower, from their accounts.

EFFECT OF COVID ON TRAVEL & TOURISM

The travel and tourism industry supports millions of people for their livelihood but in the wake of COVID-19 pandemic, the industry got shattered and has threatened the survival of the people dependent on it. In India, there are about 53,000 travel agents; one lakh tour operators; 15,000 operators in Adventure Tourism; over 2700 businesses in the MICE (meetings, industries, conferences and exhibitions) sector; 20 lakh road tourist transporters; 53,000 hospitality establishments; and over five lakh restaurants. According to an estimate Travel & Tourism industry and the allied sector supports about five crore Indians. These are spread all across in urban centres or in rural hinterlands where tourism is sometimes the key income generator, a vehicle for social inclusion and engine of development. All the verticals of the value chain in the industry have come to a standstill staring at massive unemployment and bankruptcies/insolvencies. Layoffs have already begun in the country and it has become difficult to sustain especially for those who are self-employed.
The Australian government has also announced packages that include a waiver of fees and charges for tourism businesses; support business investment and providing cash flow assistance to support SMEs which also support Travel & Tourism. AUS$700 million has been allocated to increase the instant asset write off threshold from $30,000 to $150,000 and expand access to include businesses with an aggregated annual turnover of less than $500 million (up from $50 million) until June 30, 2020.

The UK has also set out a package of targeted measures like a 12-month business rates holiday and grant funding for all retail, hospitality and leisure businesses in England. The government also created the Coronavirus Business Interruption Loan Scheme. Hong Kong has created the Anti-Epidemic Fund’s Travel Agents Subsidy Scheme. A scholarship grant has been dedicated for the upskilling and reskilling of temporarily displaced workers in the Philippines. Nearly $40 million (PHP 2 billion) will also be allocated for social protection programmes for workers who work in organizations affected by COVID-19.

**GOVERNMENT GEARING UP TO SUSTAIN TRAVEL & TOURISM**

To help the travel industry in India to tide over the financial difficulties, several measures are being taken by the Government of India. The RBI has reduced the repo rate, which will reduce the loan interest rates by at least 0.75 percent. The central bank has also allowed people to defer payment of interest in cash credit loans for at least three months, and there is no EMI payment for three months on term loans to help the tourism industry. The Government of India has also announced to amend the EPF regulations to include ‘Pandemic’ as the reason to allow the non-refundable advance of 75 percent or three months of wages, whichever is lower, from their accounts.

In India, there are about 53,000 travel agents; one lakh tour operators; 15,000 operators in Adventure Tourism; over 2700 businesses in the MICE (meetings, industries, conferences and exhibitions) sector; 20 lakh road tourist transporters; 53,000 hospitality establishments; and over five lakh restaurants. According to an estimate Travel & Tourism industry and the allied sector supports about five crore Indians.

There may be some possible suggestions that can also be thought of in the future for the tourism sector. A twelve months moratorium on EMIs of principle and interest payments on loans and working capital from Financial Institutions (both banking and non-banking) and enhancing of working capital limit may prevent the tourism businesses from going bankrupt.

To prevent insolvency, contribution support from the government on the EPF, ESIC may be increased for some months to give relief to employers and employees across the travel, tourism, hospitality industry. The travel industry has about 20000 suppliers including the allied industries, most of them are manufacturers covered under the MSME sector. More support is required for the MSME sectors to resume their business and safeguard jobs. Worker protection should be at the core of all policies. A support fund for a few months to support basic salaries with direct transfer to affected tourism employees may be thought-about to support their livelihoods. A mechanism needs to be derived so that the salaries and wages of the employees for next one year can be ensured. As the Government is trying to provide support to the tourism industry, this is a time for collective and coordinated responsibility from government, businesses and all the stakeholders so as to survive today and travel tomorrow.
Coronavirus outbreak has certainly been the cause of hardships for governments worldwide and one of the major challenges the countries are facing. The pandemic has hit hard on to business resulting in a significant slump in the economy. Lockdowns caused due to the COVID outbreak in India has brought development works, private firms, travel & tourism, construction and other businesses at a grinding halt.

On the contrary, this has also given a window to civic bodies to work on structural reforms and enhance their service delivery, especially considering the sudden boost in technology which has posed as an ultimate resort in these hard times. Considering the fact, many civic bodies resume certain development works following the announcement by the Centre including a few relaxations amidst the lockdown. Therefore, it can be inferred that in the past two months the course of action of the civic bodies has seen a drastic change. Highlighting about the functioning of GMDA amidst the lockdown, Moloy Bora, CEO, Guwahati Metropolitan Development Authority (GMDA), Government of Assam interacted with Elets Technomedia in an interview with Nisha Samant, edited by Adarsh Som of Elets Technomedia.
Following the Centre's announcement on relaxations amidst the lockdown, what are the development works resumed in Guwahati?

The GMDA is an essential department, considering the fact, there was no complete shutdown for the authority even during the lockdown. Our engineers have continued to work during that period. However, following the relaxations by the Centre, the works were upscaled. After the relaxations were announced, the important works taken up on the priority basis is the expansion of drinking water project in Guwahati, cleaning of the water bodies to prevent urban floods and to remove garbage & sludge from the water bodies.

Following the loss of jobs due to lockdown, many labourers have reverse migrated to their hometowns. What are the challenges faced by GMDA and what measures are being taken to normalize the situation?

The issue of migrant labourers has been a challenge for the civic bodies across the country. Also, for the migrants, the lockdown has been hard-hitting. Considering GMDA, the complete information on the migrant labourers will be processed after coordinating with the authorities who will be quarantining the migrants as a prevention from the transmission of COVID-19. Following the process, we will contact the contractors who are taking civil works, activities with the list of the workers in an attempt that the workers get employment opportunities in the city.

Do you think lockdown is an opportunity for the authority to bring in infrastructural reforms and strengthen the existing infrastructure in the city?

Infrastructural reforms have already been initiated in GMDA in the form of having an IT-based MIS System for works and projects. However, following the COVID-19 outbreak, we have enhanced monitoring through the IT-based MIS system. Also, cameras will be placed for monitoring purposes, especially for the works on de-silting and cleaning of water bodies so that the activities can be monitored electronically without the engineers going to the site. Moreover, in this manner, we are ensuring that social distancing is being followed.

How has the works for restoration of water bodies bodies affected by the COVID-19 crisis?

The restoration of water bodies, desilting work, cleaning of water bodies, cleaning of drains were some of the works which were carried even during the lockdown phase. Such works are also mandated by the National Green Tribunal (NGT). Such works not only ensures the clean environment for recreation but also it reduces the threat of spreading of disease through water bodies.

How is GMDA working in making Guwahati a more liveable city?

Several agencies like the Guwahati Municipal Corporation (GMC), Public Works Department (PWD), Guwahati Metropolitan Development Authority (GMDA), Water Resources Department, Guwahati Smart City Limited and more are working in coordination with each other to make Guwahati more liveable. The mandate of GMDA is to prepare the Master Plan for the same. The Guwahati Building Construction (Regulation) Bye-laws, 2014 has been suitably amended recently on May 5, 2020, to remove the bottleneck that existed before. The Master Plan amended is in the drafting phase and will be finalized soon. It will bring about newly planned areas to be developed on both sides of the Brahmaputra river flowing through the city.

Do you think that SDGs have been compromised to a certain extent due to the COVID situation? How is GMDA contributing to achieving SDGs in Guwahati?

The Sustainable Development Goals (SDGs) have not been affected due to the COVID-19 situation. On the contrary, because of the pandemic, GMDA is working towards bringing the sustainability in the city which is an important aspect of the SDGs. The collective efforts of the civic bodies are aimed at improving the city infra, services and facilities and are aimed at making the more liveable.
COORDINATION, CONVERGED AND COLLABORATIVE EFFORTS WITH RESPECT TO INFRASTRUCTURE, PLANNING, AND DEPLOYMENT HAVE TO BE AN INTEGRAL PART OF ANY INNOVATION ESPECIALLY GIVEN THE MULTI GOVERNANCE INSTITUTIONAL FRAMEWORKS WITHIN URBAN ECOSYSTEM, SAYS HITESH VAIDYA, DIRECTOR, NATIONAL INSTITUTE OF URBAN AFFAIRS (NIUA), IN CONVERSATION WITH SOUVIK GOSWAMI OF ELETS NEWS NETWORK (ENN).
How NIUA is ensuring promotion of integrated solutions for Urban India?

Cities act as an important lever to the growth of the country. Each city contributes in its own manner towards increasing productivity, fostering innovation and optimising the overall infrastructure investment. NIUA is already providing cutting-edge technical assistance and capacity building support to India’s central, state, and local governments in the creation of an enabling environment in which urban development functionaries are empowered to plan, implement, and manage urban infrastructure projects. NIUA through its unique position as a thought leader on India’s urban agenda is advocating integrated solutions through policy and programme interventions. In addition to formulating effective policy guidelines and frameworks at national, state and city level, NIUA supports governments to expand their capacity in implementation and roll-out. One of the recent priorities has been aligning and orchestrating digitalization efforts of the Ministry of Housing and Urban Affairs with relevant stakeholders.

This multi-pronged approach allows NIUA to sense and prototype various approaches and implement ones demonstrating positive results. The focus is to promote integrated solutions with an ecosystems approach at its centre, which allows multi-governance structures including various stakeholders to contribute towards achieving a common goal.

How does government’s ‘Smart City Mission,’ ‘Swachh Bharat Mission’ help India’s urban transformation?

HITESH VAIDYA
Director, National Institute of Urban Affairs (NIUA)
Both missions are playing a significant role in bringing paradigm shifts in India’s urban development approach and subsequently transformation. Both missions are contributing to the country’s efforts to create clean, sanitized, liveable, economically vibrant and inclusive cities. The programmes and rollout approaches adopted through these missions have been helpful in focusing on issues of urban planning, health, hygiene and integrated technological solutions and bringing them in the forefront of the transformational agenda. The approaches adopted by both missions have shown promise in pushing better performance and, hence, need to be scaled up and strengthened. The missions have also stimulated a tremendous amount of dialogue among diverse stakeholders, which has permeated through local, state and central levels of government, educational institutions, the financial professions, and NGOs to address many key challenges such as preserving natural, built and cultural heritage, renewing focus on improving the open space structures and developing sustainable transportation solutions, making governance citizen friendly and cost-effective and developing public health strategies for making cities safe and healthy. A critical aspect which would have a transformative impact on urban India is to enlighten relevant stakeholders about need for behavioural change in matters which have a social impact.

“What is your opinion on the importance of technology & innovation for complete overhaul of urban spectrum?”

Technology has played an important role in transforming our lives and economies in recent times. With proliferation of data and emergence of novel technologies, the potential for innovation within urban
development is manifold. The quantum leap in innovation and technology field has provided an exciting platform for making rapid strides in providing better quality municipal services to citizens.

Coordinated, converged and collaborative efforts with respect to infrastructure, planning, development and deployment have to be an integral part of any innovation especially given the multiplicity of institutions within India’s urban ecosystem. Good governance is being facilitated much more than other administrative philosophies of the past decades. Innovation and technology has become the ultimate mantra for enabling good governance in its truest sense. As traditional approaches to urban development face limitations, innovative approaches across the urban spectrum would be the differentiating factor to achieve scale and sustainability.

What according to you are the challenges of urbanisation in India and how those can be tackled?

Next 15-20 years presents a tremendous challenge but also opportunity to innovate and leapfrog towards addressing India’s struggle related to adequate and affordable housing, public transportation, water supply, waste and waste-water treatment. India is gearing up to take its rightful place as one of the world’s largest economies and the process of urbanisation in India has great implications on quality of life, public health, economic vitality and on sustainable development.

There cannot be a single approach to address India’s urban challenges. The only way to address India’s urban challenges is to ensure that the underlying governance principles of participation, decentralisation, autonomy, and accountability of representative urban local governments is strongly upheld.

City planning in India is a reactive approach, which leads to limited innovation within severe constraints. Unless there is a systems approach to building urban spaces, Indian cities are bound to struggle in addressing the needs of its citizens. Some of the concerns of today are quality housing, while also tackling urban slums and homelessness; climate change, disaster preparedness among others.

Indian cities face a shortage of skilled professionals with the capacity to address the specific challenges that arise with urbanisation. Therefor there is also the strong need to build urban professionals at local level to build better cities and address the challenges of urban India’s value-chain networks. In the rush for urbanisation, we must include all sections of the populations for our cities to be accessible, inclusive and safe.

What is your vision for NIUA?

Today’s urbanization demands innovation systems that can play an important role to ensure a faster transformative process. This calls for updating and upgrading not just policies and responses but also, the need for institutions of governance to come up with appropriate tools, to handle the demands of the 21st century.

I strongly feel that National Institute of Urban Affairs, a think-tank of the Government of India, on urban issues, should emerge as an aggregator of urban knowledge and cater to the urban eco-system by becoming a one-point stop for all urban needs of the states and cities. NIUA, will support its constituents (centre, state and cities) through: developing standards for urban management; developing evidence- based tools and guidelines; through advocacy and knowledge sharing; positioning India urban story both at national and international level while providing handholding and capacity assistance to state and cities and guiding investments in urban India for priority and emerging areas. We, at the National Institute of Urban Affairs have to adapt to the changing complexity of urban ecosystem and play a pivotal role in transforming urban India.
Local Economic Development of North-East in the context of COVID19

An often-asked question is why the North-East States particularly Assam fails to attract investment while other States like Gujarat, Maharashtra, Karnataka attract big investors from among local industrialists to multinational companies. The established industries of Tea, Oil and Coal are basic legacies of the British Era which are successful business enterprises while at the same time other plantation industries like sugarcane, horticulture, dairy, fishery or manufacturing etc. have not done well in an organized manner on a large scale. The only industry that has come up well is the cement industry to some extent due to the local availability of limestone. Thus, there is a need to have a hard look at the dynamics of the economies of the North East. The prism through which it can be viewed clearly is by understanding the local economic development, writes Moloy Bora, CEO, Guwahati Metropolitan Development Authority.
Local Economic Development study deals with the question of why economic development takes place within a country or within a region and not in others. The structural adjustment policies of the 1980s and 1990s brought about great economic benefits to western and southern Indian states while North-Eastern states remained in isolation from these positive influences, alienating the local inhabitants to be discontent, resulting in unrest for more than three decades.

In the North East, the markets that were expected to come up after the structural adjustment didn’t happen spontaneously, the Centre and the State Government tried to offset lack of eco-development by giving special Government grants for the infrastructure development as well as concessions in the North East Industrial Policy and other such fiscal instruments. The Government grants into the region led to infrastructure being created to some extent which did not synchronize with the economic development required for the region while the economic and fiscal incentives for industrialization was limited to a few firms and groups of people who readily took these concession but did not translate these concession for creating an industrial base as in other parts of India. The Government built industrial states were set up haphazardly without proper logistical and infrastructural support leading to their remaining defunct and not becoming the economic nucleus for the local economic development of the area.

Meantime, globalization after structural readjustment in the last two decades relating to international capital flows, international labour migration and worldwide value change happened rapidly in the West and in countries like China. Nationally, the foreign direct investment which is an important impetus for growth continued in those areas only where the natural flow on these investments was so long concentrated in the metro cities like Delhi, Mumbai, Hyderabad, Bangalore and towards the East it was confined to Kolkata. North East remained outside these investments. The inward investment in the metros increased exponentially because of the favourable investment, climate and these cities of India were linked to other such cities of the world, such as London, Paris, Berlin, New York, Tokyo etc.

This brings the question of the role of decentralization and how effective regional Governments are to attract investments through the route of Department of Economic Affairs of the Government of India. The functions of the Government are of different types: allocation of resources, through infrastructure development; extending delivery services empowering people etc. The government also collects resources through customs notwithstanding the fact that the Government of India has the policy of 10 percent of fund allocation of various ministries. The lack of capacity of the Governments of the North-East to spend allocated fund is also responsible for lesser fund flow leading to lower levels of the Government investment in the region.

The economics base of getting the Government to augment its own resources is also very meagre, due to inherent lower investment and the capacity of the region to generate revenue. It is high time that we look at the informal sector properly and create an effective collective mechanism which is just and equitable. The informal sector in the North-East which is huge must be made to come into the fold of accounting and encouraged and nurtured to grow from strength to strength.

The COVID effect

Now the situation regarding the dynamics of economic development will undergo a sea of change with the global crisis of COVID-19 pandemic. The migrant labours of Assam and the North East who have been working in the metros will be coming back. These migrants who are from the North East are mostly from the service sector, the IT sector and some of them in the construction sector will be an

Nationally, the foreign direct investment which is an important impetus for growth continued in those areas only where the natural flow on these investments was so long concentrated in the metro cities like Delhi, Mumbai, Hyderabad, Bangalore and towards the East it was confined to Kolkata. North East remained outside these investments. The inward investment in the metros increased exponentially because of the favourable investment, climate and these cities of India were linked to other such cities of the world, such as London, Paris, Berlin, New York, Tokyo etc.
opportunity as well as a challenge for local Micro Small and Medium Enterprises (MSMEs) to employ them. They are bringing with them knowledge of exposure to newer technologies for development. The Government in the works department as well as builders, the service sectors (when they open) should take the opportunity for their gainful employment.

As pointed out by our Prime Minister in his speech, there is an urgent requirement of self-sustaining smart cities and cluster of villages. These smart enclaves made by private investors is to be encouraged fully as the government may not have sufficient funds in the short term. The industrial park which was built for clustering an efficient use of resources should be built and whether these industries can be made functional by attracting appropriate investors is to be relooked, and hard decisions taken on their viability or otherwise. The gains from Investor Summit in February 2018 needs to be properly assessed and dialogues started with the industries, few of which are sure to get out of the metros and move to newer safer areas. The Government of India is working towards creating Rs 40,000 crores corpus to provide special guarantee funding to MSMEs which in case of Assam and North East falls under the informal sector. There is also the plan of Rs 1 lakh crore fund for MSMEs for the revival. Mumbai region has already taken steps for receiving this revival package. The Chief Minister, Assam had a discussion with the leading industries and it’s time to take it forward in a uniform fast-paced manner. Dialogue between the government and the MSMEs will have to be broad-based and continuous. The MSMEs should get into a huddle immediately to talk this through.

All said and done, the COVID-19 virus is here to stay. It will cost immensely for humanity in terms of lives and livelihoods as other such pandemics like plague in the middle ages, cholera, kala azar, tuberculosis etc. had done in the past. How we can go ahead despite the new threat of humanity is the future road. The opportunity presenting itself for the North East Region cannot be allowed to go waste both in encouraging MSMEs of the region and getting a share of the direct foreign investments for infrastructure development which is required as the gateway to South East Asia under the Act East Policy. We cannot let the Act East policy be diluted because of the pandemic.
With an objective of skilling the young workforce of Kerala and elevating their skills to global standards for employment in India and abroad, the Government of Kerala has set up Kerala Academy for Skills Excellence (KASE). KASE is also the nodal agency for facilitating and coordinating various skill development initiatives of the state. **TP Ramakrishnan**, Minister for Labour and Skills, Government of Kerala is the man behind the initiative to empower the youth of the State by enabling them to enhance their skills.

**TP RAMAKRISHNAN**
Minister for Labour and Skills, Government of Kerala
The skill programme is governed by an Administrative Framework for Governance
- SSDM is the Skill Secretariat
- World Skill Lyceum, a think tank for the Skill Secretariat

The Administrative Framework for governance consists of two administrative bodies at the government level - State Level Steering Council which is headed by the Chief Minister and High Power Committee which is chaired by the Chief Secretary and convened by Managing Director, KASE.

International Skill Training & Employability Programme (i-STEP)

Considering the peculiar demographic characteristics of Kerala, unique skilling models have been adopted by KASE with industry tie-ups and placement linkages. KASE associates with industrial partners or prospective employers or entrepreneurs through the i-STEP (International Skill Training and Employability Programme), a single-window initiative to associate with the skill development mission of the State. i-STEP is open to any sectors of the industry.

SKILL CONVERGENCE IN KERALA

Different departments have their own skilling programmes, which inadvertently result in duplication. This called for the need for convergence across the departments under a mission at the State Level. Therefore, the KASE would guide, coordinate, monitor and evaluate skilling initiatives and bring all skill development activities of the State under one umbrella. To achieve this, the Government has approved the KASE proposal for a focused, integrated skill continuum with the following features:

- The skill programme is governed by an Administrative Framework for Governance
- SSDM is the Skill Secretariat
- World Skill Lyceum, a think tank for the Skill Secretariat

The Administrative Framework for governance consists of two administrative bodies at the government level - State Level Steering Council which is headed by the Chief Minister and High Power Committee which is chaired by the Chief Secretary and convened by Managing Director, KASE.

International Skill Training & Employability Programme (i-STEP)

Considering the peculiar demographic characteristics of Kerala, unique skilling models have been adopted by KASE with industry tie-ups and placement linkages. KASE associates with industrial partners or prospective employers or entrepreneurs through the i-STEP (International Skill Training and Employability Programme), a single-window initiative to associate with the skill development mission of the State. i-STEP is open to any sectors of the industry.

SKILL CONVERGENCE IN KERALA

Different departments have their own skilling programmes, which inadvertently result in duplication. This called for the need for convergence across the departments under a mission at the State Level. Therefore, the KASE would guide, coordinate, monitor and evaluate skilling initiatives and bring all skill development activities of the State under one umbrella. To achieve this, the Government has approved the KASE proposal for a focused, integrated skill continuum with the following features:

- The skill programme is governed by an Administrative Framework for Governance
- SSDM is the Skill Secretariat
- World Skill Lyceum, a think tank for the Skill Secretariat

The Administrative Framework for governance consists of two administrative bodies at the government level - State Level Steering Council which is headed by the Chief Minister and High Power Committee which is chaired by the Chief Secretary and convened by Managing Director, KASE.

International Skill Training & Employability Programme (i-STEP)

Considering the peculiar demographic characteristics of Kerala, unique skilling models have been adopted by KASE with industry tie-ups and placement linkages. KASE associates with industrial partners or prospective employers or entrepreneurs through the i-STEP (International Skill Training and Employability Programme), a single-window initiative to associate with the skill development mission of the State. i-STEP is open to any sectors of the industry,
where the skill gap is identified by the stakeholders. Projects proposals, with the aim of imparting employability skill and 60 percent assured placements, can be submitted for consideration under the i-STEP initiative. Centres of Excellence (CoE), Accreditation of Skill Training Courses, and Skill Training program are the models under the i-STEP initiative.

KAUSHAL KENDRAS

KASE has set up Kaushal Kendras across Kerala as a rural skill hub focused on rural youth with world-class training facilities. “Kaushal Kendras” are equipped with facilities for providing training in different sectors such as communication skills, digital literacy, quantitative aptitude, analytical skills, soft skills etc. These Kendras will be a one-stop guidance complex with a multitude of career cluster touchpoints. Also, these will be a helping hand for students, job aspirants and unemployed candidates to achieve their specific goals in education, career, and more. Kaushal Kendras will be providing career guidance for the registrants and also provide relevant information about the details of educational loans, career prospects of a particular course, details of institutions for higher education, various competitive examinations, scholarships etc. In addition to this, Kaushal Kendras will act as a platform for improving the communication skills and employability skills of the candidates.

KERALA STATE INSTITUTE OF DESIGN (KSID)

The Kerala State Institute of Design (KSID) was established as a unit of KASE for the purpose of creating a vibrant design community in the State through a synergistic partnership between artisan community, professional designers and the general public. Supported by National Institute of Design (NID) Ahmedabad, the primary objective of KSID is to promote design education and enhance the interplay of technology, management, creativity and design skills among youth, and most importantly to improve the quality of lives, through design applications. KSID is, at present, running three courses:

Postgraduate Diploma in Integrated Lifestyle Product Design - This is a five-semester PG Diploma Programme which involves an understanding of strong design fundamentals including design representation, elements of colour and form, materials and process, applied ergonomics, design process and thinking, socio-cultural influences etc. at various levels through the programme.

Postgraduate Diploma in IT Integrated Communication Design (IICD) - IIICD is the first academic programme started by the school. This PG Programme aims at imparting knowledge and furthering research into the domain of designing interactive

INDIAN INSTITUTE OF INFRASTRUCTURE & CONSTRUCTION

Indian Institute of Infrastructure & Construction (IIIC), at Chavara, Kollam is the Centre of Excellence to train and equip the youth and workforce in the infrastructure and construction sector. The institute is a joint initiative of Kerala Academy of Skills Excellence (KASE), the State Skill Development Mission of Government of Kerala and Uralungal Labour Contract Cooperative Society Ltd (ULCCS Ltd,) the largest cooperative movement in Asia. IIIC targets the larger mission of skill training and thereby personal transformation by imparting training with hands-on experience through state-of-the-art workshops/demo labs and ‘On Job Training’ at worksites through internships.

The goal of this institute is to ensure that all our students are employed in one form or the other and with that in mind; the courses are broadly classified as follows:

- Technician level (8th Standard to Plus two)
- Supervisory level (Plus Two, ITI/Diploma)
- Managerial level (Graduate/ Post Graduate)

The Institute has all the infrastructural facilities meant for a skill-training institute for the overall development of the students. Some of the facilities are; smart classrooms, Wi-Fi enabled campus, hostel facilities, advanced software, well-equipped labs, qualified faculty, industrial experts visit, an internship at live projects, hands-on training and soft skills training etc. The institute has been accredited by National Skill Development Corporation (NSDC) as a Training Centre and as a ToT centre by Construction Skill Development Council of India (CSDCI).

The USP for IIIC is the assurance of placement for students who successfully complete the skill courses. IIIC with the help of joint venture partner ULCCS and in tie-up with major construction companies could offer placement for all the students so far passed out from the Institute. The selection of courses is also carefully done by assessing the Industry requirements by conducting Industry-Academy workshops on a yearly basis. This helps in formulating the right curricula for the courses with a view to enhance the employability of the students in the chosen field. Students are given extensive training for Spoken English and in Soft skills to prepare them for placement interviews and for future career advancements.
SKILL REGISTRY MOBILE APPLICATION

Skill Registry is a mobile application developed to avail the services of a skilled workforce for the daily household and commercial needs directly to the public. Skilled labourers, Service Providers and those who require their services can download the Skill Registry mobile application both for Android and for Apple and can directly take the benefit of the service. Also, registration as customers can be done at - www.keralaskillregistry.com.

The application has been developed by KASE in association with the Industrial Training Department (ITD), Kudumbashree and the Employment Department. The app provides an opportunity for skilled workers to find day to day jobs and makes them capable of finding their daily work by themselves. Skilled workers who are not certified or professionally trained will also be considered on producing a declaration certified by the Panchayat. This also acts as a platform for the customers to find their daily job requirements without any intermediaries.

Furthermore, the app also offers major services in 42 sectors namely - AC, Washing Machine, Refrigerator, Oven, Fan/Iron Box, Computer, Mixer & Grinder Service And Repair, Electrician, Plumber, Carpenter, Painter, Coconut Climber, Day Care-Child Care In-Home, Driver with a vehicle, Driver without a vehicle, 2/3/4 wheeler repair, Agricultural Work, Catering, Civil Draughtsman, Cooking, Gas Stove Repair, Interior Designing, woodcutter, Welder, Truss Work, Tailor, Gardening and Landscaping, Geriatric Care-In Home/ Hospitals, Grass Cutting, Home Cleaning, Housekeeping, House Maid, Laundry & Ironing, Masonry-Small Construction Work/ Renovation/Compost Pit/Ring Work, Mobile Beauty Parlor-Services at Home, Santhwanam-Health Check-Up at Home, and Television Repair and Installation and more.

EMPLOYABILITY CENTRES

Concerted and systematic efforts are required to make the youth employable and to place them in the private sector by making them competent to avail the employment opportunities. With this objective, Government of Kerala through Directorate of Employment and Training and KASE have set up Ten (10) Employability Centres in the districts of Ernakulam, Kannur, Kozhikode, Kollam, Palakkad, Kottayam, Alappuzha, Thrissur, Malappuram and Kasaragod. These Centres are functioning beside the Employment Exchanges in the respective districts. The infrastructure facilities to conduct training and other Human Resource Department (HRD) processes are available within the Employability Centre itself. Government, through KASE, provides the necessary hardware and software for the smooth functioning of the Centres.

CAREER DEVELOPMENT CENTRES

KASE in association with the National Employment Service Department, Government of Kerala, is in the process of setting up the Career Development Centres/Mini Employability Centres (CDC/MEC) across Kerala. The centre will act as a destination where individuals can obtain authentic solutions for all kinds of experiences in media, products and computer design applications.

Postgraduate Diploma in Textile and Apparel Design - The two and a half year Textile and Apparel Design Programme is developed to prepare students for employment in the textile as well as apparel design/fashion industry. The course intends to train young professionals with the relevant technical and design inputs in the areas of surface ornamentations of fabric through various weaving structures and post loom processes like printing and dyeing.
SKILL DEVELOPMENT

career issues faced by them. It will be equipped with the latest technologies and appropriate tools to address the issues of individuals. Moreover, the centre will offer various services like assessment and counselling, well-equipped library with internet facility, various outreach programmes in educational institutions, career lectures/workshops, exposure visits, soft skill training etc. In addition to this, CDCs will constitute various self-help groups. KASE, at present, is running five CDCs

KERALA STATE JOB PORTAL

Department of Labour and Skills, Government of Kerala has launched a unique single-window facility for job seekers and employers to boost employment in the State. The State Job Portal - http://statejobportal.kerala.gov.in/ is envisaged to be a one-stop solution or all-inclusive support system for job search and recruitment. It also offers multiple features that are engaging and interesting for the job seekers and job providers. Students passing out of various government and non-government institutes across the State will get automated access to the Job Portal. Companies who would like to recruit students from colleges or institutes henceforth need not even visit colleges. The State Job Portal provides the end-to-end recruitment solution starting from job posting to final offer letter issuance.

As of yet, the total job seekers registered are 66,979 and complete registered job seekers are 9,057. The total employers registered with the portal are 767 of which complete registered employers are 232. Moreover, the number of partnered institutes registered is 179 and complete registered partnered institutes are 96. The total vacancies posted on the job portal are 7,072. The status of job applications is 11,434 in total and 3,730 interviews have been scheduled, also 37 jobs have been offered, till date. Under the initiative, Job Fairs are also organised to open doors of opportunities in a broader spectrum. As of yet two job fairs have been successfully completed.

PRADHAN MANTRI KAUSHAL VIKAS YOJANA 2.0

KASE is the nodal agency for the implementation of Centrally Sponsored State Managed (CSSM) component of Pradhan Mantri Kaushal Vikas Yojana (PMKVY) 2.0 scheme, by virtue of its designation as the State Skill Development Mission. PMKVY is the flagship outcome-based Skill Training Scheme of the Ministry of Skill Development & Entrepreneurship (MSDE). This Skill Certification Scheme aims to enable and mobilize a large number of Indian youth to take up skill training and become employable and earn their livelihood.

Best PRACTICES

- According to PMKVY Scheme guidelines, the trainers should be ToT (Train the Trainer) certified by respective Sector Skill Councils (SSCs) and this should be ensured by the Training Partner. However, for the early commencement of batches, KASE has approached various Sector Skills Councils and exclusive ToT for trainers within Kerala has been done.
- Also, to ensure NIESBUD certification of Trainers, KASE in association with NIESBUD has conducted exclusive training for the PMKVY Trainers (148 nos) in Kerala.
- KASE in association with National Skills Development Corporation (NSDC) has conducted various handholding sessions to the Training Partners, including the workshop on new skill India portal
- Constituted PMKVY District Level Monitoring Team to carry out monitoring visits (Comprising of the officials of the Industrial Training Department)
- Constituted PMKVY District Level Placement Verification Team to ensure actual placements (Comprising the officials of Employment Department)
WAY FORWARD

As all Training Centres have been set up, their affiliation process is in progress. In addition to the ongoing Short Term Skill Training courses, KASE is in the process of implementing “special project: component of PMKVY in the following sectors.

<table>
<thead>
<tr>
<th>Name of Sector</th>
<th>Training Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic worker</td>
<td>2000</td>
</tr>
<tr>
<td>Rubber</td>
<td>1020</td>
</tr>
<tr>
<td>Apparel</td>
<td>1000</td>
</tr>
<tr>
<td>Green jobs</td>
<td>1000</td>
</tr>
<tr>
<td>Sport</td>
<td>1000</td>
</tr>
<tr>
<td>Special projects</td>
<td>6020</td>
</tr>
</tbody>
</table>

The target beneficiaries shall be fishermen community, widows, persons with disability (pwd) candidates etc.

CHALLENGES

The following are the challenges being faced regarding PMKVY scheme implementation:

TRANSFER OF FUND TO PFMS LINKED BANK ACCOUNT OF SSDM

PMKVY, being a 100 percent centrally sponsored project and the Ministry of Skill Development and Entrepreneurship (MSDE), PFMS (Public Financial Management System) compliance is mandatory. It is facing challenges in getting the funds allocated to the State by the Centre for scheme implementation.

DATA MIGRATION TO NEW SKILL INDIA PORTAL

In between the project cycle, the Ministry has developed a new portal, ‘Skill India Portal’ for the centre affiliation and accreditation. Hence, due to data migration from the old “SMART” portal to new “skill India” portal, all the activities pertaining to Training Centre affiliation experienced a blackout period disabling any actions, for around four months with effect from May 1, 2019. Also, there have been on and off technical issues popping up.

SANKALP

The Government of India has launched a World Bank assisted project - Skills Acquisition and Knowledge Awareness Livelihood Promotion (SANKALP) Programme, under the Ministry of Skill Development and Entrepreneurship (MSDE), to strengthen the institutional mechanisms for skill development and increase access to quality and market-relevant training for youth across the country.

As a part of implementing the SANKALP project, the IIIrd Regional Workshop was held from 13th-15th February 2019 at the Institute of Management in Government (IMG), Thiruvananthapuram with the participation of 45-50 officers from States, MSDE, NSDC and World Bank along with the Senior Officers from the States of Rajasthan, Gujarat, Chandigarh, Daman and Nagaland. In addition to these, the representatives from Wayanad, Idukki and Kasaragod had participated in the Workshop as well.

KASE also constituted seven District Skilling Committees and District Nodal Centers at Wayanad, Palakkad, Alappuzha, Thirissur, Thiruvananthapuram, Ernakulam and Pathanamthitta to facilitate on-ground implementation of various skilling initiatives of the Centre and State Governments for ensuring quality and consistency in the skilling ecosystem under a single umbrella.

As KASE is the official Skill Development Mission and is also the nodal body for convergence of all the skill-based initiatives in the state, the government has taken various initiatives under KASE to fulfil its objective to promote, establish, setup, monitor, govern and regulate institutions and academies for the development of core employability skills, competency standards and for promoting technology that meets the demands of various industries globally.
We would like to subscribe

<table>
<thead>
<tr>
<th>Duration (Year)</th>
<th>Issues</th>
<th>Newstand Price INR</th>
<th>Subscription Price INR</th>
<th>Savings INR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>12</td>
<td>2400</td>
<td>2300</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>24</td>
<td>4800</td>
<td>4300</td>
<td>500</td>
</tr>
<tr>
<td>3</td>
<td>36</td>
<td>7200</td>
<td>6100</td>
<td>1100</td>
</tr>
<tr>
<td>5</td>
<td>60</td>
<td>12000</td>
<td>9500</td>
<td>2500</td>
</tr>
</tbody>
</table>

Please fill this form in CAPITAL LETTERS

First Name .................................................. Last Name ..........................................................

Designation/Profession .............................................................. Organisation ..........................................................

Mailing address ..................................................................................................................................................

City ........................................................................................................... Postal code ..........................................................

State .................................................................................................... Country ..........................................................

Telephone ................................................................................................... Fax ..........................................................

Email ........................................................................................................... Website ..........................................................

I/We would like to subscribe for 1 2 3 5 Years

I am enclosing a cheque/DD No. .......................................................... Drawn on .......................................................... (Specify Bank)

Dated ........................................................................................................... in favour of Elets Technomedia Pvt. Ltd., payable at New Delhi.

For ₹/US $ .......................................................................................................................... only

* Please make cheque/dd in favour of Elets Technomedia Pvt. Ltd. payable at New Delhi
* No charges applicable for ordinary post. Charges will be applicable for speed/registered post or courier

Subscription Terms & Conditions: Payments for mailed subscriptions are only accepted via cheque or demand draft | Cash payments may be made in person

YOU CAN SUBSCRIBE ONLINE  eletsonline.com/subscriptions/

Elets Technomedia (P) Ltd
Stellar IT Park, Office No.: 7A/7B, 5th Floor, Annex Building, C-25, Sector 62, Noida, Uttar Pradesh, India - 201309, India, Ph: +91-120-4812600 | Fax: +91 - 120 - 4812660
Email: subscription@elets.in, Contact Number: +91-88606-35832
The Leading Game Changers In E-Governance Transformation Of India

Experience of more than 20 years in E-Governance

Unique distinction of most number of state-wide projects in India (Diversified, Specialized & Customized)

Unwavering Leadership in E-Municipality (1000+ Municipalities in India)

Delivered 40+ Million Citizen Services last year (10 times growth in 9 years)

Facilitators of Smart City Initiatives (Presence in 27+ Smart Cities in India)

mail us at egovernance@abmindia.com

ABM Knowledgeware Limited:
ABM House: Plot No. 268, Linking Road, Bandra (West), Mumbai - 400 050.
Website: www.abmindia.com | Call +91 22 4290 9700