GS SCORE
An Institute for Civil Services

IAS MAINS 2022

MAINS SAMPOORNA

REVISION NOTES
for
GOOD PRACTICE

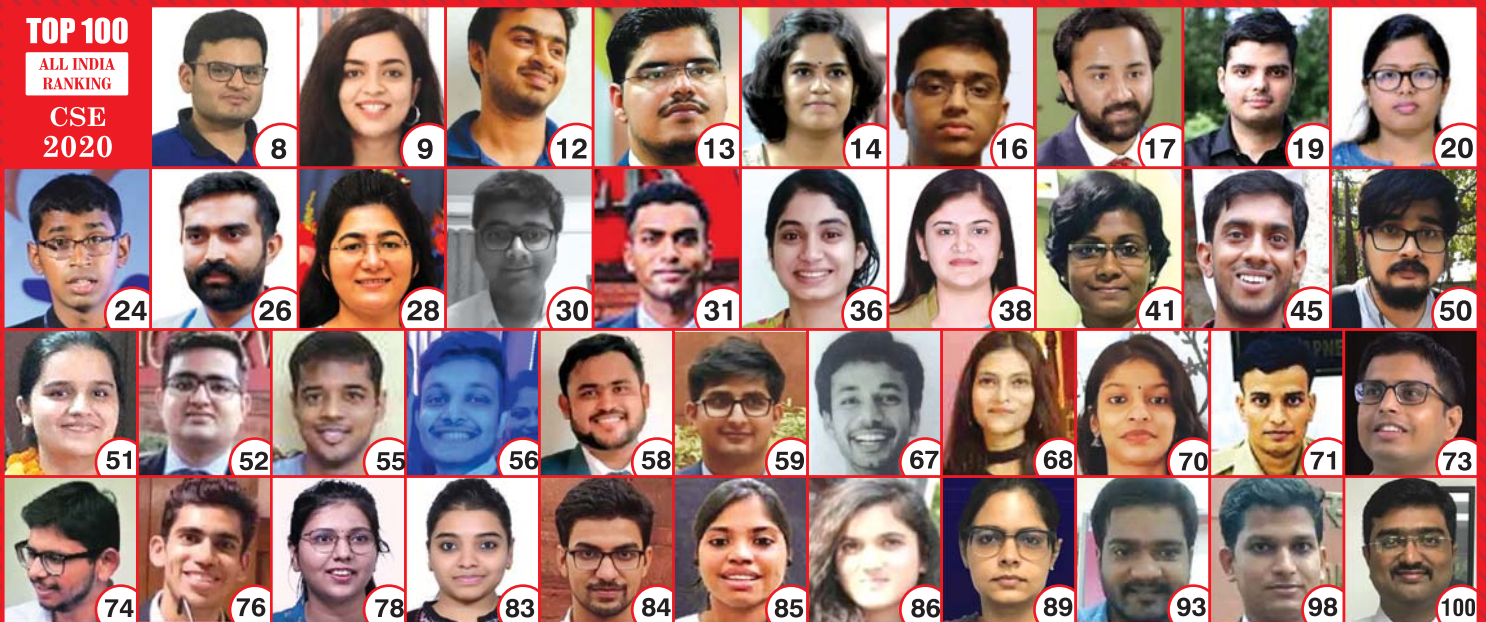## EXAMPLES & CASE STUDIES
for **MAINS**

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CSE RESULTS

TOP 100 ALL INDIA RANKING CSE 2021

02 | 04 | 07 | 12 | 24 | 25 | 29 | 31
32 | 43 | 44 | 45 | 46 | 49 | 52 | 53 | 54 | 55
66 | 67 | 68 | 76 | 80 | 83 | 89 | 92 | 93 | 95

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TOP 100 ALL INDIA RANKING CSE 2020

8 | 9 | 12 | 13 | 14 | 16 | 17 | 19 | 20
24 | 26 | 28 | 30 | 31 | 36 | 38 | 41 | 45 | 50
51 | 52 | 55 | 56 | 58 | 59 | 67 | 68 | 70 | 71 | 73
74 | 76 | 78 | 83 | 84 | 85 | 86 | 89 | 93 | 98 | 100

TOP 100 ALL INDIA RANKING CSE 2019

3 | 6 | 10 | 11 | 16 | 17 | 21 | 22 | 28
30 | 33 | 38 | 39 | 42 | 44 | 46 | 53 | 54 | 59 | 66 | 69
70 | 72 | 77 | 78 | 80 | 82 | 84 | 86 | 87 | 94 | 97 | 98

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HEALTH INITIATIVES

NATIONAL AYUSH MISSION (NAM)

Government of India is implementing **Centrally Sponsored Scheme** of National AYUSH Mission (NAM) through States/UTs for development and promotion of AYUSH system of medicine including Homoeopathy.

About the Scheme

⊙ Aims at providing cost effective AYUSH Services, with a universal access.

⊙ The resource allocation to the States/UTs is proposed on the basis of **population, backwardness and performance of the State/UT.**

⊙ Department of AYUSH would be responsible as the nodal Department

⊙ At the State level, the Mission will be governed and executed by a State AYUSH Society.

⊙ The funding pattern between Centre and State would be 60:40 for all States except for the eight North Eastern states and Uttarakhand, Jammu & Kashmir and Himachal Pradesh) where 90:10 would apply. For all UTs, it would be 100% funded by Centre under NAM.

⊙ It also Support cultivation of medicinal plants by adopting Good Agricultural Practices (GAPs) and setting up of clusters through convergence of cultivation, warehousing, value addition, marketing and development of infrastructure for entrepreneurs.

How the scheme is working so far?

⊙ The Mission is addressing the gaps in health services through supporting the efforts of State/UT Governments for providing AYUSH health services/education in the country, particularly in vulnerable and far-flung areas.

⊙ There is improvement in AYUSH education through a well-equipped enhanced number ofAYUSH Educational institutions.

⊙ It is focusing on reducing communicable/non-communicable diseases through targeted public health programmes using AYUSH systems of Healthcare.

To boost the popularity of traditional medicines provided by Ayush, the minister announced setting up of 100 Ayush dispensaries under NAM in the northeast region.

Short Notes

- **e-charak:** E-charak is a platform of interaction between medicinal plants stakeholders to buy/sell their produce.
- **Bhuvan e-herbs:** It is a geo-tagging software.
- **AYUSH Gram:** It is a concept wherein one village per block will be selected for adoption of method and practice of AYUSH way of life and interventions of health care.
- **AYURGYAN:** It is to support Education, Research & Innovation in AYUSH by providing s academic activities., training, Capacity Building etc.

Components of AYURGYAN

- Capacity Building and Continuing Medical Education (CME) in AYUSH
- Research and Innovation in AYUSH

AYUSHMAN BHARAT PRADHAN MANTRI JAN AROGYA YOJANA (AB PM-JAY)

The National Health Policy 2017 indicated the need to increase public healthcare spending in India due to rising demand for healthcare infrastructure & services and out-of-pocket expenditure. The government health expenditure (GHE) per person per year was estimated at Rs. 1,108 (US$ 14.70), (or Rs. 3 (US$ 0.040) per day), according to the National Health Accounts (NHA) estimates for 2014-15. This contrasts with the out-of-pocket expenditure (OOPE) of Rs. 2,394 (US$ 31.77) for 2014-15, which accounts for 63% of the overall health expenditure. To improve the public's access to health services and meet the rising demand for healthcare infrastructure & services, the government has introduced the **AB-PMJAY.**

About Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY)

- It adopts a continuum of care approach, comprising of two inter-related components:
  - ➤ Creation of 1,50,000 Health and Wellness Centres which will bring health care closer to the homes of the people. These centres will provide Comprehensive Primary Health Care (CPHC), covering both maternal and child health services and non-communicable diseases, including free essential drugs and diagnostic services.
  - ➤ The second component is the Pradhan Mantri Jan Arogya Yojana (PMJAY) which provides health protection cover to poor and vulnerable families for secondary and tertiary care.
- AB-PMJAY provides health assurance of up to Rs.5 Lakh per family per year for secondary and tertiary healthcare hospitalizations.
- The benefits under AB-PMJAY are portable across the country and there is no cap on family size, or age or gender.
- The beneficiary families under Ayushman Bharat – Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) have been identified from the Socio Economic Caste Census (SECC) of 2011 on the basis of select deprivation and occupational criteria across rural and urban areas
- AB-PMJAY is completely funded by the Government and costs are shared between Central and State Governments in the ratio as per the extant directives issued by Ministry of Finance.

How it will be implemented?

- The scheme is implemented across the country through a three-tier model.

➤ National Health Authority, an attached office of the Ministry of Health and Family Welfare with full functional autonomy, is the apex body implementing AB-PMJAY across the country.

➤ For effective implementation of AB-PMJAY at States/UTs level, State Health Agencies (SHAs) have been established.

➤ District Implementation Units (DIUs) have been set up for ensuring on-ground coordination between scheme stakeholders and for smooth implementation.

◉ AB-PMJAY is being implemented in all States and UTs barring West Bengal, NCT of Delhi and Odisha.

How the initiative has worked so far?

◉ The funds allocated for the scheme for the current financial year 2021-22 are Rs. 6400 crore.

◉ The number of eligible beneficiaries under SECC 2011 is 10.74 crore (50 crore people). 33 States/UTs implementing AB-PMJAY have further expanded the coverage of the scheme to include 13.44 crore families (65 crore people).

◉ During the period from 01st March 2020 –19th July 2021, a total of approx. 1.05 crore hospital admissions worth approx. Rs. 11,862 crore have been authorized under AB-PMJAY.\As on 20.07.2021, a total of 16.14 crore Ayushman cards have been issued to the scheme beneficiaries.

◉ As on 20th July 2021, approx. 23,000 hospitals have been empaneled under AB-PMJAY by various State/UT Governments.

Way Forward

As part of sustainable development goals, India is focused on achieving universal health coverage for all citizens. Some more steps needed are:

◉ Free medicines and diagnostics at HWCs.

◉ It should cover most secondary and tertiary procedures under the PM-JAY.

◉ Efforts should be put on increase awareness

◉ Infrastructure should be strengthened

PRADHAN MANTRI MATRU VANDANA YOJANA (PMMVY)

Under-nutrition continues to adversely affect majority of women in India. In India, every third woman is undernourished and every second woman is anemic. An undernourished mother almost inevitably gives birth to a low birth weight baby. Owing to economic and social distress many women continue to work to earn a living for their family right up to the last days of their pregnancy. Furthermore, they resume working soon after childbirth, even though their bodies might not permit it, thus preventing their bodies from fully recovering on one hand, and also impeding their ability to exclusively breastfeed their young infant in the first six months.

Considering these factors Indian government launched Pradhan Mantri Matru Vandana Yojana (PMMVY). It is a Centrally Sponsored Scheme being executed by the Ministry of Women and Child Development.

Objectives of PMMVY

◉ Providing partial compensation for the wage loss in terms of cash incentives.

◉ Improve health seeking behaviour amongst the Pregnant Women and Lactating Mothers (PW&LM).

PMMVY is implemented using the platform of Anganwadi Services scheme of Umbrella ICDS under Ministry of Women and Child Development in respect of States/ UTs implementing scheme through Women and Child Development Department/ Social Welfare Department and through Health system in respect of States/ UTs where scheme is implemented by Health & Family Welfare Department.

Main features of the scheme

- Under PMMVY, a cash incentive of Rs. 5000 is being provided directly in the account of Pregnant Women and Lactating Mothers (PW&LM) for first living child of the family subject to their fulfilling specific conditions relating to maternal and child health.

- The eligible beneficiaries would receive the remaining cash incentives as per approved norms towards maternity benefit under Janani Suraksha Yojana (JSY) after institutional delivery so that on an average, a woman will get Rs. 6000.

- It also provides grants-in-aid to the State Governments/ Union Territory Administrations in a dedicated Escrow account for the purpose of direct benefit transfer to the beneficiaries.

- All PW&LM, excluding those who are in regular employment with the Central Government or the State Governments or PSUs or those who are in receipt of similar benefits under any law for the time being in force.

- A beneficiary is eligible to receive benefits under the scheme only once.

- In case of miscarriage/still birth, the beneficiary would be eligible to claim the remaining instalment(s) in event of any future pregnancy.

- in case of infant mortality, she will not be eligible for claiming benefits under the scheme, if she has already received all the instalments of the maternity benefit under PMMVY earlier.

- Pregnant and Lactating AWWs/ AWHs/ ASHA may also avail the benefits under the PMMVY subject to fulfilment of scheme conditions.

Challenges

- While the estimated eligible population of PW&LM in India was 128.7 lakh (2017-18), the target set by the Government was 51.70 lakh beneficiaries, which is only 40% of the eligible population. This implies an exclusion error of at least 60% since 2017, as the target has remained unchanged over the years.

- The enrollment and disbursements under the scheme have witnessed a downward fall in the last two years, as in the data provided by the Ministry of Women and Child Development (WCD).

- In 2020-21, more than 50% of registered beneficiaries did not receive all three installments and there was a 9% drop in enrollment under the scheme.

- Despite the Government's continued emphasis on maternal and child health, the overall budget for women and child development was reduced by 20% for 2021-22.

- Most women continue to work during and post-pregnancy since they cannot afford to lose wages; additionally, they also spend on out-of-pocket expenses during pregnancy.

Way Forward

- It is imperative to include second live birth under the maternity benefit cover particularly for women in the unorganised sector who are more vulnerable to economic shocks and nutrition loss for all child births.

- A simplification of the process can result in increased registration of beneficiaries.

PRODUCTION LINKED INCENTIVE SCHEMES OF PHARMACEUTICALS

With a view to attain self-reliance and reduce import dependence "Production Linked Incentive Scheme for Pharmaceuticals" was launched to enhance India's manufacturing capabilities by increasing investment and production in the sector and contributing to product diversification to high value goods in the pharmaceutical sector.

About the Scheme

- The scheme will provide financial incentives on the incremental sales (over Base Year) of pharmaceutical goods and in-vitro diagnostic medical devices to selected applicants based on pre-defined selection criteria.

- The incentives will be paid for a maximum period of 6 years for each participant depending upon the threshold investments and sales criteria to be achieved by the applicant.

- The total quantum of the incentive for the scheme is Rs 15,000 crore.

- SIDBI is the Project Management Agency for the Scheme.

- The scheme will be part of the umbrella scheme for the Development of Pharmaceutical Industry.

Significance

- The Scheme will benefit domestic manufacturers, help in creating employment and is expected to contribute to the availability of wider range of affordable medicines for consumers.

- The scheme is expected to promote the production of high value products in the country and increase the value addition in exports.

- It is expected to promote innovation for development of complex and high-tech products including products of emerging therapies and in-vitro Diagnostic Devices as also self-reliance in important drugs.

- It is also expected to improve accessibility and affordability of medical products including orphan drugs to the Indian population.

- The Scheme is also expected to bring in investment of Rs.15,000 crore in the pharmaceutical sector.

PRADHAN MANTRI AYUSHMAN BHARAT HEALTH INFRASTRUCTURE MISSION (PMABHIM)

The present architecture of the public hospitals is not equipped fully to handle the critical requirement of clinical management of affected patients while maintaining essential services during periods of public health challenges posed by pandemics such as the current COVID-19 pandemic. Hence government has launched PM-ABHIM.

PM-ABHIM is the largest pan-India scheme for strengthening healthcare infrastructure across the country which focuses on the primary, secondary and tertiary care services.

Objectives

- To strengthen grass root public health institutions to deliver universal Comprehensive Primary Health Care, including surveillance, active community engagement and improved risk communication, health education and prevention.

- To strengthen public health institutions and public health governance capacities, to meet challenges posed by the current and future pandemics/epidemics with capacities for comprehensive diagnostic and treatment including for critical care services.

- To expand and build an IT enabled disease surveillance system.

- To support research on COVID-19 and other infectious diseases, including biomedical research to generate evidence to inform short-term and medium-term response to COVID-19 like pandemics.

How the scheme is expected to work?

- Critical Care Hospitals will be established in 602 districts with an outlay of Rs 19064.80 Crores which includes Rs 11952.43 crore as Central share and Rs 7112.37 Crore as State Share.

- Under the scheme, there is a provision for setting up of Integrated Public Health Labs (IPHLs) in all 730 districts across the country (upto FY 2025-26).

- Support for 17,788 rural Health and Wellness Centres in 10 High Focus States.
- Establishing 11,024 urban Health and Wellness Centres in all the States.
- 3382 Block Public Health Units in 11 High Focus states. Support for other States/UTs under XV Finance Commission Health Sector Grants and NHM.
- Setting up of Integrated Public Health Labs in all districts.
- Establishing Critical Care Hospital Blocks in all districts with population more than 5 lakhs

NATIONAL ORGAN TRANSPLANT PROGRAMME

The Government of India is implementing National Organ Transplant Programme (NOTP) to promote organ donation and transplantation across all States/Union Territories (UTs) including Karnataka.

Need of the Initiative

The shortage of organs is virtually a universal problem but Asia lags behind much of the rest of the world. India lags far behind other countries even in Asia. There is a wide gap between patients who need transplants and the organs that are available in India. An estimated around 1.8 lakh persons suffer from renal failure every year, however the number of renal transplants done is around 6000 only.

About the Scheme

- National Organ Transplant Programme with a budget of Rs. 149.5 Crore for 12th Five year Plan aims to improve access to the life transforming transplantation for needy citizens of our country by promoting deceased organ donation.
- National Network division of NOTTO (National Organ and Tissue Transplant Organization) would function as apex centre.
- The 'National Organ and Tissue Transplant Organisation (NOTTO)', 'Regional Organ and Tissue Transplant Organizations (ROTTOs)' and 'State Organ and Tissue Transplant Organizations (SOTTOs)' disseminate relevant information about organ donation in the public.

Objectives

- To organize a system of organ and Tissue procurement & distribution for transplantation.
- To promote deceased organ and Tissue donation.
- To train required manpower.
- To protect vulnerable poor from organ trafficking.
- To monitor organ and tissue transplant services and bring about policy and programme corrections/changes whenever needed.

Legal Framework in India

- Transplantation of Human Organs Act (THOA) 1994 was enacted to provide a system of removal, storage and transplantation of human organs for therapeutic purposes and for the prevention of commercial dealings in human organs. Transplantation of Human Organs (Amendment) Act 2011 was enacted.
- Some of the important amendments under the (Amendment) Act 2011 are as under:-
  - Tissues have been included along with the Organs.
  - 'Near relative' definition has been expanded to include grandchildren, grandparents.
  - Tissue Banks shall also be registered.

➤ Provision of Swap Donation included.

➤ Provision of Mandatory 'Transplant Coordinator' in all hospitals registered under the Act

➤ To protect vulnerable and poor there is provision of higher penalties has been made for trading in organs.

➤ National Human Organs and Tissues Removal and Storage Network and National Registry for Transplant are to be established.

Organ Donation

◉ Brain Stem death is recognized as a legal death in India under the Transplantation of Human Organs Act.

◉ After natural cardiac death only a few organs/tissues can be donated (like cornea, bone, skin and blood vessels) whereas after brain stem death almost 37 different organs and tissues can be donated including vital organs such as kidneys, heart, liver and lungs.

How the scheme is working so far?

◉ Under the National Organ Transplant Programme (NOTP) a National Level Tissue Bank (Biomaterial Centre) for storing tissues has been established at National Organ and Tissue Transplant Organisation (NOTTO), New Delhi.

◉ A provision has also been made for providing financial support to the States for setting up of Bio- material centre.

◉ Five Regional Organ and Tissue Transplant Organizations (ROTTOs) at Chandigarh, Mumbai, Chennai, Kolkata and Guwahati have been set up.

◉ Funds have also been released to the States of Bihar and Maharashtra for establishment of Bio-material Centre under NOTP.

◉ Under this programme, an apex level National Organ and Tissue Transplant Organisation (NOTTO) at New Delhi and Five Regional Organ and Tissue Transplant Organizations (ROTTOs) and fourteen SOTTOs have been established so far.

◉ Further, Regional Bio-material centre has been established at ROTTO, Tamil Nadu and funds have been released to the State of Bihar and Maharashtra for purpose.

◉ A number of activities, for generating awareness and for imparting training to all those associated with transplant activities including doctors and transplant coordinators, such as celebration of Indian Organ Donation Day every year, seminars, workshops, debates, sports events, walkathons, participation in marathons, nukkadNatak, etc. are organized at different places in the country.

e-SANJEEVANI

◉ An indigenous telemedicine technology developed by the Centre for Development of Advanced Computing (C-DAC) in Mohali, rolled out in November 2019.

Need of the initiative

◉ Presence of healthcare divide between rural and urban area

◉ Shortage of doctors and specialists

◉ Lack of access of medical services to the marginal population and the inaccessible territories,

◉ Unexpected health emergencies such as the Covid-19 pandemic reduce the mobility

Implementation Status

◉ Completed 1.2 crores (120 lakh) consultations

◉ States have shown willingness to join the initiative. Andhra Pradesh was the first state to roll out eSanjeevaniAB-HWC services.

◉ Andhra Pradesh, Karnataka, Tamil Nadu, Uttar Pradesh have become the leading states in terms of implementation

Benefits

◉ Plugging the health divide that exists between urban and rural India.

◉ Cost-effective service, making the Indian healthcare service more inclusive.

◉ Addressing the shortage of doctors and specialists at the ground level

◉ It provides consultation related to primary, secondary, and tertiary level healthcare services.

◉ Will help in reducing the healthcare burden on the common man's pocket

◉ Will help in creating a healthy Demographic Dividend

◉ Will enhance the general health awareness among the population and would reduce health ignorance.

Limitations

◉ Inaccessibility to Digital services such as Internet services and access to services such as Smartphones and tablets.

◉ Lack of Awareness among the general public about the e-Sanjeevni initiative.

◉ Functional Literacy of effectual use of the online platform.

Way Forward

◉ Multi-Lingual support should be ensured to provide wider acceptance.

◉ A Multidisiplinary approach can be adopted by linking the intitative with other schemes. For example, Linking PM Jan Aushadhi Kendra to ensure availability & delivery of medicine to vulnerable groups like expectant mothers, the elderly, and the disabled.

◉ Data analytics tools and Artificial Intelligence under the 4th generation Industrial revolution can be used to handle large data for effective healthcare management and further improvement.

e-HOSPITAL

◉ e-Hospital is an open source health information management system (HMIS) designed to deploy in cloud infrastructure to manage multiple hospitals seamlessly. It is hosted at NIC's National Cloud MeghRaj, built on a decentralized multi-instance architecture

Need of the initiative

◉ As, Indian Medical Healthcare is burdened with a high patient number, low Doctor/patient ratio, Infrastructure and managerial capacity of hospitals, lack of access to medical facilities, high cost of medical services, easy access of healthcare sector, availability of information, transparency of services, mobility issues for patients, elderly and disabled, etc. The e – Hospital provides a unique platform to tackle the above-listed problems through a single service application.

How do the e-Hospital works?

◉ It works through an Online Registration System (ORS) that provide a framework to link various hospitals across the country for Aadhaar based online registration and appointment system

- This is a one-stop solution that helps in connecting patients, hospitals, and doctors on a single digital platform.

- It makes the registration process easy, time-saving, and creates organization in medical service.

- The Billing module handles all types of billing workflows.

- The Clinic module allows the clinicians and doctors to record the clinical data of the patients like visits, examination, diagnosis, history, treatment, prescriptions, etc.

- The availability of blood groups in blood banks can also be assessed with the help of the e-Hospital application.

What is the success status of e-Hospitals?

- More than 640 **Hospitals have been enrolled under the initiative with around** 175,000 Daily Average Patients Visits and 450,000 Daily Average Transactions the e-Hospital service is has been made mandatory for registration. People choose to make online registration over the in-person appointment which was a difficult condition.

Limitations

- Inaccessibility of services such as Internet services and access to services such as Smartphones and tablets

- Lack of Awareness among the general public about the initiative.

- Functional Literacy of effectual use of the online platform.

- Issues with the security of personal information shared with the hospitals and laboratories.

Way Forward

- Multi-Lingual support should be ensured to provide wider acceptance.

- A more robust digital security system should be developed.

- The doctor/patient ratio should be increased to enhance the efficiency of service.

HEALTH MANAGEMENT INFORMATION SYSTEM (HMIS)

Health Management Information System (HMIS) is a Government to Government (G2G) web-based Monitoring Information System that has been put in place by Ministry of Health & Family Welfare (MoHFW), Government of India. HMIS is a web-based Monitoring Information System of Ministry of Health & Family Welfare to monitor the National Health Mission and other National Health Programme and provide key inputs for policy formulation and appropriate programme interventions. HMIS is specially designed to assist health departments, at all levels, in managing and planning of health programmes.

Significance

- Before development of HMIS, Ministry was having only paper based health system performance data provided by States. These reports were compiled on annual basis. HMIS has brought in a radical change by providing monthly web-based dynamic data to the Ministry and States.

- This has not only reduced the time lag but also provided an effective tool for monitoring the system on monthly basis. Over a period of time, HMIS data is being widely utilized by National and State Governments for monitoring of facilities, policy planning and decision making.

AYUSHMAN BHARAT DIGITAL MISSION (ABDM)

Every time patients were referred from one hospital to another, they had to carry files of their health documents, reports, earlier prescriptions, etc. Health care service information was not available earlier and patients had to travel to different cities to avail themselves of the medical facilities.

Ayushman Bharat Digital Mission will connect the digital health solutions of hospitals across the country with each other.

What makes the ABDM a 'citizen-centric' mission?

⦿ It is a National Digital Health Eco-system that supports Universal Health Coverage in an efficient, accessible, inclusive, affordable, timely, and safe manner, through the provision of a wide range of data, information, and infrastructure services, duly leveraging open, interoperable, standards-based digital systems, and ensuring the security, confidentiality, and privacy of health-related personal information.

⦿ The Digital Ecosystem will enable a host of other facilities like Digital Consultation, Consent of patients in letting medical practitioners access their records, etc. With the implementation of this scheme, old medical records cannot get lost as every record will be stored digitally.

⦿ Under this, every citizen will get a digital health ID and their health record will be digitally protected.

⦿ National Health Authority (NHA) has been entrusted with the role of designing strategy, building technological infrastructure, and implementation of Ayushman Bharat Digital Mission.

How the ABDM will be a breakthrough in the Healthcare sector?

⦿ Patients will be able to securely store and access their medical records and share them with health care providers to ensure appropriate treatment and follow-up.

⦿ ABDM will provide choices to individuals to access both public and private health services ensure transparency in the pricing of services and accountability for the health services being rendered.

⦿ Similarly, health care professionals across disciplines will have better access to patients' medical histories. The integrated ecosystem will also enable a better continuum of care.

⦿ ABDM will help digitize the claims process and enable faster reimbursement.

⦿ At the same time, policymakers and program managers will have better access to data. Better quality of macro and micro-level data will enable advanced analytics, usage of health-biomarkers, and better preventive healthcare.

⦿ It will also enable geography and demography-based monitoring and appropriate decision-making to inform the design and strengthen the implementation of health programs and policies.

Successful status of ABDM

The Ayushman Bharat Digital Mission was piloted successfully for one year in the six Union Territories: Andaman & Nicobar Islands, Chandigarh, Dadra & Nagar Haveli, and Daman & Diu, Ladakh, Lakshadweep, and Puducherry.

What needs to be done more?

⦿ A robust digital security system should be developed as a wide range of data and information related to the confidentiality and privacy of health-related personal information.

> ### Indian Public Health Standards
>
> ⦿ Indian Public Health Standards are a set of standards envisaged to improve the quality of health care delivery in the country under the National Rural Health Mission.
>
> ⦿ They have been used as the reference point for public health care infrastructure planning and up-gradation in the States and UTs.

How will compliance to these standards be ensured?

- Monitoring and evaluation would be both internal as well as external.
- Training of medical as well as para medical staff.
- Charter of Patients 'Rights would be' prominently displayed in all these centres.
- Rogi Kalyan Sarnitis would be formed to improve accountability.
- The District Health Mission would monitor the progress for maintenance of standards at facility level.

These IPHS guidelines will act as the main driver for continuous improvement in quality and serve as the bench mark for assessing the functional status of health facilities.

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JUDICIARY

GRAM NYAYALAYA

India's judicial system is characterized by systemic problems, including corruption, delays, pendency, increasing costs, limited legal aid, and a lack of appropriately trained lawyers and judges. To overcome these problems, the Law Ministry had set up Gram Nyayalays in 2009

Gram Nyayalayas are mobile village courts in India established for speedy and easy access to the justice system in the rural areas of India. They are aimed at providing inexpensive justice to people in rural areas at their doorsteps.

Salient Features

◉ Gram Nyayalayas shall establish **for every Panchayat at the intermediate level** or a group of contiguous Panchayats at an intermediate level.

◉ The Nyayadhikari shall periodically visit villages and may hear the parties and dispose of the cases at the place other than its headquarters.

◉ The Gram Nyayalaya shall not be bound by the rules of evidence provided in the Indian Evidence Act, 1872 but shall be **guided by the principles of natural justice** subject to any rule made by the High Court.

◉ A Gram Nyayalaya have **jurisdiction over an area specified by a notification by the State Government in consultation with the respective High Court**.

Head of the Gram Nyayalayas

◉ The Nyayadhikar is who will preside over these Gram Nyayalayas are strictly judicial officers and will be drawing the same salary, deriving the same powers as First Class Magistrates working under High Courts.

◉ He shall be appointed by the State Government in consultation with the High Court.

Jurisdiction

◉ The Gram Nyayalaya shall be a mobile court and shall exercise the powers of both Criminal and Civil Courts.

◉ The Gram Nyayalaya shall try criminal cases, civil suits, claims or disputes which are specified in the First Schedule and the Second Schedule to the Act.

◉ The Central as well as the State Governments have been given power to amend the First Schedule and the Second Schedule of the Act, as per their respective legislative competence.

◉ The Gram Nyayalaya shall try to settle the disputes as far as possible by bringing about conciliation between the parties and for this purpose; it shall make use of the conciliators to be appointed for this purpose.

Appeal

◉ Appeal in criminal cases shall lie to the Court of Session, which shall be heard and disposed of within a period of six months from the date of filing of such appeal.

◉ Appeal in civil cases shall lie to the District Court, which shall be heard and disposed of within a period of six months from the date of filing of the appeal.

◉ A person accused of an offence may file an application for plea bargaining.

Notified Gram Nyayalaya

◉ 476 Gram Nyayalayas have been notified in 15 states. Maximum number of Gram Nyayalayas have been notified in Uttar Pradesh followed by Madhya Pradesh and Telangana.

◉ Total 257 Gram Nyayalayas are operational in 15 states. Maximum number of Gram Nyayalayas are operational in Madhya Pradesh followed by Rajashtan and Uttar Pradesh.

Major Challenges

◉ The major reason behind the non-enforcement includes financial constraints, reluctance of lawyers, police officials and other State functionaries to invoke jurisdiction of Gram Nyayalayas, lukewarm response of the Bar, non-availability of notaries and stamp vendors etc. are some of the issues indicated by the States which are coming in the way of operationalisation of the Gram Nyayalayas.

◉ Majority of States have now set up regular courts at Taluk level, thus reducing the demand for Gram Nyayalayas.

◉ In the absence of a separate cadre of Gram Nyayadhikari, the Gram Nyayalayas are presided over by First Class Judicial Magistrates or Civil Judges (grade I or grade II) or in a few cases Chief Judicial Magistrates who are already over burdened with their regular judicial work.

Way Forward

◉ **Training of Gram Nyayadhikari** apart from the legal and procedural requirements of Gram Nyayalayas, training may also include the local language of the communit

◉ **Infrastructure and Security:** Separate building for the functioning of the Gram Nyayalaya as well as for the accommodation of the Gram Nyayadhikaris and other staff need to be constructed.

◉ **Creation of awareness among various stakeholders:** Suitable steps may be taken for creating awareness among various stakeholders including the revenue and police officers.

◉ **Establishment of permanent Gram Nyayalayas:** Gram Nyayalayas may be established in every Panchayats at intermediate level or group of contiguous Panchayats at intermediate level depending upon the number of disputes which normally arise from that area. While determining the location of the Gram Nyayalayas the location of courts having parallel jurisdiction may also be considered.

FAST TRACK COURTS (FTCS)

Fast track courts (FTCs) recommended by the Eleventh Finance Commission in 2000 aims to substantially bring down, if not eliminate, pendency in the district and subordinate courts over the next five years.

About Fast Track Courts (FTCs)

◉ Fast Track Courts (FTCs) are set up by the State Governments in consultation with the concerned High Courts.

◉ Setting up of subordinate courts including Fast Track Courts (FTCs) and its functioning comes within the domain of the State Governments in consultation with the respective High Courts.

> **Fast Track Special Courts (FTSCs)**
>
> ◉ Disturbing incidents of rape and gang rape of minor girls below the age of twelve years and women below the age of sixteen years have shaken the conscience of the entire nation. The occurrence of such incidents and prolonged trials of convicts necessitated creating dedicated court machinery which could expedite trial and provide immediate relief to the victims.
>
> ◉ To bring more stringent provisions and expeditious trial and disposal of such cases, the Central Government has already enacted "The Criminal Law (Amendment) Act, 2018". This led to the setting up of the FTSCs.
>
> • The Department of Justice is responsible for overlooking the setting up of FTSCs.

Challenges

- There is a huge variation in the kinds of cases handled by these courts across States, with certain States primarily allocating rape and sexual offence cases to them and other States allocating various other matters.

- Most FTCs were not set up with different infrastructure or facilities, but were often housed in an existing court. Moreover, several States appoint FTCs special judges from the current pool of judges. This substantially increases the workload of the remaining judges.

- Several FTCs lacked technological resources to conduct audio and video recordings of the victims and many of them did not have regular staff.

- Setting up of FTCs was not based on actual problems of pendency, but was often in response to specific incidents such as securities scams, rape cases and sexual harassment of children.

- In India, tribunals are managed by different ministries, and fast-track courts and special courts are administered under different judicial bodies, with little coordination or uniformity among them.

- There are delays in getting reports from the understaffed forensic science laboratories, judges make frivolous adjournments and inadequate staff adversely affects the efficiency of the fast track courts.

Way Forward

◉ States will need to identify systemic issues and address the concerns for timely disposal of cases

◉ Equal attention must be paid to both the metropolitan and far-flung non-metropolitan areas.

◉ In United Kingdom and Canada, one agency is responsible for the administration of various judicial bodies, including tribunals. This ensures that different judicial authorities can be monitored centrally.

NATIONAL LEGAL SERVICES AUTHORITY (NALSA)

In 1987, the Legal Services Authorities Act was enacted by the Parliament to establish a nationwide uniform network for providing free and competent legal services to the weaker sections of the society.

The principal objective of NALSA is:

◉ to provide free and competent legal services to the weaker sections of the society

◉ to ensure that opportunities for securing justice are not denied to any citizen by reason of economic or other disabilities

◉ to organize Lok Adalats for amicable settlement of disputes

What are Legal Services?

- Legal Services includes providing Free Legal Aid to those weaker sections of the society whofall within the purview of Section 12 of the Legal Services Authority Act, 1987.

- It also entails creating legal awareness by spreading legal literacy through legal awareness camps, print media, digital media and organizing Lok Adalats for the amicable settlement of disputes which are either pending or which are yet to be filed, by way of compromise.

- Legal services also encompasses facilitating the beneficiaries to get their entitlements under various government schemes, policies and legislations.

- NALSA also undertakes necessary steps by way of social action litigation with regards to any matter of special concern to the weaker sections of the society.

Significance

- It helps to legally empower the marginalized and excluded groups of the society by providing effective legal representation, legal literacy, and awareness and bridging the gap between the legally available benefits and the entitled beneficiaries.

- It also helps in strengthening the system of Lok Adalats and other Alternate Dispute Resolution mechanisms to provide for informal, quick, inexpensive, and effective resolution of disputes and minimize a load of adjudication on the overburdened judiciary.

Way Forward

- It is imperative that per capita spending along with the budget allocated to NALSA be increased. Additionally, provision could be made for companies to spend their corporate social responsibility (CSR) funds for legal aid and towards increasing the compensation for panel lawyers to enhance the quality of service.

- Lawyers, legislators, and the judiciary must recognize their roles in upholding the vision of Article 39A. As part of their professional responsibilities, both experienced counsel and newcomers to the bar must volunteer to represent the poor. The legislature and judiciary must collectively require every advocate to take on a minimum number of pro bono cases during their tenure, and create a strict framework to incentivise them, including giving weightage to legal aid experience in the appointment of senior advocates/judges.

- We must increase the involvement of law schools in the justice delivery process. Since its inception in the 1970s, legal aid has yet to be fully incorporated into India's clinical legal education. According to the United Nations Development Programme (UNDP), legal aid centres in law schools play a critical role in increasing legal literacy among the masses and providing related assistance.

NATIONAL JUDICIAL DATA GRID (NJDG)

- National Judicial Data Grid (NJDG) portal is a national repository of data relating to cases pending and disposed of in all district and taluka courts of the country. The portal has been developed around the concept of elastic search technology enabling efficient case management and monitoring of cases leading to effective disposal of cases.

- NJDG will work as a monitoring tool to identify, manage & reduce pendency of cases.

- The NJDG will cover all categories of cases, including those relating to the juvenile justice system.

- It also helps to provide timely inputs for making policy decisions to reduce delay and arrears in the system, facilitate better monitoring of court performance and systemic bottlenecks, and, thus, facilitate better resource management.

- NJDG has specifically helped India improve its ranking in the World Bank's Ease of Doing Business Report.

- National Judicial Data Grid (NJDG) statistics are a valuable resource "to monitor the pendency and disposal of cases".

> ## E-court Integrated Mission Mode Project
>
> The E-Courts Project was conceptualised on the basis of "National Policy and Action Plan for Implementation of Information and Communication Technology (ICT) in the Indian Judiciary – 2005" submitted by e-Committee of the Supreme Court of India (set up in 2004).
>
> ## Main objectives of the e-Court Project
>
> ◉ To provide efficient & time-bound citizen centric service delivery.
>
> ◉ To develop, install & implement decision support systems in courts.
>
> ◉ To automate the processes to provide transparency of Information access to its stakeholders.
>
> ◉ To enhance judicial productivity both qualitatively & quantitatively, to make the justice delivery system affordable, accessible, cost effective & transparent.

How it had worked in the past

◉ National Judicial Data Grid (NJDG) for District & Subordinate Courts, created as an online platform under the Project, provides information relating to judicial proceedings/decisions of computerized district and subordinate courts of the country.

◉ All stakeholders including Judicial Officers can access information relating to judicial proceedings/decisions of computerized District & Subordinate Courts and High Courts on the National Judicial Data Grid (NJDG).

◉ It also provides case status information in respect of over 13.13 crore pending and disposed cases and more than 11.46 crore orders / judgments pertaining to these computerized court.

Challenges

◉ The available data lacks in several aspects, which may make the recent Supreme Court directions difficult to achieve. This is not a new issue, and the Law Commission of India has also faced challenges while depending on judicial data to calculate the caseload across various courts.

◉ In particular, the problems in the data arise due to three reasons: Inconsistencies in what is reported, missing data and restricted access.

◉ As an example, the NJDG records only 24 case types. This is the form in which the final data is presented to judges, litigants and researchers. However, district courts often record up to 100 case types. This means that data has to be retrofitted into the 24 types, which leads to inconsistencies. This is exacerbated by the fact that courts often don't tag cases under the law in which they are filed.

Way Forward

◉ The errors and lack of standardization can be reduced by designing interfaces such that most details are automated rather than being typed by individual operators.

◉ A one-size-fits-all solution may not work for all courts. Instead, courts should be given instructions on a common reporting vocabulary and how these connect to the parameters which are to be reported.

◉ There should be a balance between space for local requirements and comparison across courts. This should be supported by bulk and open access to the data, which is regularly audited both by manual auditors as well as automatic processes.

◉ A functioning data system would allow the Supreme Court to better monitor the pendency and disposal of cases as well as suggest any improvements in the judicial system.

NATIONAL MISSION FOR JUSTICE DELIVERY AND LEGAL REFORMS

National Mission for Justice Delivery and Legal Reforms focuses on the improvement of the administration of justice and justice delivery and legal reforms in the entire country and to address the diverse needs of all sections of stakeholders.

The National Mission would help in implementing the two major goals of:

⦿ increasing access by reducing delays and arrears in the system and enhancing accountability at all levels through structural changes and

⦿ setting performance standards and facilitating enhancement of capacities for achieving such performance standards.

A mission mode approach is proposed to improve the infrastructure of subordinate courts under National Mission.

How it had worked so far:

⦿ The Mission has been pursuing a coordinated approach for phased liquidation of arrears and pendency in judicial administration, which, inter-alie, involves better infrastructure for courts including computerization, increase in strength of subordinate judiciary, policy and legislative measures in the areas prone to excessive litigation, re-engineering of court procedure for quick disposal of cases and emphasis on human resource development.

⦿ Improving infrastructure for Judicial Officers of District and Subordinate Courts

⦿ Leveraging Information and Communication Technology (ICT) for improved justice delivery

⦿ Reduction in Pendency through follow up by Arrears Committees

⦿ To reduce pendency and unclogging of the courts the Government has recently amended various laws like the Negotiable Instruments (Amendment) Act, 2018, the Commercial Courts (Amendment) Act, 2018, the Specific Relief (Amendment) Act, 2018, the Arbitration and Conciliation (Amendment) Act, 2019 and the Criminal Laws (Amendment) Act, 2018.

Way Forward:

⦿ The **ratio of Judges and Advocates to the number of pending cases in the country is vastly imbalanced** and resulting in the delay in providing justice. It has, therefore, become a necessity to work for the advancement and digitalization of the judiciary.

⦿ With the Digital India campaign making its marks in various fields, the law sector must also adapt trials through video conferencing in minor and bailable cases. Steps must be taken to provide the existing courts with computer systems and update them with the related technologies.

⦿ The data which is registered in files can be moved to online portals with proper cybersecurity measures being implemented. To objectify and make the Centrally Sponsored Scheme for Judicial Development a success, the concerned authorities must stringently implement the five-year plan proposed.

TELE-LAW

⦿ The concept of Tele-Law is to facilitate delivery of legal advice through a panel of lawyers stationed at the state Legal Services Authorities (SALSA) and CSC.

⦿ The project initiates to connect citizens with lawyers through video conferencing facilities at Common Service Centres by the Para-Legal Volunteers stationed at identified 1800 panchayat.

⦿ The Tele-Law service is provided free of cost to those persons entitled to free legal aid under Section 12 of the Legal Services Authorities (LSA) Act, 1987, and at Rs. 30/- per consultation for "others". This goes according to the **Article 39A** of Indian Constitution to provide Equal justice and free legal aid.

◉ Preferably women para legal volunteers to be indentified and empowered. They would be engaged in CSCs for enabling access to legal aid for rural citizens.

◉ Tele law model will facilitate legal advices through expert panel of lawyers placed at CSCs and legal Service Authorities in the vicinity that reduce the mobility and access issue for the legal services.

◉ Advice is free of Cost to those who are eligible for free legal aid under Section 12 of LSA Act, 1987 such as Marginalised communities like SC/ ST/ OBC, persons with disabilities, Women, Senior citizens, Industrial workers, Victims of trafficking and commercial and sexual exploitation, Victims of acid attack, Victims of drug abuse, Victims of disaster, ethnic violence, caste atrocity, earthquake or industrial disaster, Persons in custody and Persons with low income.

How Tele-Law services proved to be a success?

◉ Tele-Law is fast emerging as a popular platform amongst the common populace in main-streaming legal aid. Tele-Law has effectively championed the cause of giving voice to the voiceless and won the trust and confidence of people.

◉ A dedicated Tele-Law dashboard has been made operational to capture real-time data on nature of cases registered & advice enabled. Since June 2020, this data is being hosted on Prayas Dashboard for monitoring by PMO.

◉ It has already helped more than 12 lakh beneficiaries, including Scheduled Castes/Scheduled Tribes and women.

Way Forward

Any initiative becomes a success by when it serves the purpose and tries to plug in the loopholes. For making Tele-Law more robust and sustainable:

◉ Para-Legal Volunteers has to be well trained as they act as medium of communication between the legal advisors and people.

◉ Common Service Centers should be in vicinity and easily accessible.

◉ Infrastructure should more robust in terms of internet services, devices and common service centers.

◉ Efforts should be made to make people aware about the initiative through mobile, SMS and emails.

e – COURT

Cumbersome paper work, Lack of Transparency, Difficulty in tracking procedure, Inaccessibility of basic legal services and available legal resources such as case studies and case status, were some of the existed realities of judiciary. The e-Court Project was initiated to resolve these issues along with many other problems.

What are the main objectives of the e-Court Project?

◉ To provide efficient & time-bound citizen-centric service delivery.

◉ To develop, install & implement decision support systems in courts.

◉ To automate the processes to provide transparency of Information access to its stakeholders.

◉ To enhance judicial productivity both qualitatively & quantitatively, to make the justice delivery system affordable, accessible, cost-effective & transparent.

How does the e-Court Project will work?

◉ The project will work with the Digital India Programme of the Government of India which emphasizes on Citizen centric services, this project would also focus on Digital Infrastructure as a core utility to every citizen providing Governance and Services on demand eventually making the citizens digitally empowered.

◉ The dynamic implementation structure provides for greater participation and cooperation between the eCommittee, the Department of Justice (Government of India), NIC, DietY and Ministry of finance.

◉ It provides for High Courts as Implementing Agency, of the project under its jurisdiction.

Way Forward

- Project must strive for a modern judicial system, governed by core values of trust, empathy, sustainability and transparency which maximise the positives of technology, and minimise its risks and challenges.

- Steps must be taken for behavioural nudges, adequate training and skill set development, feedback loops, along with the requisite mandate of law.

- It must address the accompanying administrative structures through modification of existing laws, rules, and practices, as well as the enactment of newer ones, eCourts, and any future technological endeavours regarding eCourts must be founded on a stable governance framework.

LIMBS

Legal Information Management & Briefing System (LIMBS) is a web based portal developed by Department of Legal Affairs, Ministry of Law & Justice for monitoring and handling of various court cases of Govt. Departments and Ministries.

How LIMBS works?

- It is to facilitate tracking and monitoring of all ongoing cases in the Supreme Court and High Courts related to the Union of India.

- Joint Secretary (Revenue), Department of Revenue is the Nodal Officer of DoR for LIMBS. Commissioner, Directorate of Legal Affairs (DLA) has been nominated as the project coordinator for LIMBS in CBIC.

- Cases pertaining to Supreme Court are uploaded & updated on LIMBS by DLA. Cases pertaining to High Court and Tribunals are being uploaded by the concerned Commissionerates.

- Ministry's designated nodal officer authenticates the user's credentials and only authenticated users are allowed to access the website and enter the case details.

Benefits of LIMBS

- LIMB will help in organizing otherwise scattered Information at one single database and also create a professional base available for expert advice

- It will help in reducing government litigations.

- LIMBS provides low-cost web technology access to all the stakeholders involved in a court case in a coordinated way whereby it provides inputs that are available seamlessly on a 24×7 basis as per the defined access rules. Hence, it would be possible to know the various stages of a case and monitor its progress on a continuous basis through an elaborate set of user-friendly reports.

- LIMBS aims to reduce financial burden, save time and bring efficiency in the working of various Departments of a Ministry. This will introduce transparency and a sense of ownership among various stakeholders during the life cycle of a court case.

- It will help authorities to take 'data-driven decision-making and to evaluate the performance of various stakeholders and to conduct legal audits.

Way Forward

- To make the working of the government, more coordinated and to achieve the desired results, various departments must submit the data as early as possible in a time-bound and integrated manner.

- This is about civil cases, though criminal cases should also be included in its ambit.

- At the moment, this is about the Union government, and it should also be extended to state governments.

- The interoperability of LIMBS and e-Courts can be done using Open API.

SUVAS

The problem of getting access to court Judgments and Orders in regional languages has been a challenge for the Indian legal system for a very long time. For years the judicial system has been using English as a primary language for filing, producing, and disposing of judgments.

Hence software called SUVAS has been launched. It is a machine-assisted translation tool trained by Artificial Intelligence.

◎ It is a dedicated open-source judicial domain language-translation tool to translate judicial documents from English to nine vernacular languages — Marathi, Hindi, Kannada, Tamil, Telugu, Punjabi, Gujarati, Malayalam, and Bengali — and vice versa.

◎ Right now cases related to Labour, Rent Act, Land Acquisition and Requisition, Service, Compensation, Criminal, Family Law, Ordinary Civil, Personal Law, Religious and Charitable Endowments, Simple money and Mortgage, Eviction under the Public Premises (Eviction) Act, Land Laws and Agriculture Tenancies and Consumer Protection are being translated.

◎ SUVAS (Supreme Court Vidhik Anuvaad Software) has been developed by the Ministry of Electronics and Information Technology, Government of India aided by experts from IIT and IIIT.

Implementation Status

◎ This pilot development of SUVAS is at present in the testing, training, and refinement phase in 18 High Courts in the country.

Way Forward

◎ Currently, the application is designed for only 9 languages and more languages should come in its ambit.

◎ The scope of laws being translated under the project should be widened.

◎ At present, the Official Mobile App of the Supreme Court is not separately equipped with the accessibility of information to the visually impaired.

e-FILING

If Judicial work is parallelized, democracy is in danger. A situation such as the COVID-19 pandemic "calls for robust and calibrated institutional responses". e-filing opened new vistas for normalizing work which has been parallelized due to COVID-19.

e-Filing system enables the electronic filing of legal papers.

What are the key features of e-Filing?

◎ e-filing eliminates the physical submission of paper documents to a court

◎ Both civil and criminal can be filed before the High Courts and District Courts that have adopted e-Filing systems.

◎ The e-ling system can be used by any Advocate enrolled to practice in the Bar Council of any State in India or by any Petitioner in Person to le cases before the High court and District Courts of States that adopt this e-ling system.

◎ The system will also enable the police stations across India to e-le the charge sheets and other documents about criminal cases.

How e-Filing will prove to be significant?

◎ E-filing enhances the right of citizens to efficient justice delivery by being more inclusive.

◎ It will prove significant to "provide sustainable digitization and bring about a transformational change in

reconceptualizing the interactions between citizens, lawyers, the judiciary and the environment".

- ◉ It can **reduce the amount of on-site document storage required by a court as well as by law firms.**
- ◉ E-filing reduces the amount of paper that must be used in courts.

Way Forward

- ◉ Digital literacy is important for the efficient functioning of e-filing.
- ◉ The whole system should be made cyber secure.

****

EDUCATION

SAMAGRA SHIKSHA

◉ Samagra Shiksha is Centrally Sponsored Scheme for the school education sector extending from pre-school to class 12.

◉ It subsumes the three erstwhile Schemes of Sarva Shiksha Abhiyan (SSA), Rashtriya Madhyamik Shiksha Abhiyan (RMSA) and Teacher Education (TE).

◉ It is an integrated scheme for school education sector from 2021 to 2026.

◉ The Scheme is in accordance with Sustainable Development Goal for Education (SDG-4).

◉ It has been aligned with the National Education Policy (NEP) 2020 to ensure inclusive and equitable, quality and holistic school education.

◉ It emphasizes on to take care of the diverse background, multilingual needs, different academic abilities and make students active participants in the learning process.

◉ It also emphasizes promotion of Vocationalisation of education.

Implementation of the Scheme

◉ **State Level**: The Scheme will be implemented as a Centrally Sponsored Scheme by the Department of School Education and literacy through a single State Implementation Society (SIS).

◉ **National level:** At the National level, there would be:

  ➤ Governing Council headed by Minister of Human Resource Development

  ➤ Project Approval Board (PAB) headed by Secretary, Department of School Education and Literacy

◉ The Governing Council will be empowered to modify financial and programmatic norms and approve the detailed guidelines for implementation within the overall Framework of the scheme.

Significance

◉ The Scheme will help improve the transition rates across the various levels of school education and aid in promoting universal access to children to complete school education.

◉ The integration of Teacher Education would facilitate effective convergence and linkages between different support structures in school education through interventions such as a unified training calendar, innovations in pedagogy, mentoring and monitoring, etc.

◉ This single scheme will enable the SCERT to become the nodal agency for conduct and monitoring of all in-service training programmes to make it need-focused and dynamic.

◉ It would also enable reaping the benefits of technology and widening the access of good quality education across all States and UTs and across all sections of the Society.

Way Forward

- There has to a holistic survey mechanism on the analysis of Universal Access, Infrastructure Development and Retention.
- For Digital Initiatives, the infrastructure and digital literacy and training for teachers is equally important.
- School Infrastructure should be conducive for Sports and Physical Education.
- Holistic Monitoring and Programme Management should be ensured at every level.

Sustainable Development Goal 4

- It is about quality education.
- **Title** - "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all".
  - ➤ **Goal SDG-4.1** - "By 2030, ensure that all boys and girls complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes.
  - ➤ **SDG 4.5** states that "By 2030, eliminate gender disparities in education and ensure equal access to all levels of Education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations".

PRABANDH

PRoject Appraisal, Budgeting, Achievements and Data Handling System, is the portal of Dept of School Education of Ministry of Education under Samagra Shiksha.

■ Core objectives:

- ➤ To obviate the need for submitting hard copies, except where it is mandated otherwise.
- ➤ To have transparency and accuracy in the System w.r.t Approvals, Releases, Financial Status.
- ➤ To streamline the Financial Management System, to enable more accurate assessment of actual requirement of funds for implementation.
- ➤ For efficient decision- making.
- ➤ On this portal States and UTs may view the Status of GoI Releases, approved outlays, coverage as per UDISE, school wise list of approvals, school wise gaps, cancellations in approvals etc. under Samagra Shiksha
- ➤ In addition, online submission of Monthly Progress Reports, physical as well as financial, can also be made by the respective State/UTs in the PRABANDH System.
- ➤ It also provides monthly status of physical and financial progress under the major interventions of the scheme , which automatically picks up data from the system based on monthly updates done by the States and UTs

■ Achievements so far

- ➤ States and UTs are submitting District Wise Annual Work Plan and Budget proposals through the portal enabling decentralized planning.
- ➤ Detailed school-wise Functional and construction status under various components of Samagra Shiksha are being submitted.
- ➤ The Physical and Financial expenditure module for District users have been initiated to capture the progress on the Samagra Shiksha activities.

It is required that the uploaded information is validated by the district magistrate or an appropriate officer as authorised by the concerned authority.

RASHTRIYA UCHCHATAR SHIKSHA ABHIYAN (RUSA)

The Success of Sarva Shiksha Abhiyan (SSA) and Rashtriya Madhamik Shiksha Abhiyan (RMSA) has laid a strong foundation for primary and secondary education in India. However, the sphere of higher education also needed concerted efforts for improvement in access or quality. This is also essential to reap the benefits of demographic dividend of India. Hence government has launched Centrally Sponsored Scheme - Rashtriya Uchchatar Shiksha Abhiyan

The aim is to achieve mass access to higher education with high quality standards. States must ensure that all their institutions adopt NAAC accreditation as the mandatory quality assurance framework, and simultaneously seek to upgrade the overall academic quality by implementing reforms.

Major Objectives

The salient objectives of RUSA are to:

◎ Improve the overall quality of state institutions by ensuring conformity to prescribed norms and standards and adopt accreditation as a mandatory quality assurance framework.

◎ Usher transformative reforms in the state higher education system by creating a facilitating institutional structure for planning and monitoring at the state level, promoting autonomy in State Universities and improving governance in institutions.

◎ Ensure reforms in the affiliation, academic and examination systems.

◎ Ensure adequate availability of quality faculty in all higher educational institutions and ensure capacity building at all levels of employment.

◎ Create an enabling atmosphere in the higher educational institutions to devote themselves to research and innovations.

◎ Expand the institutional base by creating additional capacity in existing institutions and establishing new institutions, in order to achieve enrolment targets.

◎ Correct regional imbalances in access to higher education by setting up institutions in unserved & underserved areas.

◎ Improve equity in higher education by providing adequate opportunities of higher education to SC/STs and socially and educationally backward classes; promote inclusion of women, minorities, and differently abled persons.

> ## NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL (NAAC)
>
> ◎ It conducts assessment and accreditation of Higher Educational Institutions (HEI) such as colleges, universities or other recognized institutions to derive an understanding of the 'Quality Status' of the institution.
>
> ◎ NAAC evaluates the institutions for its conformance to the standards of quality in terms of its performance related to the educational processes and outcomes, curriculum coverage, teaching-learning processes, faculty, research, infrastructure, learning resources, organization, governance, financial well being and student services.

Components

The following are the primary components of RUSA that capture the key action and funding areas that must be pursued for the fulfilment of the targets:

◎ Up gradation of existing autonomous colleges to Universities

◎ Infrastructure grants to Colleges and Universities

◎ New Model Colleges (General) and Upgradation of existing degree colleges to model colleges

◎ Research, innovation and quality improvement

- Equity initiatives
- Faculty Recruitment Support and improvements
- Vocationalisation of Higher Education
- Leadership Development of Educational Administrators
- Institutional restructuring & reforms
- Capacity building & preparation, data collection & planning

Achievements

The following are some of the key achievements of RUSA:

- **Coverage:** The States and the UTs have responded very well to the scheme; 29 States and 6 UTs are participating in RUSA. Over 2000 State Universities and Colleges have been supported so far.
- **Gross Enrolment Ratio (GER):** The National GER prior to the launch of RUSA was 20.8 (2012), with Male GER at 22.1 and Female GER at 19.4. RUSA assistance is critical in sustaining the growth in GER. A substantial increase in National GER has been recorded at 24.5, with Male GER at 25.4 and Female GER at 23.5 in 2015-16 (AISHE 2015-16).
- **Institutionalization of State Higher Education Planning**: Prior to the formation of RUSA, 9 State Higher Education Councils were created by an Act of the legislature. The States joined RUSA with a commitment to create State Higher Education Councils within a stipulated time indicated by them. Till now, 26 more States/UTs have already created State Higher Education council, 16 of which are through an Act of the legislature.
- **State Contribution to Higher Education as a Percentage of GSDP:** Overall there has been an increase in States spending in higher education as a percentage of its GSDP.

Way Forward

- It should be underscored that the upgraded colleges and universities would be mentored for high-quality research outputs with fund-associated expertise through RUSA.
- Considering that teachers are the backbone of educational reforms, any genuine service-related/administrative concerns highlighted by teacher bodies have to be parally remedied by governments.
- The bodies also have to pragmatically approach this reform scheme and provide collective wisdom for further quality refinement.

NIPUN BHARAT

Ministry of Education has launched a National Initiative for Proficiency in Reading with Understanding and Numeracy (NIPUN Bharat), for ensuring that every child in the country necessarily attains foundational literacy and numeracy (FLN) by the end of Grade 3, by 2026-27.

Need of the Initiative

According to the, World Bank's learning Poverty Index, 55% of India's school-going children cannot read and understand a short, age appropriate text by Class 5 and according to National Survey, around 13-18% students from Class 3, 5 and 8 are below basic learning levels, and only 39-53% have achieved proficiency. Due to the low standards of Indian Education, 86th Constitutional amendment in India obligated the Right to Education. This decision aims to encourage children to get an education in school. To achieve this goal, the Education Ministry launched the NIPUN Bharat Mission.

Objectives of the Mission

The major objectives based on the recommendations of NEP 2020 are as follows:

- To ensure an inclusive classroom environment by incorporating play, discovery, and activity-based pedagogies, linking it to the daily life situations of the children and formal inclusion of children's home languages.

◉ To enable children to become motivated, independent and engaged readers and writers with comprehension possessing sustainable reading and writing skills.

◉ To make children understand the reasoning in the domains of number, measurement and shapes; and enable them to become independent in problem solving by way of numeracy and spatial understanding skills.

◉ To ensure availability and effective usage of high-quality and culturally responsive teaching learning material in children's familiar/home/mother language(s).

◉ To focus on continuous capacity building of teachers, head teachers, academic resource persons and education administrators.

◉ To actively engage with all stakeholders i.e., Teachers, Parents, Students and Community, policy makers for building a strong foundation of lifelong learning.

◉ To ensure assessment 'as, of and for' learning through portfolios, group and collaborative work, project work, quizzes, role plays, games, oral presentations, short tests, etc.

◉ To ensure tracking of learning levels of all students.

Implementation and Assessment of the Initiative

◉ **Implementation:** The Department of School Education and Literacy, Ministry of Education (MoE) will be the implementing agency at the national level and will be headed by a Mission Director.

◉ **Learning Assessments**: Assessment of progress and achievements by students, schools and states/UTs will be at the following levels:

➤ School Based Assessment

➤ Large scale assessment (including NAS, SAS, and Third Party assessment)

Way Forward

◉ Need for Preparing state specific stage-wise action plan.

◉ Devise annual targets and adapt tools developed at central level to assess annual progress

◉ Ensure teacher availability and capacity building for foundational grades

◉ Map each child enrolled in foundational grades through student registery

◉ Identification of a pool of mentors to render academic support to teachers

◉ Ensure parents and community awareness about desired learning outcomes

PM POSHAN SCHEME

PM POSHAN (POshan SHAkti Nirman) Scheme provides one hot cooked meal in Government and Government-aided schools from 2021-22 to 2025-26, earlier known as Mid-Day Meal Scheme.

Need of the Initiative

The level of malnutrition is of great concern in India with over 40% of children being classified as undernourished. Under nutrition is highly prevalent among rural children in India. Survey among rural population of India, by National Nutrition Monitoring Bureau in 2002, reported prevalence of malnutrition, using Gomez classification to be 94.6% among 6-9 year and 97.1% in 10-13 year old. Malnutrition is due to poverty, gender inequity, specific dietary patterns and recurrent illness, all these acting in conjunction.

This is a Centrally-Sponsored Scheme which covers all school children studying in Classes I-VIII in Government, Government-Aided Schools. Now, it will include the Pre-Primary Children also.

> **History Mid Day Meal Scheme**
>
> ◉ In 1925, a Mid Day Meal Programme was introduced for disadvantaged children in Madras Municipal Corporation.
>
> ◉ By the mid 1980s three States viz. Gujarat, Kerala and Tamil Nadu and the UT of Pondicherry had universalized a cooked Mid Day Meal Programme with their own resources for children studying at the primary stage.
>
> ◉ The National Mid Day Meal (MDM) programme, implemented across all the government and government-aided schools in India aimed to provide nutritional Meal to each and every child (6-14 years).
>
> ◉ In 2007, the UPA government had expanded it to Class 8.
>
> ◉ While the Centre bears the entire cost of food grains and their transportation, as well as looks after the management, monitoring and evaluation under the scheme, components such as cooking costs, payments to cooks and workers are split in a 60:40 ratio with states.

Key Changes in Mid-Day Meal to make it PM POSHAN (POshan SHAkti Nirman)

◉ The scheme is proposed to be extended to students studying in pre-primary or Balvatikas in Government and Government-aided primary schools in addition to all the 11.80 crore children from elementary classes.

◉ The concept of Tithi Bhojan will be encouraged extensively. Tithi Bhojan is a community participation programme in which people provide special food to children on special occasions/festivals.

◉ Nutri-gardens will be developed in schools to give children "firsthand experience with nature and gardening".

◉ Social Audit of the scheme is made mandatory in all the districts.

◉ Special provision is made for providing supplementary nutrition items to children in aspirational districts and districts with high prevalence of Anemia.

◉ Cooking competitions will be encouraged at all levels right from village level to national level to promote ethnic cuisine and innovative menus based on locally available ingredients and vegetables.

◉ Vocal for Local for Atmanirbhar Bharat: Involvement of Farmers Producer Organizations (FPO) and Women Self Help Groups in implementation of the scheme will be encouraged. Use of locally grown traditional food items for a fillip to local economic growth will be encouraged.

◉ Field visits for progress monitoring and inspections will be facilitated for students of eminent Universities / Institutions and also trainee teachers of Regional Institutes of Educations (RIE) and District Institutes of Education and Training (DIET).

How the initiative had worked so far?

◉ The Scheme is the world's largest school feeding programme reaching out to about 12 crore children in over 12.65 lakh schools/EGS centres across the country.

◉ The Cooked Mid Day Meal Program has been successful in addressing "classroom hunger" in the beneficiary schools.

◉ The contribution of mid-day meals to food security and child nutrition seems to be particularly crucial in tribal areas where hunger is endemic.

◉ Mid day meal has brought a sharp increase in school enrolment and attendance rates across all the states and more importantly narrowing the gender gaps in school attendance rates.

◉ Mid Day Meal Scheme also provide a useful source of employment for women, and helps liberate working women from the burden of cooking at home during the day.

Way Forward

◉ Government needs to establish a system to ascertain improvement in nutritional levels of children. It should coordinate with the concerned department and ensure maintenance of health cards in all the schools to monitor the health status of the children.

◉ Monitoring and Supervision mechanisms should be implemented effectively. The State government needs to strengthen the internal controls as well as the inspection and monitoring mechanism at all levels.

◉ The quality of cooked food served needs to be enhanced.

◉ Transfer of funds up to school level is needed to ensure full utilization of funds.

◉ The Grievance Redressal Mechanism should be widened and implemented at all levels.

◉ There should be provision for training of cooks-cum-helpers on aspects of hygiene, health, sanitation, cooking and serving.

◉ It is essential that the children and the parents are given nutrition education, so that MDM is not taken as a substitute for home food but as an addition to the food provided by the family.

PM eVIDYA PROGRAM

In order to promote digital education in the country and make e- learning feasible for students and teachers, the Government of India has launched the **PM eVIDYA** program. Under this scheme, the top hundred universities of the country will start educating students through online education.

Benefits Of PM eVIDYA Program

◉ Digital/online/on-air access to education will be ensured through the PM eVIDYA program.

◉ The top hundred universities of the country will start educating students through online education.

◉ For all those students who do not have access to the internet swayam Prabha TV channel will be launched to provide education.

◉ Diksha platform will also be launched which will involve e-content and QR code energized books for all the classes.

◉ For visually and hearing impaired students the government will also do a radio podcast.

◉ Online coaching for the competitive exam will also be provided under this scheme.

◉ Channel call Manodarpan will launch for mental health and emotional well-being student, teachers, and families.

◉ A new national curriculum and pedagogical framework for school, early childhood, and teachers will be launched which is integrated with global and 21st-century skill requirements.

◉ The National Foundational Literacy and Numeracy Mission for ensuring that every child attains Learning levels and outcomes in grade 5 will be launched.

How the initiative had worked so far?

◉ Through the Digital Infrastructure for Knowledge Sharing or DIKSHA under the e-Vidya, students are provided NCERT, NIOS, CBSE books, and related topics online.

◉ Students can access the portal's 2,685 courses by scanning the QR code on the app.

◉ The DIKSHA programme has seen over 8.46 crore course enrolments and 6.87 crore plus course completions. It also has more than 316 crore learning sessions and over 2,775 crore learning minutes on its portal.

◉ The National Initiative for School Heads' and Teachers' Holistic Advancement (NISHTHA) programme under the e-Vidya aims to improve the learning outcomes at the elementary level through an integrated teacher training initiative.

◉ It is available in 11 languages so far.

◉ The PM e-Vidya program has made joined hands with private DTH operators like Tata Sky and Airtel to provide education videos.

Way Forward

- Private players in the e-learning space 'Vidyadaan' under the e-Vidya package can collaborate to make it a win-win for all concerned.

- The package has not spelled out any financial outlay or the modalities of how content creators, technology platforms, and students will be brought together or how learning outcomes and impact will be assessed.

- Awareness generation, Infrastructure development, DTH setups, etc are also necessary to be available to the targeted population of students as the poor section of society who even do not possess TV setups cannot get the benefit of this initiative.

DIGILOCKER

DigiLocker, is a digital locker for the issuance and verification of documents and certificates, eliminating the need of carrying physical documents. Also, not only storage, but it provides ready accessibility to issuers online in times of need.

Benefits to Citizens

Important Documents can be accessed Anytime, Anywhere.

- ➤ Authentic Documents, Legally at Par with Originals.

- ➤ Digital Document Exchange with the consent of the citizen.

- ➤ Faster service Delivery- Government Benefits, Employment, Financial Inclusion, Education, Health.

Benefits to Agencies

- ➤ Reduced Administrative Overhead: Aimed at the concept of paperless governance. It reduces the administrative overhead by minimizing the use of paper and curtailing the verification process.

- ➤ Digital Transformation: Provides trusted issued documents. Issued Documents available via DigiLocker are fetched in real-time directly from the issuing agency.

- ➤ Secure Document Gateway: Acts as a secure document exchange platform like payment gateway between trusted issuer and trusted Requester/Verifier with the consent of the citizen.

- ➤ Real Time Verification: Provides a verification module enabling government agencies to verify data directly from issuers after obtaining user consent.

Way Forward

- DigiLocker, an online service from the government that allows individuals to store documents digitally, was found to have an authentication flaw, putting the data of crores of users at risk.

- The mandatory issue of digital documents to avail the services may create trouble who are not so digital literate and those who even do not have access to internet based services. To making system more robust the digital infrastructure should be worked upon.

NATIONAL DIGITAL EDUCATIONAL ARCHITECTURE (NDEAR)

- The National Education Policy 2020 (NEP) lays down a high-level roadmap and goals for the country, for the next 20 years: "To achieve universal access to quality education". This requires the development of digital infrastructure and the use of technology for access to and aiding learning. To achieve its target there is a need for a technology framework, architecture and an ecosystem approach to allow different stakeholders to participate in and create solutions in an exponential manner, to nurture our young to achieve their potential. NDEAR is meant to enable a common set of principles and approaches to be followed in building, using and re-using technology for education.

◉ The Students get access to on demand learning materials, videos, graphics and animations, virtual labs and different forms of assessment tools. Access to personalized adaptive learning (PAL), Transition to higher education and skilling to be tracked.

◉ The Teachers get access to online support for lesson plans, use of TLM, pedagogic transactions, online reference materials, competency based evaluation tools etc. They also get access to online modules for improving professional standards.

◉ Schools/School management get access to school management practices, school related ERPs, learning management systems, data analytics, etc.

◉ Parents get access to the child's holistic progress reports, school performance, teacher performance.

◉ Educational administrators use data analytics to bridge infrastructure gap, teacher availability gap, address dropouts and make informed policy choices.

How the initiative tends to change the Education System in India?

◉ The Ministry of Education has said the NDEAR will eradicate inequality in education and play an important role in modernizing it by providing a diverse education ecosystem architecture for development of digital infrastructure, which is federated and interoperable to ensure autonomy of all stakeholders, especially states and union territories.

Way Forward

◉ Digital ecosystem of Education needs to take a long-term view of aspects like interoperability, data governance, data quality, data standards, security and privacy, besides promoting open innovation.

◉ The biggest roadblock in the way of NDEAR is India's gaping digital divide, which will not be easily bridged.

◉ Digital governance methods, combined with low quality infrastructure can also lead to exclusion of vast swathes of the population given the low levels of digital literacy that persist across the country.

◉ Further, NDEAR is based on the NODE approach, which was criticised by researchers on the grounds of lack of transparency and accountability, as private entities which are not publicly accountable can now build delivery platforms for various services. This can lead to negative outcomes as private actors work on a profit motive which may go against the social welfare motives of the government.

SWAYAM

◉ There exists a huge digital divide for students who have hitherto remained untouched by the digital revolution and have not been able to join the mainstream of the knowledge economy. The most disadvantaged section was still excluded from the mainstream digital progress. Hence government has launched SWAYAM.

◉ SWAYAM is a programme initiated by Government of India and designed to achieve the three cardinal principles of Education Policy viz., access, equity and quality.

◉ The platform offers free access to everyone and hosts courses from class 9 to post-graduation. It enables professors and faculty of centrally funded institutes like IITs, IIMs, IISERs, etc. to teach students.

◉ Whereas, SWAYAM provides an integrated platform and portal for online courses, using information and communication technology (ICT) covering High School till all higher education subjects and skill sector courses to ensure that every student benefits from learning material through ICT.

Way Forward

◉ There is a need for synergizing the quality of contents on these platform, and for standardizing the content delivery.

◉ Awareness drills should be set up by the governments for making youth aware regarding this platform.

◉ A more robust digital infrastructure needs to be developed.

◉ A Systematic and coherent method should be there to make the evaluation of learning outcomes.

DIKSHA

- DIKSHA was developed based on the core principles of open architecture, open access, open licensing diversity, choice and autonomy as outlined in the Strategy and Approach Paper for the National Teacher Platform for Human Resources Development in 2017.

- It will serve as National Digital Infrastructure for Teachers. All teachers across nation will be equipped with advanced digital technology.

- It will help teachers to create training content, profile, in-class resources, assessment aids, news and announcement and connect with teacher community.

- DIKSHA is built using MIT licensed open source technology called Sunbird, which is a digital infrastructure for learning and is designed to support multiple languages and solutions and offers over a 100 micro services as building blocks for the development of platforms and solutions.

- Each state/UT leverages the DIKSHA platform in its own way, as it has the freedom and choice to use the varied capabilities and solutions of the platform to design and run programs for their teachers and learners.

How it had worked so far?

- DIKSHA since been adopted by 35 states/UTs across as well as CBSE and NCERT and by crores of learners and teachers.

- In the context of COVID-19 related disruption of schooling, DIKSHA makes it possible for all states/UTs to enable learning/education at home through innovative state programs; hence leapfrogging the use of technology for the benefit of teachers and learners across India.

Way Forward

Technology can be a game-changer. It can transform the delivery of education and make experiential learning an enjoyable experience. 'DIKSHA' portal has enormous potential, but needs to be strengthened and leveraged for in-service training. It can be used for maintaining teaching-related data.

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SOCIAL SECURITY

PRADHAN MANTRI ADARSH GRAM YOJANA (PMAGY)

An 'Adarsh Gram' is one wherein people have access to various basic services so that the minimum needs of all the sections of the society are fully met and disparities are reduced to a minimum.

These villages would have access to all such basic services that are necessary for a dignified living, creating thereby an environment in which everyone is enabled to utilize her/his potential to the fullest.

> Scheduled Castes (SCs), who constitute 16.6% of our population as per 2011 Census, have historically suffered social and educational disabilities and economic deprivation arising therefrom.
>
> ### Constitutional Provision for SCs Protection
>
> ◉ Article 46 of Part IV ("Directive Principles of State Policy") of the Constitution enjoins upon the State to promote with special care the educational and economic interests of the weaker sections of the people, in particular, of the Scheduled Castes and the Scheduled Tribes.
>
> ◉ Article 38 (2) in the same Part also enjoins upon the State to minimize inequities in income, and to endeavour to eliminate inequalities in status, facilities and opportunities, not only amongst individuals but also amongst groups of people residing in different areas or engaged in different vocations.

About the Initiative

◉ The Scheme aims at integrated development of villages in which the population of Scheduled Castes is above 50%.

◉ A total of 1000 villages from Tamil Nadu (225), Rajasthan (225), Bihar (225), Himachal Pradesh (225) and Assam (100) were selected for the Pilot phase. All the 1000 villages have been declared as Adarsh Gram.

◉ Gaps were identified in critical socio-economic '**Monitorable Indicators'** as part of various sectors/domains. These domains include water and sanitation, education, health and nutrition, agricultural best practices etc. amongst others.

> **Domains for Monitorable Indicators:** Drinking water and Sanitation, Education, Health and Nutrition, Social Security, Rural Roads and Housing, Electricity and Clean Fuel, Agricultural Practices etc., Financial Inclusion, Digitization, Livelihood and Skill Development

- **Implementation:** PMAGY provides the platform for convergent implementation of other Schemes with the aim to achieve saturation in the various domains. The fund used will be given under other Central or State Government Schemes and the 'Gap-filling' funds will be provided under the Scheme.

- **Funding:** For every new village selected, the Scheme provides for a total of Rs. 21 lakh of which Rs.20.00 lakh is for the 'Gap-filling' component and Rs.1.00 lakh is meant for 'administrative expenses' in the ratio of 1:1:1:2 at the Centre, State, District and Village level respectively.

- **Project Monitoring:** The Scheme provides for setting up of various levels of Committees for guidance, monitoring and implementation. These Committees, especially the Convergence Committees at the Village, District and State levels. It will assess the plan and execute the works/services.

Issues in earlier initiatives taken for development of SCs

- Yielded some positive outcome

- Narrowed gap between SCs and rest of the population

- No framework for focused & sustainable interventions for SC families

- Were individual centric, thus integrated development of SC habitations not taken up

- In this backdrop & to enable an area based development approach, Pradhan Mantri Adarsh Gram

Way Forward

- Strengthening of Administrative Machinery for planning, implementation and monitoring, including by training/orientation of key personnel.

- Technical Resource Support for the Scheme should be enhanced and strengthened to streamline the implementation and evaluation equally in all the villages.

- Awareness Generation and Publicity about the initiatives taken under the scheme.

- Under the Management Information System (MIS) the computerized database on selected villages, including baseline values of key indicators should be maintained and updated to see the changes after PMAGY.

SUPPORT FOR MARGINALIZED INDIVIDUALS FOR LIVELIHOOD AND ENTERPRISE (SMILE)

According to the 2011 Census, the total population of persons engaged in the act of Begging and vagrants is about 4.13 lakh which includes 3.72 lakh persons under non-workers category and about 41,400 under Marginal Workers Category. Similarly, Transgender face stigma and discrimination. They face conflicting pressures to conform to gender normative behaviour and the expectations of the society which they are unable to do so. Mostly they are abandoned. Persons experiencing destitution live in a vicious cycle of extreme poverty, homelessness, powerlessness, stigmatization, discrimination, exclusion and material deprivation, all of which mutually reinforce each other.

Ministry of Social Justice & Empowerment, Government of India, is moving towards a positive direction where it intends to establish a comprehensive rehabilitation framework that will positively engage with the daily issues of survival as well as build intervention for protection and economic as well as social growth of marginalized sections including transgender and beggars.

About the Initiative

- It includes two sub-schemes –

  ► 'Centra l Sector Scheme for Comprehensive Rehabilitation for Welfare of Transgender Persons'

  ► The Scheme includes following components:

    • Scholarships for Transgender Students

    • Skill Development and Livelihood for the empowerment of transgender community

- Composite Medical Health for Transgender persons

- Housing in the form of 'Garima Greh' for Transgender Persons

- E-Services (National Portal & Helpline and Advertisement)

- Provision of Transgender Protection Cell

- Other Welfare Measures

➤ 'Central Sector Scheme for Comprehensive Rehabilitation of persons engaged in the act of Begging'.

◉ **Focus Areas:** It focuses extensively on rehabilitation, provision of medical facilities, counseling, education, skill development, economic linkages etc.

◉ **Implementation:** It will be a collective effort of State Governments/UTs/Local Urban Bodies, Voluntary Organizations, Community Based Organizations (CBOs) and institutions and others.

Constitutional and Statutory Support for Transgender

◉ **Article 14** of the Indian Constitution guarantees equality for all people before the law or equal protection of the laws within the territory of India. This principle is further extended in Article 15, which prohibits discrimination on various grounds including race, sex, caste or place of birth.

◉ **Article 41** of the Constitution of India enjoins the States to make effective provision for securing the right to work, to education and to public assistance in cases of unemployment, old age, sickness and disablement and in other cases of undeserved want within the limit of its economic capacity and development.

◉ In a landmark judgment dated 15.04.2014 delivered by Hon'ble Supreme Court in WP No. 400/2012 filed by National Legal Services Authority (NLSA) vs UOI, along with other directions the Court directed that Hijras, Eunuchs, apart from binary gender, be treated as "third gender" for the purpose of safeguarding their rights under Part III of our Constitution and the laws made by the Parliament and the State Legislature.

◉ The Ministry of Social Justice and Empowerment has enacted "**The Transgender Persons (Protection of Rights) Act, 2019"** from 10.01.2020. The Act, inter alias, have provision for identification of Transgender Persons, Non-discrimination against a Transgender Person in educational institutions, employment, healthcare services etc.

◉ The Ministry has enacted "**The Transgender Persons (Protection of Rights), Rules, 2020**" for implementation of the provisions of the Act. These rules will help in recognition of identity of Transgender persons and thus will provide the actual figures of transgender persons in the country.

◉ As per **RGI during census- 2011** for the collection of data on sex during Population Enumeration, three codes were provided i.e. Male - 1, Female - 2 and other - 3. In case the respondent wished to record neither '1' nor '2' , then enumerator was instructed to record sex as 'Other' and give code '3'.

How it is working so far?

◉ Pilot project initiated in the act of Begging in seven (7) cities namely - Delhi, Bangalore, Hyderabad, Indore, Lucknow, Nagpur and Patna.

◉ Ministry has initiated 12 pilot shelter homes namely 'Garima Greh': Shelter Home for Transgender Persons and provided financial assistance to community based organizations (CBOs) for setting up of these shelter homes.

◉ These pilot shelter homes are in States of Maharashtra, Gujarat, Delhi, West Bengal, Rajasthan, Bihar, Chhattisgarh, Tamil Nadu and Odisha.

◉ Azadi ka Amrit Mahotsav (AKAM), Awareness programmes were organized in states.

◉ Loans are also disbursed to the people with these marginal sections for the purpose of rehabilitation.

◉ The budget allocation has been done in advance for the effective implementation of the scheme.

Way Forward

- Survey and Identification of beneficiaries shall be carried out by the Implementing Agencies for better targeting by consultation with the local bodies.

- Outreach work should be done to mobilise the persons engaged in begging to avail the services available in the Shelter Homes.

- The shelter homes will facilitate education for children engaged in the act of Begging and children of persons engaged in the act of Begging, so the shelter houses should be properly taken care of in terms of cleanliness and other basic facilities.

- Comprehensive resettlement should be ensured and monitored with the help of dedicated monitoring agencies.

SELF-EMPLOYMENT SCHEME OF LIBERATION & REHABILITATION OF SCAVENGERS

According to the House Listing and Housing Census, 2011 released by the Registrar General of India that more than 26 lakh insanitary latrines still existed. This includes about 7 lakh insanitary latrines serviced by humans. The practice of manual scavenging leads to the social discrimination and destitution of people involved in this occupation. Elimination of insanitary latrines and manual scavenging as well rehabilitation of manual scavengers in alternative occupation have been areas of high priority of the Government. To achieve the above objectives government has launched 'Self Employment Scheme for Rehabilitation of Manual Scavengers' (SRMS) under which identified manual scavengers and their dependents are provided the rehabilitation benefits.

Constitutional and Statutory protection to the Manual Scavengers

- Article 46 of the Constitution, inter alia, provides that the State shall protect the weaker sections, and, particularly, the Scheduled Castes and the Scheduled Tribes from social injustice and all forms of exploitation.

- Parliament enacted the "Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013"in September, 2013 which has come into force with effect from 06.12.2013 in all States and Union Territories except the State of Jammu and Kashmir.

- Government of India notified the 'Prohibition of Employment as Manual Scavengers and their Rehabilitation Rules, 2013.

- **Aim:** It aims to provide the following benefits to the identified Manual Scavengers:

  - One-time cash assistance of Rs. 40,000/- to the identified Manual Scavengers.

  - Loans for project cost upto Rs.15.00 lacs on concessional rates of interest.

  - Credit linked back-end capital subsidy upto Rs. 5,00,000/-.

  - Skill Development Training upto two years with stipend of Rs. 3000/- per month.

National Safai Karamcharis Finance & Development Corporation (NSKFDC)

- This is a wholly owned Govt. of India Undertaking under the Ministry of Social Justice & Empowerment.

- It was set up on 24th January 1997 as a Company "Not for Profit" under Section 8 of the Companies Act, 2013.

- NSKFDC is in operation since October, 1997, as an Apex Corporation for the all round socio-economic upliftment of the Safai Karamcharis (including wastepickers), Manual Scavengers and their dependants throughout India.

How it has been working so far?

- The allocation for year 2021-22 under the Self Employment Scheme of Liberation & Rehabilitation of Scavengers Scheme is 2.00 crore.

- Scheme for Rehabilitation of Manual Scavengers (SRMS) Targets : 11,000, Sanctioned: 11,000 Trained: 9897

- The increase in the family income of most of the beneficiaries is because OTCA has supported them in switching to more remunerative employment opportunities.

- To address the health problems of manual scavengers, organizing free medical check-ups was included in the Scheme from 2018-19 onwards. NSKFDC has been organizing health camps to provide free medical check-up.

- It has been found that on an average about 18.27 percent of the beneficiaries have availed insurance facilities.

Challenges

- NSKFDC which is the implementing agency for the scheme on rehabilitation of manual scavengers has an adequate corpus fund. It is found that the actual expenditure on the scheme depends upon the level of participation of states in the identification of Manual Scavengers.

- Very limited proportion of the beneficiaries i.e. 9.8 percent had shown interest in availing loan facilities. Among those who applied for a loan, about 17 percent households reported that their loan is still pending while 6 percent have stated that their loan application was rejected mainly due to lack of proper and required documents.

- Irrespective of the purpose for which loan was taken, the beneficiaries have utilized the loan amount for their personal/consumptive purpose in a larger extent i.e. 73 percent. Only 24 percent respondents have used the loan for starting a business.

Way Forward

- It may be noted that the beneficiaries are not receptive to avail loans due to lack of entrepreneurial skills. The financial institutions as well as NSKFDC through their frequent interaction in awareness camps attempt to motivate.

- NSKFDC may expedite the implementation of skill training component of the scheme.

- Keeping in view low education and awareness levels of manual scavengers and their hesitation in availing loan for self-employment projects, it is recommended that arrangements should be made for adequate handholding of the manual scavengers so that they can avail loans for self-employment and also run their projects efficiently.

- As many of the manual scavengers are not willing to shift to occupations other than sanitation related works, they should be assisted for availing sanitation related projects.

- At present majority of manual scavengers are not willing to apply for loan due to their inhibition that the banks do not extend desired cooperation. Therefore, agreements should be made with major banks for extending loan to manual scavengers.

- Main reason for backwardness of the manual scavengers is their low level of education. Special drive should be started for enrolment of out of school children of school going age by involving social service organisations.

- It has been observed that manual scavengers are not willing to participate in Skill training and not to shift from their bastis to get other gainful employment. Therefore, possibilities may be explored to provide them skilling and gainful employment near their place of residence.

RASHTRIYA VAYOSHRI YOJANA (RVY)

About the Scheme

- The Scheme is being implemented by Artificial Limbs Manufacturing Corporation of India (ALIMCO) which is a Public Sector Undertaking under the Ministry of Social Justice and Empowerment.

- Under this, aids and assistive living devices are provided to senior citizens belonging to BPL category or those senior citizens who earn less than 15000/- per month.

- The aids and assistive devices viz. walking sticks, elbow crutches, walkers/crutches, tripods/quadpods, hearing aids, wheelchairs, artificial dentures and spectacles are provided to eligible beneficiaries, free of cost.

Senior Citizen Welfare Fund (SCWF)

- A Senior Citizen Welfare Fund (SCWF) was established in 2016.

- It aims for providing financial assistance to such Schemes that promote financial security of senior citizens, healthcare and nutrition of senior citizens, welfare of elderly widow sand other innovative schemes directed towards welfare of senior citizens.

- The Fund comprises of the amounts available under Saving Schemes of the Central Government that remain unclaimed for a period of seven years from the date of the account being declared as inoperative account.

- The Fund is administered by an Inter-Ministerial Committee (IMC) with the Ministry of Social Justice and Empowerment as the Nodal Ministry for administration of the Fund.

Challenges

- It has also been observed that there is a lack of mechanism to ensure that all the identified tehsils and villages of the district have been covered.

- It is not mandatory on the part of IA i.e. ALIMCO to verify addresses of beneficiaries and the IA is bound to record whatever address is provided by the beneficiaries. The scheme has been assisting weaker sections of the society and in many cases the assisted population were found to have migrated from the address provided.

- It is noticed from the available data about distributed appliances that there is no uniformity in distribution of aids.

- Further, it is also seen that the maximum number of beneficiaries have multiple disabilities and assistive aids provided to them is not proportionate to their highest type of disability, which is defeating the very basic objectives of the scheme.

- State level line departments is involved in implementation only for approving and forwarding applications of IAs as the funds approved by the MoSJ&E are directly released to IAs without state government in loop and state government is not able to monitor the pace and efficiency of the implementation, assess its process and quality of aids and appliances. It may also result in overlooking the guidelines, procedures, parameters, processes by the IA in implementation.

- However, it is difficult to assess the extent of coverage as there have been no updated census records of senior citizen population.

Way Forward

- The camps should be organized in the proximity of villages.

- On the general awareness about the scheme, only 25% beneficiaries were aware and have heard about the scheme, which seems very low. Before conducting camps, IA and other organisations advertise and inform people about when and where the camp is going to be organised.

- Ensuring coverage of entire tehsils and villages in the district becomes a big challenge. Therefore, there is need to develop a system to make sure that all the tehsils/villages are equally benefited.

- Composite Rehabilitation Centres (CRC), District Disability Rehabilitation Centres, State Handicapped Development Corporations, the National Institutes working in the areas of disability and NGOs may also be roped in for implementation of the Scheme.

SCHEME OF RESIDENTIAL EDUCATION FOR STUDENTS IN HIGH SCHOOL IN TARGETED AREA (SRESHTA)

The students from the Scheduled Caste communities, for long been subjects of untouchability, were kept out of quality education; a situation that perpetuates the disadvantages carried forward for generations of discrimination. The Governmental efforts to spread educational facilities without discrimination have worked well in achieving near universal access. However, the objective of providing access to quality education that provides a level playing field, is still far from reality.

The scheme for Residential Education for Students in High Schools in Targeted Areas (SHRESHTA) has been conceived to provide access to high quality education to the students from Scheduled Caste communities.

About the scheme

- Residential Education of students in High School in Targeted areas (SHRESHTA) is a Central sector scheme launched by Social justice and Empowerment.

- The scheme is applicable only for residential schools (independent) affiliated to CBSE (Central Board of Secondary Education) up to class 12th.

- Schools must be in operation for 5 years or more with 75 percent pass percentage or more in Class 10 and Class 12 in last 3 years.

- There will be a Bridge Course of 3 months to be provided to the students to enable them to get acquainted to the school. This Bridge course will be student specific and will target at enhancing the capability of the student to adept to the environment of the school.

- All institutions which are receiving grants-in-aid under the Scheme shall proactively disclose the performance on their website and also on the eAnudaan/online portal.

- **Implementation of the scheme:** The District Administration will be the prime implementing agency for Mode 1. Under Mode 2, VO/NGO/organization will also be the part of implementation.

How it works?

- Under Mode-I of the Scheme, every year a specified number of meritorious SC students in States/UTs, whose parents annual income is up to Rs. 2.5 Lakh, are selected for providing quality residential education in Top-class Private Residential High Schools, including Hostel facilities for SC students at free of cost from class 9th to class 12th.

- Entire cost of school fee and residential charges including mess charges, ranging from Rs.1 Lakh to 1,35,000/- p.a. for each student, are paid to the Reputed Private Schools by the Department of Social justice and Empowerment.

- Under Mode-II, ongoing projects of Non-residential schools/Residential Schools/ Hostels of the VOs/NGOs are supported. Components like salary of staff, food items, books and stationary etc. have been dropped from the revised Scheme and unitary cost norm (per student basis) have been included to make the scheme more transparent, free from manipulation of costs and more beneficiary oriented.

How it has been working so far?

- Every year, it is expected that about (3000) students would be selected for admission in Class 9 and Class 11 under the scheme.

- In successive years the grants have been approximately remained constant.

Way Forward

◉ SHRESHTA is applicable only on residential schools (independent) affiliated with the CBSE. Schemes can also be extended to non-residential schools also.

◉ It can also be extended to other boards apart from CBSC and state boards.

◉ In such cases awareness generation about the scheme in students below class 9 is also important.

◉ There has to be a strict monitoring mechanism of utilization of fund given to schools and NGOs.

SCHEME FOR HIGHER EDUCATION YOUTH IN APPRENTICESHIP AND SKILLS (SHREYAS)

◉ SHREYAS is a programme conceived for students in degree courses, primarily non-technical, with a view to introduce employable skills into their learning, promote apprenticeship as integral to education and also amalgamate employment facilitating efforts of the Government into the education system so that clear pathways towards employment opportunities are available to students during and after their graduation.

◉ **SHREYAS** is a programme basket comprising the initiatives of three Central Ministries, namely

➤ Ministry of Human Resource Development

➤ Ministry of Skill Development & Entrepreneurship

➤ Ministry of Labour& Employment

Objectives

◉ To improve employability of students by introducing employment relevance into the learning process of the higher education system

◉ To forge a close functional link between education and industry/service sectors on a sustainable basis

◉ To provide skills which are in demand, to the students in a dynamic manner

◉ To establish an 'earn while you learn' system into higher education

◉ To help business/industry in securing good quality manpower

◉ To link student community with employment facilitating efforts of the Government

◉ Under the NAPS scheme, Central Government shares 25% of the stipend per month subject to a maximum of Rs.1500 p.m during the period of the apprenticeship. Apart from that, an amount upto Rs.7500 will be met towards basic training cost, where needed.

How it has been working so far?

◉ More than 40 higher educational institutions have already been tied up for taking up embedded apprenticeship courses.

◉ In all the tracks together, it is proposed to cover **50 lakh students** by 2022.

◉ The government has sanctioned Rs 10,000 crore sanction for this programme, while addressing his speech. Also, the central government would give 'some' funds to the industry to train students.

Way Forward

◉ A targeted portion of allocation should be given to women and SC students.

◉ There has to be transparent mechanism on the availability of data on number of students who are getting the training.

PM YASASVI SCHEME

- To deal with this drop-out situation, the government and various other public organizations have come up with suitable aids to meet their financial needs. Students are now open to wide variety of scholarships for continuing their education based on needs for vulnerable section of the society. The **'PM Yashasvi Scholarship Scheme'** is a National Scholarship Scheme for the students of the deprived section of the society from grade nine to post-graduate (PG) with the idea of engaging the senior citizens for mentoring them.

- **Aim:** With the help of PM YASAHVI (Young Achievers Scholarship Award Scheme for Vibrant India), it will help in motivating the students of the deprived sections (SC/ST/OBC/EWS) of the country to get higher education.

- **Amount sanctioned**: In the current year, an allocation of Rs.6000 crores was already made for this scheme, but now it has been increased to Rs.7200 crores.

- **Fund allocation**: the fund allocation will be distributed among the centre and the state in the ratio of 60:40.

- **Eligibility**:
  - Students from class IX (9th Class) to PG (Post Graduate)
  - Only Backward students of the society (SC / ST / OBC / EWS) will be eligible for this.
  - Must be a citizen of India.

- **Implementation**: The Ministry of Social Justice and Empowerment has released the "PM Yashasvi Scholarship Scheme" for the students of the deprived sections (SC/ST/OBC/EWS) of the country.
  - A merit test will be conducted every year in the month of June-July to get the PM Yashasvi Scholarship.
  - After this, the scholarship will be sent directly to the bank account of the students.

- This scheme will encourage students to work harder to remain a scholar in their fields and ultimately make their concepts strong.

- The drop out events due to lack of financial assistance will reduce, especially for girls, who are more prone to leave their higher studies due to lack of money and marriage pressures.

Benefits

- It will increase the reach of information about the government scholarships.
- Boost the importance of maintaining a basic curriculum and teaching standards across the country.
- Help improve the quality and implementation of scholarships.
- Improving the educational opportunities for all is critical to improving human capital that is critical for the knowledge economy.

Issues

- In case a student misses the deadline of scholarship, he will not get a second chance to apply for other scholarships.
- The national-level scholarship exam would become an added burden on students.
- Having a separate exam for identifying merit is redundant as already students are appearing for board examinations and entrance examinations.
- If the existing pre-matric and post-matric scholarship schemes are done away with, it could end up hampering the education of students.

Way Forward

◉ The single national scholarship scheme under PM-YASASVI can be beneficial only if it is implemented properly. Without correct implementation, it can become a hindrance rather than a help for students in India.

◉ The government should leverage the experience of scholarship provider platforms while developing this new scholarship scheme as they have a first-hand experience of supporting students.

◉ The aim of the schemes should not just to increase public spending in education but to utilize the spending to maximum benefit—to focus public spending in segments and activities that are best served by government intervention, while in other cases leveraging public money for greater private flows.

PRADHAN MANTRI DAKSHTA AUR KUSHALTA SAMPANN HITGRAHI (PM-DAKSH) YOJANA

◉ PM-DAKSH (Pradhan Mantri Dakshta Aur Kushalta Sampann Hitgrahi) Yojana was launched by the Ministry of Social Justice & Empowerment (MoSJ&E), Government of India in 2020-21 as part of a National Action Plan for skilling of marginalized persons covering **SCs, OBCs, EBCs, DNTs, Sanitation workers including waste pickers**

◉ The scheme will be implemented through three Public Sector Undertakings, of the Ministry of Social Justice & Empowerment.

Objectives

◉ To improve all-round competency & adeptness of 2.7 lakh persons, over the next 5 years, beginning with nearly 0.5 lakh youth in the first year i.e. 2021-22, from the following sections of the target group:

  ➤ **Artisans**–may be able to improve their revenue generation capacities within their practicing vocations,

  ➤ **Women** - may be able to enter into self-employment thereby financially empowering themselves without neglecting their domestic activities; and

  ➤ **Youth from the target groups** - may acquire long-term training and specialization in employable vocations giving them better standing in the job market.

Key features

◉ Training free of cost for the trainees, 100% grants by Government.

◉ Stipend of Rs.1,000/- to Rs.1,500/- per month per trainee for trainees having 80% and above attendance in short term and long term training.

◉ Wage compensation of Rs.3000/- per trainee (Rs.2500/- as per PM-DAKSH and Rs.500/- as per Common Cost Norms for trainees having 80% and above attendance in Reskilling/Up-skilling.

◉ Trained candidates will be provided certification after successful completion of training and assessment.

◉ Trained candidates will be provided placement after assessment and certification.

Way forward

◉ The Corporations should directly monitor all the training programmes.

◉ Participation of representatives in the Selection Committee and meeting should be organized and minutes of the meeting should be open for public inquiry.

◉ Provision of inviting PMU team to visit the on-going training sight for inspection, Instant information on WhatsApp Groups for different activities, Monitoring of training programmes by setting up CCTVs and live streaming of the session and launching of PM DAKSH Portal for Monitoring of skilling training on real time basis should be done.

◉ Online surveillance through CCTV, Apps

SOME STATE LED INITIATIVES

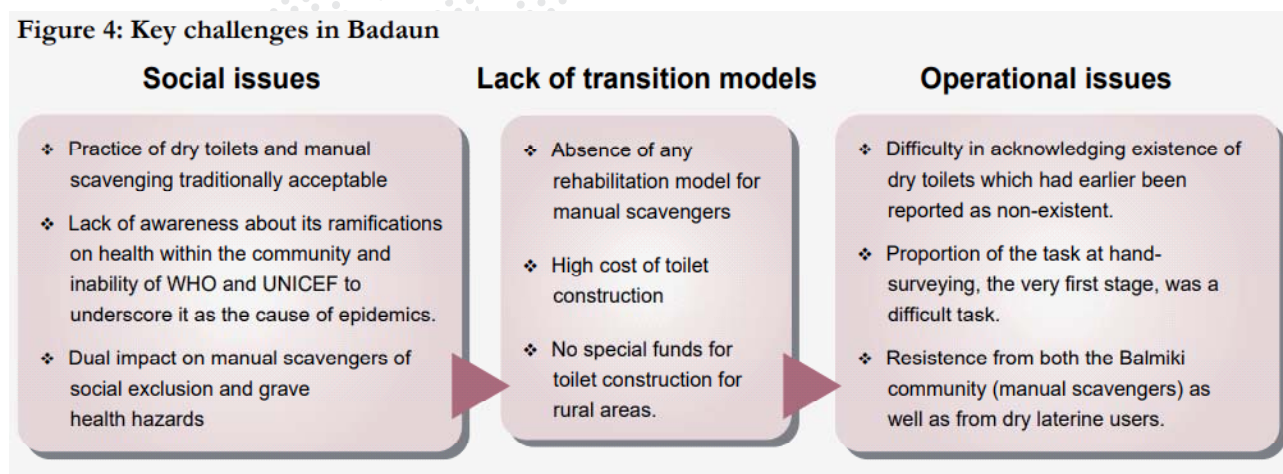## A. Daliya Jalao: Liberating and rehabilitating manual scavengers in Badaun district of Uttar Pradesh

The continuing practice of manual scavenging that involves cleaning of dry toilets and carrying/transporting the night-soil as head-load, primarily by women of certain Dalit communities, has remained a blot on India's development story. This practice has continued despite promulgation of prohibitive legislations and court rulings such as the Employment of Manual Scavengers and Construction of Dry Latrines (Prohibition) Act, 1993, which was followed by a Supreme Court ruling in 2003. To overcome it, UP government has launched Daliya Jalao. The Daliya Jalao initiative was a result of the combined efforts of the District Magistrate and the district administration of Badaun, with the support of the local community.

Major Outcomes

◉ **Conversion of dry toilets into pour flush toilets:** Within a year from the start of implementation, 50,000 dry toilets in 535 villages were converted into pour-flush ones. Another 20,000 dry toilets in the urban households of the district were also converted by July 2011.

◉ **Liberation of manual scavengers:** The initiative liberated 2,750 manual scavengers in Badaun from dehumanising work by July 2011. The main reason behind this achievement was that community leaders took upon themselves the task of convincing manual scavengers to give up scavenging and a collective decision was taken by the community to this effect.

◉ **Improvement in health:** The initiative has had a profound impact on the health indices, evidenced mainly by the fact that there was no fresh case of polio since 2010 in contrast to 52 wild polio-virus cases reported during the previous year, 2009. The numbers of sick children recorded in pulse polio rounds also came down from 155 cases in April 2010 to 95 in May 2011. There was also a steady decline in the incidence of diarrhoea as the number of cases decreased from 18,216 in 2009-10 to 12,675 in 2010-11.

Key Challenges

Manual scavenging was a traditionally accepted practice and any attempt to eliminate it was a very challenging task. It presented multifarious challenges in terms of social acceptance and inclusion, financial implications in rehabilitation as well as implementation of the initiative and functional difficulties in implementing this initiative in mission mode.

Figure 4: Key challenges in Badaun

Social issues	Lack of transition models	Operational issues
✤ Practice of dry toilets and manual scavenging traditionally acceptable ✤ Lack of awareness about its ramifications on health within the community and inability of WHO and UNICEF to underscore it as the cause of epidemics. ✤ Dual impact on manual scavengers of social exclusion and grave health hazards	✤ Absence of any rehabilitation model for manual scavengers ✤ High cost of toilet construction ✤ No special funds for toilet construction for rural areas.	✤ Difficulty in acknowledging existence of dry toilets which had earlier been reported as non-existent. ✤ Proportion of the task at hand-surveying, the very first stage, was a difficult task. ✤ Resistence from both the Balmiki community (manual scavengers) as well as from dry laterine users.

Way Forward

◉ The strategy of Daliya Jalao can be replicated at places where the manual scavenging is prevalent.

◉ Awareness generation among the people with regards to the health outcomes can be taken.

- Effective participatory strategies can ensure mitigation.
- Alternate employment opportunities should be provided to the rescued scavengers.
- Stringent enforcement of legislations and rules should be ensured.

B. Forest Rights Act, 2006: Distributing land deeds to tribal people in Tripura.

Need of the Initiative

During British colonial rule in India, all forested areas in the country, which at the time was one-fourth the land surface, was brought under direct control of the state under the Indian Forest Act. The vast number of communities whose social and economic lives were intimately linked to the forest were deprived of their right to continue peacefully, leading to grave injustice. The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (hereinafter referred to as Forest Rights Act or FRA) was, therefore, promulgated with the objective of granting the tribal population of the country legal rights to forest land that they inhabit.

About the Initiative

- Under the provisions of the FRA, the official land deeds or pattas are handed over to eligible candidates by designated officials of the State government after a process of verification and review.
- There are two sets of rights that may be granted – individual rights and community forest rights.
- The eligibility criteria states that these rights have been granted to those primarily residing on forest land for three generations (75 years).
- The rights are granted to those who occupied forest lands prior to 13 December, 2005 and depend on the forest or forest land for bonafide livelihood needs.

Key Features

- **Objectives:** The primary objective is to ensure that tribal people and forest dwellers have a clear and legal right to forest areas documented in the land deeds issued to them. In Tripura, this has been extended to the provision of economic benefits to all patta holders in the State for the social and economic upliftment of tribal people.
- **Pillaring:** At the grassroots level, pillaring (i.e. placement of oblong stone markers, generally in four corners of the plot, to indicate boundary) is done to benefit the beneficiaries by clearly demarcating properties that have been granted under FRA.
- **Mapping:** The administration also makes use of a Global Positioning System (GPS) interface for mapping and recording the exact coordinates of the area of forest land being claimed.
- **Beneficiaries:** The beneficiaries are the Scheduled Tribes and other forest dwellers who receive pattas under the FRA.
- **Implementation:** The nodal implementing agency is the Tribal Welfare Department, Government of Tripura, headed by the Chief Secretary. At each administrative level, committees have been formed as per the FRA.
- **Economic Benefits:** The State government has dovetailed schemes of other line departments and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) for providing economic benefits to patta holders.

Outcomes

- **Strong uptake of the FRA and related economic benefits**: Claims were received in thousands on various fronts including completion of GPS demarcation, pillaring completion, passbook updation, GPS updation on MIS, and provision of IAY housing.

◎ **Surge in provision of economic benefits:** Economic benefits to tribal people also surged in various categories from the year 2010-11 to the year 2011-12. While 2,612 families benefited in fisheries in 2010-11, the number of such families in the year 2011-12 rose to 3,061. Similarly, the number of families benefiting in the horticulture segment was 5,642 in 2010-11, while the number of such families went up to 11,142 in the year 2011-2012.

Challenges

◎ Intermittent delay in coordination is one of the prominent challenges. The verification process requires the coordination of a number of authorities from different departments.

◎ Augmenting financial resources is also a challenging task. Plans for expanding beyond the provision of economic benefits and including social benefits such as academic programmes/scholarships for forest dwellers have not materialised yet due to insufficient funds.

◎ Fruition time in livelihood activities also poses a formidable challenge. With regard to some economic benefits granted in the implementation of the FRA in Tripura, there may be considerable delay in actually receiving the fruits of the benefits.

Way Forward

◎ Reviewing all rejected and pending claims to IFR and CFR expeditiously

◎ Ensuring regular meetings of district and sub-division level committees to consider and approve IFR and CFR claims in a time-bound manner

◎ Building capacities of gram sabhas for governance and management of community forest resources.

◎ Besides leveraging modern technology to map and monitor the implementation of FRA, the forest bureaucracy must also be reformed to serve as service providers to gram sabhas .

C. Samarpan: Early identification and intervention to check disability in Madhya Pradesh

Need of the Initiative

Globally, birth defects occur in six to seven out of every 100 babies born annually. In the Indian context, birth defects account for 9.6% of all new born deaths. There is a clearly visible policy gap in addressing issues of disability among children in India.

Samarpan emphasises the criticality of employing twin concepts in guiding any policy initiative in this direction: one, the critical period of development of a child, and two, the role of specialist disciplines like neuroplasticity, which refers to the changes in neural pathways and synapses which determine brain development. These twin concepts guided the search for a plan of action to put these ideas proactively on the health map of the Hoshangabad district. The result was the launch of the Samarpan initiative, focussing on early identification and intervention in U-5 children in the district.

About the Initiative

◎ Samarpan's Early Intervention Clinic (EIC) realises a convergence model of the Departments of Public Health & Family Welfare (PHFW), Women and Chilld Development (WCD), and the District Disabled Rehabilitation Centre (DDRC).

◎ It was led by the Hoshangabad district administration.

◎ Every month, 1,500 children are examined in a coordinated exercise involving a vast number of health officials and converging existing schemes such as the National Rural Health Mission (NRHM) and the Mukhya Mantri Bal Hriday Upchaar Yojna.

◎ This initiative was supported by the United Nations Office for Project Services (UNOPS)- Norway India

Partnership Initiative (NIPI).

Key Features

- **U-5 Screening:** The main objective of the initiative was to identify early signs of development delays in U-5 children in Hoshangabad district en masse, by conducting screening tests based on development milestones for the newborn and U-5 children.

- **Multidisciplinary evaluation**: The initiative also aims to have a comprehensive facility under a single roof for the specialised and multidisciplinary evaluation of children's social development.

- **Nodal Implementing agency:** The nodal implementing agency was the district administration of Hoshangabad District.

- **Other agencies involved**: Department for Women and Child Development (WCD), District Health Department, District Disability Rehabilitation Centre (DDRC), Department for Social Justice & Empowerment, and Revenue Department.

Outcomes

- **Replication:** The relevance of this initiative was established in February 2013, when the NHRM launched the Rashtriya Bal Swasthya Karyakram, modelled on Samarpan.

- **Coverage of U-5 children:** A total of 1,05,550 children were screened by Anaganwadi Workers using the 'Samarpan' screening test, and 2,311 children were identified with delays-in-developmental milestones as of March, 2014.

- **Increased acceptance of disability and treatment seeking behaviour:** The social impact of the initiative was significant, especially as it led to an increased acceptance of disability in society, and encouraged people to seek required treatment. Samarpan made positive efforts to mainstream people with disability. A small child with mental retardation was invited to inaugurate the Samarpan facility with the aim to ease the stigma attached to disability.

- **Societal sensitivity to persons with disabilities and mainstreaming:** Consistent IEC activities ensured that society was encouraged to be more sensitive to disability. Apart from therapeutic and specialised interventions, the Samarpan team also provided assistance and support to enroll these children in schools. This worked positively in main streaming them in society.

Challenges

- A total lack of any policy direction to guide the practical roll-out of the initiative was a big challenge. There was no policy in India that took a preventive perspective on disability, especially in the case of children. Hence, the initiative took a long time and research to take shape.

- Lack of adequate awareness and sensitivity about the issues of child disability such as critical development period, and neuroplasticity among the local doctors and other health workers.

- Lack of funds available with departments to contribute towards implementing the Samarpan initiative was also a stumbling block.

- Resistance among parents to accept disability in their children is also an impediment along with social resistance towards accepting disability.

Way Forward

- The National Health Policy should also include the U-5 disabilities for the purpose of making policy guidelines for its implementation.

- Awareness generation about the disabilities issues and their available treatment can also be done.

- As the U-5 development related disabilities are quite common, so states and central government can take proactive measures to enhance the nutrition and other pregnancy related needs of women.

- The technology interventions and support can be given to boost the medical facilities.

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MSME SECTOR

PRADHAN MANTRI MUDRA YOJANA (PMMY)

In India, despite having a vast banking network, there are many micro units which are outside the formal banking sector. According to NSSO Survey (2013), there are 5.77 crore small business / micro units, mostly individual proprietorship or 'Own Account Enterprises' (OAE), and majority of them are owned by people belonging to Scheduled Caste, Scheduled Tribe or Other Backward Classes (OBCs). Of these, less than 5% only have access to formal credit institutions and the rest have to rely upon informal sources for funding their business (friends, relatives or money lenders).

In order to bring them under the formal credit channel, as part financial inclusion process, Pradhan Mantri Mudra Yojana (PMMY) was launched

About the Initiative

- These loans are given by Commercial Banks, RRBs, Small Finance Banks, MFIs and NBFCs.
- Any Indian Citizen, who is eligible to avail of loan and has a business plan for an income generating activity can avail of MUDRA loan under PMMY.
- Under the aegis of PMMY, MUDRA has created three products namely 'Shishu', 'Kishore' and 'Tarun' to signify the stage of growth / development and funding needs of the beneficiary micro unit / entrepreneur and also provide a reference point for the next phase of graduation / growth.

Sr. No.	Category	Amount
1.	Shishu	upto ₹ 50000/-
2.	Kishor	₹ 50,000 and up to ₹ 5 lakh
3.	Tarun	above ₹ 5 lakh and up to ₹ 10 lakh

How it had worked so far?

- Cumulative Outreach to 29.55 crore MSE Borrower Accounts with Credit Support of ` 15.52 lakh crore.
- Empowering Women with 68% Loan Accounts belonging to Women Beneficiaries.
- Addressing the Credit Needs of Weaker Sections with 51% of the Loan Accounts belonging to SC/ST/OBC.

- The state level performance is being monitored by the respective SLBCs of the states. Of all the states, Karnataka topped with sanction of ` 30,199.18 crore, followed by West Bengal with ` 29,335.98 crore and Uttar Pradesh stood at third position with ` 29,231.25 crore.

Way Forward

- There is raised concerns over the growing level of bad loans from the Pradhan Mantri MUDRA Yojana. The country's largest bank, the State Bank of India (SBI), has seen its gross NPAs in the Mudra loan segments at close to 20 per cent of its loan outstanding under Pradhan Mantri Mudra Yojana (PMMY) scheme. Many experts suggest that PSBs are not the right vehicle to do Mudra loans. There are banks like Bandhan Bank and Small Finance Banks that have made a profitable business model in serving the underbanked and underserved.

- Banks need to focus on repayment capacity at the appraisal stage and monitor the loans through the lifecycle much more closely. Early recognition of these risks and initiating action to mitigate the related regulatory and supervisory challenges is key to harnessing the full potential of these developments.

- Microfinance institutions must broaden their client outreach to reduce the concentration risk in their own interest and to serve a wider clientele base.

CREDIT LINKED CAPITAL SUBSIDY SCHEME (CLCSS)

A large percentage of Micro and Small Enterprises (MSEs) units continue with outdated technology and plant & machinery, due to requirement of investment and lack of awareness in respect of both the quality standards and access to modern technologies. With rising competition due to liberalization of the economy, the survival and growth of the MSE units are critically dependent on their modernization and technological up-gradation as they will lead to improvement in quality and productivity. The technology up-gradation of both the process of manufacturing and corresponding plant and machinery is necessary for the micro and small enterprises to reduce the cost of production and remain price competitive at a time when cheaper products are easily available in the global market.

About the Initiative

- It aims at facilitating technology upgradation by providing capital subsidy to MSE units, on institutional finance (credit) availed by them for modernization of their plant and machinery involved in manufacturing process and equipment for rendering services.

- The CLCS component of the scheme will continue to provide capital subsidy to MSE units @ 15 %, for induction of well established and improved technology in select sub-sectors/products.

  ➤ In-order to ensure fair inclusion of SC/ST category, women entrepreneurs and entrepreneurs from NER, Hill States (Jammu & Kashmir, Himachal Pradesh & Uttarakhand) Island Territories (Andaman & Nicobar and Lakshadweep) and the identifies Aspirational Districts/LWE Districts, the subsidy has also been made admissible for investment in acquisition/replacement of plant & machinery/equipment & technology up-gradation of any kind.

- The ceiling limit of amount of loan/institutional finance eligible for subsidy is Rs.1.00 crore.

- Online Application and Tracking System exist for the easing the process.

- The Scheme is a demand driven one without any upper limit on overall annual spending on the subsidy disbursal.

- **Monitoring:** The committee of experts comprising, industry associations, IF Wing and ministries/departments under the Chairmanship of AS&DC (MSME) will be constituted to monitor the progress of the CLCS component of the CLCS-TU Scheme.

- **Retrospective in nature**: The scheme is implemented from retrospective date, therefore subsidy should be calculated on the Investment on eligible machineries as per earlier practice.

- **Capital Subsidy**: The quantum of capital subsidy would be restricted to 15% (maximum up to Rs.15 lakh) of the eligible investment.

CREDIT GUARANTEE TRUST FUND FOR MICRO AND SMALL ENTERPRISES (CGTMSE)

The Credit Guarantee Fund Scheme for Micro and Small Enterprises (CGMSE) was launched by the Government of India to make available **collateral-free credit** to the micro and small enterprise sector.

Need of the Initiative

There are an estimated 26 million micro and small enterprises (MSEs) in the country providing employment to an estimated 60 million persons. The MSE sector contributes about 45% of the manufacturing sector output and 40 % of the nation's exports. Of all the problems faced by the MSEs, non- availability of timely and adequate credit at reasonable interest rate is one of the most important. One of the major causes for low availability of bank finance to this sector is the high risk perception of the banks in lending to MSEs and consequent insistence on collaterals which are not easily available with these enterprises. The problem is more serious for micro enterprises requiring small loans and the first generation entrepreneurs.

About the Initiative

The trust aims to provide guarantee in respect of the credit facilities extended by the lending institutions without any collateral security and /or third party guarantees to the new or existing Micro and Small Enterprises.

- **Contribution:** The corpus of CGTMSE is being contributed by the Government and SIDBI in the ratio of 4:1 respectively.

- **Finance Limit:** Any collateral / third party guarantee free credit facility extended by eligible institutions with a maximum credit cap of 200 lakh are eligible to be covered.

- **Financing:** The institutions, which are eligible for financing facilitation under the scheme,

  ➤ scheduled commercial banks (Public Sector Banks/Private Sector Banks/Foreign Banks)

  ➤ select Regional Rural Banks (which have been classified under 'Sustainable Viable' category by NABARD).

  ➤ National Small Industries Corporation Ltd. (NSIC), North Eastern Development Finance Corporation Ltd. (NEDFi) and SIDBI have also been made eligible institutions.

- **Hybrid Security:** CGTMSE has introduced a new "Hybrid Security" product allowing guarantee cover for the portion of credit facility not covered by collateral security. In the partial collateral security model, the MLIs will be allowed to obtain collateral security for a part of the credit facility, whereas the remaining part of the credit facility, up to a maximum of 200 lakh, can be covered under Credit Guarantee Scheme of CGTMSE. CGTMSE will, however, have pari-passu charge on the primary security as well as on the collateral security provided by the borrower for the credit facility.

How it had worked so far?

- Over the past 20 years, CGTMSE has been instrumental in providing guarantee cover to collateral and/or third party guarantee free credit facilities extended by eligible Member Lending Institution [MLIs] to MSEs.

- With increased and dedicated focus on MSE lending, CGTMSE has undergone transformative reforms since 2017 to expand the scope of its schemes to uncovered segments like Partial collateralized loans, Retail Trade and amongst uncovered lenders like NBFCs and Small Finance Banks and Scheduled Co-Operative Bank.

- CGTMSE has leveraged technology to achieve this scale and the entire operations are carried out online including NPA marking and claim settlements.

- The scheme was modified from time to time for ease of operations, enhancement of credit flow to MSE sector and to meet the requirements of the MSEs as well as Lending Institutions.

Way Forward

- The lending institution should evaluate credit applications by using prudent banking judgement.
- There shall not be any delay on to notify the default in the borrowers account which shall result in the Trust facing higher guarantee claims.
- The payment of guarantee claim by the Trust to the lending institution does not in any way take away the responsibility of the lending institution to recover the entire outstanding amount of the credit from the borrower.

PRIME MINISTER'S EMPLOYMENT GENERATION PROGRAMME (PMEGP)

Prime Minister's Employment Generation Programme (PMEGP) is a credit linked subsidy program formed by merging the two schemes that were in operation till 31.03.2008 namely Prime Minister's Rojgar Yojana (PMRY) and Rural Employment Generation Programme (REGP) for generation of employment opportunities through establishment of micro enterprises in rural as well as urban areas.

About the Initiative

Credit Linked Subsidy Scheme (CLSS)

- Under such schemes , government provides a direct subsidy on loan interest rates to the various beneficiaries of the scheme.

- It is aimed at generating self-employment opportunities through establishment of micro-enterprises in the non-farm sector by helping traditional artisans and unemployed youth.
- Any individual, above 18 years of age and at least VIII standard pass is eligible for the benefits under the scheme.
- The maximum projects cost is Rs 25 lakh in the manufacturing sector and Rs 10 lakh in the service sector.

Aim

- The scheme aims to generate employment opportunities in rural as well as urban areas of the country through setting up of new self-employment ventures/projects/micro enterprises.
- Besides, the scheme also seeks to provide continuous and sustainable employment to all segment of traditional and prospective artisans and rural / urban unemployed youth in the country, so as to help arrest migration of rural youth to urban areas.
- The scheme also focuses to increase the wage-earning capacity of artisans and contribute to increase in the growth rate of rural and urban employment.

Objectives

- To generate employment opportunities in rural as well as urban areas of the country through setting up of new self-employment ventures/projects/micro enterprises.
- To bring together widely dispersed traditional artisans/ rural and urban unemployed youth and give them self-employment opportunities to the extent possible, at their place.
- To provide continuous and sustainable employment to a large segment of traditional and prospective artisans and rural and urban unemployed youth in the country, so as to help arrest migration of rural youth to urban areas.

Implementation:

◉ The scheme is implemented by Khadi and Village Industries Commission (KVIC) functioning as the nodal agency at the national level.

◉ At the state level, the scheme is implemented through State KVIC Directorates, State Khadi and Village Industries Boards (KVIBs), District Industries Centres (DICs) and banks.

◉ In such cases KVIC routes government subsidy through designated banks for eventual disbursal to the beneficiaries / entrepreneurs directly into their bank accounts.

◉ The identification of beneficiaries will be done at the district level by a Task Force consisting of representatives from KVIC/State KVIB and State DICs and Banks. The Task force would be headed by the District Magistrate / Deputy Commissioner / Collector concerned.

Way Forward

◉ Awareness generation among the population about the scheme.

◉ State KVIBs and District centres should be strengthen for the purpose of implementation of the scheme at local level.

◉ Financial Inclusion should be ensured by opening bank accounts under government schemes such as Jan Dhan Yojana.

◉ Beneficiary selection procedure should become more robust to channelize the credit in the most deserving people.

SFURTI PROJECT

With a view to make the traditional industries more productive and competitive and facilitating their sustainable development, the Govt. of India announced a Central Sector Scheme titled the "Scheme of Fund for Regeneration of Traditional Industries (SFURTI)".

◉ Under the scheme, the clusters are provided with assistance in setting up Common Facility Centers, Raw Material Banks, procurement of machines, training, exposure visits, branding, etc.

Type of Clusters	Per Cluster Budget Limit
Heritage Clusters (1000-2500 artisans)	Rs. 8.00 crore
Major Clusters (500-1000 artisans)	Rs. 3.00 crore
Mini-Clusters (Upto 500 artisans)	Rs. 1.50 crore

◉ The financial assistance provided for any specific project shall be subject to a maximum of Rs 8 (eight) crore.

◉ It aims to organize the traditional artisans into clusters and to make the Traditional Industries more productive, profitable and capable for generating sustained employment.

◉ The scheme covers three types of interventions:

➤ **Soft interventions**– Activities to build general awareness, counselling, skill development and capacity building, exposure visits, market development initiatives, design and product development,etc.

➤ **Hard interventions**– Creation of common facility centres, raw material banks, upgradation of production infrastructure, warehousing facility, tools and technological upgradation,etc.

➤ **Thematic interventions**– Interventions on a cross-cutting basis for brand building, new media marketing, e-commerce initiatives, research and development, etc.

◉ **Nodal Agencies:** Ministry of Micro, Small and Medium Enterprises (MSME) and its organizations (Khadi and Village Industries Commission-KVIC and Coir Board), in collaboration with State Governments, their organizations and non-governmental organizations.

- **Implementing Agenices:** Implementing Agencies (IAs) would be non-Government organizations (NGOs), institutions of the Central and State Governments and semi – Government institutions, field functionaries of State and Central Govt., Panchayati Raj institutions (PRIs), etc. with suitable expertise to undertake cluster development.

Way Forward

- It is noted that turnover and profitability of enterprises has not significantly increased when compared to the investment made. Hence, necessary forward and backward linkages and marketing connect is needed to ensure higher income of the cluster and artisans.

- Government should work on convergence of the scheme with other similar government schemes.

PM SVANidhi

Street vendors represent a very important constituent of the urban informal economy and play a significant role in ensuring availability of the goods and services at affordable rates at the door-step of the city dwellers.

The COVID-19 pandemic and consequent lockdowns have adversely impacted the livelihoods of street vendors. Therefore, to provide working capital to street vendors government has initiated PM SVANidhi to resume their business.

About the Initiative

- The scheme is a Central Sector Scheme i.e. fully funded by Ministry of Housing and Urban Affairs.

- Urban street vendors will be eligible to avail a Working Capital (WC) loan of up to Rs.10,000 with tenure of 1 year and repaid in monthly instalments. For this loan, no collateral will be taken by the lending institutions.

- On timely or early repayment, the vendors will be eligible for the next cycle of working capital loan with an enhanced limit.

- No prepayment penalty will be charged from the vendors for repayment before the scheduled date.

- In case of Scheduled Commercial Banks, Regional Rural Banks (RRBs), Small Finance Banks (SFBs), Cooperative Banks SHG Banks, the rates will be as per their prevailing rates of interest. In case of NBFC, NBFC-MFIs etc., interest rates will be as per RBI guidelines for respective lender category.

- The vendors, availing loan under the scheme, are eligible to get an interest subsidy @7%. The interest subsidy amount will be credited into the borrower's account quarterly.

- The Scheme is available for beneficiaries belonging to only those States/UTs which have notified Rules and Scheme under Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act, 2014.

- The Scheme is available to all street vendors engaged in vending in urban areas as on or before March 24, 2020.

- State bank of India has been a prime lending institution.

- Madhya Pradesh has been the largest distributor.

Way Forward

- Urban Local Bodies (ULB's), which is a crucial connecting point between the lending agency and the eligible applicants, need to play a more proactive role. Many applications are kept pending due to the lack of letter of recommendation from the ULB's.

- The government should work on similar schemes that aim at bringing up the benefits of formalization, and simultaneously at reducing the cost of formalisation for small and micro informal enterprises.

- Voluntary formalisation, rather than a forced one, is the way forward for the Indian economy to take the informal sector along on its path to recovery.

KHADI REFORM AND DEVELOPMENT PROGRAMME (KRDP)

In order to fully realize the significant growth potential of KVI sector in terms of employment generation, enhance earnings of artisans and also to ensure positioning of Khadi in consonance with the current market needs, holistic reform measures for Khadi sub sector are envisaged. The Khadi reform and Development programme initiated by Govt. of India with the support of Asian Development Bank (ADB) is an effort in that direction.

Khadi and Village Industries Commission (KVIC) is the Implementing Agency of KRDP. KVIC will develop Khadi Mark for positioning khadi as a guaranteed hand spun and hand woven cloth ensuring specified base earning of artisans.

Objectives

- To strengthen the better earning for artisans and make them involved in the implementation of the Khadi Reform and Development Programme.
- To position khadi with the current market requirements and develop khadi as a global brand.
- To provide support for the development of five identified traditional village industries such as handmade paper, honey, herbal health and cosmetics, leather and agro-food processing industry.

Significance

- KRDP will offer scope for a significant increase in artisans earnings.
- Implementation of modified Market Development Assistance (MDA) will provide additional incentives to all artisans and special incentive to spinners.
- Payment of wages to artisans through bank or post office account will encourage artisans to plan savings for future betterment.
- The proposed professional marketing strategies by Marketing Organisation will enhance earning opportunity of artisans.
- Development of new product through regular skill up-gradation programme will assure increased earning.
- Artisans participating in the governing body of the institution will enable a better understanding of khadi activities among the artisans to enhance the growth of the institution.
- Artisans can establish khadi institutions under Producer Company model to assure entrepreneurship among the artisans.
- Through khadi mark global recognition of hand spinning and hand weaving is given.
- The number of artisans employed by Khadi Institutions (KIs) will be increased by 15%.
- The earnings of Khadi artisans will be increased by 20%.

Challenges

- Inconsistency in supply and demand.
- Lack of awareness among people and businesses.
- Impact of GST on khadi.
- Slow trickle-down of research and development works.
- The raw materials required for the khadi industry are neither of good quality nor are they abundant.
- They face tough completion from cheap machine made clothes.
- Lack of capital and financial resources has hit this industry hard.
- This industry has not been able to produce a variety of designs and fashion clothes to fulfil the needs of the middle and upper class.

Way Forward

◉ Recognizing khadi activities as work of art and khadi artisans as artists and that the profession is aptly glorified and talents are recognized.

◉ Wages and incentives should be fair and commensurate to the work. This will be ensured keeping in mind the statutory minimum wages.

◉ Focusing on eco-friendly and natural products of the sector.

◉ Identification of surplus land with KVIC and KVI Institutions and work out action plan for effective utilization of land.

NATIONAL BEEKEEPING & HONEY MISSION (NBHM)

It's a new Central Sector Scheme "National Beekeeping and Honey Mission (NBHM)" for overall promotion & development of scientific beekeeping and production of quality honey & other beehive products.

◉ It strives towards giving thrust under the 3 Mini – missions on:

➤ capacity building & trainings

➤ specific focus on women

➤ input support for promotion & production

➤ setting up of Integrated Beekeeping Development Centres (IBDCs)

➤ digitization /online registration

➤ processing, value addition, market support

The NBHM will work in coordination with other Governmental programs / schemes relating to promotion of beekeeping.

Way Forward

The steps needed are:

◉ Strengthening of National Bee Board and State Boards/ Missions

◉ Strengthening & involving supplementary Institutional frame work to promote scientific beekeeping for pollination support to the crops – SHGs /FIGs / FPCs /Cooperatives/ NDDB/ GCMMF, etc.;

◉ Developing quality germplasm & nucleus stock of honey bees;

◉ Policy on migration / transportation of bee colonies etc.;

◉ Convergence of various schemes of various departments;

◉ Making Forest Laws/ Acts, suitable for beekeeping etc.;

◉ Domestic strds. for honey & other beehive products by BIS/ FSSAI, etc.;

◉ Disease diagnostic labs & bee products quality analysis labs ;

◉ Insurance of bee colonies;

◉ Availability of credit/ loan through banks

SOLAR CHARKHA MISSION

Ministry of MSME has launched Mission Solar Charkha for production of solar-spun yarn through solar-powered charkhas.

Objective

◉ To ensure inclusive growth by generation of employment, especially for women and youth, and sustainable development through solar charkha clusters in rural areas.

- To boost rural economy and help in arresting migration from rural to urban areas.

- To leverage low-cost, innovative technologies and processes for sustenance.

It will help to boost rural economy and help in arresting migration from rural to urban areas. These solar charkhas are to be operated using solar power which is a renewable energy source. It will help in the development of the Green Economy as it is an environmentally friendly program. It will also generate sustainable employment for the artisans.

> ### Solar Charkha
>
> - Ministry of MSME has classified Solar Charkha Unit as a Village Industry.
>
> - A standard Solar Charkha with 10 spindles has been rated and approved by experts, and the technical specifications finalized by the Ministry, after testing the various models of Solar Charkhas.
>
> ### Cluster
>
> - 'Cluster' would mean a group of villages in a radius of 8 to 10 kilometers of a focal village. Such a cluster will have 200 to 2000 beneficiaries, each of whom will be given two charkhas of 10 spindles.

Targets

- The scheme is envisaged to generate direct employment nearly to one lakh persons in the approved Fifty (50) clusters.

- The geographical distribution of the clusters throughout the country, with at least 10% located in the North Eastern Region (NER), J&K and hilly states, will also be kept in view.

- Special focus will be given to 117 aspirational districts for soliciting project proposals under the scheme.

Way Forward

- Identification of beneficiaries should be done by involving the local administration.

- Equal distribution of clusters should be ensured.

- Skill development drives should be conducted locally.

- Women should be given special focus.

A SCHEME FOR PROMOTION OF INNOVATION, RURAL INDUSTRY & ENTREPRENEURSHIP (ASPIRE)

ASPIRE was launched to provide knowledge to the entrepreneurs for starting up their businesses and becoming job providers.

Objectives of ASPIRE Scheme

- Creation of new jobs and reducing unemployment

- Grassroots economic development at the district level

- Promoting entrepreneurship culture in India

- Facilitating innovative business solutions for meeting the social needs of the people

- Promoting innovation for further strengthening the competitiveness in the MSME sector

Components of ASPIRE Scheme: The components of this scheme are-

> ➤ **Livelihood Business Incubation (LBI):** This is setting up business incubators to incubate, provide skill development training to youth, impart entrepreneurship and facilitate funding for empowering the entrepreneurs to set up their business enterprises.

> **Technology Business Incubation (TBI):** Technology Business Incubators are an effective economic development tool.

> **Start-up Promotion through Small Industries Development Bank of India (SIDBI):** It works through innovative means of finance. The innovative means of finance of SIDBI include equity, quasi-equity, venture capital fund, angel fund, challenge fund, impact fund, etc.

Benefits of the ASPIRE Scheme

- Agricultural techniques and operations that are related to them are being automated thus adding value to agricultural and forest products.

- Agricultural pre/post-harvest waste recycling, off-farm yet farm-connected animal husbandry, etc have been introduced.

- Promoted Rural-relevant business models for aggregation and value addition.

Way Forward

- Focus should be on transfer of information and skill development to effectively use the transferred technology.

- There is an urgent need to upgrade infrastructure utilities (like water, power supply, road/rail) for any enterprise to run its operations successfully.

- Entrepreneurs need to develop quality conscious mindsets embedded in the organisational culture.

- Sensitization and handholding of MSMEs at different and upgraded level of certification is the need of the hour.

MODIFIED MARKET DEVELOPMENT ASSISTANCE (MMDA)

- The Government of India introduced the "Modified Market Development Assistance" (MMDA) scheme in 2016 – 17.

- Under the scheme 30% subsidy is provided as Grant on Prime Cost of Khadi & Polyvastra. Earlier the subsidy was 25%.

- Modified MDA Scheme aims at decontrolling and de-linking the sales price from the Cost Chart, thus offering scope to the Institutions to add value to Khadi; so that the products can be sold at market oriented prices.

Objectives

- To encourage Small & Micro exporters in their efforts at tapping and developing overseas markets.

- To increase participation of representatives of small/ micro manufacturing enterprises under MSME India stall at International Trade Fairs/ Exhibitions.

- To enhance export from the small/ micro manufacturing enterprises

- To popularize the adoption of Bar Coding on a large scale.

Way Forward

- A fair distribution and allocation of funds should be ensured as it has been observed that majority of the export fund was utilized by the established exporters.

- Amount of subsidy for artisans and workers may be enhanced to bring more equal distribution.

UDYAM SAKHI PORTAL

The ministry of MSME, on a mission to enhance the cause of women entrepreneurship, has introduced a portal known as Udyam Sakthi portal. The facility is set to nurture entrepreneurship and create business models for economical products and services so as to empower women, thereby making them self-reliant and self-sufficient.

Need of the Initiatives

India ranks low for women entrepreneurship, in spite of a female population which numbers to around 80 lakhs. These women are in need of revenue and modes of self-sustenance. Entrepreneurship supports them with these aspects and provides a boost to their self-esteem. The portal will facilitates these women to initiate their businesses by providing them with the essential technical support.

About the Portal

- ◎ It was launched to provide information regarding financial schemes, policies and programmes of the Ministry of Micro, Small and Medium Enterprises to existing/prospective women entrepreneurs in the MSME sector.
- ◎ The portal accords the following services through its programmatic functions:
  - ➤ Entrepreneurship learning tools
  - ➤ Incubation facility
  - ➤ Training program for fund raising
  - ➤ Providing mentors
  - ➤ One-on-one investor meet
  - ➤ Provide facilities for market survey
  - ➤ Learning and development; be it by means of education, information, or technical assistance and training.

Significance of the portal

- ◎ It is a network for nurturing social entrepreneurship creating business models revolving around low-cost products and services to resolve social inequities.
- ◎ It seeks to encourage women entrepreneurs and to aid, counsel, assist and protect their interests.
- ◎ It also helps women to start, build and grow their businesses.
- ◎ It preserves free competitive enterprise and to maintain and strengthen the overall economy of our nation.

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WOMEN EMPOWERMENT INITIATIVES

MAHILA KISAN SASHAKTIKARAN PARIYOJANA

The "**Mahila Kisan Sashaktikaran Pariyojana" (MKSP),** a sub component of the Deendayal Antodaya Yojana-NRLM (DAY-NRLM), started in 2011. It seeks to improve the present status of women in Agriculture, and to enhance the opportunities available to empower her.

Need of the initiative

Rural women form the most productive work force in the economy of majority of the developing nations including India. More than 80% of rural women are engaged in agriculture activities for their livelihoods. About 20 per cent of farm livelihoods are female headed due to **widowhood, desertion, or male emigration.** Agriculture support system in India strengthens the exclusion of women from their entitlements as agriculture workers and cultivators. Most of the women-headed households are not able to access extension services, farmers support institutions and production assets like seed, water, credit, subsidy etc. As agricultural workers, women are paid lower wage than men.

About the initiative

- ◉ **Beneficiaries:** MKSP recognizes the identity of **"Mahila" as "Kisan**" and strives to build the capacity of women in the domain of agro-ecologically sustainable practices.

- ◉ **Focus area**: The focus of MKSP is on capacitating small landholders to adopt sustainable climate resilient agro-ecology and eventually create a pool of skilled community professionals.

- ◉ **Aim:** to strengthen small landholder agriculture through promotion of sustainable agriculture practices such as Community Managed Sustainable Agriculture (CMSA), Non Pesticide Management (NPM), Zero Budget Natural Farming (ZBNF), **Pashu-Sakhi model** for doorstep animal care services, Sustainable regeneration and harvesting of Non-Timber Forest Produce.

- ◉ **Vision**: It has a clear vision to reach out to the poorest of poor households and expand the portfolio of activities currently handled by the Mahila Kisan.

- ◉ **Implementation**: The program is being implemented by DAY-NRLM in partnership with State Rural Livelihood Missions/ Community Based Organizations (CBOs)/NGOs, as implementing partners (PIAs) across the country.

How it has been working so far?

- ◉ **Working on institutional framework**:
  - ▸ The project aims at improving the capacities of women in agriculture to access the resources of other institutions and schemes within a convergence framework.

➤ The details of the Framework and its Scope include the following activities

  ● Detail Project Report Preparation for proposed MKSP adhering to the MKSP guideline

  ● Technical Protocol documentation.

  ● Value Chain study on selected commodities.

  ● Institution building

◉ Mobilizing the women farmers, facilitating them with demonstrations of sustainable agriculture technologies and providing continuous handholding support to Mahila Kisan during critical stages of intervention are the basic essence of the MKSP project.

◉ Eventually women emerge as best practitioners and trainers after abundant amount of capacity building rounds and practical sessions.

◉ The various aspects of sustainable agriculture practices which are covered during the capacity building sessions are summarized as follows:

  ➤ Low cost sustainable practice such as NPM/IPM/ Integrated Nutrient Management

  ➤ Mitigation of risk of exposure to hazardous farm practices.

  ➤ Soil health improvement

  ➤ Soil & water conservation and ground water recharging

  ➤ Bio-diversity enhancement-Poly cropping , multilayer farming etc

  ➤ Use of indigenous knowledge

  ➤ Resource Management

  ➤ Suitability of technology to local agro-ecology

  ➤ Resilience to climate change Integrated Natural Framing

  ➤ Drudgery reduction for women farmers

  ➤ Focus on landless, small and marginal farmers as project participants

Way forward

◉ Identifying the beneficiaries in more inclusive manner.

◉ Women and associated rights under the scheme must be ensured by the Panchayati Raj Institutions.

◉ A rural level committee must be formed for better implementation and scrutiny.

◉ Fund allocation must be decentralised.

◉ Mahila kisan sabhas can be arranged at societal level by civil societies to make women of the rural areas aware of the benefits.

KISHORI SHAKTI YOJANA

Kishori Shakti Yojana is a redesign of the already existing Adolescent Girls (AG) Scheme being implemented as a component under the centrally sponsored Integrated Child Development Services (ICDS) Scheme.

Kishori Shakti Yojana (KSY) seeks to empower adolescent girls, so as to enable them to take charge of their lives.

States are maintaining Kishori Health Cards for Adolescent Girls in Angawadi Centres (AWCs) to record the information about the weight, height, Body Mass Index (BMI) along with other services provided under the scheme.

Need of the initiative

Adolescence is a crucial phase in the life of a human being, especially women. At this stage, various emotional and physical changes happen in a girl and vital interventions at this stage can help the individual develop positive attitudes towards health and well-being. The adolescent girls do not have adequate access to vital health and nutrition information/Services/Programmes aimed at improving the nutritional and health status of adolescent girls and promoting self-development, awareness of health, hygiene, nutrition, family welfare and management. Lack of nutritional food and healthy and hygienic practices can hamper the growth and development of a girl and hinder her from fully achieving her potential. It is with this intent that the Kishori Shakti Yojana was envisaged.

Objectives

- To improve the nutritional and health status of girls in the age group of 11-18 years;
- To provide the required literacy and numeracy skills through the non-formal stream of education, to stimulate a desire for more social exposure and knowledge and to help them improve their decision making capabilities;
- To train and equip the adolescent girls to improve/ upgrade home-based and vocational skills;
- To promote awareness of health, hygiene, nutrition and family welfare, home management and child care, and to take all measure as to facilitate their marrying only after attaining the age of 18 years and if possible, even later;
- To gain a better understanding of their environment related social issues and the impact on their lives; and
- To encourage adolescent girls to initiate various activities to be productive and useful members of the society.

How the scheme has worked so far?

- Against the requirement of 33.10 crore during 2010-15, 32.42 crore was allocated; 18.88 crore (58 per cent of allocated amount) was released; and 11.69 crore (62 per cent of released amount) was spent for implementation of the scheme in the State.
- Thus, there was huge gap between allocation and release and also between release and actual expenditure. Insufficient budget provisions and non-utilisation of available funds resulted in shortfall in physical achievement of the targets.
- The KSY scheme was initiated with the objective of improving nutrition and health status of AGs in the age group of 11-18 years but it provided for coverage of only 60 girls per Block (Project) in a year in 53 districts covered under the scheme.
- As a result of this ceiling of covering 60 AGs per block, it was noticed during scrutiny of records of test-checked 14 districts that against the total population of 70,74,240 AGs, only 35,100 AGs were covered under the KSY scheme during 2012-15. Hence, only one per cent of the AGs in these districts could be covered under KSY.
- Under the scheme, 1,80,600 AGs in 602 sanctioned projects in the State were to be imparted three days training in respect of health and nutrition and 60 days vocational training in two batches of 30 girls under each project/block. The vocational training covered area such as stitching, pickle making etc

Way Forward

- Building social assets by strengthening social networks, positive peer groups, female role models, group affiliation and membership.
- Provisions for physical strength and fitness, mental and emotional health, self-confidence, information and knowledge around gender-based violence, sexual and reproductive health and rights, economic empowerment, and life skills are needed.
- The creation of safe, female-friendly public spaces where girls can gather to learn new skills, form friendships, expand their social networks, and receive mentoring in a supportive environment is an important strategy in overcoming the social isolation that many girls face.
- A safe and supportive environment is a contributory factor in motivating young people to make healthy choices.

NIRBHAYA SCHEME

Following the tragedy of December 2012, the Government has set up a dedicated fund – "Nirbhaya Fund", which can be utilized for projects specifically designed to improve the safety and security of women. It is a non-lapsable corpus fund, being administered by Department of Economic Affairs, Ministry of Finance.

About the scheme:

- The Ministry of women and child development (MWCD) is to appraise, recommend proposals and schemes to be funded under the Nirbhaya Fund.

- The Nirbhaya Fund is a non-lapsable corpus fund. The empowerment committee has enumerated that the proposed projects under Nirbhaya Fund should have the following features:

  - Direct impact on safety and security concerns of women

  - Optimum use of existing infrastructure

  - Innovative use of technology

  - No duplication of existing government schemes/programmes

  - Provision for real time intervention as far as possible

  - Strict privacy and confidentiality of women's identity and information.

  - Defined role of all stakeholders

  - No. of beneficiaries to be reached – absolute or estimated

  - Defined monitoring mechanism – from lowest level up to MWCD

  - Support of State WCD/Social Welfare Department, State Home Department and concerned central Ministry/Department (in case of proposals from States)

Major Projects Launched under the Fund:

- **Central Victim Compensation Fund (CVCF)**

  - CVCF has been set up under Nirbhaya Funds at a total cost of Rs. 200.00 Crore.

  - CVCF has been released as a one-time grant to States/UTs to support and supplement the Victim Compensation schemes in respective States/UTs and expenditure from this fund is allowed to States/UTs after consuming non-budgetary resources with them.

- **One Stop Centres (OSCs):**

  - For women, One Stop Centres (OSCs) have been set up across the country, Popularly known as Sakhi Centres.

  - One Stop Centres (OSC) is intended to support women affected by violence, in private and public spaces, within the family, community and at the workplace.

  - **Services offered to the beneficiaries**:

    - Emergency Response and Rescue Services

    - Medical assistance

    - Legal Aid and counselling

    - Shelter

    - Video Conferencing Facility

- ■ **Scheme of Universalisation of Women Help Line:**

  - ➤ The Scheme of Universalisation of Women Help Line is also being implemented since 1stApril, 2015 and is intended to provide 24 hours emergency and non-emergency response to women affected by violence through:

    - referral services (linking with appropriate authority such as police, One Stop Centre, hospital) and

    - by providing information about women welfare schemes/ programmes across the country through a single uniform number (181)

  - ➤ So far, women helplines have become operational in 33 States/UTs. They have managed more than 54.25 lakh calls.

- ■ **Mahila Police Volunteer (MPV) Scheme:**

  - ➤ The Mahila Police Volunteer (MPV) Scheme is being implemented by the Ministry in collaboration with Ministry of Home Affairs.

  - ➤ This scheme is funded by Nirbhaya Fund as a centrally sponsored scheme with the aim to create and empower MPVs.

  - ➤ They are to act as a link between police and the community and facilitate women in distress.

  - ➤ MPVs serve as a public police interface in order to fight crime against women and report incidents of violence against women such as domestic violence, child marriage, dowry harassment and violence faced by women in public spaces.

- ■ **Emergency Response Support System (ERSS):**

  - ◎ Ministry of Home Affairs (MHA) has accepted the recommendations of the Justice Verma Committee in the backdrop of unfortunate incident of Nirbhaya in December'2012.

  - ◎ It has approved a national project by name of 'Emergency Response Support System (ERSS)', with budgetary provision of ₹321.69 Crore with a view to introduce a Pan-India Single Emergency Response Number '112' to address all kinds of distress calls such as police, fire and ambulance etc.

Monitoring and Evaluation

- ◎ MWCD is responsible to review and monitor the progress of sanctioned projects/schemes under Nirbhaya Fund in conjunction with the concerned Central Ministries/Departments.

- ◎ The monitoring and reporting mechanism to be followed at the State Government/UT level and at the level of the concerned Central Government Ministry/ Department and should form a part of the proposal.

- ◎ Strict monitoring will be followed for all proposals, including those which have already been appraised by EC and funds disbursed to the respective Ministries/Departments or States/UTs.

Challenges in working of One Stop Centre

- ◎ **Lack of proper infrastructure**: Lack of basic resources is common at OSCs and compromised quality of care (HC). Some sexual assault centres reported insufficient basic comfort items like clean clothes and sanitary pads, as well as other basic supplies (HC).

- ◎ **Poor monitoring system**: Poor documentation and data management were seen across contexts. Reasons for this included lack of staff knowledge on how to document violence, outdated information systems, variable record keeping procedures and the ethical and logistical challenges of tracking survivors. A related barrier was lack of evaluation and research; many sites gathered data, but failed to analyse data.

- **Less accessibility:** Free services at the OSC facilitated access to survivors (LC). However, 11 reports from OSCs in over 20 countries found that some survivors were forced to pay user fees (MC). Survivors from rural areas faced geographical barriers to access at OSCs (MC), often due to high cost of transportation.

- **Lack of Clarity of roles and responsibilities:** Implementing partners often disagreed on OSC priorities, responsibilities and budgets (MC). At some OSCs, these disputes led to confusion among staff on whom and how services should be delivered (LC).

Way forward

- **Proper fund allocation**: for total coverage, there is 14% more need to increase the budget for the scheme.

- **Involvement of non-governmental agencies**: only government interventions will not work for better implementation of the scheme. Civil societies, NGOs and community participation can help bring more beneficiaries for the welfare scheme.

- **Increase awareness**: women and needy should get adequate knowledge regarding its benefits and implementation, which can be ensured by involving locals in the scheme and organising 'sabhas' in market places.

UJJAWALA

'**Ujjawala**' scheme is a comprehensive scheme for prevention of trafficking and rescue, rehabilitation, reintegration and repatriation of victims of trafficking for commercial sexual exploitation.

Need of the initiative

Trafficking of children and women for commercial sexual exploitation is an organized crime violating basic human rights. Lack of **a protective environment**, **low status of women, and poverty** are a few reasons for trafficking. A multi sectoral approach is needed which will undertake preventive measures to arrest trafficking especially in vulnerable areas and sections of population; and to **enable rescue, rehabilitation and reintegration of the trafficked victims**. Ujjawala is a thorough scheme launched by the government for the prevention of illicit trafficking of the victims who were trafficked for commercial sexual exploitation.

About the initiative

- **Aim:** The Ujjawala scheme was launched in **2007** to put an end to the trafficking of children and women. The aim is to prevent, rescue, rehabilitate, reintegrate, and repatriate victims trafficked for commercial sexual exploitation.

- **Identification of beneficiaries**: The **State Governments/Union Territories (UTs)** have notified their victim compensation schemes in terms of **Section 357A** of the **Code for Criminal Procedure (Cr.PC).**

- **Fund allocation**: to support and supplement the State Compensation Schemes, Ministry of Home Affairs will release grants to State Governments/ UTs under the Central Victim Compensation Fund from **Nirbhaya Fund**.

- **Components of the scheme**:

  - Rescue

  - Prevention

  - Rehabilitation

  - Re-integration

  - Repatriation

- **Targeted group**:

- ➤ Women and children who are vulnerable to trafficking for commercial sexual exploitation.

- ➤ Women and children who are victims of trafficking for commercial sexual exploitation.

- ◉ **Implementing agencies**:

  - ➤ Women and Child Welfare Department or Social Welfare Department of State Government

  - ➤ Women's Development Corporations/Centres

  - ➤ Urban Local Bodies

  - ➤ Renowned Public-Private Trusts

  - ➤ Voluntary Organisations

- ◉ **Eligibility conditions for implementing agency**:

  - ➤ The organization should be **registered under the law** and must have a managing body with its powers and functions clearly in sync with the guidelines and framework laid down in the Constitution for such bodies.

  - ➤ The agency should not have the primary motive of **gaining profit from any individual or group**

  - ➤ Minimum of **3 years of experience** is a must post-registration of the organization

  - ➤ The organization should be financially sound with proper availability of resources and experienced personnel to handle delicate issues.

Objectives

- ◉ Prevention of trafficking of children and women for commercial sexual exploitation by means of social mobilization and awareness generation programmes, the participation of local communities, generation of public debates, and opinions through seminars/workshops and other innovative activities.

- ◉ Facilitating the **rescue of victims** and placing them in safe custody.

- ◉ Provision of rehabilitation services to the victims through the provision of basic amenities and needs **like food, clothing, shelter, medical help, legal aid, guidance, counselling as well as vocational training.**

- ◉ For working towards **reintegrating the victims** into their family and the society at large.

- ◉ Facilitating **cross-border victims to repatriate into their home country.**

Challenges

- ◉ **Poverty**: is a cause behind child trafficking. Some parents sell their children, not just for the money, but also in the hope that their children will escape the situation of chronic poverty and move to a place where they will have a better life and more opportunities.

- ◉ **Social or cultural practice of devaluing women and girls in society:** thus making women disproportionately vulnerable to trafficking.

- ◉ **Porous nature of borders**: corrupt Government officials, the involvement of international organized criminal groups or networks and limited capacity of or commitment by immigration and law enforcement officers to control borders.

- ◉ **Migration:** The desire of potential victims to migrate is exploited by offenders to recruit and gain initial control or cooperation, only to be replaced by more coercive measures once the victims have been moved to another State or region of the country, which may not always be the one to which they had intended to migrate.

- ◉ Some of the common reasons behind migration are poverty, oppression, lack of human rights, lack of social or economic opportunity, dangers from conflict or instability and similar conditions.

How it has been working so far?

- ◉ As on date of launch, **273 projects including 151 Protective and Rehabilitative Homes** have been supported under the Scheme.

- These rehabilitative centres are given **financial support for providing shelter and basic amenities** in the case the victims are children, as well as for undertaking vocational training and income generation activities to provide the victims with alternate livelihood option.

- Under the Scheme, arrangements are made by the implementing organization for providing vocational training to the women through the Vocational Training Institutes recognized by Directorate General of Employment and Training under the **Ministry of Labour and Employment.**

- Training and examination fees are reimbursed on submission of the certificate issued by the **vocational training institute** on successful completion of training.

Way forward

- Formation and functioning of Community Vigilance Groups.

- Formation and **functioning of Balika** (adolescent girls)/Balala (adolescent children) **Sanghas.**

- **Sensitization Workshops/Seminars** should be conducted for the victims.

- Awareness generation through **mass media** including kalajathas, **street plays, pupettery or** through any other art forms, preferably traditional.

- Development and printing of awareness generation material such as **pamphlets, leaflets** and **posters.**

- **Rescue operations** (details on the methodology, network and relationship of the implementing agency with the local authorities, police etc).

- Provide **Medical Care, Legal Aid, Administrative Support, Education, Vocational Training** and Income Generation Activities for victims.

- **Setting of Half-Way Homes**: The Half –way Home will be set-up by the implementing agency when there are enough women victims ready to leave the peer home and are in employment/vocational activity and can financially sustain themselves.

- Adequate **auditing** of **funds allocated** in the scheme to reduce misuses of funds.

STEP (SUPPORT TO TRAINING AND EMPLOYMENT PROGRAM FOR WOMEN)

0STEP Programme, has been addressing special situation of poor women and women in remote areas who are not in a position to move out of their immediate surroundings and go to a formal skill centre to acquire training.

Need of the initiative

Government of India has set an ambitious plan training 500 million individuals by 2022 which translates to training 42 million a year. For this purpose, India's vocational training infrastructure needs to be expanded to meet the diverse and many skill requirements of the population. There has been recent concern about the decline in women's workforce participation in India. Simultaneously, women have become more aspirational and are ready to contribute equally to the economy.

About STEP

- The Ministry of Women and Child Development (MWCD) has been administering 'Support to Training and Employment Programme for Women (STEP) Scheme' since 1986-87 as a 100% 'Central Sector Scheme'.

- The STEP Scheme aims to provide skills that give employability to women and to provide competencies and skill that enable women to become self-employed/ entrepreneurs.

- The Scheme is intended to benefit women who are in the age group of 16 years and above across the country including rural women.

- The grant-in-aid under the Scheme is given to institutions/ organizations including NGOs.

◉ Training is provided to poor and marginalized women in traditional trades which are largely in the informal sector. The programme strives to build upon the traditional knowledge of women and convert it into sustainable livelihood capacitation.

◉ The assistance under STEP Scheme will be available in any sector for imparting skills related to employability and entrepreneurship, including but not limited to the Agriculture, Horticulture, Food Processing, Handlooms, Tailoring, Stitching, Embroidery, Zari etc, Handicrafts, Computer & IT enable services along with soft skills and skills for the work place such as spoken English, Gems & Jewellery, Travel & Tourism, Hospitality.

◉ All Skill Development courses offered under the scheme framework must conform to the National Skill Qualification Framework (NSQF).

How it had worked so far?

◉ The guidelines were revised last in 2016, wherein the duration of training was set at 3 months and 6 months maximum, and the programme was modified to focus solely on skill development and employment.

◉ Currently, the scheme is implemented via partner agencies and monitored closely by the government.

◉ 80 percent of the payment is linked with training assessments; and only 20 percent is contingent on actual placements.

◉ Lodging and travel expenses of trainees are reimbursed, and an independent third party certifies the trainees, and issues certificates at the end of training.

◉ The implementing agencies can show proof of employment by submitting salary slips of the first few months, etc. to the Ministry.

◉ Beneficiaries are also provided post-placement support.

◉ During 2013-14 period, 31,478 beneficiaries were covered while the number stood at 30,481 in the 2012-13 fiscal.

◉ By providing skilling in specifics trades, STEP increases women's access to employment/ self-employment opportunities and factors of production. Therefore, it is marked 'Positive' on Access.

What needs to be done in future?

◉ Beneficiary identification: Beneficiaries under the scheme are identified by the implementation agencies on metrics such as ownership of assets, income status, etc. Data on these metrics is not readily available and information is hard to verify, making the scheme prone to leakages on this account.

◉ Monitoring: The scheme requires rigorous monitoring and places significant administrative load on the implementation agencies for submitting documents and on the government for verifying them. Requirements such as employment records/salary slips are difficult to implement, especially in economic setups that are largely informal.

◉ Alignment of Incentives: The incentives of the different actors involved in the scheme are not aligned. This may lead to suboptimal outcomes.

◉ Only 20 percent of the funding is linked to actual employment and pay-out is contingent on submission of employment record/salary slips. Therefore, it is highly likely that beneficiaries will just get trained and not get linked with employment opportunities.

◉ Budget for STEP has progressively reduced. Even in the earlier years, the actual funds spent were much lower than those budgeted.

SURAKSHIT MATRITVA AASHWASAN (SUMAN)

This initiative focuses on assured delivery of maternal and newborn healthcare services encompassing wider access to free, and quality services, zero tolerance for denial of services, assured management of complications along with respect for women's autonomy, dignity, feelings, choices and preferences, etc.

Need of the Initiative

Though the country has a civil hospital in every district but still in many states the pregnant lady has to deliver the baby at home. The biggest reason for this practice is the lack of transportation and poverty. When a lady is in labor she needs to be in a clean place and needs professional help.

Objectives of the SUMAN Scheme

Following are the objectives of the SUMAN scheme that Government aims to achieve -

- This scheme offers zero expenses access to detection and management of complications during and after pregnancy.
- Pregnant women can avail a zero expense delivery and C-section facility at public health facilities.
- SUMAN scheme ensures zero-tolerance for denial of services to children and pregnant women.
- Pregnant women also receive free transport from home to the health facility and drop back after discharge.
- This initiative facilitates respectful care with privacy and support for breastfeeding.
- Facilities such as services for sick newborns and neonates and vaccination is offered for zero cost.
- However, to gain these benefits, applicants have to fulfill certain eligibility parameters.

How the initiative had worked so far?

- Till 14th December 2021, 10,010 facilities have been notified under SUMAN.

What needs to be done more?

- Health Infrastructure and healthcare facilities needs to be improved to ensure more inclusivity and easy access as still hospitals facilities are majorly concentrated in urban area.
- There has to be a strict mechanism to ensure the implementation of the initiative.
- Complaint register and redress mechanism should be ensured for its efficient functioning.
- The initiative should be linked with the Common Service Centers for making it digital.
- Digital literacy and educational literacy should be enhanced to get better results

PRADHAN MANTRI SURAKSHIT MATRITVA ABHIYAN

Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA) was launched to provide fixed-day assured, comprehensive and quality antenatal care universally to all pregnant women (in 2nd and 3rd trimester) on the 9th of every month.

Need of the Initiative

While India has made considerable progress in the reduction of maternal and infant mortality, every year approximately 44000 women still die due to pregnancy-related causes and approximately 6.6 lakh infants die within the first 28 days of life. Many of these deaths are preventable and many lives can be saved if quality care is provided to pregnant women during their antenatal period and high risk factors such as severe anemia, pregnancy-induced hypertension etc are detected on time and managed well.

Objectives of the program:

- Ensure at least one antenatal checkup for all pregnant women in their second or third trimester by a physician/specialist
- Improve the quality of care during ante-natal visits. This includes ensuring provision of the following services:

- ► All applicable diagnostic services
- ► Screening for the applicable clinical conditions
- ► Appropriate management of any existing clinical condition such as Anaemia, Pregnancy induced hypertension, Gestational Diabetes etc.
- ► Appropriate counselling services and proper documentation of services rendered
- ► Additional service opportunity to pregnant women who have missed ante-natal visits

- ◉ Identification and line-listing of high risk pregnancies based on obstetric/ medical history and existing clinical conditions.
- ◉ Appropriate birth planning and complication readiness for each pregnant woman especially those identified with any risk factor or comorbid condition.
- ◉ Special emphasis on early diagnosis, adequate and appropriate management of women with malnutrition.
- ◉ Special focus on adolescent and early pregnancies as these pregnancies need extra and specialized care.

Features

- ◉ A minimum package of antenatal care services (including investigations and drugs) would be provided to the beneficiaries on the 9th day of every month at identified public health facilities (PHCs/ CHCs, DHs/ urban health facilities etc) in both urban and rural areas in addition to the routine ANC at the health facility/ outreach.
- ◉ One of the critical components of the Abhiyan is identification and follow up of high risk pregnancies. A sticker indicating the condition and risk factor of the pregnant women would be added onto MCP card for each visit:
  - ► Green Sticker- for women with no risk factor detected
  - ► Red Sticker – for women with high risk pregnancy
- ◉ 'IPledgeFor9' Achievers Awards have been devised to celebrate individual and team achievements and acknowledge voluntary contributions for PMSMA in states and districts across India.

What is the implementation status of the scheme?

- ◉ Inspite of the massive increase in the number of pregnant women coming to institutions for delivery, till date only 61.8% women receive first ANC in first trimester (RSOC) and the coverage of full ANC (provision of 100 IFA tablets, 2 tetanus toxoid injections and minimum 3 ANC visits) is as low as 19.7% (RSOC).
- ◉ Poor awareness

What needs to be done more?

- ◉ Maternal mortality with MMR of 167 per 1, 00,000 live births still remains high even with improved access to maternal health care services. There has to be mechanisms for monitoring and supportive supervision.
- ◉ Regular training of health care providers at different levels across the country.
- ◉ Existence of outreach platforms like Village Health and Nutrition Day should be conducted.
- ◉ The desired coverage and quality of maternal health services should be ensured.

POSHAN ABHIYAN

Nutrition or POSHAN Abhiyaan or National Nutrition Mission, is Government of India's flagship programme to improve nutritional outcomes for children, pregnant women and lactating mothers.

Need of the Initiative

The problem of under-nutrition is a complex and multi-dimensional issue, affected mainly by a number of generic factors including poverty, inadequate food consumption due to access and availability issues, inequitable food

distribution, improper maternal infant and child feeding and care practices. The high rate of anaemia amongst women (53.1 percent in 2015-16) has a negative impact on their future pregnancies, leading to the birth of potentially anaemic children. The situation worsens when these infants also receive inadequate diets. To address the nutrition challenges of women and children government has Ministry of Women and Child Development has started POSHAN Abhiyaan.

About POSHAN Abhiyan

- It was launched on the occasion of the International Women's Day on 8 March, 2018 from Jhunjhunu in Rajasthan.
- The objective of POSHAN Abhiyaan to reduce stunting in identified Districts of India with the highest malnutrition burden.
- POSHAN Abhiyaan targets to reduce stunting, under-nutrition, anaemia (among young children, women and adolescent girls) and reduce low birth weight by 2%, 2%, 3% and 2% per annum respectively. Although the target to reduce Stunting is at least 2% p.a., Mission would strive to achieve reduction in Stunting from 38.4% (NFHS-4) to 25% by 2022 (Mission 25 by 2022).
- It aims to do it by improving utilization of key Anganwadi Services and improving the quality of Anganwadi Services delivery. Its aim to ensure holistic development and adequate nutrition for pregnant women, mothers and children.
- NITI Aayog has been entrusted with the task of closely monitoring the POSHAN Abhiyaan and undertaking periodic evaluations.

Key Features

- mapping of various Schemes contributing towards addressing malnutrition
- introducing a very robust convergence mechanism
- ICT based Real Time Monitoring system
- incentivizing States/UTs for meeting the targets
- incentivizing Anganwadi Workers (AWWs) for using IT based tools
- eliminating registers used by AWWs
- introducing measurement of height of children at the Anganwadi Centres (AWCs)
- Social Audits
- Setting-up Nutrition Resource Centres, involving masses through Jan Andolan for their participation on nutrition through various activities, among others.

Implementation of the Scheme

For implementation of POSHAN Abhiyaan the four point strategy/pillars of the mission are:

- Inter-sectoral convergence for better service delivery
- Use of technology (ICT) for real time growth monitoring and tracking of women and   children
- Intensified health and nutrition services for the first 1000 days
- Jan Andolan

How the Abhiyan had performed?

- As per the report of Comprehensive National Nutrition Survey (CNNS) conducted by UNICEF, prevalence of stunting, wasting and underweight among children is 34.7%, 17% and 33.4% respectively, which is an improvement and reduction from the levels reported in National Family Health Survey-4.
- The funds released for the scheme are being utilized by most of the State Governments except Odisha and West Bengal.
- Odisha has recently approved implementation of POSHAN Abhiyaan in the State and West Bengal is yet to implement the Abhiyaan.

- Osmanabad district has stood first in Maharashtra in implementing the Centre's 'poshan abhiyaan' and bringing down the number of malnourished kids as well as stunting among children. The schemes were implemented by the child and women welfare department of the Osmanabad ZP through 'bachat gats' (self-help groups), Anganwadi workers, their officers and public participation.

What needs to be done to make it a success?

- Awareness generation in the remote areas.
- Real time monitoring at every level by the officials and departments.
- Digital Literacy should be enhanced to avail benefits.
- Digital devices and infrastructure should become more accessible.
- Nutrition quality should be improved to get better results

Mission Poshan 2.0

It is an Integrated Nutrition Support Programme. Four Centrally-sponsored schemes namely are anganwadi services, POSHAN Abhiyan, Scheme for Adolescent Girls, and National Creche Scheme have been merged to form the new Saksham Anganwadi or Mission POSHAN 2.0. It seeks to address the challenges of malnutrition in children, adolescent girls, pregnant women and lactating mothers through a strategic shift in nutrition content and delivery and by creation of a convergent eco-system to develop and promote practices that nurture health, wellness and immunity. Poshan 2.0 will seek to optimize the quality and delivery of food under the Supplementary Nutrition Program.

About the initiative

- Mission Poshan 2.0 will contribute to human capital development of the country; address malnutrition challenges; promote nutrition awareness and good eating habits for sustainable health & well-being and address nutrition related deficiencies through key strategies.
- Under the programme, nutritional norms and standards and quality and testing of THR will be improved and greater stakeholder and beneficiary participation will be promoted besides traditional community food habits.
- Poshan 2.0 shall focus on Maternal Nutrition, Infant and Young Child Feeding Norms, Treatment of MAM/SAM and Wellness through AYUSH. It will rest on the pillars of Convergence, Governance, and Capacity-building.
- Poshan Abhiyan will be the key pillar for Outreach and will cover innovations related to nutritional support, ICT interventions, Media Advocacy and Research, Community Outreach and Jan Andolan.
- Mission Poshan 2.0 will integrate several key strategies to fulfil its objectives, viz., Corrective strategies, Nutrition Awareness strategies, Communication strategies and Creation of green eco-systems. The objectives under Mission Poshan 2.0 will be realized through strong interventions-driven convergent activities with key Ministries/Depts./Organizations.
- Digital infrastructure under the "Poshan Tracker" rolled out through National e-Governance Division as a governance tool, will strengthen and bring about transparency in nutrition delivery support systems.
- Technology under Poshan Tracker is being leveraged for (i) dynamic identification of stunting, wasting, under-weight prevalence among children; (ii) last mile tracking of nutrition service delivery.

SWADHAR GREH

The Scheme targets the women victims of difficult circumstances who are in need of institutional support for rehabilitation so that they could lead their life with dignity.

Need of the Initiative

During the COVID-19 pandemic lockdown in 2020, National Commission for Women (NCW) received 23722 complaints of crimes against women, the highest in the past 6 years. If women are to be empowered and

gender gaps to be bridged, addressing voilence should be at the top of policy formulation and implementation. A study highlights that a large number of survivors of VAW continue living in their abusive homes, often unaware of alternative safe spaces or not finding them viable. In line with the Sustainable Development Goals emphasising on eliminating VAW and under the purview of National Policy for Women 2016, the Swadhar Greh was initiated.

Objectives of the Scheme

Under the Scheme, Swadhar Greh will be set up in every district with capacity of 30 women with the following objectives:

- To cater to the primary need of shelter, food, clothing, medical treatment and care of the women in distress and who are without any social and economic support.
- To enable them to regain their emotional strength that gets hampered due to their encounter with unfortunate circumstances.
- To provide them with legal aid and guidance to enable them to take steps for their readjustment in family/society.
- To rehabilitate them economically and emotionally.
- To act as a support system that understands and meets various requirements of women in distress.
- To enable them to start their life afresh with dignity and conviction.

How the scheme will help women?

It would be pursued adopting the following strategies:

- Temporary residential accommodation with the provision of food, clothing, medical facilities etc.
- Vocational and skill up gradation trainings for economic rehabilitation of such women
- Counseling, awareness generation and behavioral trainings
- Legal aid and Guidance
- Counseling through telephone

How the scheme is working so far?

- As on December 2020, there were 362 SGs, down from 559 in 2017-18 and 417 in 2019-20. This was despite the sanction of 51 new SGs in 2019-20. Based on the guidelines, each of the 736 districts in India should have a SG; however, the existing numbers of SGs cover only 50 per cent of the required number.
- Budget allocations for the scheme have seen a decline over the last five years.

What needs to be done?

- The concept of shelter-homes has been in place for over 20 years now, but a decline in the number of SGs can either mean that 'everything is fine', or that there is a serious lacuna in the system. The way forward should be increasing policy focus on SG and related schemes, with adequate budgetary allocations.

GENDER ADVANCEMENT FOR TRANSFORMING INSTITUTIONS (GATI)

GATI is a novel pilot programme envisioned in mission mode to promote gender equity in Science, Technology, Engineering, Mathematics and Medicine (STEMM) domains

Need of the initiative

Women in India face several challenges in moving up the academic and administrative ladder due to systemic barriers and structural factors. Gender equality in scientific laboratories and institutions of higher education is

not only about numbers but also about various micro and macro level factors operating at institutional level. This clearly demonstrates a need for multi stakeholder interventions.

About GATI

⊚ It aspires to create an enabling environment for equal participation of women in Science, Technology, Engineering, Medicine and Mathematics (STEMM) disciplines at all levels, addressing deep-rooted problems.

⊚ The GATI model draws inspiration from the Athena SWAN Gender Equality Charter and accreditation framework operated by Advance HE, UK, since 2005.

⊚ Institutions who are signatory to the GATI charter would be expected to commit to adopting its principles within their policies, practices, action plans and institutional culture.

⊚ They would be required to create SMART (Specific, Measurable, Achievable, Relevant and Time-bound) action plans for systemic and cultural transformation.

⊚ A metric-based self-assessment application followed by peer review would be used to establish how well the principles of the charter have been imbibed in the institutional framework through outcome focused initiatives.

⊚ Success in the endeavor would lead to an institutional award and recognition as beacon of gender equity.

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GOOD GOVERNANCE

ASPIRATIONAL DISTRICTS PROGRAMME

Living standards in India are affected by significant inter-state and inter-district variations. The scourge of under-development is confined to certain pockets in this country. This makes it a challenge as well as an opportunity. Despite economic progress in the country, if these places have remained underdeveloped, it is because they suffer from a host of contributing factors. In order to remove this heterogeneity, the government has launched in January 2018, the 'Transformation of Aspirational Districts' programme (ADP).

About Aspirational Districts Programme

- The Government of India has **launched** the 'Transformation of **Aspirational Districts**' initiative in **January 2018.**

- **Implementation: NITI Aayog anchors the programme** with support from Central Ministries and the State Governments.

What are Aspirational Districts?

- Aspirational Districts are those districts in India that are affected by poor socio-economic indicators.

- These are aspirational in the context that improvement in these districts can lead to the overall improvement in human development in India.

- The 117 districts were identified from 28 states, at least one from each state.

- **Aim**: The 'Transformation of Aspirational Districts' Programme **aims** to expeditiously **improve the socio-economic status of 117 districts from across 28 states.**

- **Principles:** The **three core principles** of the programme are –

  ➤ **Convergenc**e (of Central & State Schemes)

  ➤ **Collaboration** (among citizens and functionaries of Central & State Governments including district teams)

  ➤ **Competition** among districts.

- **Themes**: The programme focuses on **5 main themes** - Health & Nutrition, Education, Agriculture & Water Resources, Financial Inclusion & Skill Development, and Basic Infrastructure.

- **Core of SDGs:** ADP is 'aligned to the principle of "leave no one behind"—the vital core of the SDGs

- **Ranking:** Districts are ranked through 'delta ranking' based on progress made on a real-time basis.

- ADP is based on 49 indicators from the 5 identified thematic areas, which focuses closely on

  ➤ improving people's Health & Nutrition

  ➤ Education

  ➤ Agriculture & Water Resources

  ➤ Financial Inclusion & Skill Development, and

  ➤ Basic Infrastructure

Thematic Area	Weightage	No. of Indicators
Health & Nutrition	30%	13
Education	30%	08
Agriculture & Allied	20%	10
Financial Inclusion & Skill Development	10%	11
Basic Infrastructure	10%	07
Composite Index	100%	49

Virudhunagar, Tamil Nadu achieved overall first rank in 2021 ranking.

Simdega (Jharkhand), Chandauli (Uttar Pradesh), Sonbhadra (Uttar Pradesh) and Rajgarh (Madhya Pradesh) were found to have progressed the most since the beginning of the programme.

How the initiative is working so far?

- In an independent appraisal report, **United Nations Development Programme (UNDP)** India has lauded the Aspirational Districts Programme (ADP) as a very successful model of local area development. The report mentioned that it could be applied worldwide. (**UNDP** is the global development network of the United Nations. The UNDP is funded entirely by voluntary contributions from UN member states. It was established in 1965.

- Under ADP previously neglected districts, including those in remote locations and those affected by Left Wing Extremism, 'have experienced more growth and development in the last three years than ever before.

- The programme has strengthened the technical and administrative capacities of the districts.

- Several initiatives were undertaken under the programme as best practices. Noteworthy among them is GoalMart, an e-commerce portal launched by Assam's Goalpara district administration 'to promote rural, ethnic and agrarian products of the district in the national and global markets'.

Challenges of the Initiative

- Lack of trained human resource and technical capacities at the district and block levels.

- ADP is affected by the issue pertaining to insufficient budgetary resources.

- ADP is implemented by multiple ministries which leads to a lack of coordination.

- High-quality administrative data is critical to improving programme implementation and design at the local level.

- The Delta ranking itself is largely focused on assessing quantity (that is, coverage of access) rather than quality.

- On-time delivery of textbooks in schools are part of the ranking index, However, textbook delivery may or may not be a problem in districts.

Way Forward

- There is a need to focus more on capacity building, 'including the appointment of dedicated personnel such as Aspirational District Fellows or Technical Support Units across all the districts or to collaborate with development partners for providing technical expertise, skills training, etc'.

- There is need to revise a few indicators that are close to being saturated or met by most districts, such as 'electrification of households' as an indicator of basic infrastructure.

- It was also found that while on average, the districts have seen an increase in resilience and decrease in vulnerabilities, the least-improved districts have witnessed an increase in vulnerabilities, which requires a special focus on the sectors in which these districts have underperformed

GOOD GOVERNANCE INDEX

The objective of GGI is to create a tool which can be used uniformly across the States to assess impact of various interventions taken up by the Central and State Governments including UTs. Based on the GGI Framework, the Index provides a comparative picture among the States while developing competitive spirit for improvement.

About Good Governance Index (GGI)

- Department of Administration Reforms and Public Grievances (DARPG), Government of India has launched the Good Governance Index (GGI) Framework.

- The first ranking for the States and Union Territories (UTs) was launched in 2019.

- Index is released biannually.

- The GGI 2019 encompassed 10 Governance Sectors and 50 Governance Indicators. For GGI 2020-21, same 10 Governance Sectors are retained while indicators have been revised to 58.

> ### What is Good governance?
>
> ⊙ Good governance can be referred as an effective and efficient process of decision making and the process by which decisions are implemented (or not implemented) keeping the amelioration of citizens as the topmost priority.
>
> ⊙ Resource allocation, creation of formal establishments, setting up rules and regulations etc., are part of achieving this goal.
>
> ⊙ 25th December is celebrated as Good Governance Day.

What are the key Outcomes of GGI, 2020-21?

⊙ Gujarat tops the composite ranking in the 58 indicator index followed by Maharashtra and Goa.

⊙ Uttar Pradesh registers 8.9 percent improvement in GGI indicators in the period 2019 to 2021..

⊙ Jammu and Kashmir registers 3.7 percent improvement in GGI indicators in the period 2019 to 2021.

⊙ Delhi tops the Union Territories category composite ranking.

⊙ GGI 2021 says that in the North-East and Hill States category, Mizoram and Jammu and Kashmir have registered an overall increase of 10.4% and 3.7% respectively over GGI 2019.

Way Forward

⊙ To make the GGI germane, moving forward for subsequent editions of the GGI, it should be proposed to be broadened and encompasses the process/es followed to produce results that meet the needs of society while making the best use of resources at Governments' disposal.

⊙ To make the evolution process and the assessment more wholistic, some additional aspects (inclusion of input and process-based indicators) should be added to the Index.

⊙ There has to be both qualitative and quantitative parameters to balance out the Index.

DIGITAL INDIA MISSION

The Digital India programme is a flagship programme of the Government of India with a vision to transform India into a digitally empowered society and knowledge economy.

What is Digital India?

⊙ Digital India is a Programme to prepare India for a knowledge future.

⊙ The focus is on being transformative – to realize IT + IT = IT

⊙ The focus is on making technology central to enabling change.

⊙ It is an Umbrella Programme – covering many departments.

⊙ It weaves together a large number of ideas and thoughts into a single, comprehensive vision so that each of them is seen as part of a larger goal.

⊙ Each individual element stands on its own. But is also part of the larger picture.

⊙ It is coordinated by DeitY, implemented by the entire government.

⊙ The weaving together makes the Mission transformative in totality

⊙ The Programme:

  ➤ Pulls together many existing schemes.

  ➤ These schemes will be restructured and re-focused.

  ➤ They will be implemented in a synchronized manner.

- ➤ Many elements are only process improvements with minimal cost.
- ➤ The common branding of programmes as Digital India highlights their transformative impact.

Vision of Digital India

Centered on 3 Key Areas

- ◉ **Digital Infrastructure as a Utility to Every Citizen**
- ◉ **Governance & Services on Demand**
- ◉ **Digital Empowerment of Citizens**

Pillars of Digital India

- ◉ Digital India is an umbrella programme that covers multiple Government Ministries and Departments.
- ◉ It weaves together a large number of ideas and thoughts into a single, comprehensive vision so that each of them can be implemented as part of a larger goal.

Nine Pillars of Digital India

1. Broadband Highways	4. E-Governance – Reforming government through Technology	7. Electronics Manufacturing – Target NET ZERO Imports
2. Universal Access to Phones	5. eKranti – Electronic delivery of services	8. IT for Jobs
3. Public Internet Access Programme	6. Information for All	9. Early Harvest Programmes
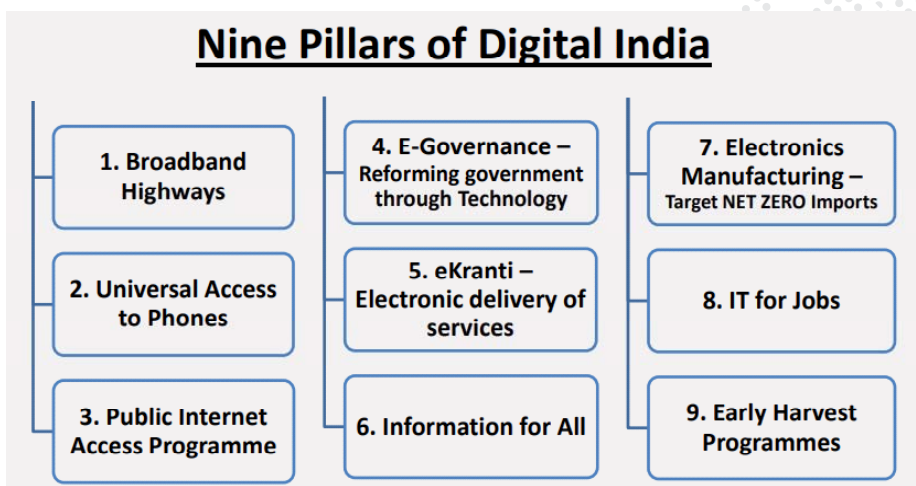
Implementation of Digital India

- ◉ Digital India is to be implemented by the entire Government with overall coordination being done by the Department of Electronics and Information Technology (DeitY).

Institutional Mechanisms at National Level

- Monitoring Committee on Digital India
- Digital India Advisory Group (Chaired by Minister CIT)
- Apex Committee (Chaired by Cab Sec.)
- DeitY — CIO — Line Ministries
- State Governments / UTs
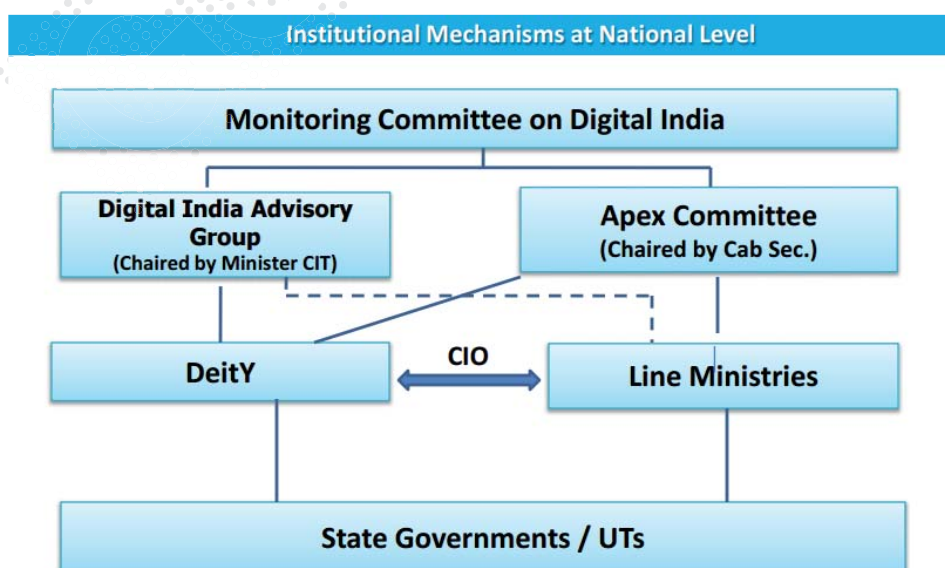
- While implementing this programme, there would be wider consultations across government, industry, civil society, and citizens to discuss various issues to arrive at innovative solutions for achieving the desired outcomes of Digital India.

- DeitY has already launched a digital platform named as "myGov" (http://mygov.in/) to facilitate collaborative and participative governance.

How the initiative is working so far?

- The Digital India Scheme made it possible to link 12000 post offices of rural areas electronically.

- This scheme increases the electronic transactions concerned with e-governance.

- In almost 1.15 Lakh Gram Panchayats, an optical fiber network of Rs 2, 74,246 Km has been connected under Bharat Net Programme.

- Common Service Center has been operative under the National e-governance project of the Indian government that provides access to information and communication technology. Through computer and Internet access, the CSCs are creating multimedia content on various matters like e-governance, health, education, entertainment, telemedicine, and other government and private services.

- Presently, the number of daily active internet users has crossed 300 million from 10-15 million daily users.

- Broadband in 2.5 lakh villages, universal phone connectivity

- 400,000 Public Internet Access Points

- Wi-fi in 2.5 lakh schools, all universities; Public wi-fi hotspots for citizens

- 1.7 Cr trained for IT, Telecom and Electronics Jobs

- Job creation: Direct 1.7 Cr. and Indirect at least 8.5 Cr.

- e-Governance & eServices: Across government

- Digitally empowered citizens – public cloud, internet access

Challenges of the Initiative

- The daily basis Internet speed and Wi-Fi hotspots speed are slow as compared to the developed countries.

- The small and medium scale industries are struggling a lot in adapting new modern technology.

- Limited capability of entry-level smartphones for smooth internet access.

- Lack of skilled manpower in the field of digital technology.

- To look for about one million cybersecurity experts to check and monitor the growing menace of digital crime.

Way Forward

- Net neutrality should be ensured and the tariff prices should be reasonable to have a better access of internet by all.

- Limited capability of entry-level smartphones for smooth internet access.

- More manpower should be skilled in the field of digital technology.

- Cyber Security system should be enhanced to make the digital information safe.

- There has to be a government intervention to measure the implementation status of the program.

RIGHT TO INFORMATION (RTI) ACT 2005

The Right to Information (RTI) Act 2005 was passed to empower the citizens, promote transparency and accountability in the working of the Government, contain corruption, and make our democracy work for the people in real sense.

Need of the RTI Act

In India, it all started with petitions of the press to the Supreme Court, relating to issues of enforcement of the right to freedom of speech and expression. Access to information was realised as being a key tool to fight corruption and wrongdoing, the public has a right to scrutinise the actions of its leaders and engage them into a full and open debate - the free flow information is a must for a society so diverse in its mind-sets.

The Supreme Court, in **State of U.P v. Raj Narain** - a 1974 case, recognized the '**right to know'** as a right inherent in **Fundamental Right to freedom of speech and expression** guaranteed under **Article 19(1)(a)** of the Constitution.

Key Features

Under the RTI Act, 2005, Public Authorities are required to make suo moto disclosures on various aspects of their structure and functioning. This includes:

1. **The disclosure on their organisation, functions, and structure.**
2. **The powers and duties of its officers and employees.**
3. **The financial information.**

◉ The intent of such disclosures is that the public should need minimum recourse through the Act to obtain such information.

◉ If such information is not made available, citizens have the right to request for it from the Authorities.

◉ This may include information in the form of documents, files, or electronic records under the control of the Public Authority.

◉ The intent behind the enactment of the Act is to promote transparency and accountability in the working of Public Authorities.

Meaning of the Term 'Public Authorities'

◉ 'Public Authorities' include bodies of self-government established under the Constitution, or under any law or government notification.

◉ For instance, these include Union Ministries, Public Sector Undertakings, and Regulators.

◉ It also includes any entities owned, controlled or substantially financed and non-government organizations substantially financed directly or indirectly by funds provided by the government.

How RTI is enforced in India?

◉ The Act has established a **three tier structure** for enforcing the right to information guaranteed under the Act.

◉ Public Authorities designate some of their officers as Public Information Officers.

◉ The first request for information goes to Central/State Assistant Public Information Officer and Central/State Public Information Officer, designated by the Public Authorities.

◉ These Officers are required to provide information to an RTI applicant within 30 days of the request.

◉ Appeals from their decisions go to an Appellate Authority.

◉ Appeals against the order of the Appellate Authority go to the State Information Commission or the Central Information Commission.

◉ These Information Commissions consists of a Chief Information Commissioner, and up to 10 Information Commissioners.

What are the significant outcomes of this act?

◉ The Right to Information (RTI) Act has shown an early promise by exposing wrongdoings at high places,

such as in the organisation of the Commonwealth Games, and the allocation of 2G spectrum and coal blocks. However, it now faces multiple challenges.

Challenges with RTI Act 2005

- Lack of awareness amongst the citizens and various constraints like fees, complicated procedures faced by them.
- The Information commissions can only direct public authorities to take necessary steps to comply with the Act, but cannot enforce if such directions are ignored.
- The Central and State Information Commissions have been functioning with less than their prescribed maximum strength of eleven because governments have not shown enthusiasm in making appointments.
- Vacancies lead to delay in disposal of cases, which is further compounded by the backlog in the High Courts, where a number of decisions of the commission are challenged.
- Numerous frivolous queries often continue along genuine ones leading to clogging of the RTI system.
- Suo motu disclosure required under RTI Act has remained unsatisfactory.
- Lack of infrastructure, staff and proper training to information officers.
- It has several limited provisions for organisations like judiciary, legislature and law enforcement agencies.
- Though these challenges were already a drag on the efficient working of Information Commissioners, the new amendments proposed by the government further dilutes the provisions and powers of RTI Act.

Comparison of the provisions of the Right to Information Act, 2005 and the Right to Information (Amendment) Bill, 2019

Provision	RTI Act, 2005	RTI (Amendment) Bill, 2019
Term	The Chief Information Commissioner (CIC) and Information Commissioners (ICs) (at the central and state level) will hold office for a term of five years.	The Bill removes this provision and states that the central government will notify the term of office for the CIC and the ICs.
Salary	The salary of the CIC and ICs (at the central level) will be equivalent to the salary paid to the Chief Election Commissioner and Election Commissioners, respectively.	The Bill removes these provisions and states that the salaries, allowances, and other terms and conditions of service of the central and state CIC and ICs will be determined by the central government.
Deductions in Salary	The Act states that at the time of the appointment of the CIC and ICs (at the central and state level), if they are receiving pension or any other retirement benefits for previous government service, their salaries will be reduced by an amount equal to the pension.	The Bill removes these provisions.

Issues with the New Amendments

The bill threatens to dilute the autonomy of the Information Commissions at the Centre as well as states in the following ways:

- Doing away with the equivalence of the Central Information Commissioners with the Election Commissioners on the ground that the two have different mandate will send a message that **transparency is less important for a democracy than holding of free and fair elections** is preposterous.
- Replacing the existing fixed five-year tenure of the Information Commissioners with tenure as prescribed by the government would make the tenure largesse to be bestowed by the government.

◉ It's against federalism as the Central government will also control through rules, the terms and conditions of appointment of Commissioners in the States.

Way Forward

◉ Transparency law should be strengthened in line with Supreme Court judgements that right to information is being integral to the right to free expression under Article 19(1)(a).

◉ The law needs to be amended to bring about full compliance by government departments and agencies that receive substantial funding from the exchequer.

◉ Every public authority should computerise their records for wide dissemination and proactively publish certain categories of information so that the citizens need minimum recourse to request for information formally.

◉ Amendments should be widely discussed by citizens and RTI activists in the public domain before converting them into law.

◉ People should be united, organised and more vigilant about work in government sector to make this act successful and fight against corruption and unlawful activities.
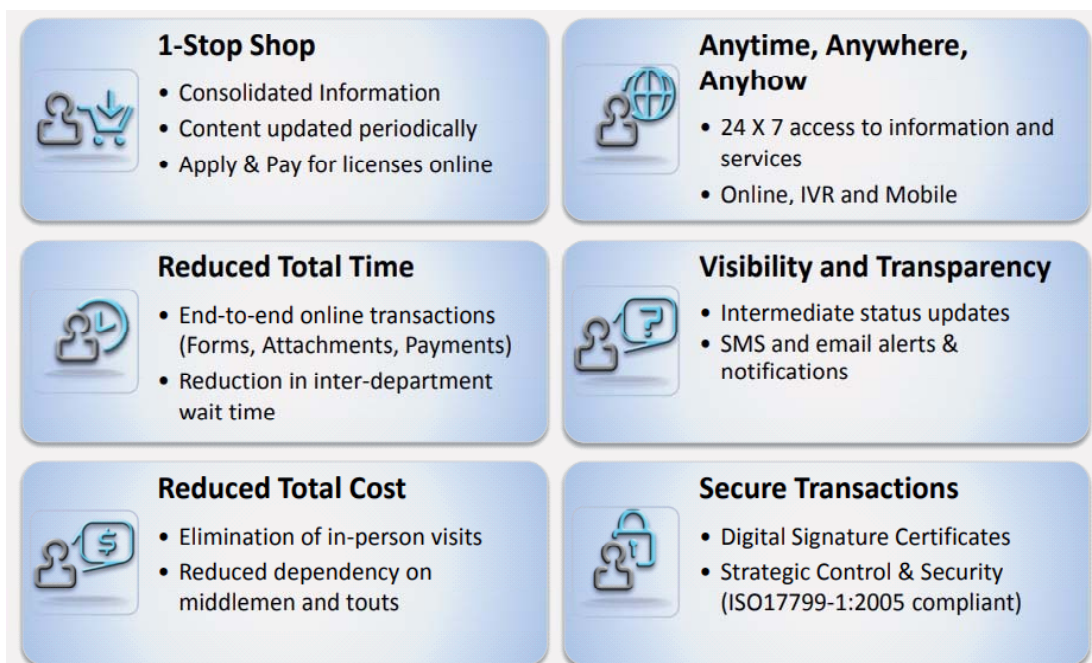
E-ECONOMY SCHEMES

eBiz

◉ The focus of eBiz is to improve the business environment in the country by enabling fast and efficient access to Government-to-Business (G2B) services through an online portal.

◉ eBiz is being implemented by Infosys Technologies Limited (Infosys) under the guidance and aegis of Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce & Industry, Government of India.

◉ This will help in reducing unnecessary delays in various regulatory processes required to start and run businesses.

◉ It aims at reducing the points of contact between business entities and Government agencies, standardizing "requirement information", establishing single-window services, and reducing the burden of compliance, thereby benefitting stakeholders such as entrepreneurs, industries and businesses, industry associations, regulatory agencies, industrial promotional agencies, banks and financial institutions, and taxation authorities.

◉ It will also boost the business environment in the country by promoting ease of doing business.

◉ The Comptroller General of Accounts has given approval to establish the electronic system of collection, apportionment and remittance of fees collected under the eBiz portal.

◉ It is for the first time in the country that collection of fees through credit and debit cards for different services have been permitted making it very convenient for business to deposit fees.

■ **Significance of the initiative**

The following are the outcomes of the eBiz project

➤ A world-class G2B portal that enhances India's business competitiveness through a single, service oriented, event driven interface for all G2B interactions.

➤ Integrated G2B Services across Central, State & Local Government & across all geographies in India.

The above outcome results in the following benefits to the investor,

1-Stop Shop
- Consolidated Information
- Content updated periodically
- Apply & Pay for licenses online

Anytime, Anywhere, Anyhow
- 24 X 7 access to information and services
- Online, IVR and Mobile

Reduced Total Time
- End-to-end online transactions (Forms, Attachments, Payments)
- Reduction in inter-department wait time

Visibility and Transparency
- Intermediate status updates
- SMS and email alerts & notifications

Reduced Total Cost
- Elimination of in-person visits
- Reduced dependency on middlemen and touts

Secure Transactions
- Digital Signature Certificates
- Strategic Control & Security (ISO17799-1:2005 compliant)

- **Challenges**

  - Technological capabilities of govt. staff,

  - Business process re-engineering,

  - Change in management etc.

  - Accessibility of the internet in India.

  - Concerns over security, fear of spam.

  - Seamless implementation of the project

- **Way Forward**

  - Most of the regulatory clearances for businesses are required at the state level and unless it is a very large project, 99.9% of the projects do not require central government clearance. Centre can focus on strengthening the state level single window clearance concepts.

  - Technological improvement of government officials and timely clearance of the projects should be ensured.

e-Procurement Project

- The traditional systems of procurement in government departments through manual modes suffered from various problems such as inordinate delays (approximately 4 to 6 months) in tender/order processing, heavy paper work, multi-level scrutiny that consumes a lot of time, physical threats to bidders, cartel formation by the contractors to suppress competition, human interface at every stage, inadequate transparency, discretionary treatment in the entire tender process, etc. This MMP aims at making government procurement simplified, transparent, and result-oriented.

- Government eProcurement System of National Informatics Centre, GePNIC Product facilitates procurement of Goods, Services & Works.

- The e-Procurement will cover all aspects of procurement from indent of tender to tender preparation, bidding, bid evaluation and award of contract.

It is mandatory for all Ministries / Departments of the Central Government, Central Public Sector Enterprises (CPSEs) and Autonomous and Statutory Bodies to publish all their tender enquiries on the CPP Portal.

■ **Significance of the project**

➤ It will establish a one stop-shop for all services related to government procurement made across various Ministries and the line Departments.

➤ Reduce cycle time and cost of procurement.

➤ Enhance transparency in government procurement.

➤ Enhance efficiency of procurement.

➤ Bring about procurement reform across the government.

➤ It also provides information on active tenders, global tenders, high value tenders, awarded tenders etc.

➤ It is also integrated with Government eMarkertplace.

➤ Handle end-to-end rather than just tendering Improve efficiency of procurement by way of costs and cycle times

➤ Enhance the unified buying power of the state and thereby savings

■ **How the system works to protect security of data?**

➤ The system has strong in-built security features including two-factor Authentication with Digital Signature Certificates (DSCs) as per IT Act, Usage of SSL, Role-based User Access and Bid-encryption at Client end etc.

➤ Each document uploaded into the system is digitally signed for authentication purposes which introduces accountability on the part of the stakeholders, namely officials / bidders.

➤ The system has undergone regular security audit and is certified by Standardization Testing and Quality Certification (STQC) as per EPS guidelines issued by MeitY.

■ **How it had worked so far?**

➤ Savings in terms of Time and Cost has been noticeably witnessed. Many Organizations like Indian Army, Indian Oil, Govt. of West Bengal have conducted study and have substantiated these facts.

➤ Immense transparency has been brought in the procurement process by auto population of key information in Public Domain at appropriate milestones. This has considerably reduced RTIs/ Litigations / Complaints.

➤ Wide visibility all tenders PAN India in CPP portal has led to reduction in Newspaper advertisement leading to considerable savings.

■ **Way Forward**

➤ Many public institutions limit their activities to a simple transfer of their information and services online without taking into consideration the re-engineering process needed to grasp the full benefits. The government must have a clear strategy to overcome the barriers to change.

➤ Part of the strategy is to engage in a rigorous assessment of the current situation, the reality on the ground and the inventory of projects, articulate costs, impacts and benefits of programme as well as continuously monitor and evaluate the project upgrading.

➤ Borrowing a lesson from the private sector, e-Procurement must be customer-driven and service oriented.

➤ Another important aspect that the Government and PSU's need to look into is driving organizational compliance with negotiated contracts. This would enable Governments to keep and sustain their savings

Digi Saksham

DigiSaksham - a digital skills programme is launched to enhance the employability of youth by imparting digital skills that are required in an increasingly technology driven era.

■ **Need of the initiative**

Around the world, 2020 has emerged as one of the most challenging years in many of our lifetimes. In six months, the world has endured multiple challenges, including a pandemic that has spurred a global economic crisis. As societies reopen, it's apparent that the economy in July will not be what it was in January. Increasingly, one of the key steps needed to foster a safe and successful economic recovery is expanded access to the digital skills needed to fill new jobs. And one of the keys to a genuinely inclusive recovery are programs to provide easier access to digital skills for people hardest hit by job losses, including those with lower incomes, women, and underrepresented minorities.

■ **About the DigiSaksham**

➤ The program was launched by the Ministry of Labour and Employment in September 2021.

➤ This is a joint initiative with Microsoft india, an extension of the Government's ongoing programs to support the youth from rural and semi-urban areas.

➤ Through DigiSaksham initiative, free of cost training in digital skills including basic skills as well as advance computing, will be provided to more than 3 lakh youths in the first year.

➤ The Jobseekers can access the training through National Career Service (NCS) Portal.

➤ The initiative gives priority to the job-seekers of semi urban areas belonging to disadvantaged communities, including those who have lost their jobs due to Covid-19 pandemic.

➤ Through this initiative, nearly one crore active jobseekers registered will be able to access training in areas like Java Script, Data Visualisation, Advance Excel, Power Bi, HTML, Programming languages, software development fundamentals, Introduction to coding , etc, equipping them with the skills required in a digital economy.

➤ DigiSaksham will be implemented in the field by Aga Khan Rural Support Programme India (AKRSP-I).

■ **How the project will work?**

Under the DigiSaksham initiative, there will be basically three types of training viz. Digital Skills – Self paced learning, VILT mode training (Virtual Instructor led) and ILT mode training (Instructor led).

The ILT training which is in person training would be conducted at the Model Career Centres (MCCs) and National Career Service Centres (NCSC) for SCs/STs across the country.

■ **Significance of DigiSaksham**

➤ Digi Saksham is an innovative step from the Government of India to bridge the gap between the demand and availability of skilled human resources in-country.

➤ It will help the youth from rural areas to get IT training.

➤ This DigiSaksham will empower job seekers in the tech-driven economy of our country.

➤ It is estimated that almost 10 million jobseekers will be benefited by this Digisaksham scheme.

■ **Way Forward**

➤ Constant skilling, reskilling and up-skilling is a must with fast-paced technology upgradations.

➤ Centre-State cooperation should be ensured for the better implementation of the scheme.

➤ Digital infrastructure of Common Service Centers should be enhanced to reap the better result for rural areas.

e-RUPI

e-RUPI is a one time contactless, cashless voucher-based mode of payment that helps users redeem the voucher without a card, digital payments app, or internet banking access.

- **About e-RUPI**

  - e-RUPI is basically a digital voucher which a beneficiary gets on his phone in the form of an SMS or QR code.

  - It is a pre-paid voucher, which he/she can go and redeem it at any centre that accepts its.

  - e-RUPI should not be confused with Digital Currency which the Reserve Bank of India is contemplating. Instead e-RUPI is a person specific, even purpose specific digital voucher.

  - The National Payments Corporation of India (NPCI), which oversees the digital payments ecosystem in India, has launched e-RUPI, a voucher-based payments system to promote cashless transactions.

  - It has been developed in collaboration with the Department of Financial Services, Ministry of Health & Family Welfare and National Health Authority.

  - NPCI has partnered with 11 banks for e-RUPI transactions. They are Axis Bank, Bank of Baroda, Canara Bank, HDFC Bank, ICICI Bank, Indian Bank, IndusInd Bank, Kotak Mahindra Bank, Punjab National Bank, State Bank of India and Union Bank of India.

  - The acquiring Apps are Bharat Pe, BHIM Baroda Merchant Pay, Pine Labs, PNB Merchant Pay and YoNo SBI Merchant Pay.

- **How e-RUPI works?**

  - For example, if the Government wants to cover a particular treatment of an employee in a specified hospital, it can issue an e-RUPI voucher for the determined amount through a partner bank. The employee will receive an SMS or a QR Code on his feature phone / smart phone. He/she can go to the specified hospital, avail of the services and pay through the e-RUPI voucher received on his phone.

- **How is e-RUPI advantageous to the Consumer?**

  - e-RUPI does not require the beneficiary to have a bank account, a major distinguishing feature as compared to other digital payment forms.

  - It ensures an easy, contactless two-step redemption process that does not require sharing of personal details either.

  - Another advantage is that e-RUPI is operable on basic phones also, and hence it can be used by persons who do not own smart-phones or in places that lack internet connection.

- **How is e-RUPI different from digital currencies?**

  While the introduction of e-RUPI is the first step towards having a digital currency in India, it in itself is not a digital currency but rather a social service voucher system, to ensure the reach of particular benefits to the eligible beneficiaries without any discrepancies and delay.

  This is different from cryptocurrencies which buy goods and services, or trade them for profit. More importantly, it is government-regulated. The prepaid voucher that is paid for by the government will largely be utilised, at least initially, to provide welfare subsidies.

- **Significance of the initiative**

  - e-RUPI is expected to play a major role in strengthening Direct-Benefit Transfer and making it more transparent. Since, there is no need for physical issuance of vouchers, it will also lead to some cost savings as well.

  - Being a prepaid voucher, e-RUPI would assure real time payments to the service provider.

  - e-RUPI is expected to ensure a leak-proof delivery of welfare services.

- ▶ It can also be used for delivering services under schemes meant for providing drugs and nutritional support under Mother and Child welfare schemes, TB eradication programmes, drugs & diagnostics under schemes like Ayushman Bharat Pradhan Mantri Jan Arogya Yojana, fertiliser subsidies etc.

- ▶ Aimed at bridging the digital gap among the unbanked population, the beneficiaries or users of this payment mechanism will not require a card, digital payments app, or internet banking access to redeem the voucher.

- ▶ Even the private sector can leverage these digital vouchers as part of their employee welfare and corporate social responsibility programmes.

- ■ **How it had worked so far?**

  - ▶ NPCI has tied up with more than 1,600 hospitals where e-RUPI can be redeemed.

  - ▶ e-RUPI is expected to widen, with even private sector using it to deliver employee benefits and MSMEs adopting it for Business To Business (B2B) transactions.

  - ▶ The introduction of Covid vaccination voucher is also aimed at ramping India's vaccination drive as e-RUPI allows beneficiaries to easily book appointments for the shots.

- ■ **Way Forward**

  - ▶ The launch of e-RUPI could potentially highlight the gaps in digital payments infrastructure that will be necessary for the success of the future digital currency.

  - ▶ However, with the beneficiary not required to disclose their identity, these vouchers are also likely to be claimed by other people. This loophole needs to be taken care for the purpose of safety of benefits.

eTaal (Electronic Transaction Aggregation & Analysis Layer)

- ◉ Ministry of Electronics and Information Technology (MeitY) along with National Informatics Centre (NIC), the nodal information technology arm of Government of India, have developed **Electronic Transaction Aggregation & Analysis Layer (eTaal)** portal.

- ◉ eTaal is a platform for dissemination of e-Transaction statistics of National and State level e-Governance Projects including Mission Mode Projects.

- ◉ It automatically pulls the e-Transaction Data from applications integrated with it using Web Service Technology and facilities quick analysis of transaction data for the user.

- ◉ The dashboard also facilitates quick analysis of data of various applications in tabular as well as graphical form enabling users to drill down to the lowest level of detail without compromising security and integrity of the servers from where data has been captured.

  - ▶ The project was started in 2015.

  - ▶ **Implementing agency**: NIC/NICSI

  - ▶ Provides visibility for the National/State level services of e-Governance Projects and presents status on actual utilization of various systems running at various locations.

> ### What is e-Transaction?
>
> ◉ An e-Transaction is a transaction delivering public service using ICT tools to improve access, enhance transparency and reduce response time while also satisfying all of the following four conditions:
>
>   ➤ Service is requested through electronic means (self-access or assisted access) including mobile devices.
>
>   ➤ Workflow/approval process is electronic
>
>   ➤ Database is electronic/ digitized.
>
>   ➤ Service delivery is electronic.
>
> ◉ In order to improve access, enhance transparency and reduce response time is termed as an e-Transaction.

■ **Objectives of eTaal**

➤ Providing quick view of Transactions performed electronically (self-service or assisted access mode).

➤ Measuring the no. of Transactions performed by various eGovernance applications on a real time basis.

➤ Acting as an indicator of scale of services being delivered to the citizens.

➤ Providing quick analysis of transaction in tabular and graphical form analysis by the service, by the time-period, by the State/Dept, or by the geography, instantaneously.

➤ Enabling the Ministries/Deptts. Implementing e-Governance projects get a real-time view of the impact of their projects and take remedial steps or interventions where needed.

■ **Way Forward**

➤ Identification of Departments which are offering eServices should be done for the purpose of integration of more data service analytics.

➤ Identification of eServices being delivered from these departments should be done.

➤ Workshop for Trainers Training.

➤ Creation of Web Service by the application teams: For each server, we need to create a Web Service after proper testing.

NATIONAL e – GOVERNANCE PLAN

◉ NeGP is a strategic and ambitious multi-year, nation-wide program to transform the country from a government-centric to a citizen-centric paradigm in service provision; to treat citizens as clients rather than beneficiaries of government services; and to empower the citizens to demand and receive convenient, cost effective and transparent services from government.

◉ NeGP was formulated by the Department of Electronics and Information Technology (DeitY) and Department of Administrative Reforms and Public Grievances (DARPG).

◉ provision of services in a specified sector or level of government (state, municipality, district, village) to meet service level agreements (SLAs) representing country-wide standards of transparency, efficiency, accessibility and reliability of public service delivery.

◉ MMPs will have a large geographic and functional scope and will be supported by policy and institutional reforms; culture changes; process improvements; capacity building; technology investments and system development etc.

- The existing or ongoing projects in the MMP category, being implemented by various Central Ministries, States, and State Departments would be suitably augmented and enhanced to align with the objectives of NeGP.

- The important support components include Core policies and guidelines on Security, HR, Citizen Engagement, Social Media as well as Standards related to Metadata, Interoperability, Enterprise Architecture, Information Security etc.

Implementation of NeGp

- In order to promote e-Governance in a holistic manner, various policy initiatives and projects have been undertaken to develop core and support infrastructure.

- The major core infrastructure components are State Data Centres (SDCs), State Wide Area Networks (S.W.A.N), Common Services Centres (CSCs) and middleware gateways i.e National e-Governance Service Delivery Gateway (NSDG), State e-Governance Service Delivery Gateway (SSDG), and Mobile e-Governance Service Delivery Gateway (MSDG).

- The Government has accorded approval to the vision, approach, strategy, key components, implementation methodology, and management structure for NeGP.
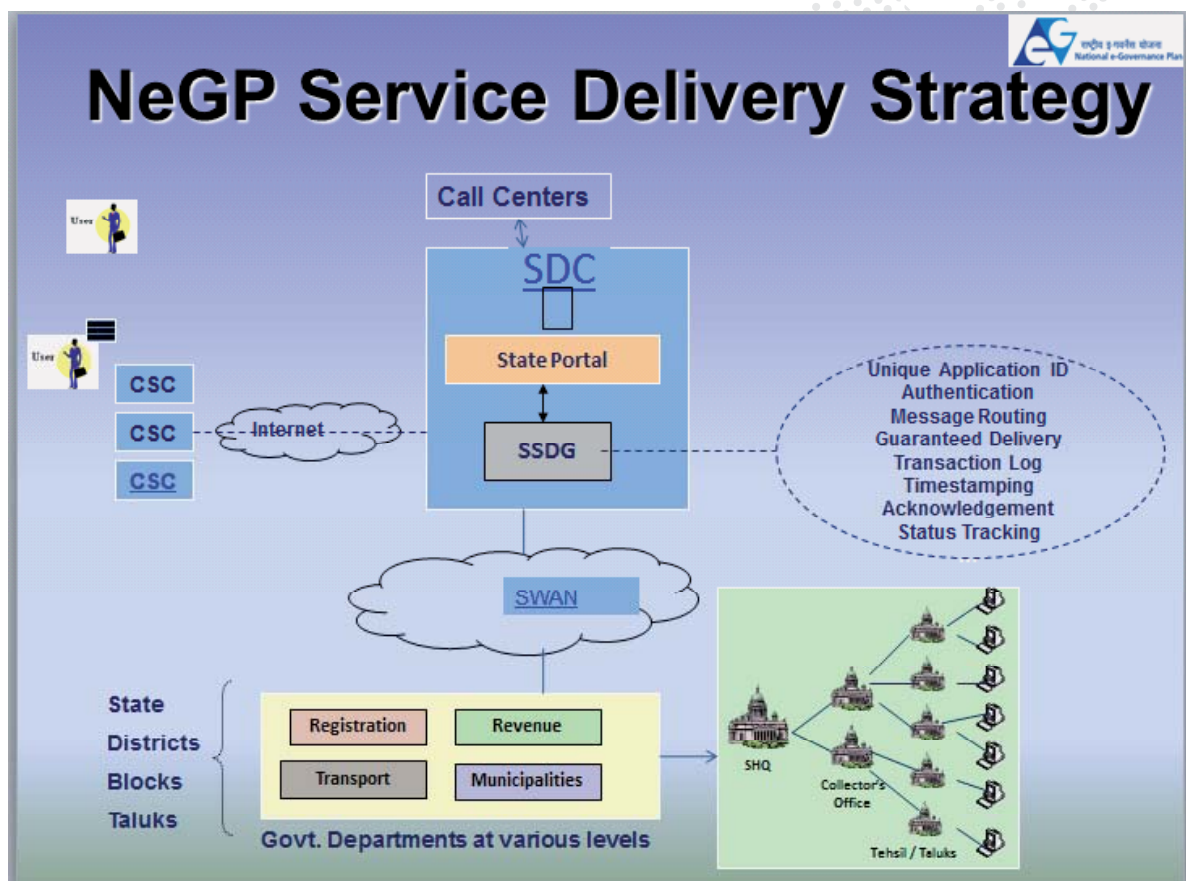
Way Forward

- Lack of needs analysis, business process reengineering, interoperability across MMPs, and coping with new technology trends (such as mobile interfaces, cloud computing, and digital signatures) were some of the limitations of the initiative.

- For Citizen-centric approach - more effective service delivery model is needed

- Quality Education and Skill Upgradation is required to harness the benefits of e-governance.

- Integrating existing G2C delivery channels with CSCs

e- DISTRICT

◉ Districts are the de facto front-end of government where most Government-to-Consumer or G2C interaction takes place. The eDistrict project was conceptualized to improve this experience and enhance the efficiencies of the various Departments at the district-level to enable seamless service delivery to the citizen.

◉ eDistrict aims at providing support to the basic administrative unit i.e. "District Administration" to enable content development of G2C services, which would optimally leverage and utilize the three infrastructure pillars, to deliver services to the citizen at his doorstep.

■ **Objectives**

  ➤ Target high volume services at District level

  ➤ Undertake backend process re-engineering to e-enable the delivery of these services through CSCs

  ➤ Making e-District Project service-oriented and Transaction-oriented

  ➤ Minimizing the Time to Benefit

  ➤ Ensuring the Optimal Use of Infrastructure

  ➤ Providing Flexibility in Implementation

■ **Examples of services:**

  ➤ Issue of Certificates, Application for Pensions, Revenue Court related, Government Dues and Recovery related, Ration Card related and Grievance redressal

Status of e-District

◉ Pilot projects are being implemented in 14 States (37 districts) covering a population base of 110 million (appx.)

◉ Out of these 14, the Pilot projects have been successfully launched in 3 states – UP, Assam and Tamil Nadu

◉ Average number of citizen transactions/ month/ district are 20,000

◉ Front-ends under the scheme, in the form of citizen facilitation centers, were envisoned to be built at District, Tehsil, Sub-division and Block levels.

◉ Village-level front-ends would be established through Common Services Centres (CSCs) for delivery of services.

Impact assessment

◉ Number of trips to Government offices significantly reduced by 1-2 trips

◉ Waiting time at offices reduced in the range 20-40%

◉ Land Records Project – Significant reduction in bribery

◉ Direct cost savings to the citizens in the range Rs.60-110/- (per transaction)

◉ Kerala has achieved issue of more than one crore digital certificates, including birth and death certificates.

Way Forward

◉ IT Infrastructure upgradation Plan is required for efficient implementation.

◉ Procurement and Financial Management Plan has to be more robust.

◉ Site Preparation Plans for better functioning.

◉ Functional Requirement Specifications for the re-engineered Processes

◉ Training Requirement

DARPAN

- It gives the technical administration a tool, which is needed to deliver real-time, dynamic project monitoring without coding or programming through web services.

- It enhances the analytical capabilities through data collection by consolidating multiple data sources into one centralized, easy-to-access platform. It immediately identifies trends and quickly drilldowns into data to gain enhanced perspectives of the district level projects.

- The important fact of the architecture of the dashboard is that it has been hosted on common framework for the entire country.
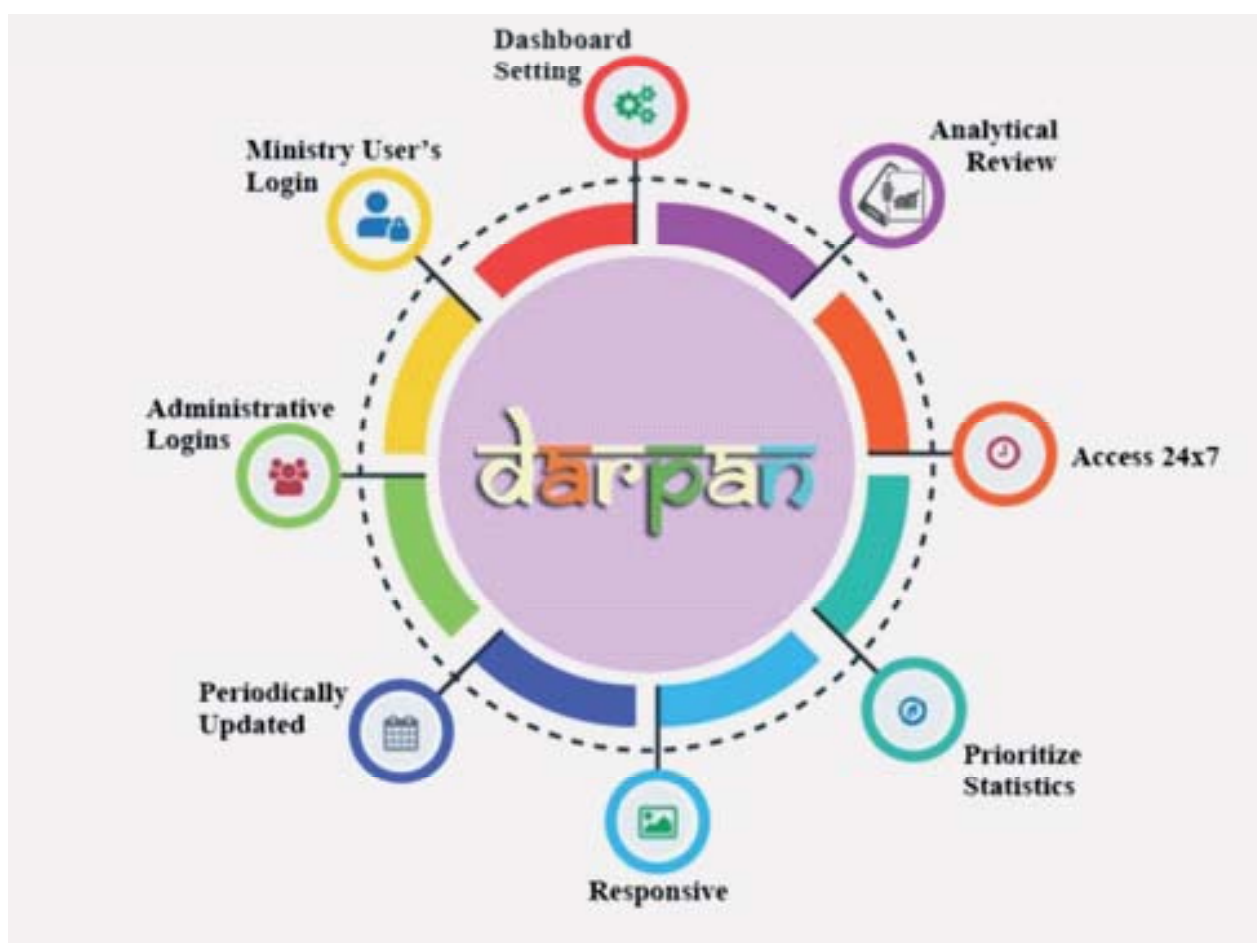
How DARPAN is going to enhance efficiency in the system?

- Acts as a powerful analytical & monitoring tool for department/organizations

- Provides a single pane visibility into all key project matrics

- Displays updated reports on dashboard on-demand

- DARPAN has been designed to encourage healthy competition among the participating departments by ranking them on formula based Key Performance Indicators (KPIs) with respect to the projects of a particular department or organization.

- DARPAN has sufficient parameters, adequately configurable meeting maximum requirements of Ministries, Department and State & District Administration.

- This will bring more transparency in the system as the data will be available in real time.

PRAGATI (PRO-ACTIVE GOVERNANCE AND TIMELY IMPLEMENTATION)

It was found that delayed projects created a lot of stress on the economy in the form of Non-Performing Assets, escalating project costs and aimed benefit not accruing to the targeted people. Therefore a system for timely review of national programmes, projects and policy related grievances with nationwide consultation was needed.

PRAGATI is aimed for a culture of Pro-Active Governance through online video conferencing & meetings and Timely Implementation of projects and schemes. It is also a robust system for bringing e-transparency and e-accountability with real-time presence and exchange among the key stakeholders.

Key features:

- The PRAGATI platform uniquely bundles three latest technologies: Digital data management, video-conferencing and geo-spatial technology.
- It also offers a unique combination in the direction of cooperative federalism since it brings on one stage the Secretaries of Government of India and the Chief Secretaries of the States.
- It will take into consideration various correspondences to PM's office by the common people or from high dignitaries of States and/or developers of public projects.
- With the three objectives of: Grievance Redressal, Programme Implementation and Project Monitoring, an IT-based redressal and monitoring system has been designed.
- It will combine Data Management and Analysis, Geo-spatial Applications as well as Video-conferencing.
- The system has been designed in-house by the PMO team with the help of National Informatics Center (NIC).

How the PRAGATI platform has performed in past years?

- **PRAGATI has been used to discuss issues relating to unseasonal rain and relief to farmers, public grievances, project implementation, Swachh Bharat and 'ease of doing business.'**
- Issues flagged by States for example Uttar Pradesh and Maharashtra, regarding National Highways and clearance for Navi Mumbai airport, respectively have also been worked upon.
- Six Central Government projects involving more than a dozen Union Government Ministries and thirteen States. It was noted that various actions and permissions relating to projects were pending for several years. Due to PRAGATI, on several issues there was definite progress. In fact, some of the issues were almost finally resolved.
- Progress of School Toilet Programme, and Swachh Bharat Abhiyan has also been viewed.
- Under the review meetings, different ongoing projects of various states have been taken for review purpose.
- Prime Minister has also reviewed the scheme of 'One Nation – One Ration Card' (ONORC) and asked the officials to explore the multiple utilities of the technological platform developed under the scheme to ensure provision of a wide array of benefits to the citizens.
- Construction of oxygen plants and availability of hospital beds has also been reviewed under the review meetings.
- In the previous 36 PRAGATI meetings, 292 projects having a total cost of 13.78 lakh crore have been reviewed.
- More than 861 issues have been comprehensively discussed for resolution.
- All the 17 sustainable development goals have been touched in PRAGATI forum.

Significance of PRAGATI platform

- The platform tries to bring transparency in the system by bringing direct accountability from the PM.
- PRAGATI will boost the spirit of federalism as it brings the secretaries from state and center at a single platform.
- This initiative will provide comprehensive review of ongoing projects for bring more efficiency.
- PRAGATI carries a citizen-centric approach as even the concerns of general people can also be reviewed under the meetings.

Way Forward

- Issues are facing lack of co-ordination between ministries/departments/states, no urge for fast redressal of issues, lack of clear ideas on resolution of grievances.
- Moreover there are no robust system, NIC platform, Portal which combine data management & Analysis, GIS/other locational Applications well as Video-conferencing for a serious review at highest level.

COMMON SERVICES CENTRES 2.0 (CSC 2.0)

Common Services Centre (CSC) programme is an initiative of the Ministry of Electronics & IT (MeitY), Government of India. CSCs are the access points for delivery of various electronic services to villages in India, thereby contributing to a digitally and financially inclusive society.

Common Service Centre (CSC) Scheme

- This is one of the Mission Mode Projects under Digital India programme. Initially the CSC Scheme was approved by the Government of India in September 2006 under NeGP.
- The scheme aimed for the establishment of one lakhs ICT enabled front-end service delivery outlets, equitably spread across rural India in the ratio of one CSC per six villages, thereby covering all six lakhs villages.
- CSCs were envisaged as internet enabled centres allowing access of government, private and social services to citizen.
- The Scheme was implemented on PPP mode – Government (DIT, SDA, CSC SPV), Service Centre Agency (SCA) and VLE. SCA was supposed to get Revenue Support (viability gap grant).

About Common Services Centres 2.0 (CSC 2.0)

- It envisions the development of CSCs as a reliable and ubiquitous IT-enabled network of citizen service points connecting local population with government departments, business establishments, banks, insurance companies and educational institutions, with an impact on primary, secondary and tertiary sectors of the country's economy.
- CSC - Common Service Centres, has been set up by the Ministry of Electronics & IT under the Companies Act, 1956 to oversee implementation of the CSC scheme. Common Service Centres (CSC) scheme provides a centralized collaborative framework for delivery of services to citizens through CSCs, besides ensuring systemic viability and sustainability of the Scheme.

Objectives of CSC 2.0

- Non-discriminatory access to e-Services for rural citizens by making CSCs complete service delivery centres, utilizing the infrastructure already created in terms of other Mission Mode Projects.
- Expansion of self-sustaining CSC network till the Gram Panchayat level – 2.5 lakh CSCs, i.e. at least one CSC per Gram Panchayat, more than one preferred.

◉ Empowering District e-Governance Society (DeGS) under the district administration for implementation.

◉ Creating and strengthening the institutional framework for rollout and project management, thereby, supporting the State and District administrative machinery and handholding of VLEs through local language Help Desk support.

◉ Enablement and consolidation of online services under single technology platform, thereby making the service delivery at CSCs accountable, transparent, efficient and traceable, with a technology-driven relationship between all stakeholders.

◉ Providing Centralized Technological Platform for delivery of various services in a transparent manner to the citizens.

◉ Increasing sustainability of VLEs by sharing maximum commission earned through delivery of e-services and encouraging women to join as VLEs.

Significance of the Scheme

◉ Transparent and timely delivery of government and other eServices at affordable cost.

◉ Reducing citizens' efforts and resources in availing services within their localities by eliminating their visit to Government offices for the same.

◉ Integrated framework for delivery and dissemination of various government initiatives and benefits through ICT enablement.

◉ Introducing change agents for skill development, education and trainings, financial inclusion and indirect employment generation.

◉ Acting as last mile distribution units for various governments' direct benefits to marginalised/backward communities.

◉ Encouraging more and more participation of women to become VLEs and increasing their contribution in the social and economic development.

◉ The CSCs are acting a medium for rural citizens to get digitally empowered and interact with the government and its agencies.

Way Forward

◉ **'High time and travel transaction cost'**, low digital literacy and 'low awareness' are among the key challenges faced by CSCs in rural India. These challenges should be tackled to make the programme more effective. Additional camps should also be set up by the government.

◉ The PPP model of the CSCs presently lacks a strong grievance redressal mechanism in case of failure in providing a G2C service for any reason. Government should ensure **long term sustainability** of these centres and **an accountability gap** should also be filled.

◉ A strong accountability mechanism ensures a formal route for grievance registration and redress, regular government supervision and monitoring of the centres for enforcement of mandates, transparency through mandatory display of rate-list for all services offered.

◉ Identifying areas specific challenges and developing a hierarchical framework of challenges would help decision-makers develop and implement effective strategies for delivering integrated e-services to citizens at CSCs.

e-DAKHIL PORTAL

◉ This is a web application for E-filing of consumer complaints that has been developed by NIC for the purpose.

◉ The e-daakhil portal empowers the consumer and their advocates to file the consumer complaints along

with payment of requisite fees online from anywhere for the redressal of their complaints.

◉ It also facilitates the consumer commissions to scrutinize the complaints online to accept, reject or forward the complaint to the concerned commission for further processing.

◉ To facilitate the rural consumers for e-filing, it has been decided to integrate the Common Service Centres (CSC) with the e-daakhil portal.

Significance of the portal

◉ The eDaakhil portal allows consumers to file complaints at their convenience, from anywhere, diminishing the requirement of their physical presence at consumer commissions.

◉ It also allows for consumer commissions to scrutinise these online submitted complaints and accept, reject or forward these to the concerned commission for further processing.

◉ With the enactment of Consumer Protection Act, 2019, which has stated specific provisions for filing of complaint online, E-Daakhil portal will prove to be a boon to the aggrieved consumers.

◉ Now, the court will reach the houses of the complainant in India, where the complainants can avail the portal to pay their fees online through UPI, Internet Banking, Debit Card, etc.

Status of its implementation

◉ E-filing was launched by National Consumer Dispute Redressal Commission (NCDRC) on 7th September, 2020. Delhi was the first state to implement it on 8th September, 2020.

◉ Later Maharashtra, Andaman & Nicobar Islands, Bihar, Chhattisgarh, Jharkhand, Gujarat, Chandigarh, Andhra Pradesh, Odisha, Uttar Pradesh, Madhya Pradesh, Punjab, Karnataka & Haryana implemented facility of e-filling in their respective States/UTs.

◉ Department of Consumer Affairs had been proactively following up with the States/UTs to launch e-filing. Total 444 locations are covered including NCDRC, State Commissions and District Commissions.

Way Forward

◉ Low digital literacy and 'low awareness' are among the key challenges faced in urban area and especially in rural India. These challenges should be tackled to make the programme more effective.

◉ As it has been linked to the Common Service Centresc(CSCs), the drawbacks associated with them will affect the e-Dakhil initiative. The easy access to CSCs should be ensured along with the skilled youth to make the CSC fruitful.

◉ The ease of filling may increase the unnecessary complaints lodging. There should be a mechanism that irrelevant complaints would not hamper the judicial activities of service envisioned.

◉ Consumer commissions should be made more effective by increasing the skilled work force to tackle the high number of complaints.

e-GRAM SWARAJ PORTAL

With the enormous amount of funds under the Central Finance Commission being given to over 2.5 lakhs Panchayats; it is necessary to have a robust system for effective monitoring of public expenditure by means of a holistic system capturing the entire gamut of activity right from the stage of planning to monitor the various stages of work, recording the expenditure incurred for the works to providing a complete details of the asset created.

E-Gram Swaraj aims to bring in better transparency and strengthening the **e-Governance** in Panchayati Raj Institutions (PRIs) across the country through decentralized planning, progress reporting and work-based accounting.

Features

- Panchayat Profile: Maintains Panchayat profile with Election Details, Elected Members, Committee, etc.
- Planning: Facilitates the planning of activities and action plan creation
- Progress Reporting: Records the physical and financial progress of approved activities
- Accounting: Facilitates the work-based accounting and monitoring of funds
- Technical architecture supports inter-operability with other PES products
- Simple and User-Friendly
- Assets available on Gram Manchitra GIS
- Web-based and available 24X7

Significance

- e-Gram Swaraj will assist in enhancing the credibility of Panchayats which would induce greater devolution of funds to PRIs.
- The e-Gram Swaraj portal/app will provide panchayats a single interface to prepare and implement their gram panchayat development plan (GPDP).
- Furthermore, e-Gram Swaraj provides aplatform for effective monitoring by higher authorities.
- The project seeks to completely transform the functioning of Panchayati Raj Institutions (PRIs), making them more transparent, accountable and effective as organs of decentralized self-governing institutions. This will make democracy truly decentralized.
- This also captures the wishes, suggestions and resolutions that are put forward in the Gram Sabha.
- This will enable intelligent convergence of funds from different sources of funds for an activity, thereby ensuring that the available funds are utilized to the maximum possible extent and at the same time important activities are not abandoned due to lack of funds.
- The portal will boost participatory local level planning by panchayati raj institutions (PRIs), to identify needs, levels of delivery and the enhancements desired by the people in each sector.

How it had worked so far?

- Around 2.6 lakh Gram Panchayats Profile have been created under the Portal.
- More than 8.7 lakh elected representative are active on the Gram Swaraj Portal for the purpose of accountability and ensuring the timely updation of schemes.
- Geo-tagging of the assets has been initiated in around more than 2 lakh GPs (~80%).
- The Ongoing Physical Progress can be assessed in more than 1 lakh GPs (~42%) under the Portal.
- Around 2000 Gram Panchayat Development Projects has been listed on the Portal.
- Financial Reporting of around 2.3 lakh (~88%) gram panchayats has been listed.
- Audit Plans of around 1.2 lakh (~43%) GPs has been updated.
- Around 47000 Audit Reports have been Generated in 2020-21.

Way Forward

- For the efficient functioning and enhanced capacity the training and skilling to the PRIs should be ensured.
- To garner the maximum benefit and transparency the literacy level of the elected representatives should be enhanced.
- The systems of accountability should be in place by duly empowering gram sabhas, so that citizens are able to hold PRIs to account for any inadequacies in service delivery.
- For the purpose of Geo-tagging the infrastructure facilities internet services etc and tagging equipments should be ensured.

SAATHEE PORTAL

- SAATHEE (State-wise Actions on Annual Targets and Headways on Energy Efficiency) is a portal for State Designated Agency (SDA) for state level activities in the energy conservation sphere.

- It will be useful in capturing the physical and financial status/ progress of Energy Efficiency activities being implemented by States/ UTs across the country.

- It will facilitate real-time monitoring of the progress of implementation of all the Energy Efficiency and Energy Conservation endeavours such as demonstration projects, awareness campaigns, capacity building workshops, etc. being carried out by SDAs at the state-level.

- It will also help in decision making, coordination, control, analysis, and implementation and enforcement of the compliance process for various energy consumers at the pan India level.

Way Forward

- For the real-time monitoring of the progress of implementation of all the Energy Efficiency and Energy Conservation endeavours data should be available at real time from different states. So efficient data procurement should be ensured.

e - GOVERNANCE

"e-governance" or electronic governance refers to the use of Information and Communication Technologies (ICTs) by government agencies for any or all of the following reasons:

The goals of e-Governance are:

- Better service delivery to citizens
- Ushering in transparency and accountability
- Empowering people through information
- Improved efficiency within Governments
- Improve interface with business and industry.

Keeping the above in view, **Ministry of Electronics and Information Technology (MeitY) has established the `Centre for e-Governance' (CEG).** The CeG showcases applications, demonstrations and presentations that reflect the progress achieved in the implementation and usage of e-Governance.

Best Practices of e-Governance

A Best Practice is the improvement in efficiency of management systems for the delivery of basic services, communication of information and facilitating public decision making. Best Practices often incorporate active solutions for problem solving based on effective partnerships and institutionalized interface with stakeholders and citizens.

Central government's Best Practices

National e-governance Plan: The NeGP Vision consists of making all Government services accessible to the common man in his locality, through common service delivery outlets and ensure efficiency, transparency & reliability of such services at affordable costs to realise the basic needs of the common man. The Government has approved the National eGovernance Plan (NeGP), comprising of 27 Mission Mode Projects (MMPs) and 10 components. Some of the important missions are discussed as follows-

> **MCA 21 - The first Mission Mode Project to be launched under NeGP:** The project aims at providing easy and secure online access to all registry related services provided by the Union Ministry of Corporate Affairs to corporates and other stakeholders at any time and in a manner that best suits them. MCA 21 project is an outcome of the MCA's quest for simplifying forms, making forms e-centric, promoting online transactions, and reaching out to stakeholders.

- ➤ **Passport Seva - A Mission Mode Project under NeGP:** The Passport Seva Project is intended to transform the delivery of all passport related services across the country, with accent on process efficiency, citizen focus, employee productivity and system transparency.

- ➤ **NIC - National Portal of India** being implemented to provide a single window access to the information and services of the Indian Government at all levels from Central Government to State Government to District Administration and Panchayat for the Citizens.

- ➤ **DGS&D, Ministry of Commerce and Industry** - To reduce cycle time and cost of procurement, to enhance transparency and efficiency of procurement covering all aspect of procurement from indent of tender-to-tender preparation, bidding, bid evaluation and award of contract with security features.

- ➤ **DARPG -E-Office**-This project is aimed at significantly improving the operational efficiency of the Government, by transitioning to a Less Paper Office within next five years.

- ➤ **eBiz** Project implemented by Department of Industry Policy & Promotion (DIPP) for provision of Government to Business (G2B) services to stakeholders.

- ◉ **The National Institute of Smart Governance:** NISG has been incorporated as a 'not-for-profit company' under Section 25 of the Companies Act 1956 India, at Hyderabad in 2002. Its vision is to establish itself as a Centre of Excellence in e-Governance by leveraging private sector resources through public private partnership mode for the spread of e-Governance. Informed stakeholders will complement efforts to re-invent government through modified procedures that mirror efficiency, convenience, fairness, equity and justice.

- ◉ **Digital India Mission**: Digital India is a campaign launched in 2016, by the Government of India in order to ensure the Government's services are made available to citizens electronically by improved online infrastructure and by increasing Internet connectivity or making the country digitally empowered in the field of technology. It aims to transform India into a digitally empowered society and knowledge economy.

- ◉ **e –Aadhaar:** e-Aadhaar is a password protected electronic copy of Aadhaar, which is digitally signed by the competent Authority of UIDAI. As per Aadhaar Act, e-Aadhaar is equally valid like Physical Copy of Aadhaar for all purposes.

- ◉ **Jeevan Parman:** Jeevan Pramaan is a Life Certificate program affiliated with Aadhaar for people with pensions. It is a biometric enabled digital service for pensioners. Pensioners of Central Government, State Government or any other Government organization can take benefit of this facility. It was started in 2014.

- ◉ **MyGov**: MyGov is a citizen engagement platform launched by the Government of India. It is aimed at creating a common platform for Indian citizens to "crowdsource governance ideas from citizens". MyGov has adopted multiple engagement methodologies like discussions, tasks, polls, surveys, blogs, talks, pledges, quizzes and on-ground activities by innovatively using internet, mobile apps, IVRS, SMS and outbound dialling (OBD) technologies.

- ◉ **etaal:** Ministry of Electronics and Information Technology (MeitY) along with National Informatics Centre (NIC), the nodal information technology arm of Government of India, have developed **Electronic Transaction Aggregation & Analysis Layer (eTaal)** portal. It provides an aggregated view of eTransactions performed through e-Governance applications implemented including, but not limited to, the national-level mission mode projects (MMPs) under the National e-Governance Plan (NeGP). eTaal 2.0 portal is launched for providing a real-time aggregated view of volume of e-Services being delivered across the central, state and local governments in India. It displays the number of 'end-to-end electronic transactions' as the indicator for measuring the performance of G2C, G2B and B2C e-Services.

- ◉ **e-Office:** The eOffice aims to support Governance by ushering in more effective and transparent inter and Intra-Government processes. Enhance transparency – files can be tracked, and their status is known to all at all times. Increase accountability – the responsibility of quality and speed of decision making is easier to monitor. Assure data security and data integrity.

- ◉ **e-Sanjeevani:** eSanjeevani is a Government of India's flagship telemedicine technology

- ◉ **National Cyber Crime Reporting Portal:** This portal is an initiative of Government of India to facilitate victims/complainants to report cyber crime complaints online.

- ◉ **e-District:** The eDistrict project was conceptualized to improve this experience and enhance the efficiencies

of the various Departments at the district-level to enable seamless service delivery to the citizen.

◉ **Meghdoot:** Meghdoot, a joint initiative of India Meteorological Department (IMD), Indian Institute of Tropical Meteorology (IITM) and Indian Council OF Agricultural Research (ICAR) aims to deliver critical information to farmers through a simple and easy to use mobile application.

◉ **Indian IP Panorama:** Indian Intellectual Property Panorama, released by the Government of India offers to increase awareness and build sensitivity towards IP, among stakeholders in the SME sector, academia and researchers.

◉ **Param Yuva II:** PARAM Yuva II is a High Performance Computing (HPC) Cluster that is latest and fastest in the prestigious PARAM series of Supercomputers built in India. Yuva II is an upgraded version of PARAM Yuva, is yet another step towards creating a general purpose research oriented computational environment architected to solve bigger problems and provide an opportunity for scientific breakthroughs.

◉ **DigiLocker:** It serves as a platform to enable citizens to securely store and share their documents with service providers who can directly access them electronically.

◉ **e-Hospital-Online Registration Framework (ORF):** It is an initiative to facilitate the patients to take online OPD appointments with government hospitals. This framework also covers patient care, laboratory services and medical record management.

◉ **National Scholarships Portal (NSP):** It provides a centralized platform for application and disbursement of scholarship to students under any scholarship scheme.

◉ **DARPAN:** It is an online tool that can be used to monitor and analyze the implementation of critical and high priority projects of the State. It facilitates presentation of real time data on Key Performance Indicators (KPIs) of selected schemes/projects to the senior functionaries of the State Government as well as district administration.

◉ **PRAGATI (Pro-Active Governance And Timely Implementation):** It was launched in 2015. It has been aimed at starting a culture of Pro-Active Governance and Timely Implementation. It is also a robust system for bringing e-transparency and e-accountability with real-time presence and exchange among the key stakeholders.

◉ **Common Services Centres 2.0 (CSC 2.0):** It is being implemented to develop and provide support to the use of information technology in rural areas of the country. The CSCs are Information and Communication Technology (ICT) enabled kiosks with broadband connectivity to provide various Governments, private and social services at the doorstep of the citizen.

◉ **National Centre of Geo-informatics (NCoG):** Under this project, Geographic Information System (GIS) platform for sharing, collaboration, location based analytics and decision support system for Departments has been developed.

◉ **e-Kranti:** National e-Governance Plan 2.0: It is an essential pillar of the Digital India initiative. It was approved in 2015 with the vision of **"Transforming e-Governance for Transforming Governance"**.

◉ **Tele-Law:** Department of Justice has partnered with NALSA and CSC e-Governance Service India Limited for mainstreaming legal aid to the marginalised communities through Common Services Center (CSC).

STATE LEVEL BEST PRACTICES

State	Best practices
Andhra Pradesh	**Mee Seva:** It is a good governance initiative that incorporates the vision of National eGov Plan "Public Services Closer to Home" and facilitates single entry portal for entire range of G2C& G2B services . The objective of MeeSeva is to provide smart, citizen centric, ethical, efficient and effective governance facilitated by technology. The initiative involves

	universal and non-discriminatory delivery of all government services to citizens & Businessmen of all strata and improved efficiency, transparency and accountability for the government.
	e-Seva: These centres have been established in over 200 villages and towns delivering services to citizens based on a low-cost networking model. Originally, it was implemented in the form of the TWINS (Twin Cities Integrated Network Services) project in 1999 in the twin cities of Hyderabad and Secunderabad. The highlight of the eSeva project is that all the services are delivered online to consumers / citizens by connecting them to the respective government departments and providing online information at the point of service delivery.
	e-Procurement Project: The Government of Andhra Pradesh introduced the e-Procurement project in 2003 with the following objectives: i. To reduce the time and cost of doing business for both vendors and government; ii. To realize better value for money spent through increased competition and the prevention of cartel formation.
	Parishkaram - Call Centre: A Call Centre titled "Parishkaram" has been started by the Government of Andhra Pradesh to enable citizens to query information about government services or for redressal of grievances. Parishkaram means resolving complaints and problems.
Assam	**ASHA Web portal** for agriculture business in partnership with farmers and producers organizations, financial institutions and community information centres (CICs), localized content with value added services like insurance, credit, trading etc. **Project SANWAD** offers citizen oriented services like certificate (income, caste, domicile, land records etc.) and online grievance redressal system. PPP Business Model for kiosks.
Bihar	**Revenue Administration through Computerized Energy (RACE) Billing Project:** In 2001, Bihar State Electricity Board (BSEB) to take the assistance of ICT in providing value added and consumer-friendly service to the clients. A separate department of IT was created in BSEB to implement the project and the software was designed by NIC.
Gujarat	The **Chiranjiv Yojana** for controlling maternal mortality. **Nirmal Gujarat Project** for cleanliness. **Swantah Sukhay** – Every District/taluka level officer selects a project, with quantifiable targets and specific deadlines with freedom and flexibility to implement one project in a campaign mode for services to general public. Projects include 24X7 days medical facilities in rural areas, model fair price shops, telemarketing of rural produce incorporating ICT, biometric attendance, citizen centres etc.
Karnataka	**Bhoomi** allows computerized easy access and facilities for 'mutations and updation of 20 million land records belonging to 6.7 million farmers in an efficient and transparent way based on a self sustaining business models. Khajane Project:
Haryana	◉ Best Practices on **'Integrated Workflow System for Paperless Admission'** with online off-campus counseling for all technical courses including post graduate, undergraduate and diploma education has obtained Central award for Exemplary Horizontal Transfer of ICT based Best Practice category 2007-08. ◉ **Mustard Procurement management System** has obtained an award in the Special Sectoral Award Category, 2007-2008. ◉ **Janani Suvidha Yojana** for maternal health care.

Kerala	◉ Successfully piloted Rural ICT access points Akshaya with epayment facilities.
	◉ The **SWIFT pilot programme** provides one point solution for 25 types of certificates.
	◉ **PEARL** for administration of registration laws and documents, Agriculture management Information System, etc.
	◉ **Asraya** a community based initiative to remove destitution.
	◉ **Project FRIENDS:** FRIENDS (Fast, Reliable, Instant, Efficient Network for the Disbursement of Services) is a Single Window Facility providing citizens the means to pay taxes and other financial dues to the State Government. It was launched in Thiruvananthapuram in June 2000 and replicated in other district headquarters during 2001-02. The services are provided through FRIENDS Janasevana Kendrams located in the district headquarters.
Madhya Pradesh	◉ **Gyandoot**: Gyandoot is an Intranet-based Government to Citizen (G2C) service delivery initiative. It was initiated in the Dhar district of Madhya Pradesh in January 2000 with the twin objective of providing relevant information to the rural population and acting as an interface between the district administration and the people. The basic idea behind this project was to establish and foster a technologically innovative initiative which is owned and operated by the community itself.
	◉ **Rogi Kalyan Samitis** with autonomy to charge user fees and deploy them for purchase of equipment and maintenance' are other important experiments.
Rajasthan	◉ **e- mitra service centres**: Has set up over 500 e- mitra service centres on PPP basis in 31 out of 32 districts with services including certificates, payment of bills, transport ticketing, ration card etc with business process reengineering in linked departments. This e-Governance initiative builds upon the experiences gained through the LokMitra and JanMitra pilot projects launched in 2002. There are two major components – 'back office processing' and 'service counters'.
	◉ **SARATHI** (Stamp and Registration Automation with Technology and Information) e-registration in an hour.
Tamilnadu	◉ **SARI Project** Madurai District pilot phase services include farming advice by the Madurai Agricultural College & Research Centre; applications for government loans; e-mail, chatting and voicemail; eyecare and treatment; income, caste, birth and death certificates; old age pension; computer education etc.
Tripura	◉ **E Suvidha Kendras** or service facilitation centres in all SDM offices providing 22 citizen services with tracking.
Uttar Pradesh	◉ **Lokavani**: Lokvani is a public-private partnership project at Sitapur District in Uttar Pradesh which was initiated in November, 2004. Its objective is to provide a single window, self sustainable e-Governance solution with regard to handling of grievances, land record maintenance and providing a mixture of essential services.

International e – Governance Best Practices

◉ **Expanding Electronic Government, USA** - In July, 2001 an initiative known as 'Expanding Electronic Government' was initiated as a part of the President's Management Agenda in USA. The objective was to make use of information technology to eliminate wasteful federal spending, reduce governmental paperwork and improve government response time to citizens. This expansion of e-government had three guiding principles: i. It should be citizen-centered and not bureaucracy or agency-centered. ii. It should produce measurable improvements for citizens. iii. It should be market-based, aimed at promoting innovation.

◉ **GovBenefits.gov:** In USA, it provides one-stop access to information and services of over four hundred government programmes for the benefit of citizens.

◉ **Mobile Phone Signature:** This is one of the most secure methods available for identifying yourself over the Internet (login) through mobile phone or activated smartcard. Evaluation and monitoring is being performed

continuously. As E-Government, but also eServices in the business sector heavily base on eSignatures, it is necessary to continuously monitor the security aspects, the technological development as well as the uptake, the performance etc.

◉ **Federal Service Bus, Belgium** – Ensure coherent use of digital technologies across policy areas and levels of government. Creation of an Enterprise Service Bus platform for use at Belgian federal level; definition of a service oriented architecture and implementation of a number of user-centric services for systematic (re) use of authoritative data. Fedict is the agency in charge of the Federal Service Bus and associated services.

◉ **Electronic Travel Authorization (eTA), Canada:** Reflect a risk management approach to addressing digital security and privacy issues, and include the adoption of effective and appropriate security measures. eTA is a new entry requirement for visa-exempt foreign nationals (apart from U.S. citizens and other specified exempt travellers) who are travelling to Canada by air. eTA allows Canada to pre-screen these travellers, which will streamline their arrival at the border, improve the safety and security of Canadians, and protect the integrity of our immigration system.

◉ **Strengthening of Digital Government Governance, Chile:** – Secure leadership and political commitment to the strategy, Ensure coherent use of digital technologies across policy areas and levels of government, The project considers the procurement of studies on national and international approaches to Digital Government governance, as well as consultations to the CIOs of public entities and relevant stakeholders from the private sector and civil society, aimed at the implementation of a new Digital Government governance framework in Chile.

◉ **Digital Government Institutional Framework, Columbia:** : This is the Digital Government policy of Colombian State, which has been constantly evolving in its scope and implementation, recognizing the use of Information and Communications Technologies (ICT) as a fundamental instrument to improve public management and relationship between Government and citizens. Establish effective organisational and governance frameworks to co-ordinate the implementation of the digital strategy within and across levels of government.

◉ **Enterprise Architecture in the Public Sector, Finland:** Act on Information Management Governance in Public Administration and obliges all public administration organizations to develop their architecture. In doing so they must follow and make use of the Public Administration's common Architecture and its elements. The Ministry of Finance is responsible for developing and maintaining the Public Administration's common Architecture. The Ministry of Finance is authorized to lay down regulations concerning information architecture, information systems architecture and technical architecture.

◉ **Innovative Working Environment, Japan:** The Administrative Management Bureau ("AMB") of MIC launched an initiative of office innovation in January 2015. Presumably the first to completely change the conventional office space arrangements among the government Ministries of Japan. Establish effective organisational and governance frameworks to co-ordinate the implementation of the digital strategy within and across levels of government.

◉ **Open Data Big Bang Project, Korea:** Create a data-driven culture in the public sector. Citizens and enterprises select public data that have practical usage in business, and the government discloses the big data.

◉ Global Digital Marketplace project, UK: Globally, public procurement is in desperate need of reform and must embrace the tools, techniques and culture of the digital age. It's a government's top corruption risk as it's where money and discretion collide. The UK has begun to address this: GDS is leading the Global Digital Marketplace project, which is embedding user-centred, design-led, data driven and open approaches across digital, data and technology planning, procurement, contracting and service delivery.

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AGRICULTURE

NATIONAL MISSION FOR SUSTAINABLE AGRICULTURE (NMSA)

National Mission for Sustainable Agriculture (NMSA) aims at making agriculture more productive, sustainable, remunerative and climate resilient by promoting location specific integrated /composite farming systems; soil and moisture conservation measures; comprehensive soil health management; efficient water management practices and mainstreaming rainfed technologies.

Need of the Initiative

Indian agriculture remains predominantly rainfed covering about 60% of the country's net sown area and accounts for 40% of the total food production. Thus, conservation of natural resources in conjunction with development of rainfed agriculture holds the key to meet burgeoning demands for food grain in the country. Towards this end, National Mission for Sustainable Agriculture (NMSA) has been formulated for enhancing agricultural productivity especially in rainfed areas focusing on integrated farming, water use efficiency, soil health management and synergizing resource conservation.

About NMSA

- NMSA derives its mandate from Sustainable Agriculture Mission which is one of the eight Missions outlined under National Action Plan on Climate Change (NAPCC).
- It aims at promoting sustainable agriculture through a series of adaptation measures focusing on ten key dimensions encompassing Indian agriculture namely;
  - 'Improved crop seeds
  - livestock and fish cultures'
  - 'Water Use Efficiency'
  - 'Pest Management'
  - 'Improved Farm Practices'
  - 'Nutrient Management'
  - 'Agricultural insurance'
  - 'Credit support'
  - 'Markets'

- ➤ 'Access to Information'

- ➤ 'Livelihood diversification'

- ◎ NMSA give special emphasis on soil & water conservation, water use efficiency, soil health management and rainfed area development.

- ◎ The focus of NMSA will be to infuse the judicious utilization of resources of commons through community based approach.

Program Components

NMSA has following four (4) major programme components or activities:

- ◎ **Rainfed Area Development (RAD):** RAD will adopt an area based approach for development and conservation of natural resources along with farming systems. This component will introduce appropriate farming systems by integrating multiple components of agriculture such as crops, horticulture, livestock, fishery, forestry with agro based income generating activities and value addition.

- ◎ **On Farm Water Management (OFWM):** OFWM will focus primarily on enhancing water use efficiency by promoting efficient on-farm water management technologies and equipment.

- ◎ **Soil Health Management (SHM):** SHM will aim at promoting location as well as crop specific sustainable soil health management including residue management, organic farming practices by way of creating and linking soil fertility maps with macro-micro nutrient management, appropriate land use based on land capability, judicious application of fertilizers and minimizing the soil erosion/degradation.

- ◎ **Climate Change and Sustainable Agriculture:** Monitoring, Modeling and Networking (CCSAMMN): CCSAMMN will provide creation and bidirectional (land/farmers to research/scientific establishments and vice versa) dissemination of climate change related information and knowledge by way of piloting climate change adaptation/mitigation research/model projects in the domain of climate smart sustainable management practices and integrated farming system suitable to local agro-climatic conditions.

Implementation of the Scheme

- ◎ National Advisory Committee (NAC) under Chairmanship of Secretary (A&C) along with the representatives of Ministry of Water Resources, Rural Development, Panchayati Raj, Environment & Forest, Food Processing Industries, Tribal Affairs, Agricultural Research & Education and Animal Husbandry Dairying & Fisheries have been constituted to provide strategic direction for guidance and planning for effective implementation of the mission.

- ◎ State Level Committee (SLC) chaired by Agriculture Production Commissioner(APC)/Principal Secretary/ Secretary (Agriculture/Horticulture) with representation from concerned line Departments like Revenue, Animal Husbandry, Fisheries, Forests etc., CEO of SLNA, SAUs and ICAR Centers will oversee planning and implementation of the Mission.

- ◎ District Mission Committee (DMC) will be entrusted with project formulation, implementation and monitoring of NMSA. DMC may be headed by Collector or CEO of Zilla Parishad /District Council.

Other organizations involved

- ◎ Climate Change Cell (CCC) of DAC&FW along with Soil & Land Use Survey of India (SLUSI) will serve as knowledge networking centre

- ◎ Soil and Land Use Survey of India (SLUSI)

- ◎ National Centre of Organic Farming (NCOF)

- ◎ Central Fertilizer Quality Control & Training Institute (CFQCTI)

How the Scheme is working so far?

- ◎ Since, 2015-16 an area of 30.69 lakh ha has been brought under micro irrigation so far.

- ◎ Since inception of the scheme, an area of 6,811.57 ha has been brought under Integrated Farming System.

- Indian Council of Agricultural Research (ICAR) has developed 45 models for climate resilient Integrated Farming Systems (IFS) which are replicated in Krishi Vigyan Kendras (KVKs) for demonstration and extended through the Rainfed Area Development (RAD) programme.

- Climate resilient villages have been developed, one in each of 151 districts under the project National Innovations in Climate Resilient Agriculture (NICRA).

- An atlas on vulnerability of Indian agriculture to climate change has been prepared by Central Research Institute of Dryland Agriculture (CRIDA), Hyderabad.

- District Agriculture Contingency Plans for 648 districts have been prepared for managing weather aberrations for sustainable agriculture.

- Due to preparedness and introduction of climate resilient varieties, total food grain has increased from 208.60 Million Tonnes in 2005-06 to 284.95 Million Tonnes in 2018-19 and horticulture production from 116.9 Million Tonnes in 2004-05 to 313.85 Million Tonnes in 2018-19.

- In Andhra Pradesh, during the Pethai and Titli cyclones of 2018, the crops cultivated through natural farming showed greater resilience to heavy winds than conventional crops.

Way Forward

- Despite government policy support, organic farming currently covers only two per cent of the country's total net sown area (140 million ha). India has about two million certified organic producers, but reliable information about uncertified organic farmers is not available.

- Merely 0.8% of the Ministry of Agriculture and Farmers Welfare budget is allocated to National Mission for Sustainable Agriculture indicating a significant scope to support sustainable agriculture further.

- Focus on knowledge exchange and capacity building among farmers and agriculture extension workers on SAPSs. Leveraging and building-on the extensive prevailing on-ground CSO capacity would be a great first step.

- Restructure the government support to farmers. Instead of encouraging resource-intensive cultivation through inputs-based subsidies, align incentives towards resource conservation while rewarding outcomes (such as total farm productivity, enhanced ecosystem services) and not merely outputs such as yields. It will allow a multitude of farming approaches, including SAPSs, to flourish.

- Support rigorous evidence generation through long-term comparative assessment (between resource-intensive and sustainable agriculture) in view of changing-climate to inform long-term resilient approaches to nutrition security. It would help enable an evidence-backed and context-relevant scale up of SAPSs.

PARAMPARAGAT KRISHI VIKAS YOJNA (PKVY)

"Paramparagat Krishi Vikas Yojna (PKVY)" aims at development of sustainable models of organic farming through a mix of traditional wisdom and modern science to ensure long term soil fertility buildup, resource conservation and helps in climate change adapatation and mitigation.

Objectives

The objective is to produce agricultural products free from chemicals and pesticides residues by adopting eco-friendly, low-cost technologies. Key Thrust areas of PKVY in promoting organic farming include the following:

- Promote organic farming among rural youth/ farmers/ consumers/ traders
- Disseminate latest technologies in organic farming
- Utilize the services of experts from public agricultural research system in India
- Organize a minimum of one cluster demonstration in a village

About PKVY

- It primarily aims to increase soil fertility and thereby helps in production of healthy food through organic practices without the use of agro-chemicals.

- PKVY also aims at empowering farmers through institutional development through clusters approch not only in farm practice management, input production, quality assurance but also in value addition and direct marketing through innovative means.
- Participatory Gurantee System under PGS-India programme will be the key approach for quality assurances under the PKVY. The farmers will have option to adopt any form of organic farming in complince of PGS-India standards.
- While adopting a system it must be ensured that the system adopted is compatible to the area and crop and assures optimum yield and provides adequate measures to manage nutrients,pests and diseases.

1.6 Institutional Framework

NATIONAL ADVISORY COMMITTEE

Department of Agriculture; Cooperation and Farmers Welfare (DAC&FW)

State Department of Agriculture & Cooperation

Regional Councils (RCs)

- Indian Council of Agricultural Research (ICAR)
- State Agricultural Universities (SAUs)
- Central Agricultural Universities (CAUs)
- Krishi Vikas Kendras (KVKs)
- National Seed Corporation (NSC)
- Small Farmers Agribusiness Consortium (SFAC)

Figure 5: PKVY - Institutional Framework

How the initiative had worked?

- **Cost reduction (cost saving):** There is an immediate reduction in the cost of cultivation (cost saving) up to 10 to 20% as the beneficiaries are not using purchased fertilizers and pesticides. Due to reduction in costs, there was increase in net returns ranging from 20 to 50%.
- **Savings in purchased inputs (cash expenses):** The benefits are significant in crops like paddy and cotton, for which farmers spend huge amount of money on purchase of fertilizers and pesticides before PKVY.
- **Price premium was observed in some clusters,** which are nearer to large cities and have good linkages with large markets (the price premium was ranged from 10% to 30% based on the type of market linkage, commodity and market linkage. In general price premium is not widely observed.
- **Yield improvement** observed only in a few farmers who do all PKVY practices since last few years, but in general there was no significant yield increase in first year.

Way Forward

- **Timely action:** Plan preparation, release of fund and implementation needs to be streamlined.
- **Identification of potential zones (Organic Special economic Zones):** There was a need for identification of potential zones like rainfed areas, tribal areas, where traditionally farmers use less fertilizers for intensive

efforts for promoting organic clusters. Creation of organic special Economic zones (OSEZ) where the tribal population is more such as Chhattisgarh, Jharkhand, Srikakulam in Andhra Pradesh.

- **Incentives:** Announcing incentives to the farmers (master farmers) who adopt organic farming for the first 3 – 5 years to compensate low yields.

- **A multi-agency approach,** involving public, private and NGOs may be encouraged. Currently there was little involvement of institutions like KVKs, ATMAs and SAUs to promote organic agriculture.

PRADHAN MANTRI KRISHI SINCHAYEE YOJANA (PMKSY)

The overreaching vision of Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) will be to ensure access to some means of protective irrigation to all agricultural farms in the country, to produce 'per drop more crop', thus bringing much desired rural prosperity.

Need of the Initiative

Out of about 141 m.Ha of net area sown in the country, about 65 million hectare (or 45%) is presently covered under irrigation. Substantial dependency on rainfall makes cultivation in unirrigated areas a high risk, less productive profession. Empirical evidences suggest that assured or protective irrigation encourages farmers to invest more in farming technology and inputs leading to productivity enhancement and increased farm income.

About PMKSY

- PMKSY has been formulated amalgamating schemes viz. Accelerated Irrigation Benefit Programme (AIBP) of Ministry of Water Resources, River Development & Ganga Rejuvenation; Integrated Watershed Management Programme (IWMP) of Department of Land Resources; and On Farm Water Management (OFWM) component of National Mission on Sustainable Agriculture (NMSA) of Department of Agriculture and Cooperation.

- All the States and Union Territories including North Eastern States are covered under the programme.

- PMKSY is to be implemented in an area development approach, adopting decentralized state level planning and projectised execution, allowing the states to draw their irrigation development plans based on district/blocks plans with a horizon of 5 to 7 years. States can take up projects based on the District/State Irrigation Plan.

- The National Steering Committee (NSC) of PMKSY under the chairmanship of Hon'ble Prime Minister, will provide policy direction to programme framework.

- A National Executive Committee (NEC) under the chairmanship of Vice Chairman of NITI Aayog will oversee the programme implementation at national level.

Programme Components

Accelerated Irrigation Benefit Programme(AIBP)

- To focus on faster completion of ongoing Major and Medium Irrigation including National Projects.

PMKSY (Har Khet ko Pani)

- Creation of new water sources through Minor Irrigation (both surface and ground water)

- Repair, restoration and renovation of water bodies; strengthening carrying capacity of traditional water sources, construction rain water harvesting structures (Jal Sanchay);

- Command area development, strengthening and creation of distribution network from source to the farm;

- Ground water development in the areas where it is abundant, so that sink is created to store runoff/ flood water during peak rainy season.

- Improvement in water management and distribution system for water bodies
- Creating and rejuvenating traditional water storage systems like Jal Mandir (Gujarat); Khatri, Kuhl (H.P.); Zabo (Nagaland); Eri, Ooranis (T.N.); Dongs (Assam); Katas, Bandhas (Odisha and M.P.) etc. at feasible locations.

PMKSY (Per Drop More Crop)

- Programme management, preparation of State/District Irrigation Plan,
- Information Communication Technology (ICT) interventions through NeGP-A to be made use in the field of water use efficiency, precision irrigation technologies, on farm water management, crop alignment etc. and also to do intensive monitoring of the Scheme
- Topping up of input cost particularly under civil construction beyond permissible limit (40%), under MGNREGS for activities like lining inlet, outlet, silt traps, distribution system etc.

PMKSY (Watershed Development)

- Effective management of runoff water and improved soil & moisture conservation activities such as ridge area treatment, drainage line, treatment, rain water harvesting, in-situ moisture conservation and other allied activities on watershed basis.
- Converging with MGNREGS for creation of water source to full potential in identified backward rainfed blocks including renovation of traditional water bodies.

How the initiative is working?

- Till its inclusion under PMKSY in 2016, 297 irrigation/ multi-purpose projects were included for funding under AIBP. Out of these, 143 projects have been completed and 5 projects were foreclosed. An irrigation potential of 24.39 lakh hectare has been created through the completed projects.
- After launch of PMKSY in 2015-16, AIBP became a part of PMKSY. Under PMKSY-AIBP, 99 projects having ultimate potential of 76.03 lakh hectare have been prioritized for completion. Against the balance ultimate potential of 34.63 lakh hectare, 21.45 lakh hectare has been achieved till March, 2020.

Way Forward

- Fund Utilization should be ensured in a given time period.
- Regular Monitoring and evaluation of achieved outcomes
- Field specialization and people participation should be ensured.

PRADHAN MANTRI FASAL BIMA YOJANA (PMFBY)

60% of the Indian agriculture comes under the rain-fed agriculture and the unpredictability of Monsoon along with changing climate patterns make farmers at loss in the end. Crop insurance is a means of protecting the agriculturist against financial losses due to uncertainties that may arise from crop failures/losses arising from named or all unforeseen perils beyond their control. Thus government has launched Pradhan Mantri Fasal Bima Yojana.

Objective of the Schemes

- Pradhan Mantri Fasal Bima Yojana (PMFBY) aims at supporting sustainable production in agriculture sector by way of:
  - ➤ Providing financial support to farmers suffering crop loss/damage arising out of unforeseen events
  - ➤ Stabilizing the income of farmers to ensure their continuance in farming
  - ➤ Encouraging farmers to adopt innovative and modern agricultural practices

○ Ensuring flow of credit to the agriculture sector which will contribute to food security, crop diversification and enhancing growth and competitiveness of agriculture sector besides protecting farmers from production risks.

About the Scheme

○ The Scheme covers all Food & Oilseeds crops and Annual Commercial/Horticultural Crops.

○ The scheme is implemented by empanelled general insurance companies.

○ Selection of Implementing Agency (IA) is done by the concerned State Government through bidding.

○ The scheme is compulsory for loanee farmers availing Crop Loan /KCC account for notified crops and voluntary for other others.

○ The scheme is being administered by Ministry of Agriculture.

○ Integration of land records with the PMFBY portal, Crop Insurance mobile-app for easy enrollment of farmers and usage of technology such as satellite imagery, remote-sensing technology, drones, artificial intelligence and machine learning to assess crop losses are some of the key features of the scheme.

○ The scheme makes it easier for the farmer to report crop loss within 72 hours of occurrence of any event through the Crop Insurance App, CSC Centre or the nearest agriculture officer.

○ Premium cost over and above the farmer share is equally subsidized by States and GoI. However, GoI shares 90% of the premium subsidy for North Eastern States to promote the uptake in the region.

Coverage of Risks and Exclusions under PMFBY Scheme:

Following stages of the crop risks leading to crop loss are covered under the Scheme. Addition of new risks by the State Govt other than the one mentioned below, by the State Govt. is not permitted.

○ **Prevented Sowing/Planting/Germination Risk:** Insured area is prevented from sowing / planting / germination due to deficit rainfall or adverse seasonal/weather conditions. 25% of the sum insured will be paid and the Policy will be terminated.

○ **Standing Crop (Sowing to Harvesting):** Comprehensive risk insurance is provided to cover yield losses due to non-preventable risks, viz. Drought, Dry spell, Flood, Inundation, widespread Pests and Disease attack, Landslides, Fire due to natural causes , Lightening, Storm, Hailstorm and Cyclone.

○ **Post-Harvest Losses:** Coverage is available only upto a maximum period of two weeks from harvesting, for those crops which are required to be dried in cut and spread / small bundled condition in the field after harvesting against specific perils of Hailstorm, Cyclone, Cyclonic rains and Unseasonal rains.

○ **Localized Calamities:** Loss/damage to notified insured crops resulting from occurrence of identified localized risks of Hailstorm, Landslide, Inundation, Cloud burst and Natural fire due to lightening affecting isolated farms in the notified area.

○ **Add-on coverage for crop loss due to attack by wild animals:** The States may consider providing add-on coverage for crop loss due to attack by wild animals wherever the risk is perceived to be substantial and is identifiable.

○ **General Exclusions:** Losses arising out of war and nuclear risks, malicious damage and other preventable risks shall be excluded.

How the Scheme is working so far?

○ 21 states implemented the scheme in Kharif 2016 whereas 23 states and 2 UTs have implemented the scheme in Rabi 2016-17.

○ 29.19 crore farmer applications have insured their crops under the PMFBY since 2016.

○ More than Rs 95,000 crore worth of claims have been provided to farmers since the launch of the scheme in the year 2016, against the total premium of Rs 17,000 crore paid by them.

○ Lowest premium for all farmers of India - 2% for all Kharif Food & Oilseeds crops, 1.5% for Rabi Food & Oilseeds crops and 5% for Annual Commercial/Horticultural Crops.

◎ Largest crop insurance scheme in the history of independent India and globally, the third largest scheme in terms of premium

Way Forward

◎ Loan waiver schemes announced by state governments along with mandatory Aadhar linkage should be rationalised to enable PMFBY of greater coverage.

◎ There has been reports of delayed compensation by some of the states.

◎ Need behavioural change regarding the cost of insurance being a necessary input and not a money-back investment.

◎ PMFBY needs to be streamlined with state crop insurance schemes and schemes like Restructured Weather Based Crop Insurance Scheme to include more risk areas not covered under them.

Successful implementation of PMFBY is an essential benchmark in agricultural reform in India to make farmers self-sufficient in times of crisis and support the creation of a self sufficient kisan.

DIGITAL INDIA LAND RECORDS MODERNIZATION PROGRAMME (DILRMP)

The Digital India Land Records Modernization Programme (DILRMP) has been conceptualized as a major system and reform initiative that is concerned not merely with computerization, updating and maintenance of land records and validation of titles, but also as a programme that will add value and provide a comprehensive database for planning developmental, regulatory and disaster management activities by providing location-specific information, while providing citizen services based on land records data.

Need of the Initiative

◎ The present manual land records are old, insufficient, not duly updated, not agreeing among and within the corresponding records. The manual system of record keeping has become cumbersome, opaque, susceptible to manipulations and hard to administer by the administration. Further the present system of registration of deeds and documents as provided for in the Registration Act, the titles to property are merely presumptive and the State does not give guarantee for such titles.

◎ Land Records Information is one of the most valuable assets of any Government. By organizing land-related data into a meaningful Information Warehouse, Government decision makers can be empowered with a flexible tool to provide citizen-centric services and can assess their impact over the intended section of the population.

About Digital India Land Records Modernization Programme (DILRMP)

◎ The Land Reforms (LR) Division was implementing two Centrally Sponsored Schemes viz.: Computerisation of Land Records (CLR) & Strengthening of Revenue Administration and Updating of Land Records (SRA&ULR). Later on 21.8.2008, the Cabinet approved merger of these schemes into a modified Scheme named Digital India Land Records Modernization Programme (DILRMP).

◎ The main aims of DILRMP are to usher in a system of updated land records , automated and automatic mutation , integration between textual and spatial records , inter-connectivity between revenue and registration, to replace the present deeds registration and presumptive title system with that of conclusive titling with title guarantee.

◎ The integrated programme would modernize management of land records, minimize scope of land/property disputes, enhance transparency in the land records maintenance system, and facilitate moving eventually towards guaranteed conclusive titles to immovable properties in the country.

- The major components of the programme are computerization of all land records including mutations, digitization of maps and integration of textual and spatial data, survey/resurvey and updation of all survey and settlement records including creation of original cadastral records wherever necessary, computerization of registration and its integration with the land records maintenance system, development of core Geospatial Information System (GIS) and capacity building.

- The State Governments/UT Administrations will implement the programme with financial and technical supports from the Dept. of Land Resources, Government of India. The district will be taken as the unit of implementation, where all activities under the programme will converge.

Significance of the Programme

The citizen is expected to benefit from DILRMP in one or more of the following ways;

- Real-time land ownership records will be available to the citizen

- Since the records will be placed on the websites with proper security IDs, property owners will have free access to their records without any compromise in regard to confidentiality of the information

- Free accessibility to the records will reduce interface between the citizen and the Government functionaries, thereby reducing rent seeking and harassment.

- Public-private partnership (PPP) mode of service delivery will further reduce citizen interface with Govt. machinery, while adding to the convenience

- Abolition of stamp papers and payment of stamp duty and registration fees through banks, etc. will also reduce interface with the Registration machinery

- With the use of IT inter linkages; the time for obtaining RoRs, etc. will be drastically reduced

- The single-window service or the web-enabled "anytime-anywhere" access will save the citizen time and effort in obtaining RoRs, etc.

- Automatic and automated mutations will significantly reduce the scope of fraudulent property deals

- Conclusive titling will also significantly reduce litigation

- These records will be tamper-proof

- This method will permit e-linkages to credit facilities

- Market value information will be available on the website to the citizen

- Certificates based on land data (e.g., domicile, caste, income, etc.) will be available to the citizen through computers

- Information on eligibility for Government programs will be available, based on the data

- Issuance of land passbooks with relevant information will be facilitated

- The program will also support the SVAMITVA, a Central Sector Scheme of Ministry of Panchayati Raj towards establishment of clear ownership of property in rural inhabited (Abadi) areas, by mapping of land parcels using drone technology and providing 'Record of Rights' to village household owners with issuance of legal ownership cards.

Challenges of the initiative

- Not only are the units of measurement different, but some of the official terms used in relation to land records also vary across districts.

- Most RoRs (revenue records) have been digitised, but maps have not been updated through modern survey methods and the maps available online at present are digitised copies of cadastral maps.

- While most records of rights are available online, there was a significant volume of cases where the records were not available/accesible. There is a uniform problem of the absence of legacy records online.

- Every stake-holder of the DILRMP has to have clear understanding that this area of e-governance is the most complicated, intricate, difficult and tricky. This program is not easy than any other e-governance programme.

◎ This program has multi facets viz. techno, legal, administrative, behavioural, attitudinal, political will. Achieving DILRMP would involve, getting across many serious political, logistical, administrative, attitudinal change management hurdles.

Way Forward

◎ Since land record procedures and systems are different in different States, a baseline survey on the current status of the States and their requirements under the sanctioned components of the programme along with evaluation of the work already undertaken so far is required to be completed within the financial year.

◎ Due to rapid change in space technology and sophistication in the measurement process, DoLR will firm up technology related guidelines with sufficient flexibility for the State Government to execute the programme as per their contextual need.

◎ The Integrated Land Information Management System (ILIMS) gives rise to new concerns and new functions that need to be properly understood and addressed. These concerns relate to security of information system assets and data integrity. One important information system function, therefore, is asset safeguarding and data integrity.

◎ User authentication is the process of identifying a user. The information system must satisfy itself that the user is the one who he/she claims to be. There are a number of ways a user can be authenticated.

◎ Every land record data that is entered into the database needs to be approved/authenticated by the officer who is competent for the purpose as per the local revenue manual.

◎ No outsourcing or PPP should normally be allowed in the sensitive districts/areas, as identified by the appropriate Government.

◎ The Gram Sabha could be involved to facilitate survey/re-survey, wherever necessary.

AGRISTACK

At present, the majority of farmers across India are small and marginal farmers with limited access to advanced technologies or formal credit that can help improve output and fetch better prices. Hence government has launched Agristack.

About the Agristack

◎ A centralised farmers database to be created as part of Agristack — which will be linked with land records of farmers across the country to generate unique farmer IDs — will allow details regarding all benefits and assistance extended to farmers to be kept at one place so that "it can be a source of information for providing benefits to the farmers in future".

◎ This database is linking the land records of farmers across the country with data related to programmes like PM Kisan, Soil Health Card and Pradhan Mantri Crop Insurance Scheme — which are available with the government — also being integrated while the "process of inclusion of other data is going on".

◎ Under the Agristack mechanism, "each farmer will be provided with a digital ID, which will be linked to their Aadhaar number" and that data for Agristack "may include personal details, profile of land held, production details, and financial details".

◎ The Department has commenced the work for creating Agristack in the country.

◎ In order to create Agristack, the department is in the process of finalising "India Digital Ecosystem of Agriculture (IDEA)" which will lay down a framework for Agristack.

◎ Accordingly, a Task Force has been constituted and in furtherance, a Concept Paper on IDEA has already been floated for comments from the general public not only through department's website but also through emails especially to subject matter specialists, Agro-Industry, Farmers, Farmer Producer Organisations (FPOs).

◎ The IDEA would help in laying down the architecture for the Agri-stack in the country

Significance of the initiative

- This Ecosystem will help the Government in effective planning towards increasing the income of farmers in particular and improving the efficiency of the Agriculture sector as a whole.

- Agristack will help address issues of lack of access to credit and information for farmers and also provide solutions on everything from pest infestation, crop wastage, poor price discovery, and yield forecasting.

- It will help the farmer take "informed decisions on what crop to grow, what variety of seed to buy, when to sow, and what best practices to adopt to maximise the yield". Further, the other players in the agriculture supply chain can use the database to "plan their production and logistics on precise and timely information".

- Agristack will enable farmers find out "whether to sell or store their produce, and when, where and at what price to sell"
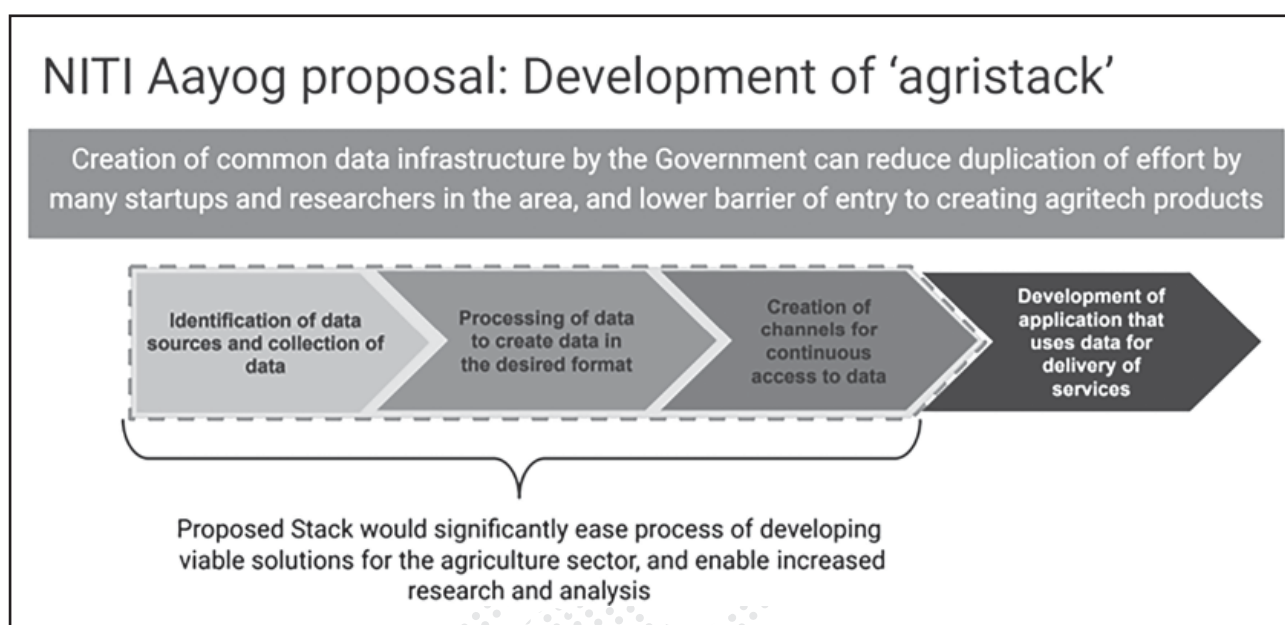
Implementation Status

- The Department of Agriculture, Cooperation and Farmers Welfare, entered into a Memorandum of Understanding (MoU) with Microsoft Corporation to start a pilot project in 100 villages of Uttar Pradesh, Madhya Pradesh, Gujarat, Haryana, Rajasthan and Andhra Pradesh.

- The MoU requires Microsoft to create a 'Unified Farmer Service Interface' through its cloud computing services.

- Leading Technology/Agri-tech/StartUp companies were identified and invited to collaborate with the Government of India to develop Proof of Concepts (PoC) based on small portions of data from the federated Farmers' database for certain identified areas (Districts/Village).

- The PoCs will help in understanding solutions that can be built using available data and some of them, if found beneficial to the farmers will be scaled up at National level.

What are the concerns flagged with Agristack?

- Agristack involves the collection of wide-ranging and deep data on virtually all aspects of agriculture, concerns of safety and equity have been raised by activists and farmers' bodies.

- "Farms generate a huge amount of data in their daily operations, and so are fertile ground for agritech and fintech firms. Thus, in their quest to provide farmers with better services, they may end up harvesting and processing farm data without the consent of the farmer, leading to a situation where, 'banks and insurance companies [know] more about the incomes and businesses of farms than the individual farmers themselves'.

◎ Given asymmetries in digital literacy between the different components of the agricultural ecosystem, "farmers may also be unable to adequately judge the value of their data and so may end up with compensation that is incommensurate with the same".

◎ Another issue flagged with the process of creation of Agristack is the reported lack of consultation with the critical stakeholders.

Way Forward

◎ Data collection and its security must be ensured beforehand.

◎ Farmers digital literacy must be a priority.

◎ Every stakeholder must be consulted before initiating any major step regarding the accumulation of records.

NATIONAL AGRICULTURE MARKET (eNAM)

◎ National Agriculture Market (eNAM) is a pan-India electronic trading portal which networks the existing APMC mandis to create a unified national market for agricultural commodities.

Need of the initiative

◎ Agriculture market was suffering from non-uniform marketing for farmers / sellers, information asymmetry between farmer and trader, lack of information on better and real-time price discovery based on actual demand and supply of agri-commodities, lack of transparency in auction process, low prices commensurate with quality of produce, presence of middle man, etc lead to the extortion of farmers and marketing inefficiency.

◎ Hence a platform was needed to promote uniformity in agriculture marketing by streamlining of procedures across the integrated markets, removing information asymmetry between buyers and sellers and promoting real time price discovery based on actual demand and supply.

About National Agriculture Market (eNAM)

◎ Small Farmers Agribusiness Consortium (SFAC) is the lead agency for implementing eNAM under the aegis of Ministry of Agriculture and Farmers' Welfare, Government of India.

◎ It envision to promote uniformity in agriculture marketing by streamlining of procedures across the integrated markets, removing information asymmetry between buyers and sellers and promoting real time price discovery based on actual demand and supply.

◎ It aims to integrate the APMCs across the country through a common online market platform to facilitate pan-India trade in agriculture commodities, providing better price discovery through transparent auction process based on quality of produce along with timely online payment.

◎ It seeks to leverage the physical infrastructure of the mandis through an online trading portal, enabling buyers situated even outside the Mandi/ State to participate in trading at the local level.

Significance of the initiative

◎ e-NAM basically increases the choice of the farmer when he brings his produce to the mandi for sale. Local traders can bid for the produce, as also traders on the electronic platform sitting in other State/ Mandi.

◎ The farmer may choose to accept either the local offer or the online offer. In either case the transaction will be on the books of the local mandi and they will continue to earn the market fee. In fact, the volume of business will significantly increase as there will be greater competition for specific produce, resulting in higher market fees for the mandi.

◎ eNAM portal will enable farmers to showcase their products through their nearby markets and facilitate traders from anywhere to quote price.

◎ e-NAM provides single window services for all Agricultural Produce Market Committee (APMC) related services and information.

◉ eNAM further strengthen it towards One Nation One Market goal, facilitating farmers, traders and mandis to collectively work together as a cohesive unit to take nation towards online sale and purchase of agri-produce through eNAM portal.

◉ Real time price discovery for better & stable price realization for producers

◉ Reduced transaction cost for buyers

◉ Availability of information on e-Nam mobile app about commodity prices.

◉ The details of price of commodity sold along with quantity are received through SMS

◉ More efficient supply chain & warehouse based sales

◉ Online payment directly to the bank accounts of the farmers.

What is the implementation status of eNAM?

◉ In last 4 years the e-NAM has registered a user base of 1.66 Cr Farmers, 1.31 lakh Traders, 73,151 Commission Agents and 1012 FPOs.

◉ As on 14th May 2020, total volume of 3.43 Crore MT & 38.16 Lakh numbers (Bamboo & Coconut) collectively crossed a remarkable business milestone worth Rs. 1 lakh crore on e-NAM platform. Presently 150 commodities, including Foodgrains, Oilseeds, Fibers, Fruits & Vegetables, are traded on eNAM.

NATIONAL e-GOVERNANCE PLAN IN AGRICULTURE (NEGPA)

◉ A Centrally Sponsored Scheme National e-Governance Plan in Agriculture (NeGPA) aims to achieve rapid development in India through use of Information & Communication Technology (ICT) for timely access to agriculture related information to the farmers.

◉ The e-Governance of agriculture will help farmers to get soil health cards, dissemination of crop advisories to the farmers, precision farming, smart cards for farmers to facilitate e-governance, crop insurance, settlement of compensation- claims, grant of agricultural subsidies, community/village resource centres etc.

◉ The objectives of the missions under the NeGPA are: Bridging farmer centricity and service orientation to the programs Enhancing reach and impact of extension services Improving access of farmers to information and services throughout crop-cycle Building-upon, enhancing and integrating the existing ICT initiatives of Centre, and States Enhancing efficiency and effectiveness of programs through process redesign More effective management of schemes of DAC Promoting a common framework across states.

◉ Stakeholders, especially farmers, can avail different services under this project through multiple channels including Government offices, Kiosks, Krishi Vigyan Kendras, Kisan Call Centers, Agri Clinics, Common Service Centers and web/mobile applications among others.

◉ Besides these, they can also avail services using various Center, and State Agriculture portals fall under the project.

◉ These portals ensure standardization of the processes and allow for a smoother flow of data.

◉ The modern management of agriculture such as Remote Sensing, Geographical Information System (GIS), Data Analytics, Cloud Computing, Artificial Intelligence (AI), Machine Learning (ML), Internet of Things (IoT), Robotics, Drones, Sensors and Blockchain would also be infused with the management of agriculture.

Significance of the initiative

◉ The project provides various services including Government to Business, Government to Consumer, Government to Government and Government to Employee, among others. The key benefits of the project are as follows:

  ➤ Farmers get access to information and various services.

  ➤ Online agricultural services would be provided across the states.

  ➤ Grievances of the farmers would be addressed in a faster and more efficient way.

➤ Provision and use of email services across the department.

➤ The department would become more transparent and efficient.

➤ The farmers would be able to give feedback to the decision-makers.

➤ Various Governments schemes made for farmers would be monitored in a better and more efficient way.

➤ Resources can be managed more effectively.

➤ Farmers can reap higher benefits and profitability.

➤ Stakeholders can use information more effectively for decision making.

➤ The project lays the foundation for the development of various e-businesses in the agriculture sector.

➤ The organisation would become better and more efficient.

How the digitization of agriculture has helped farmers?

◉ In order to infuse modern information technologies in the farm sector, the NeGPA guidelines were amended in 2020-21 and funds were released for sanctioning projects for customization / shifting of web & mobile applications already developed by the States, to the platform to be developed using digital/emerging technologies.

◉ Realizing the significance of new digital & emerging technologies, the Committee on Doubling Farmers' Income (DFI) has recommended further expanding and augmenting of the digital agriculture initiatives of Government of India.

◉ Several States have come forward to utilize this amended policy and accordingly pilot projects have been sanctioned in various States to make use of emerging technologies.

◉ For better planning, monitoring, policy making, strategy formulation and smooth implementation of schemes for the farmers a nationwide Farmers Database linked with land records is being created. The data of 4.3 crore farmers linked with land records have already been verified and the database would be unveiled shortly.

◉ The Committee on Doubling Farmers' Income (DFI) in its report appreciated the role of Digital Technology, which can play a transformational role in modernizing and organizing how rural India performs its agricultural activities.

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CYBER SECURITY

NATIONAL CYBER CRIME REPORTING PORTAL

This portal is an initiative of the Government of India to facilitate victims/complainants to report cybercrime complaints online. Complaints reported on this portal are dealt by law enforcement agencies/ police based on the information available in the complaints.

Need of the Initiative

Many cybercrimes in the city are going unreported especially the crimes against women and child sexual exploitation do not get reported due to the lack of platform available to them for lodging the complaints. If the complaints are not filed against the accused no action can be taken that may cause damage in long run. To overcome the shortcoming of reporting online abuse cases and any other cyber-crime National Cyber Crime Reporting Portal has been launched.

About the National Cyber Crime Reporting Portal

◉ This portal caters all types of cyber crime complaints including complaints pertaining to online Child Pornography (CP), Child Sexual Abuse Material (CSAM) or sexually explicit content such as Rape/Gang Rape (CP/RGR) content and other cyber crimes such as mobile crimes, online and social media crimes, online financial frauds, ransomware, hacking, cryptocurrency crimes and online cyber trafficking.

> **Cybercrime**
>
> ◉ In general cybercrime may be defined as "Any unlawful act where computer or communication device or computer network is used to commit or facilitate the commission of crime".

◉ The portal also provides an option of reporting an anonymous complaint for reporting online Child Pornography (CP) or sexually explicit content such as Rape/Gang Rape (RGR) content.

◉ Providing false information could make complainant liable to penal action as per the Indian Penal Code.

How it had worked so far?

◉ So far more than 6 lakh complaints have been received and 12,776 FIRs have been registered.

◉ The MHA holds regular interactions with the State/UTs and advises them to expedite the disposal of cyber crime incidents reported with special emphasis on disposal of incidents pertaining to women and children.

- So far, more than 700 police districts and more than 3,900 police stations have been connected with this Portal.

- In future, this portal will provide for chatbot for automated interactive assistance system to the public for guidance on cybercrime prevention and how to report incidents on the portal.

Data on of Cyber Crime and its reporting in India

- India recorded 50,035 cases of cyber crime in 2020, with a 11.8% surge in such offences over the previous year, as 578 incidents of "fake news on social media" were also reported, official data showed on September 15.

- The rate of cyber crime (incidents per lakh population) also increased from 3.3% in 2019 to 3.7% in 2020 in the country, according to the National Crime Records Bureau (NCRB) data

- In 2019, the country recorded 44,735 cases of cyber crime, while the figures stood at 27,248 in 2018, the data from corresponding years showed.

- The year saw 4,047 cases of online banking fraud, 1,093 OTP frauds and 1,194 credit/debit card fraud, while 2,160 cases related to ATM were reported in 2020, the NCRB figures showed.

- There were also 578 cases of fake news on social media, 972 related to cyber stalking or bullying of women and children, 149 incidents of fake profile and 98 of data theft.

- In terms of motive, the maximum 60.2% cyber crimes lodged in 2020 were done for fraud (30,142 out of 50,035 cases), the NCRB, which functions under the Ministry of Home Affairs, stated. It was followed by sexual exploitation with 6.6% (3,293 cases) and extortion 4.9% (2,440 cases), the data showed.

- Among States, the maximum 11,097 cyber crime cases were reported in Uttar Pradesh followed by Karnataka (10,741), Maharashtra (5,496), Telangana (5,024) and Assam (3,530), it showed.

- However, the crime rate was highest in Karnataka with 16.2 % followed by Telangana (13.4%), Assam (10.1%), Uttar Pradesh (4.8%) and Maharashtra (4.4%), the data showed.

- National capital Delhi recorded 168 such cases during the year with a crime rate of 0.8%, according to the NCRB, which is responsible for collecting and analysing crime data as defined by the Indian Penal Code and special and local laws in the country.

Future Prospects

- After successful completion, this portal can improve the capacity of the law enforcement agencies to investigate the cases and will improve success in prosecution.

- This portal also focuses on specific crimes like financial crime and social media related crimes like stalking, cyber bullying, etc.

- This portal will improve coordination amongst the law enforcement agencies of different States, districts and police stations for dealing with cyber crimes in a coordinated and effective manner.

- MHA is committed to provide and create an eco system for dealing with the cyber crimes in a comprehensive & coordinated manner.

What more is needed to make the initiative a success?

- Common people, especially women should be aware of the portal.

- As crime control and prevention come under the state list and the portal comes under the Ministry of Home Affairs, a proactive collaboration should be encouraged between State Police and the Centre.

- The timely disposal should be ensured by the State Police Departments.

- Digital literacy should be promoted to make people technology-friendly.

CERT-IN

CERT-In is an acronym for 'Indian Computer Emergency Response Team'. CERT-In is the National Incident Response Centre for major computer security in its constituency.

Need of the Initiative

Increasing incidents of cyber security such as Information stealing, Malware, hacking Phishing, Malicious Code propagation, and Network Scanning & Probing, of I-T departments, banks, oil companies, and other financial bodies have reported a spurt in cyber attacks and fake mails which was affecting their operations. To respond to computer security incidents, report on vulnerabilities, and promote effective IT security practices throughout the country CERT-In was launched.

About CERT-In

◉ CERT-In provides Incident Prevention and Response services as well as Security Quality Management Services.

◉ CERT-In creates awareness on security issues through the dissemination of information on its website (https://www.cert-in.org.in) and operates 24x7 incidence response Help Desk.

◉ Proactive services such as Advisories, Security Alerts, Vulnerability Notes, sharing of Indicators of Compromise, Situational awareness of existing & potential cyber security threats and Security Guidelines to help organisations secure their systems and networks.

◉ Reactive services when security incidents occur so as to minimize damage.

◉ Security Quality management services in the form of cyber security audits, promotion of best practices and cyber security exercises/drills

How it had performed in Past?

◉ In the year 2020, CERT-In handled 1158208 incidents.

◉ The type of incidents handled were Website Intrusion & Malware Propagation, Malicious Code, Phishing, Distributed Denial of Service attacks, Website Defacements, Unauthorized Network Scanning/Probing activities, Ransomware attacks, Data Breach and Vulnerable Services. Remedial measures for handling incidents were suggested and implemented in coordination with relevant stakeholders.

◉ CERT-In conducted 15 cyber security training and awareness programs for Government, Public and Critical Sector organisations and communication & Information infrastructure providers to educate them in the area of Information Security with the latest security threats, needs and developments & deployment of techniques and tools in order to minimize security risk.

What needs to be done more on this front?

◉ The system is accused of inaction on grievances raised in several cyber security breaches and data leaks committed by various entities. Proactive measures should be taken on the reported matters as soon as possible.

◉ International best practices should be adopted to make the system even better.

◉ Information and cyber security division should be interlinked with other departments and ministries of center and state governments to make the CERT-In more accountable and efficient.

◉ There have to be technological improvements to enhance efficiency in cyber security.

INDIAN CYBER CRIME COORDINATION CENTRE (I4C)

I4C serves as a node in the fight against cybercrime. It intends to identify research problems and conduct R&D activities in the development of new technologies and forensic tools in collaboration with academia/research institutes in India and abroad. The goal is to prevent the use of cyberspace to further the cause of extremist and terrorist organizations.

Objectives

◉ To act as a nodal point in the fight against cybercrime

◉ To Identify the research problems/needs of Law Enforcement Agencies (LEAs) and take up R&D activities in developing new technologies and forensic tools in collaboration with academia / research institutes within India and abroad

◉ To prevent misuse of cyber space for furthering the cause of extremist and terrorist groups

◉ Suggest amendments, if required, in cyber laws to keep pace with fast changing technologies and International cooperation

◉ To coordinate all activities related to implementation of Mutual Legal Assistance Treaties (MLAT) with other countries related to cybercrimes in consultation with the concerned nodal authority in MHA.

At the initiative of Union Ministry for Home Affairs (MHA), 15 States and UTs have given their consent to set up Regional Cyber Crime Coordination Centres at respective States/UTs.

How the initiative is working?

◉ MHA released manuals, newsletter of Indian Cyber Crime Coordination Centre of Cyber and Information Security Division for the purpose of training, coordination and awareness generation.

◉ PM Modi-led govt's I4C wing saves over Rs 12-cr of cyber fraud victims since 2018.

◉ Over 5.5 lakh cybercrime cases have been registered at the Cyber Crime Reporting Portal and FIR have been filed in around 30% of these cases.

CYBER SURAKSHIT BHARAT INITIATIVE

Cyber Surakshit Bharat aims to ensure awareness about cybercrime and adequate safety measures for Chief Information Security Officers (CISOs) and frontline IT staff across all government departments.

Need of the Initiative

Digital India is a key initiative for the country. In light of the recent attacks, there is increased focus on cyber safety. Recognizing the need to strengthen the cyber security ecosystem in India, and in alignment with the vision for a 'Digital India, the Ministry of Electronics and Information Technology (Meity), launched the Cyber Surakshit Bharat initiative in association with National e-Governance Division (NeGD) and industry partners.

About the Initiative

◉ Cyber Surakshit Bharat is the first public-private partnership of its kind that is set to leverage the expertise of the IT industry in cybersecurity.

◉ The Cyber Surakshit Bharat scheme was launched in cooperation with National e-Governance Division (NeGD) and various industry partners in India.

◉ Microsoft is one of the four founding partners of this consortium along with Intel, WIPRO, Redhat and Dimension Data.

- The objective of the programme is to educate & enable the Chief Information Security Officers (CISO) & broader IT community to address the challenges of cyber security.

  ➤ Create awareness on the emerging landscape of cyber threats

  ➤ Provide in-depth understanding on key activities, new initiatives, challenges and related solutions

  ➤ Applicable frameworks, guidelines & policies related to the subject

  ➤ Share best practices to learn from success & failures

  ➤ Provide key inputs to take informed decision on Cyber Security related issues in their respective functional area

- It will include an awareness program on the importance of cybersecurity; a series of workshops on best practices and enablement of the officials with cybersecurity health tool kits to manage and mitigate cyber threats.

How will it work?

- Cyber Surakshit Bharat Yojana will be operated on three principles namely education, awareness and enablement.

- The initiative focuses on a wide array of topics ranging from the fundamental building blocks of a secure critical infrastructure to the role of a CISO in IT risk management to analysing a department's cyberhealth.

- This program also conducts training sessions for CISOs and technical officials from the Central Government, State Governments and Union Territories, Public Sector Banks, Public Sector Units, Defence Forces, Defence PSUs and technical arms of the Air Force, Army and the Navy.

Status of Cyber Surakshit Bharat

- Ministry of Electronics and Information Technology (MeitY) has conducted deep dive training program for Chief Information Security Officers (CISOs) and frontline IT officials from various Ministries & Departments, Government & Semi-Government organisations from Central and State Governments, PSUs, banks, among others.

- MeitY had issued a directive to all Central Government ministries to appoint a Chief Security Officer (CSO) to ensure Cyber safety, in addition to issuing an RFP to all empanelled auditors to conduct a cybersecurity audit for government departments.

What needs to be done?

- An efficient mechanism has to be developed to ensure the complete role of involved private groups.

- Centre and State coordination should be ensured for better results.

PIB FACT CHECK

PIB Fact Check is an initiative of PIB to check the authenticity of a news or any video or content.

Need of the Initiative

- The Digital mode of information has become a major source of information for the general public and the immense amount of fake news circulating online creates unnecessary buzz and causes misinformation. A high amount of fake news can reduce the impact of real news by competing with it. The speed at which false information is being circulated on social media", the government will try to verify the authenticity of government-related information. PIB Fact Check is one such initiative to check the authenticity of any available content.

How does the PIB Fact Check works?

- Any user may send the news that they want to be verified if it seems fake.

- Government-related News available on platforms such as WhatsApp, Twitter, FB, and other social media platforms can be checked to be true or false.

- Once the news gets verified it is declared as fake or true and the information is provided on the Twitter handle of PIB.

- It said the web link or a "snapshot" of that information can be shared through email, and the government would respond after checking its authenticity.

- The Fact check will ask the concerned officer of the particular ministry to check with the ministry and put out the factual position."

Criticism of the initiative

- However, some critics have panned PIB Fact Check for being aggressive in calling out reports deemed critical to the Central government.

- Cases have also appeared where the news was found to be true but PIB Fact Check had declared it as Fake.

What more is needed to be done?

- PIB has to "put a new system in place", for which they are "identifying and training officers".

- The fact check should expand in terms of news coverage as right now only initiative restricted to information about the Union government and its ministries and departments get verified.

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INITIATIVES FOR BLUE ECONOMY

WHAT IS BLUE ECONOMY?

According to the World Bank, the blue economy is the "sustainable use of ocean resources for economic growth, improved livelihoods, and jobs while preserving the health of ocean ecosystem." Blue Economy will aid in achieving the UN Sustainable Development Goals, of which one goal, 14, is "Life Below Water".

An important challenge of the blue economy is to understand and better manage the many aspects of oceanic sustainability, ranging from sustainable fisheries to ecosystem health to preventing pollution. Blue economy challenges us to realize that the sustainable management of ocean resources will require collaboration across borders and sectors through a variety of partnerships, and on a scale that has not been previously achieved.
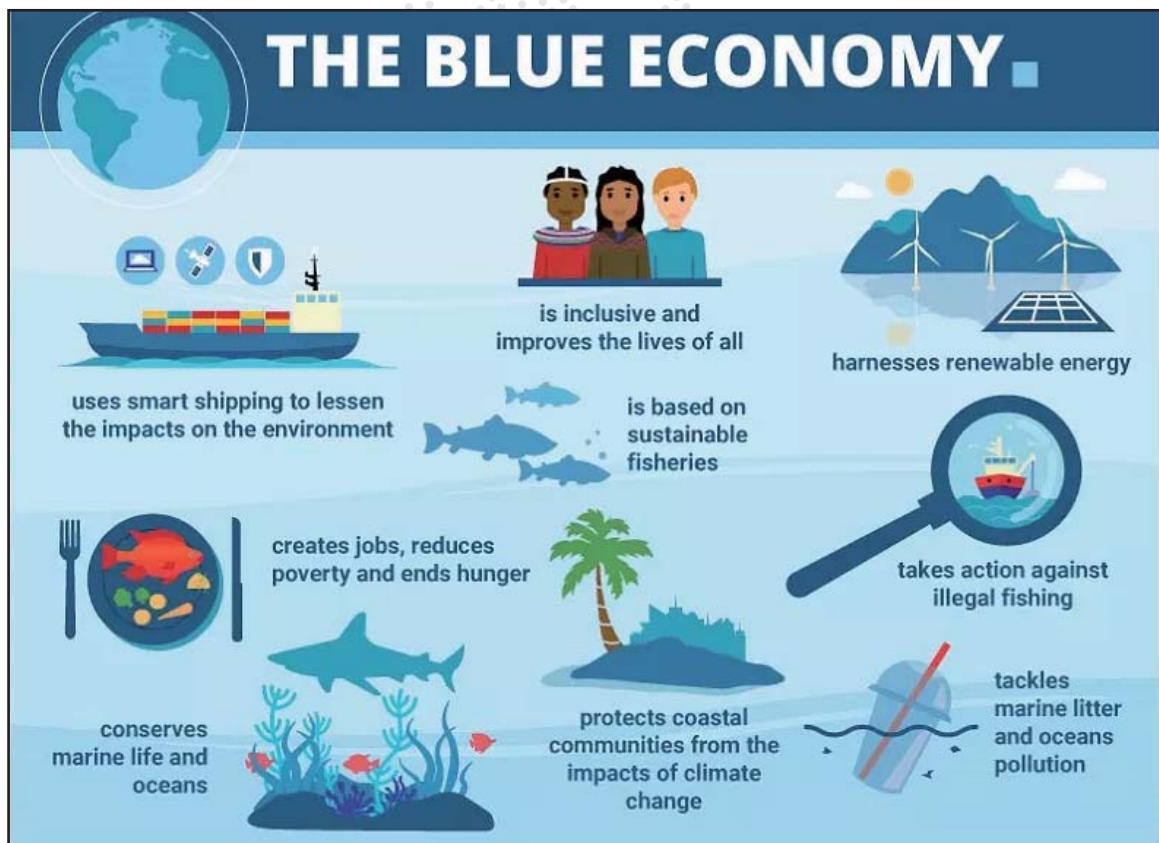
SCHEMES TO SUPPORT BLUE ECONOMY

1. Ocean Services, Modelling, Application, Resources and Technology (O-SMART)

■ **Need of the Scheme**

As the resources on land are not adequate enough to meet the future demands, India is embarking on blue economy for effective and efficient use of the vast ocean resources in a sustainable way, which would require a great deal of information on ocean science, development of technology and providing services. Further, the coastal research and marine biodiversity activities are important to be continued also in the context of achieving United Nations Sustainable Development Goal-14 to conserve and sustainably use the oceans, seas and marine resources for sustainable development. This has been envisaged under the (O-SMART) scheme.

■ **About the scheme**

➤ The scheme was initiated under the Ministry of Earth Science (MoES).

➤ The scheme encompasses seven sub-schemes namely

● Ocean Technology

● Ocean Modelling and Advisory Services (OMAS)

● Ocean Observation Network (OON)

● Ocean Non-Living Resources

● Marine Living Resources and Ecology (MLRE)

● Coastal Research and Operation

● Maintenance of Research Vessels.

■ **Significance of the Scheme**

➤ The services rendered under the O-SMART will provide economic benefits to a number of user communities in the coastal and ocean sectors, namely, fisheries, offshore industry, coastal states, Defence, Shipping, Ports etc.

➤ Implementation of O-SMART will help in addressing issues relating to Sustainable Development Goal-14, which aims to conserve use of oceans, marine resources for sustainable development.

➤ This scheme (O-SMART) also provides necessary scientific and technological background required for implementation of various aspects of Blue Economy.

➤ The State of Art Early Warning Systems established under the O-SMART Scheme will help in effectively dealing with ocean disasters like Tsunami, storm surges.

➤ The technologies being developed under this Scheme will help in harnessing the vast ocean resources of both living and non-living resources from the seas around India.

➤ In the next five years (2021-26) this scheme would provide further comprehensive coverage through strengthening the ongoing activities towards delivering cutting edge technology applicable for marine domain, forecast and warning services to various coastal stake holders, understanding biodiversity towards conservation strategy for marine living organisms and understanding coastal processes.

Indian Tsunami Early Warning Centre (ITEWC)

⊙ The Indian Tsunami Early Warning Centre (ITEWC) was established at Indian National Centre for Ocean Information Services (INCOIS).

- INCOIS, an autonomous body under Ministry of Earth Sciences which continues to provide timely tsunami advisories to stake holders and has functioned flawlessly since its establishment in October 2007.
- The ITEWC is also providing tsunami services to 25 Indian Ocean Countries as part of the Intergovernmental Oceanographic Commission (IOC) of UNESCO framework.
- ITEWC is also coordinating with coastal States/UTs to implement Tsunami Ready Programme, a concept introduced by UNESCO, at community level.
- Odisha has implemented the programme in two villages (Venkatraipur and Noliasahi) and based on the national board recommendation, IOC (UNESCO) recognized these villages as Tsunami ready communities.

State of Art Early Warning Systems

- The State of Art Early Warning Systems established under the O-SMART Scheme will help in effectively dealing with ocean disasters like Tsunami, storm surges.
- Besides, the state-of-the art early warning systems setup for oceanic disasters viz., Tsunami, storm surges, are also providing round the clock services for India and countries of the Indian Ocean, which have been recognized by UNESCO.

Polymetallic Sulphides (PMS)

- It is a seabed mineral. It is a potential source of precious metals such as gold and silver, and the base metals such as copper, zinc, and lead. A higher base metal content characterizes PMS compared to other seabed minerals such as polymetallic nodules and cobalt crusts.
- International Seabed Authority has allotted ten thousand square kilo-metres area with 15 years plan of work for exploring PMS along the Central Indian Ridge and Southwest Indian Ridge region of the Indian Ocean.

■ **How the Scheme is working so far?**

▶ The Cabinet Committee on Economic Affairs gave its approval for continuation of the umbrella scheme "Ocean Services, Modelling, Application, Resources and Technology (O-SMART)" of Ministry of Earth Sciences, for implementation during the period from 2021-26 at an overall cost of Rs. 2177 crore.

▶ Currently, five lakhs fishermen community are receiving this information daily through mobile which includes allocation of fish potential and local weather conditions in the coastal waters. This will help in reducing the search time for fishermen resulting savings in the fuel cost.

▶ India has been recognised as Pioneer Investor with International Seabed Authority (ISA) for conducting extensive research on deep sea mining of Poly Metallic Nodules (PMN) and hydrothermal sulphides in the allotted area of the India Ocean.

▶ The technology development for desalination using low temperature thermal desalination installation of such facility in Lakshadweep islands is also a significant achievement.

▶ Moreover, India's ocean related activities are now extended from the Arctic to Antarctic region covering large ocean space which have been monitored by through in-situ and satellite-based observation.

▶ India has taken leadership role in implementing Indian Ocean component of Global Ocean Observing System in Intergovernmental.

■ **Way Forward**

▶ While conducting research the conservation aspect of the biodiversity should be taken care of properly. The uncontrolled exploitation of Poly-metallic nodules can harm the oceanic biodiversity.

▶ A disaster prone infrastructure should be developed to provide services even in the case of natural calamities.

➤ Adequate fund allocation to R & D is necessary for the success of any scheme.

2. Atmosphere and Climate Research - Modelling Observing Systems and Services (ACROSS)

The increased incidence of extreme weather events due to Global Climate change and the risk associated with severe weather has prompted MoES to formulate many target oriented programs, which are carried out in an integrated manner through IMD, IITM, NCMRWF and INCOIS. As a result, these activities are put together under the umbrella scheme "ACROSS".

■ About the Initiative

➤ It addresses different aspects of weather and climate services, which includes warnings for cyclone, storm surges, heat waves, thunderstorms etc.

➤ The scheme is being implemented by the Ministry of Earth Sciences (MoES) through its units namely

- India Meteorological Department (IMD)

- National Centre for Medium Range Weather Forecasting (NCMRWF)

- Indian Institute of Tropical Meteorology (IITM)

- Indian National Centre for Ocean Information Services (INCOIS)

■ Objective of the Scheme

The objective of the ACROSS scheme is to provide a reliable weather and climate forecast for betterment of society. It aims at improving skill of weather and climate forecast through sustained observations, intensive R & D, and by adopting effective dissemination and communication strategies to ensure its timely reach to the end-user of all services like Agro-meteorological Services, Aviation service, Environmental monitoring services, Hydro-meteorological services, climate services, tourism, pilgrimage, mountaineering etc.,

■ Significance

➤ The scheme will provide improved weather, climate, ocean forecast and services, and other hazard related services thereby ensuring transfer of commensurate benefits to the end -user through various services like Public weather service, Agro-meteorological Services, Aviation services, Environmental monitoring services, Hydro-meteorological services, climate services, tourism, pilgrimage, power generation, water management, Sports & adventure etc.

➤ The whole process from generation of forecast to its delivery requires considerable manpower at every stage, thereby generating employment opportunities to many people.

■ How the scheme is working so far?

➤ The Cabinet Committee on Economic Affairs gave its approval for continuation of the umbrella scheme "Atmosphere & Climate Research-Modelling Observing Systems & Services (ACROSS)" along with its eight sub-schemes to the next finance cycle of five years i.e. 2021-2026 at an estimated cost of Rs.2,135 crore.

➤ A sizable number of scientific and technical staff along with requisite administrative support, thereby generating employment.

➤ To ensure last-mile connectivity of the weather based services to the end -user, a large number of agencies like the Krishi Vigyana Kendras of Indian Council of Agricultural Research, Universities and local municipalities are roped in thus generating employment opportunities to many people.

■ Way Forward

➤ It should identify the key societal needs for fundamental climate research to tackle 21st Century problems across climate resilience, adaptation and mitigation.

➤ It should focus on the scientific priorities where ACROSS can make a unique contribution through its national, coordinated and integrative activities.

➤ Although the focus should be on providing the bedrock climate science, the strategy should demonstrate a clear pathway to applications, i.e. climate services.

➤ A short synthesis of community to engage with potential and fundamental climate research institutions.

3. Deep Ocean Mission (DOM)

➤ Deep Ocean Mission with be a mission mode project to support the Blue Economy Initiatives of the Government of India. Ministry of Earth Sciences (MoES) will be the nodal Ministry implementing this multi-institutional ambitious mission.

➤ It aims to explore deep ocean for resources and develop deep sea technologies for sustainable use of ocean resources.

➤ "Deep Ocean Mission" was started under the Ministry of Earth Sciences (MoES) on at an estimated cost of Rs. 4077.0 crore for a period of 5 years to be implemented in a phase-wise manner.

➤ Indian Space Research Organisation (ISRO) is one of the collaborators of the Ministry of Earth Sciences for implementation of Deep Ocean Mission (DOM).

■ Objectives

➤ Development of technologies for deep sea mining, underwater vehicles and underwater robotics;

➤ Development of ocean climate change advisory services;

➤ Technological innovations for exploration and conservation of deep sea biodiversity;

➤ Deep ocean survey and exploration;

➤ Proof of concept studies on energy and freshwater from the ocean; and

➤ Establishing advanced marine station for ocean biology

■ Components of the scheme

The Deep Ocean Mission consists of the following six major components.

➤ **Development of Technologies for Deep Sea Mining, and Manned Submersible**: A manned submersible will be developed to carry 3 people to a depth of 6000 metres in the ocean with suite of scientific sensors and tools. Only a very few countries have acquired this capability. An Integrated Mining System will be also developed for mining Polymetallic Nodules from 6000 m depth in the central Indian Ocean. This component will help the Blue Economy priority area of exploring and harnessing of deep-sea minerals and energy.

➤ **Development of Ocean Climate Change Advisory Services**: A suite of observations and models will be developed to understand and provide future projections of important climate variables on seasonal to decadal time scales under this proof of concept component.

➤ **Create awareness** amongst the public, students, academicians and user communities about the various fields of Earth system science as well as on the achievements and services rendered by MoES.

➤ **Technological innovations for exploration and conservation of deep-sea biodiversity:** Bio-prospecting of deep-sea flora and fauna including microbes and studies on sustainable utilization of deep sea bio-resources will be the main focus. This component will support the Blue Economy priority area of Marine Fisheries and allied services.

➤ **Deep Ocean Survey and Exploration**: The primary objective of this component is to explore and identify potential sites of multi-metal hydrothermal sulphides mineralization along the Indian Ocean mid-oceanic ridges. This component will additionally support the Blue Economy priority area of deep-sea exploration of ocean resources.

➤ **Energy and freshwater from the Ocean:** Studies and detailed engineering design for offshore Ocean Thermal Energy Conversion (OTEC) powered desalination plant are envisaged in this proof of concept proposal. This component will support the Blue Economy priority area of off-shore energy development.

➤ **Advanced Marine Station for Ocean Biology**: This component is aimed as development of human capacity and enterprise in ocean biology and engineering. This component will translate research into industrial application and product development through on-site business incubator facilities. This component will support the Blue Economy priority area of Marine Biology, Blue trade and Blue manufacturing.

■ Significance of the Scheme

➤ The technologies required for deep sea mining have strategic implications and are not commercially available. Hence, attempts will be made to indigenise technologies by collaborating with leading institutes and private industries.

➤ A research vessel for deep ocean exploration would be built in an Indian shipyard which would create employment opportunities.

➤ This mission is also directed towards capacity development in Marine Biology, which will provide job opportunities in Indian industries.

➤ In addition, design, development and fabrication of specialised equipment, ships and setting up of required infrastructure are expected to spur the growth of the Indian industry, especially the MSME and start-ups.

➤ The outcome of the program is intended to identify potential new resources and develop technology for harnessing them in future, which may generate additional opportunity for livelihoods.

➤ The Deep Ocean Mission is related to the Blue Economy.

➤ The activities of Deep Ocean Mission will help the components of blue economy such as fisheries, tourism and maritime transport, renewable energy, aquaculture, seabed extractive activities and marine biotechnology.

➤ One of the objectives is focussed on studies on deep sea vent conditions and formation of life-friendly molecules and organismal components, which will attempt to throw some light on how life originated on Earth.

➤ Rs. 58.77 crore is allocated for a period of 5 years for Deep Sea bio-fouling and origin of life studies.

➤ The Deep Ocean Mission will also be examining the effect of climate change and warming on regional sea levels and assessing what impact that would have on coastal regions.

■ Challenges

➤ The technologies required for deep sea mining have strategic implications and are not commercially available.

➤ Deep sea mining can have a deleterious impact on species that inhabit the bottom of the ocean.

➤ There is also the risk of accidents like leaks and spills of fuel that could endanger deep sea life.

■ Way Forward

➤ India should focus and invest to develop indigenous technologies via collaboration with "leading institutes and private industries".

➤ Strict protocols by considering biodiversity should be formed.

➤ Excessive and negligence on the part of conservation of resources may impact the oceanic ecological balance. The clearance of projects should be done carefully.

4. Polar Science and Cryosphere (PACER)

Once regarded as barren, inhospitable places where only explorers go, the north and south polar regions have been transformed into high profile sites of scientific research. Be it in understanding the role of the polar realm in modulating the global climate or for studying the ecosystem adaptability and survival under extreme conditions, there has been an increasing interest in the science of the polar realm, over the past two-odd decades. The focus areas of scientific studies in the Arctic and the Antarctic have been largely confined to earth, atmospheric and biological sciences.

Hence government has launched Polar Science and Cryosphere Research (PACER) scheme comprising the Antarctic program, Indian Arctic program, Southern Ocean program and Cryosphere and Climate program is implemented successfully through National Centre for Polar and Ocean Research (NCPOR), an autonomous institute under the Ministry of Earth Sciences.

National Centre for Polar and Ocean Research (NCPOR):

- National Centre for Polar and Ocean Research (NCPOR) is India's premier R&D institution responsible for the country's research activities in the Polar and Southern Ocean realms.
- NCPOR is an autonomous institute under the Ministry of Earth Sciences.
- It also sees the management and upkeep of the Indian Antarctic Research Bases "Maitri" and "Bharati", and the Indian Arctic base "Himadri".

■ Components of the Scheme

➤ Polar Science and Cryosphere Research (PACER) scheme comprising

- Construction of polar research vessel
- Construction of the third research base in Antarctica
- Indian scientific endeavours in the Arctic
- Polar expeditions-Antarctica
- Replacement of Maitri station
- Southern Ocean

India's achievements in Polar research and exploration

- India launched the first of her Annual Scientific Expeditions to Antarctica way back in 1981.
- This was followed by the country's successful entry to the realms of Southern Ocean research in 2004 and the Arctic, three years later.
- To cater to the requirements of the Indian scientists in both the polar regions, two stations (Maitri and Himadri) have been established to serve as living-cum-research bases in the Antarctic and Arctic respectively.

■ Significance

➤ When delivered the polar research vessel will cater to the scientific and logistics needs of the Indian scientific endeavours in Antarctica, Southern Ocean and Arctic seas.

➤ The scientific studies proposed and being carried out by Indian scientists in the Arctic will be contributing significantly to the global community's ongoing efforts in understanding the climate change phenomena.

➤ The modern, green station will conserve energy and use additional alternative sources of Wind and solar means to reduce Carbon footprints and save fuel consumption.The modern sewage disposal system will

overcome the problems being faced in the current unfriendly procedure, where the sewage water finds way to the drinking water source.

➤ The multi-institutional national mission of scientific studies in the Southern Ocean realm would be providing an exhaustive database which could throw light on several as yet-unanswered questions related to the dynamics of the Southern Ocean, the biogeochemical fluxes of carbon, nitrogen, silica and iron and their influence on the trophic structure, the role of the Southern Ocean in modulating the global climate etc

■ How the scheme is working so far?

➤ The Polar Science and Cryosphere (PACER) scheme has been approved for continuation during 2021-2026.

➤ Clear-air atmospheric observatories containing automatic weather stations, a suite of sensors to measure aerosol and greenhouse gas concentrations has been established at Maitri and Bharati stations.

➤ IndARC mooring system along with Hydrophone system was successfully retrieved and deployed in Kongsfjorden, Svalbard.

➤ Glaciological field campaigns were carried out in six benchmark glaciers in Chandra basin of Lahaul-Spiti region of Western Himalaya.

➤ Differential Global Positioning System (DGPS) and Ground Penetrating Radar (GPR) survey were conducted.

➤ Two new Automatic Weather Station (AWS) systems were installed at Baralacha La, a high elevation site in the arid Spiti region to strengthen infrastructure across the Chandra basin.

■ Way Forward

India's acquisition of its first PRV should not be seen in comparison to other emerging states' polar infrastructural developments. India's needs are specific and should be understood from its scientific, economic and strategic perspectives in the polar regions.

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ENVIRONMENT

NATIONAL CLEAN AIR PROGRAM (NCAP)

It is an initiative of Ministry of Environment, Forest and Climate Change (MoEFCC) for making determined efforts to deal with the air pollution problem across the country in a comprehensive manner.

Need of the Initiative

The impact of air pollution is not limited to health but it gets extended to agriculture and general well-being of human, floral and faunal population. It is in this context, the need for a National Clean Air Programme (NCAP)-India as national level strategies for reduction in air pollution levels at both regional and urban scales is felt.

About National Clean Air Program (NCAP)

- The plan includes 102 non-attainment cities, across 23 states and Union territories, which were identified by the Central Pollution Control Board (CPCB) on the basis of their ambient air quality data between 2011 and 2015.

Non-attainment cities: These are those that have fallen short of the National Ambient Air Quality Standards (NAAQS) for over five years.

- NCAP aims to meet the prescribed annual average ambient air quality standards at all locations in the country in a stipulated timeframe.

- The tentative national level target of 20%–30% reduction of $PM_{2.5}$ and PM_{10} concentration by 2024 is proposed under the NCAP taking 2017 as the base year for the comparison of concentration.

Objectives

- To augment and evolve effective and proficient ambient air quality monitoring network across the country for ensuring comprehensive and reliable database.

- To have efficient data dissemination and public outreach mechanism for timely measures for prevention and mitigation of air pollution and for inclusive public participation in both planning and implementation of the programmes and policies of government on air pollution.

- To have feasible management plan for prevention, control and abatement of air pollution.

Initiatives under NCAP

- **Augmenting Air Quality Monitoring Network**: National air quality monitoring network to be revisited, past data to be analyzed for rationalization of monitored parameters, and monitoring needs be reassessed for augmenting the monitoring network adopting optimum blending of techniques such as manual, continuous, sensor & satellite based techniques.

- **Air Quality Management Plan for Non-Attainment Cities**: The city action plans need to be guided by a comprehensive science based approach involving (i) identification of emission sources; (ii) assessment of extent of contribution of these sources; (iii) prioritizing the sources that need to be tackled; (iv) evaluation of various options for controlling the sources with regard to feasibility and economic viability; and (v) formulation of action plans.

- **Indoor Air Pollution Monitoring & Management**: It refers to the physical, chemical, and biological characteristics of air in the indoor environment within a home, building, or an institution or commercial facility.

  ➤ Air Pollution Health Impact Studies

  ➤ Setting up Air Information Centre

  ➤ Certification system for monitoring instruments

  ➤ Air Quality Forecasting System

  ➤ Extensive Plantation Drive

  ➤ Issuance of Notification on Dust Management (Road dust and C&D)

  ➤ Intensive Awareness, Training and Capacity Building Drive

  ➤ Three tier mechanism for review of monitoring, assessment and inspection for implementation

- **National Emission Inventory**: An emission inventory is an accounting of the amount of pollutants discharged into the atmosphere. An emission inventory usually contains the total emissions for one or more specific air pollutants, originating from all source categories in a certain geographical area and within a specified time span, usually a specific year. Emissions and releases to the environment are the starting point of every environmental pollution problem.

- **Network of Technical Institutions**: Knowledge Partners Network of highly qualified and experienced academicians, academic administrators and technical institutions in the area of air pollution will be created to provide holistic services for the establishment and operation of policies and programmes of Government of India on air pollution.

- **Technology Assessment Cell:** Technology Assessment Cell is being envisaged to evaluate the technologies having significance in reference to prevention, control and abatement of pollution. The cell is expected to focus on both indigenous and international monitoring and abatement technologies. It is also expected to contribute towards evaluating the technology and devising the mechanism of technology transfer under various bilateral and multilateral agreements.

- **Extending source apportionment studies to all non-attainment cities**: Source apportionment study, which is primarily based on measurements and tracking down the sources through receptor modelling, helps in identifying the sources and extent of their contribution. Source apportionment studies which have been initiated in six major cities viz. (i) Delhi; (ii) Mumbai; (iii) Chennai; (iv) Bangalore; (v) Pune; and (vi) Kanpur at present is planned to be extended to all 94 non-attainments.

- **Institutional Framework**: An effective institutional framework which basically refers to formal organisational structures is the precondition for the successful implementation of pollution specifically air pollution related intervention tools and therefore needs to be considered in particular.

Indian Government other initiatives

Government has undertaken many significant steps which inter-alia include:

- National Ambient Air Quality Standards
- sector specific emission and effluent standards for industries

- setting up of monitoring network for assessment of ambient air quality
- introduction of cleaner gaseous fuels like CNG, LPG etc and ethanol blending
- launching of National Air Quality Index (AQI)
- universalization of BSIV for vehicles by 2017
- leapfrogging from BS-IV to BS-VI standards for vehicles by 1stApril, 2020
- banning of burning of biomass
- promotion of public transport network
- Pollution Under Control Certificate
- issuance of directions under Air (Prevention and Control of Pollution) Act, 1981
- installation of on-line continuous (24x7) monitoring devices by 17 highly polluting industrial sectors
- ban on bursting of sound emitting crackers between 10 PM to 6 AM
- notification of graded response action plan for Delhi and NCR identifying source wise actions for various levels of air pollution, etc

How the initiative is working so far?

- The city specific action plans have been prepared which, inter-alia, include measures for strengthening the monitoring network, reducing vehicular/industrial emissions, increasing public awareness etc.

- Implementation of the city specific action plans are regularly monitored by Committees at Central and State level namely Steering Committee, Monitoring Committee and Implementation Committee.

- Some Smart Cities have established Integrated Command and Control Centres (ICCCs) which are also connected to Air Quality Monitors (AQMs) for effective monitoring.

- In 2019, full program proposal was released and this includes 122 non-attainment cities, who are required to submit an action plan to reduce their respective air pollution levels in 2024 by at least 20%.

Way Forward

- Mandate regular updates for emission and pollution loads. This will automatically help address the information gaps to support planning, tracking progress, and evaluating impacts of interventions.

- Move from city-centric to airshed-centric air quality management. This approach requires an inter-state coordination mechanism, which can be facilitated by setting up regional airshed management authorities that enjoy cross-state jurisdiction.

- Grand greater fiscal autonomy for Urban Local Bodies to maintain the infrastructure necessary for sustaining air quality benefits.

- Responsible agencies should identify key indicators that could be tracked to monitor the impact of the interventions.

- Delineate responsibilities -- planning, implementing, enforcing, monitoring -- for each recommended measure across participating agencies and avoid overlaps

ENVIRONMENTAL INFORMATION SYSTEM (ENVIS)

ENVIS is a plan programme as a comprehensive network in environmental information collection, collation, storage, retrieval and dissemination to varying users, which include decision-makers, researchers, academicians, policy planners and research scientists, etc. ENVIS was conceived as a distributed information network with the subject-specific centers to carry out the mandates and to provide the relevant and timely information to all concerned.

Need of the Initiative

Environment management plays an important role in effecting a balance between the demands and resources available, thereby also keeping environmental quality at a satisfactory level. For any rational management of the environment that comprises of environmental planning, appraisal and applicable law, availability of verifiable knowledge on state-of environment is a pre-requisite. Environmental Information System (ENVIS) is a decentralized system of centres mandated to develop a web-based distributed network of subject-specific databases.

Objectives of the Scheme

- To build up a repository and dissemination centre in Environmental Science and Engineering.

- To enable application of modern technologies of acquisition, processing, storage, retrieval and dissemination of information of environmental nature.

- To support and promote research, development and innovation in environmental information technology.

- To provide national environmental information services relevant to present needs and those capable of development to meet future needs of users, originators, processors and disseminators.

- To build up storage, retrieval and dissemination capabilities, with the ultimate objective of disseminating information speedily to the users.

- To promote national and international cooperation and liaise with agencies concerned for exchange of environment related information.

- To promote, support and assist education and personnel training programmes designed to enhance environmental information processing and utilising capabilities.

- To promote exchange of information amongst developing countries.

Significance

- ENVIS has provided scientific, technical and semi-technical information on various environmental issues, serves as the backbone of policy formulation and environment management at all levels of Government as well as decision-making.

- It has also given environmental protection and worked for improvement for sustaining good quality of life of all living beings.

How the initiative is working so far?

- A large number of nodes, known as ENVIS Centres, have been established in the network to cover the broad subject areas of environment with a Focal Point in the Ministry of Environment & Forests.

- Both the Focal Point as well as the ENVIS Centres have been assigned various responsibilities to achieve the Long-term & Short-term objectives.

- ENVIS due to its comprehensive network has been designed as the National Focal Point (NFP) for INFOTERRA, a global environmental information network of the United Nations Environment Programme (UNEP).

- In order to strengthen the information activities of the NFP, ENVIS was designated as the Regional Service Centre (RSC) of INFOTERRA of UNEP in 1985 for the South Asia Sub-Region countries.

- ENVIS network at present consists of a chain of 69 network partners out of which 40 are on subject-specific and 29 on State/UT related issues. These network partners are called ENVIS Centers and are located in the notable organizations/institutions/State/UT Government Departments/Universities throughout the country.

Way Forward

- ENVIS scheme can extend its reach through involvement of institutions/organizations in State Governments, academia sector, corporate sector, NGO sector, etc.

- The ambit of ENVIS can be broadened by including varying subject areas, themes, local conditions, issues, information/data needs of the country pertaining to environment.

- Modern means of Information and Communication Technologies (ICTs) can be used to ensure more participation in the planning and implementation.

NAGAR VAN SCHEME (URBAN FOREST SCHEME)

It is an initiative of Ministry of Environment Forest and Climate Change incorporate more than 200 corporations and cities in the country for the purpose of environment conservation.

Need of the Initiative

India is endowed with rich biodiversity having several species of animals and plants and hosts 4 of the 35 global bio-diversity hotspots containing several endemic species. However, increasing population, deforestation, urbanisation and industrialisation have put our natural resources under tremendous pressure causing loss of biodiversity. Biodiversity is vital for survival of all life form on this planet and is a key to providing various ecological services. Biodiversity conservation has traditionally been considered confined to remote forest areas but with increasing urbanisation a need has arisen to safeguard and save biodiversity in urban areas also. Urban forest is the best way to bridge this gap.

About the Initiative

- **Conservation of land:** Under this scheme a minimum of 20 hectares of forests will be created in the city.

- **Aim:** It aims at developing 200 Nagar Van (City Forests) across the country in cities having Municipal Corporation or Municipalities by involving local communities, educational institutions, local bodies, NGOs etc in next five years.

- **Participation:** The scheme would require the involvement of the people to make it a success. It focuses on people's participation and collaboration between Forest Department, Municipal bodies, NGOs, Corporates and local citizens.

- **Maintenance**: Van Udyan once established will be maintained by the State Government.

- **Location:** The Nagar Van will either be constructed on the current forest land or another vacant land provided by the local bodies in cities across India. The Warje Urban forest located in Pune at Maharashtra will be considered as a role model for this.

- **Funding:** CAMPA (Compensatory Afforestation Fund Management and Planning Authority) will fund the Nagar Van scheme or the Urban Forests scheme.

- **Objectives**

  - To create 200 City Forests in the Country. A City Forest will be developed in each City with Municipal Council.

  - To create awareness on plants and biodiversity.

  - Conservation education on important flora and fauna of the region including threat perception.

  - Ecological rejuvenation of the cities-Forests the green lungs will contribute to Environmental improvement of cities by pollution mitigation, cleaner air, noise reduction, water harvesting and reduction of heat islands effect.

  - In-situ Biodiversity conservation.

  - Health benefits to citizens.

  - Making cities climate resilient.

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Compensatory Afforestation Fund Management and the Planning Authority (CAMPA)

- CAMPA is the Management and Planning Authority for Compensatory Afforestation Fund created by following orders from India's apex court.
- The Authority serves as a National Advisory Council for supervision, technical assistance and assessment of compensatory reforestation activities under the chairmanship of the Union Minister of Environment & Forests.
- CAF (Compensatory Afforestation Fund) Act, 2016 has been enacted to manage the funds collected under an ad hoc Compensatory Afforestation Fund Management and the Planning Authority (CAMPA) compensatory afforestation process.
- 90% of the funds collected are to be allocated to States while 10% of the funds are to be retained by the Centre.

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Significance

- **Ecological benefits:** Include reduction in temperature rise in urban areas, reduction in CO2 emissions through photosynthesis, removal of other air pollutants, prevention of soil erosion, recharge of groundwater, and stabilization of soil. The conserved forest will also act as home to many animals and birds and hence help in conservation of biodiversity.
- **Economic benefits:** Urban trees play a very vital role in maintaining ecological balance and improving human life. They further act as places for recreational activity, thus making forest tourism a source of wealth generation. People can benefit from green-space accessibility in terms of reduced mortality and improved general health. Furthermore, they impart various economic benefits through tangible economic items like firewood, timber, fruits, medicinal products, etc.

How the initiative has performed so far?

- Nagar Van-Udyan Yojana was approved by the National CAMPA Advisory Council (NCAC) from the Compensatory Afforestation Fund managed by the Ad-hoc CAMPA during 2015 for implementation as pilot scheme.
- The forest area of 20 ha to 100 ha within the city limits were covered and financial assistance at the rate of Rs.2 lakhs per ha upto 100 ha were provided.
- 80% of the fund was provided by NCAC and the remaining 20% by the State Government.
- A total of 46 projects worth rupees 5000 crores have been cleared.

Way Forward

- Community participation should be enhanced by awareness generation and specific campaign.
- Government land allocation can also enhance the forest area.
- Smart cities project can be implemented to support the initiative.
- Implementation and monitoring methods can be improved for better result.

NATIONAL REDD+ STRATEGY

Complying with the UNFCCC decisions on REDD+, India has prepared its National REDD+ Strategy. The Strategy builds upon existing national circumstances which have been updated in line with India's National Action Plan on Climate Change, Green India Mission and India's Nationally Determined Contribution (NDC) to UNFCCC.

Need of the Initiative

Climate change due to accelerated Green House Gases (GHGs) emission has become one of the toughest challenges of the present. Deforestation and forest degradation is a major source of CO2 (an important Green House Gas) emission. Forests are both a source as well as the most effective carbon sink, offering great mitigation and adaptation potential. Paris agreement on climate change also recognizes role of forests in climate change mitigation and calls upon country Parties to take action to implement and support REDD+.
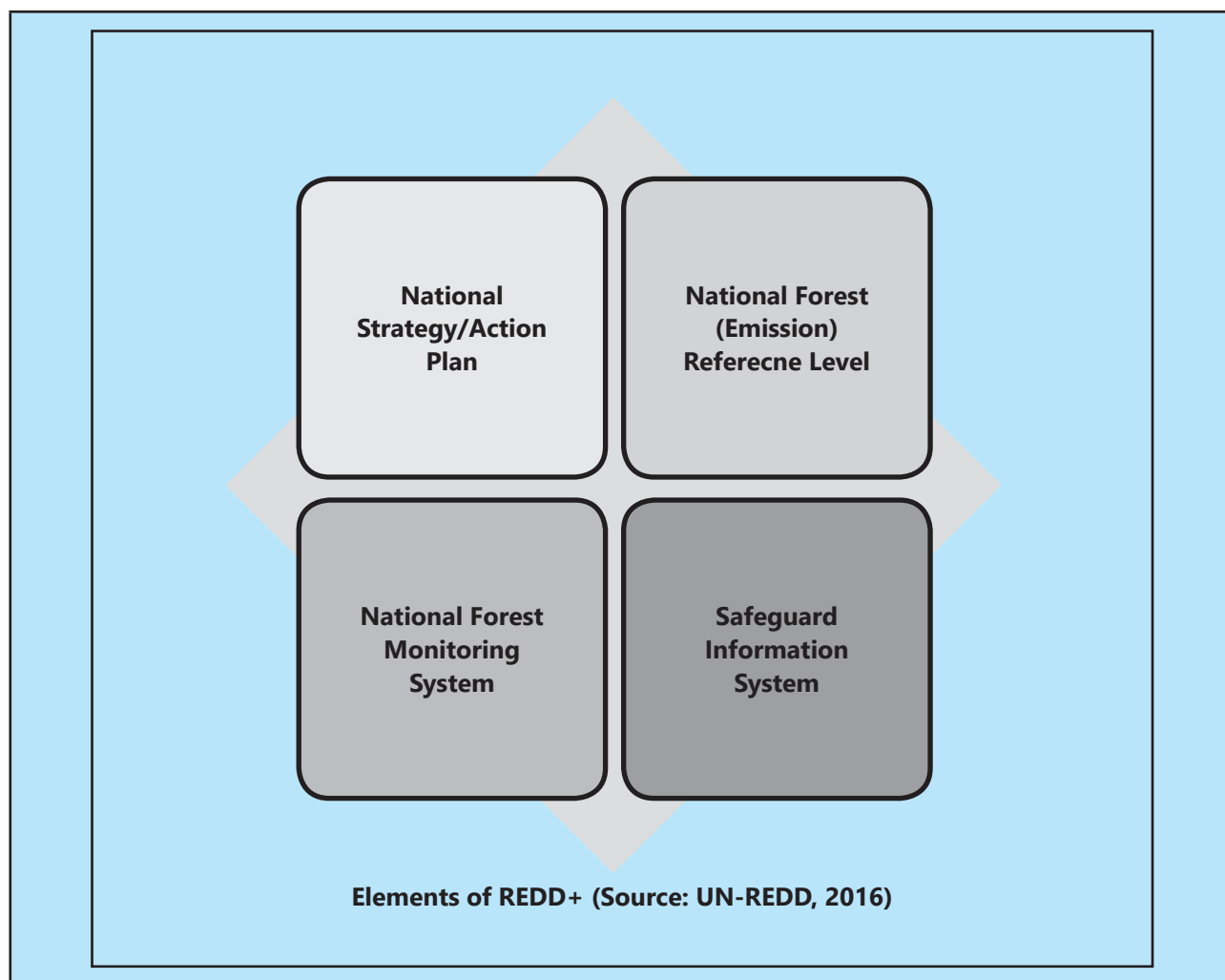
About National REDD+ Strategy

- The strategy seeks to address drivers of deforestation and forest degradation and also developing a roadmap for enhancement of forest carbon stocks and achieving sustainable management of forests through REDD+ actions.
- India's National REDD+ strategy is one of the tools to achieve India's commitment to Paris Agreement.
- National REDD+ Policy will follow the provisions laid down by all the relevant UNFCCC decisions. Most prominent among these decisions are the:
  - ▶ Paris Agreement
  - ▶ Warsaw Framework for REDD+
  - ▶ Cancun Agreements

Objectives of National REDD+ Policy

- To create REDD+ architecture at National and Sub-National levels to support REDD+ actions.
- To develop an appropriate REDD+ strategy and implementation frameworks at a nested level to represent the diversity of forests in the country
- To manage the forests for a bouquet of ecosystem services, including but not limited to biodiversity, that are flowing to local communities from the forests and not for carbon services only,
- To safeguard the rights and interests of local communities including improvement of their livelihood
- To encourage and incentivize local communities for their role in conservation by transferring the financial benefits accrued on account of REDD+ to them based on their performance, as is reflected in monitoring, including small scale projects at JFMC/ EDC level,
- To strengthen coordination among sectors and stakeholders having direct and indirect impacts on land use and forestry.
- To lay emphasis on achieving various thematic elements of SMF by addressing the drivers of deforestation and forest degradation, afforestation of degraded areas, protection measures, etc. while implementing the REDD+ programmes,
- To improve and enhance supply of forest products and ecological and environmental services of the forests for comprehensively benefitting the society leading to increased growing stock and the stored carbon in the forest,
- To develop appropriate mechanism for channelizing REDD+ funding and transferring the accrued financial benefits to the communities in a fair, equitable and transparent manner,
- To provide adequate technical and financial resources to implement various phases and action plan of REDD+.

Reducing Emissions from Deforestation and Forest Degradation (REDD+)

- Reducing Emissions from Deforestation and Forest Degradation (REDD+) under UNFCCC is a global endeavour to use carbon sequestration potential of the forests to manage climate change within accepted limits of tolerance.
- REDD+ means "Reducing Emissions from Deforestation and forest Degradation", conservation of forest carbon stocks, sustainable management of forests, and enhancement of forest carbon stocks in developing countries.
- REDD+ aims to achieve climate change mitigation by incentivizing forest conservation.

National Strategy/Action Plan

National Forest (Emission) Referecne Level

National Forest Monitoring System

Safeguard Information System

Elements of REDD+ (Source: UN-REDD, 2016)

Significance

- ◉ **Positive Outcomes**: India's first biennial update report to UNFCCC has revealed that forests in India capture about 12% of India's total GHG emissions. Thus, forestry sector in India is making a positive cost effective contribution for climate change mitigation.

- ◉ **International Commitments**: India has communicated in its Nationally Determined Contribution under Paris Agreement, that it will capture 2.5 to 3 billion tonnes of Carbon dioxide through additional forest and tree cover by 2030. It will help in achieving the target.

Supportive Legislation

- ◉ Policies and acts of India that supports and uplifts REDD+ activities are
  - ➤ Indian Forest Act (1927)
  - ➤ Wildlife Protection Act (1972)
  - ➤ Water (Prevention and Control of Pollution) Act (1974)
  - ➤ Forest Conservation Act (1980)
  - ➤ Air (Prevention and Control of Pollution) Act (1981)
  - ➤ Environment (Protection) Act (1986)
  - ➤ National Forest Policy (1988)

> ➤ Panchayat (Extension to Scheduled Areas) Act (1996)
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> ➤ Biological Diversity Act (2002)
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> ➤ National Environment Policy (2006)
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> ➤ The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act (2006)
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> ➤ National Tribunal Act (2010)
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> ➤ National Agroforestry Policy (2014)
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> ➤ National Working Plan Code (2014) and
>
> ➤ National Action Plan on Climate Change (2008)

How the initiative is working so far?

- From 1995 to 2019, carbon stocks in India's forests are estimated to have increased from 6245 million tons to 7124.6 million tons.
- REDD+ funding will be raised domestically via the Green India Mission, Namami Gange Programme, Green Highway Policy, and other initiatives in India.
- According to the latest Indian State of Forest Report (IFSR) of 2019, the forest and tree cover at the national level increased by 5,188 square kilometers (0.56%) compared to the ISFR report of 2017.

Way Forward

- State-wise innovative programmes can be initiated like Green Army of Maharashtra, an initiative of the State Government of Maharashtra to assist that state to execute massive plantation program intended to increase the forest cover in the state from the current 20% to the nationally mandated 33% of Maharashtra's land area.
- Two pronged strategy to address the protection of the existing forests, and simultaneously should make arrangements for providing the desired goods and services to the people through alternatives, can be adopted.
- The effective implementation of regulation will help to minimize the unplanned drivers.
- The natural calamities are unavoidable, but attempts can be made to minimize the impacts.
- This strategy should be chalked out in a transparent manner in consultation with the stakeholders including the local community, whose greater involvement, in any case, will be required in the management of forests.

PARIVESH (PRO ACTIVE AND RESPONSIVE FACILITATION BY INTERACTIVE AND VIRTUOUS ENVIRONMENTAL SINGLE WINDOW HUB)

PARIVESH is a Single-Window Integrated Environmental Management System, developed in pursuance of the spirit of 'Digital India' initiated by the Prime Minister and capturing the essence of Minimum Government and Maximum Governance.

Need of the Initiative

In order to bring more transparency and accountability in the forests, environment and wildlife clearance process, Ministry of Environment, Forests and Climate change, Government of India has rolled out a portal named as Pro-Active Responsive facilitation by Interactive and Virtuous Environmental Single Window Hub (PARIVESH).

About PARIVESH

◉ PARIVESH is a web based, role based, G2C and G2G workflow application that are developed for online submission and monitoring of the proposals submitted by the user agencies for seeking forests, environment and wildlife clearances.

◉ It automates the entire tracking of proposals which includes online submissions of a new proposal, editing/ updating the details of proposals and displays status of the proposals at each stage of the workflow.

Objectives

◉ To enhance efficiency, transparency and accountability in the Forest, Environment and Wildlife Clearance Process.

◉ To reduce turnaround time for activity.

◉ To enhance responsiveness through workflows automation and availability of real time information.

◉ To enhance ease and convenience of citizens and businesses in accessing information and services.

◉ To achieve standardization in processes across regional and state level.

Significance

◉ This innovative initiative will drastically improve the entire process of appraisal and environmental clearance in the Ministry.

◉ It will ensure transparency and expedite the process of granting clearance.

SPRINGSHED MANAGEMENT IN THE INDIAN HIMALAYAN REGION

Introduction

◉ Springs are groundwater discharge points in the mountains where the water-bearing layers (aquifer) intersects with the ground surface, and water seeps out of rock pores, fissures, fractures, or depressions.

◉ Springs are the primary water source for millions of people in the mid-hills of the Hindu Kush Himalayas (HKH) and supply over 90% of water needs for domestic uses.

Need of the Initiatives

Over the past decade or so, there has been increasing concern that springs are drying up or becoming seasonal, and their discharge is reducing over the years, even though quantitative evidence is still relatively sparse. The seasonal and overall decline in springs has affected both domestic water availability in remote villages as well as agricultural productivity, as springs are an essential source of irrigation in the Himalaya. Thus, the decline of Himalayan springs and the larger Himalayan groundwater systems threaten the water security of the hill populations and the entire Indo-Gangetic plains. In the past decade or so, spring revival efforts using the principles of hydrogeology has become the most widely accepted model of springshed management (SM) by several non-governmental organisations (NGOs) and governmental agencies in the Himalaya

Major Initiatives

■ **Use of Remote Sensing (RS) and GIS technologies such as LiDAR for spring inventories.**

Main Activities

Regional mapping of springs using LiDAR-based sensor technology and ground-truthing.

LiDAR

◉ Lidar, stands for Light Detection and Ranging, is a remote sensing method that uses light in the form of a pulsed laser to measure ranges (variable distances) to the Earth.

◉ These light pulses—combined with other data recorded by the airborne system — generate precise, three-dimensional information about the shape of the Earth and its surface characteristics.

◉ A lidar instrument principally consists of a laser, a scanner, and a specialized GPS receiver.

◉ Airplanes and helicopters are the most commonly used platforms for acquiring lidar data over broad areas.

Ground-truthing

◉ In remote sensing, "ground truth" refers to information collected on location. Ground truth allows image data to be related to real features and materials on the ground.

◉ The collection of ground truth data enables calibration of remote-sensing data, and aids in the interpretation and analysis of what is being sensed.

Advantages

➤ 3D terrain mapping at higher accuracy.

➤ Enabling scaling up at a landscape level.

➤ Reducing costs and supplements manual mapping.

Major challenges

➤ Steep slopes unable to capture data.

➤ Laser penetration through canopy cover.

➤ Ground truthing with on-ground spring inventory data

■ **Combining hydrogeological mapping, isotope techniques and hydrological instrumentation to create regional aquifer maps.**

➤ Multi-disciplinary action research aimed at modelling spring behaviour, aquifer mapping, and recharge area delineation.

Aquifer

◉ An aquifer is a body of porous rock or sediment saturated with groundwater. Groundwater enters an aquifer as precipitation seeps through the soil. It can move through the aquifer and resurface through springs and wells.

◉ There are two general types of aquifers: confined and unconfined.

◉ Confined aquifers have a layer of impenetrable rock or clay above them, while unconfined aquifers lie below a permeable layer of soil.

Isotope techniques for Aquifer mapping

◉ Tracing groundwater flow paths and assessing groundwater dynamics is quintessential for evaluating the future security of water resources. In this regard, isotope techniques, especially environmental isotopes, have proven to be potential tools in addressing such complex challenges in hydrology.

◉ Environmental isotopes are: (^{2}H, ^{18}O, ^{13}C, ^{3}H and ^{14}C).

How does the technique work?

◉ Generally, groundwater preserves its stable water isotopic composition unless diluted or mixed with waters of different stable water isotopic signatures or warmed above 60°C.

◉ The stable water isotopic composition of groundwater reflects the stable water isotopic signatures of recharging water, movement through flowpaths, and the altitude of the recharged fraction.

◉ Consequently, the stable water isotopes can be used to better comprehend the hydrodynamic processes influencing groundwater along different flowpaths.

◉ Integrated isotopic tools are used to investigate the effect of complex geologic structure on the groundwater residence times and respective potential sources, mixing, and recharge mechanisms.

Aim

➤ To map the impacts of climate change on the Himalayan springs

➤ To find the role of forests, agriculture and other land-use on spring discharge and quality

➤ Find the connections between springs across local-watershed-basin scales

Advantages

➤ Regional understanding of climate change impacts on springs.

➤ Developing scientific knowledge base.

➤ Identifying the most vulnerable type of springs for prioritised conservation.

➤ Improvement in recharge measures based on inputs from action-based research.

Major challenges

➤ Lack of rock exposure.

➤ Limited availability of geological maps.

➤ Capacity building for undertaking regional aquifer mapping.

■ **Village water security plans (VWSPs) using participatory water budget assessments.**

Aim

➤ To find out the critical springs for prioritized interventions from a community's perspective.

➤ To find out the tools for undertaking feasibility surveys and water budgeting exercises with communities.

Water Budgeting

◉ Water budgets are tools that water users and managers use to quantify the hydrologic cycle.

◉ A water budget is an accounting of the rates of water movement and the change in water storage in all or parts of the atmosphere, land surface, and subsurface. Although simple in concept, water budgets may be difficult to accurately determine.

Advantages

➤ Provides detailed information on available water resources and their supply and demand estimates.

➤ Helps prioritise critical springs and plan for appropriate interventions.

➤ Acts as an entry point activity to mobilise and involve the community.

➤ Helps in demand management.

Major challenges

➤ Digitization of relevant data for scientific analysis.

➤ Technical knowledge dissemination to the community.

➤ Mainstreaming demand management with supply augmentation.

■ **Use of hydrological data and isotope techniques to supplement hydrogeological mapping for accurate recharge area identification and impact assessment.**

Aim

➤ To assess the impacts of climate change on the Himalayan springs

➤ Finding the role of forests, agriculture and other land-use on spring discharge and quality

➤ To find out the connections between springs across local-watershed-basin scales

Advantages

➤ Helps delineate the aquifer boundaries and recharge area.

➤ Helps in the identification of the origin of groundwater, age, flow velocity and direction, connections between different aquifers, local porosity, transmissivity, and dispersity of an aquifer.

➤ Used to estimate the mean elevation of the contributing catchment.

➤ Helps to understand the spatial distribution of potential source waters.

➤ Useful in impact assessment and quantification of hydro-socio-ecological impact.

Major challenges

➤ Limited field studies on isotope analysis of springs

➤ Financial and technical capacity building constraints.

➤ Lack of easily accessible and high- resolution geological maps.

■ **Payment for Ecosystem Services as a funding mechanism for springshed management.**

Main Activities

➤ Identify upstream-downstream linkages w.r.t springs.

➤ Devising mutually agreed monetary/in-kind payments mechanisms between upstream and downstream communities.

➤ Documentation and operationalization of PES mechanism though periodic meetings between the stakeholders.

Ecosystem services

⊙ Ecosystem services are the many and varied benefits to humans provided by the natural environment and from healthy ecosystems. Such ecosystems include, for example, agroecosystems, forest ecosystems, grassland ecosystems and aquatic ecosystems.

> ◉ The Millennium Ecosystem Assessment (MA), a major UN-sponsored effort to analyze the impact of human actions on ecosystems and human well-being, identified four major categories of ecosystem services: provisioning, regulating, cultural and supporting services.

Advantages

➤ Incentivizes upstream communities to provide ecological services to downstream communities and improves urban-rural equity.

➤ Ensures a sustainable model of incentivization as well as conflict- resolution.

➤ Creates ownership and shared benefits among the both communities.

➤ Potential opportunity to leverage resources from tourism industry for SM.

Major challenges

➤ Conflict resolution between communities sharing water resources.

➤ Benefit sharing between communities.

➤ Financial Incentives may not be substantial enough to be lucrative for upstream communities.

Key Recommendations for Springshed Management (SM)

➤ A National Springs Mission (NSM) will facilitate the improved coordination, efficient execution, and scaling up of springshed management initiatives in India. It can consolidate, converge and synergize the learnings and experiences of state government agencies, CSOs, and other stakeholders under one umbrella and help develop national or regional-level decision support systems for existing and upcoming practitioners.

➤ Creating a national digital database on spring-related data collected by various agencies will improve ease of access and academic research. In addition, the data can be integrated into an online portal and facilitate open access sharing for all stakeholders, including the local communities.

➤ Creating new and support for existing, state and national-level science-policy-practice consortiums will facilitate experience sharing, complementary knowledge generation, transfer, and capacity building of all stakeholders.

Some Environment Terms

Carbon footprint

◉ A carbon footprint is the total amount of greenhouse gases (including carbon dioxide and methane) that are generated by our actions.

◉ The average carbon footprint for a person in the United States is 16 tons, one of the highest rates in the world.

◉ The carbon footprint of every Indian was estimated at 0.56 tonne per year – 0.19 tonne per capita among the poor and 1.32 tonne among the rich.

◉ Globally, the average carbon footprint is closer to 4 tons.

Geo bags

◉ Geo bags are **made out woven polyester and polypropylene fabrics, that are filled with sand and/ or soil**.

◉ Geo bags are generally used to build shore-protection structures.

Dykes

◉ A **dyke** is a thick wall that is built to stop water flooding onto very low-lying land from a river or from the sea.

About "Z" sheet piling technology

Owing to Kapada district's complex geology, the rate of water infiltration into the ground is not very beneficial to restore groundwater. Despite constructing numerous water harvesting structures, the groundwater table is rapidly declining. The situation demands the recharging of freshwater zones, in declining water table areas, with artificial means to maintain the groundwater table at optimum levels.

The district administration, after examining different options, decided to construct Sub -Surface Dams by using innovative, low-cost technolo gy.

Technology

◉ Sheet piles are long structural sections with a vertical interlocking system that create a continuous wall.

◉ The walls are often used to retain either soil or water.

◉ The ability of a sheet pile section to perform is dependent upon its geometry and the soils it is driven into.

◉ The pile transfers pressure from the high side of the wall to the soil in front of the wall.

◉ Z-shaped sheet piles are called Zs because the single piles are shaped roughly like a horizontally stretched Z.

◉ The interlocks are located as far away from the neutral axis as possible to ensure good shear transmission and increase the strength-to-weight ratio.

◉ Z piles are the most common type of sheet pile and can be used in a wide variety of applications.

◉ Retaining walls, cofferdams, parking garages, environmental barrier walls, and bulkhead walls for ports are just a few of their varied uses.
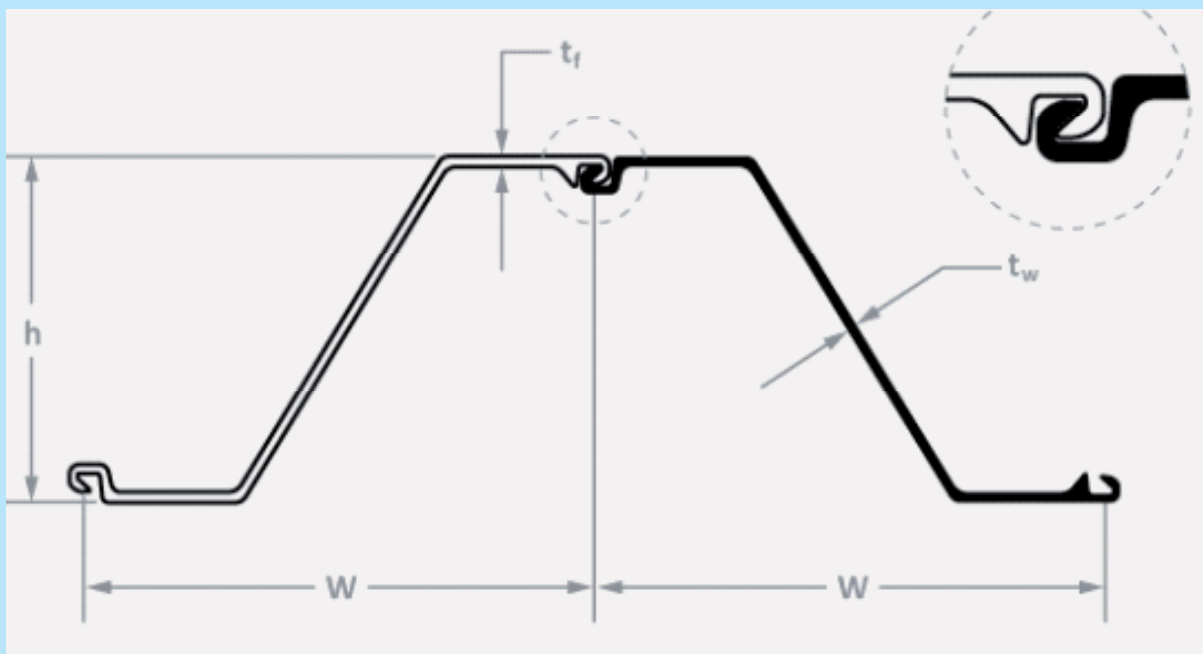
Multi-Layered Water Management

⊙ The present-day water situation is conceptualized as an imbricated multi-layered system: a multi-layered water resource, managed by a multi-layered governance system and used by a multi-layered social population.

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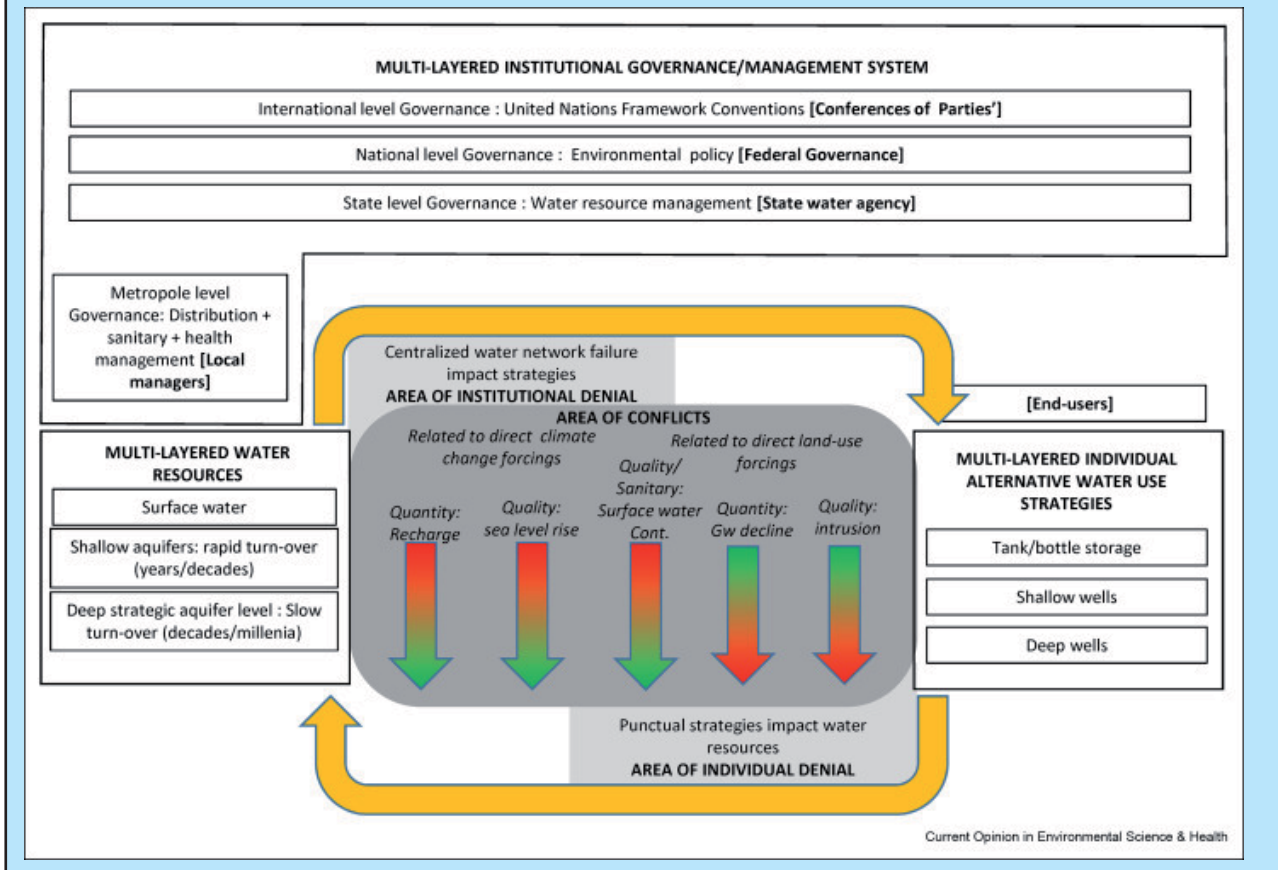
SOME IMPORTANT CASE STUDIES RELATED TO WATER MANAGEMENT

A. Springs Wetlands and Groundwater Connect in the Nilgiris

■ **Background**

The Nilgiris are known for their significant biological and cultural diversity. The region relies heavily on state water supply systems and on a network of springs and wells in the discharge areas. However, issues of falling water levels and wells running dry have become common in the region. Water quality tests revealed coliform presence across the Coonoor area. To protect these spring sources, it is important to understand their behaviour, identify and conserve them.

Hill Wetlands

⊙ Most of the wetlands in the hills are often small, a few cents to a few acres in size.
⊙ They have patches of land that are perennially wet and may also have standing water in some cases.

- They may or may not have inflows and/or outflows through channels or streams, depending on the topography.
- Wetlands play a crucial role in regulating the flow of water thereby ensuring year round water availability and reducing the chances of floods.
- Wetlands also clean the water of pollutants, provide a home to an astonishing variety of biodiversity and are an important source of drinking water to people as well as wildlife and livestock.

Nilgiris

- Nilgiri is the name given to a range of mountains spread across the borders among the states of Tamilnadu, Karnataka and Kerala.
- The nilgiri hills are part of a larger mountain chain known as the Western Ghats.
- The highest peak being Doddabetta, at 2,637 metres (8,652 ft).
- The Nilgiri Biosphere Reserve is located here.

- **Objectives:** To revive and conserve springs and for springshed management in the region.

■ Interventions:

- ► Community involvement and convergence: wetlands that were the primary source of drinking water and were under threat were identified.
- ► A nursery was raised and saplings planted with the participation of the community, panchayat and a local school.

■ Outcomes:

- ► The springs that used to dry up in the summers has now become perennial. A small shola forest has ensured sustained water levels in the wells.
- ► The community has responded positively to the intervention and is happy with the water availability in its springs and wells even during the lean season.

■ Way Forward

- ► Wetlands in Nilgiris are small in size and tend to be ignored. They should be mapped and protected and their role understood by the users.
- ► Document biodiversity species that are found in and around the wetland
- ► Hill wetlands importance should be highlighted to agencies such as the Hill Area Development Programme
- ► Wetland hill areas should be given a special status in Nilgiris.
- ► Protect and conserve wetland through scientific management of catchment area and vegetation.

B. Aquifer Based Groundwater Management

- **Place of Implementation**: Gadakwadi Village, Khed Tehsil, Pune District, Maharashtra
- **Agency:** Advanced Centre for Water Resources Development and Management (ACWADAM), Srinivasan Service Trust (SST) and Arghyam Trust
- **Year of Implementation**: 2015–16

■ **Background**

Gadakwadi village faces severe water crisis in the summers, rendering agriculture unviable and forcing people to migrate in search of work. The people of Gadakwadi embarked on a participatory groundwater management journey with the Advanced Centre for Water Resources Development and Management, and Srinivasan Service Trust.

Objectives: To enable water security, enhance groundwater recharge, promote the efficient use of water through farmers' groups and develop a watersecurity plan for the village.

■ **Interventions**

➤ Awareness generation and sensitization of the community on groundwater management.

➤ Primary data such as water level and quality, rainfall, socio-hydrological data, etc., collected through community resource persons.

➤ The ACWADAM team, along with the community, prepared a groundwater management plan for the village, which was presented in the gram sabha.

➤ The ACWADAM team also tried convergence with various government programmes such as the Jalyukta Shivar, Jalswarajya II, etc.

■ **Outcomes**

➤ The community accepted the following recommendations given under the groundwater management plan:

• Ban on drilling of borewells in the village

• Selection of groundwater recharge sites based on hydrogeological study

• Protocols for drinking water security

• Efficient use of water through the use of drips and sprinklers

• Crop planning based on water availability

➤ Water conservation structures helped enhance the recharging capability of aquifers.

➤ From being tanker-fed, the village became completely tanker-free in 2017–18.

➤ A significant change in the cropping pattern and income of the community was observed.

Aquifer

An aquifer is a body of rock and/or sediment that holds groundwater.

There are two general types of aquifers: confined and unconfined.

Confined aquifers have a layer of impenetrable rock or clay above them, while unconfined aquifers lie below a permeable layer of soil.

Groundwater is the word used to describe precipitation that has infiltrated the soil beyond the surface and collected in empty spaces underground.

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