

ADDRESSING RURAL POVERTY: LIVELIHOOD DEVELOPMENT AND DIVERSIFICATION

- Poverty is **multi-dimensional** and therefore requires a range of interventions. There are various challenges of creating poverty-free Rural Clusters.
- These include: i) Connectivity, Roads, Internet, LPG; ii) Power, Housing, ODF, waste management; iii) Water Conservation; iv) Health and Nutrition; v) Bank CREDIT, Financial inclusion; vi) Education, Skill Development; vii) Women SHGs Economic activity; viii) Well-being of vulnerable; ix) Non-farm livelihood, Multiple Livelihoods; x) Sports Youth Clubs Culture; xi) Social protection for old, widows, disabled

Efforts so far:

- The last 4 years have seen a considerable stepping up of financial resources for improving the well-being of poor households. Annual expenditure in 2017-18 is more than double of what it was in 2012-13.
- Also, the other additional sources of funds for poverty alleviation should be kept in mind. These include – **Pradhan Mantri Awas Yojana – Gramin (PMAY-G)**, **increased amount of fund transfer as mandated by 14th Finance Commission**, leveraging of Bank Loans by Women SHGs etc.
- Besides the specific resource provision for Rural Poverty Programmes, the thrust on Swachh Bharat Mission (SBM), increase in the allocation of Ministry of Agriculture and other Infrastructure and Livelihood Programmes for the poor, the total transfer of financial resources to Rural India has been very significant.
- The Department of Rural Development has focused on Development and Diversification of Livelihoods of the poor households during this period.
- The **Socio Economic Caste Census (SECC) 2011** released in July 2015 provided an **Evidence Based Criteria** for Selection of Beneficiaries under various Government Programmes.
- The application of deprivation criteria of SECC to the Provision for LPG Gas connection under Ujjwala, free households electricity connection under Saubhgya etc. have ensured that the benefits of development reach the most deprived on a priority.
- The use of SECC in finalization of labour budgets to states under MGNREGS and insistence in enrolment of all women from households with deprivation under SHGs of Deendayal Antyodaya Yojana-National Rural Livelihoods Mission (DAY-NRLM) has also ensured that poor regions with larger number of poor households receive priority in Programmes of Rural Poverty.
- The livelihood linkages in convergence with subsidy programmes for animal resources and for agriculture contribute to improved incomes in the agriculture and Allied Sectors.

Few Examples Highlighting Success of these Efforts:-

1. 143 lakh hectares of land provided benefit of water conservation works.
2. 33 lakh women farmers supported under non-chemical based agro ecological interventions.
3. 86000 Producer Groups and 126 Agri Produce companies established.
4. Over 6000 barefoot technicians trained and certified.

Impact Analysis:

- **National institute of public finance and policy (NIPFP)** was requested to assess the impact of Pradhan Mantri Awas Yojana-Gramin (PMAY-G) on income and Employment. The report estimated that the scheme could have **generated about 52.47 crore person-days**.

- For Rural Infrastructure, the PMGSY has been a flagship Programme and during the last 4 years 1.69 lakh kms of roads were constructed.
- The **person-days generated under MGNREGS** in the last 3 years has been in the range of 235 crore every year. This is higher than most years before, indicating how the thrust on durable assets and Individual Beneficiary Schemes has generated a steady demand for MGNREGS.
- Similarly, Studies of Water Conservation works under MGNREGA by the institute of economic growth confirmed increase in income, productivity, acreage, and the water table.
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- The **expansion of the National Food Security Act (NFSA)** with a provision of rice at Rs. 3 per kg and wheat at Rs. 2 per kg has facilitated food security in poor households. The increase in the consumer Price Index for agricultural Labour has been modest on account of the low food price inflation during this period as food items comprise the largest chunk of the basket of goods and services for calculating the consumer Price Index for Agricultural Labour.
- **Evaluation studies by the Institute of Rural Management Anand (IRMA)** have also confirmed increase in incomes, productive assets and enterprises in villages where Women Self-Help Groups are active under DAY-NRLM.

Factors Contributing to Different Types of Poverties:

Poverty of Households	Poverty of Geographies
<ul style="list-style-type: none"> • lack of education and skills; • under-nutrition and ill-health; • lack of employment opportunities • assetlessness • lack of safe housing • limited access to public services • clutches of middlemen/corruption • absence of social capital-collectives of women/vouth/poor households 	<ul style="list-style-type: none"> • low price for produce – distress • violence/crime • unirrigated agri/vagries of monsoon • lack of basic infra-roads, electricity, internet • lack of access to markets and jobs • lack of non-farm opportunities

INDIA’S JOURNEY TOWARDS A \$5 TRILLION ECONOMY

India is poised to rise steadily on the path of becoming a global power. This presents us with both the opportunity and mandate to envision new India we aspire to create and the world order we wish to shape.

India’s Foreign Policy Approach

- India’s foreign policy approach has been undergoing a **paradigm shift** with **economic and strategic relations gaining significant** cultural undercurrents.
- The new approach is reflected in the foreign policy pillars of Panchamrit – **Samman** (dignity and honour), **Samvaad** (engagement and dialogue), **Samriddhi** (shared prosperity), **Suraksha** (regional and global security) and **Sanskriti evam Sabhayata** (culture and civilizational linkages).
- This has found place in our global engagements through our ‘Neighborhood First’ and ‘Act East’ approach. More recently in the second term of this government the emphasis has **shifted from**

SAARC to BIMSTEC and Indian Ocean Region (IOR) in particular. The BIMSTEC is fast replacing SAARC as the primary forum for India's regionalism. In line with the stated policy the Prime Minister undertook his first visit to the Maldives and Sri Lanka.

- He reiterated the priority India attaches to its '**Neighbourhood First**' policy and the SAGAR Doctrine. SAGAR refers to "Security and Growth for All in the Region" which was propounded in 2015. The presence of the Prime Minister of Mauritius during the oath-taking of the Prime Minister of India in 2019 was a significant indicator in that direction.

Achieving a \$5 Trillion Economy

- At the Government Council Meeting of the NITI Aayog recently, Prime Minister announced the **target of a \$5 trillion economy for India** by 2024. To achieve the \$5 trillion economy, the Economic Survey has laid a road map where it says **India must grow at 8 percent**.
- The survey has the theme for enabling a "**shifting of gears**", "to achieve the objective of becoming a \$5 trillion economy by 2024-25".
- It makes the case for **investment, especially private investment** as key driver, that drives demand, creates capacity, increase labour productivity, introduces new technology and generates jobs.
- The survey stated "**a virtuous cycle or a vicious cycle**". It says **when economy is in a virtuous cycle**, investment, productivity growth, job creation, demand and exports feed into each other and enable **animal spirits in the economy to thrive**".
- This can be achieved by focusing the following sectors:

A. Focus on MSME sector

- The significant of 65 million MSMEs who create about 120 million jobs and 30 percent of total employment generation cannot be underestimated.

B. Focus on Agricultural Sector

- The real issue is not the level of productivity but **how produce can be converted into value** that will decide farmers 'income'.
- The focus has *shifted from increasing per acre productivity to gainfully employing farm households in other farm-related activities* and to **improve post-production value-addition** by pooling of land and aggregation of farmers' produce to give growers better bargaining power in the market.
- And to do this the government has focused on **development of sustainable and efficient cold-chain infrastructure** in India for which **National Center for Cold-chain Development (NCCD)** has been working with private sector, Ministry of Agriculture and Ministry of Food Processing industries.

C. Focus on Services Sector

- Services contribute to 56.5 percent of GDP but create only 30 per cent of jobs. The sector need to develop expertise in IOT, AL, VR and their applications. Travel and tourism, health and professional services can be the other key service sectors.
- Another big opportunity comes in **global healthcare and wellness** which is a \$8 trillion industry. There is an opportunity in converting India's 600 district hospitals as medical nursing and paramedical schools to train 5 million doctors, nurses and paramedics to meet the global requirement, who in turn can remit billions of dollars foreign currency every year.
- There is a huge potential in **construction sector** which contributes 10 percent to India's GDP and it is the largest job generating sector after Agriculture.

D. A Trillion Dollar Opportunity in Digital India

- Through Digital India Initiative, India is now poised for the next phase of growth – creation of tremendous economic value and empowerment of citizens as new digital applications permeate sector after sector. **India can create up to \$1 trillion of economic value** from the digital economic in 2025, up from around \$200 billion currently generated.
- India's **digital consumer base is the second largest in the world** and growing at the second fastest rate amongst major economics. Our inclusive digital model is narrowing the digital divide within the country and bringing benefits of technology to all segments of people.

Vision for New India:

- 'New India' will be a \$5 trillion economy and a model of Good Governance for the world. PM has set the following Vision for New India:
 1. To be free from poverty, full of prosperity;
 2. To be free from discrimination, filled with equality;
 3. To be free from injustices, ensconced in justice;
 4. To be free from squalor, covered with cleanliness;
 5. To be free from corruption, complete with transparency;
 6. To be free from unemployment, enriched with employment;
 7. To be free from atrocities against women, full with respect for women; and
 8. To be free from despondency, full of hope.

Conclusion:

It is absolutely essential to work on a framework that provides ease of business and predictability. It is also time to redirect energies on providing the environment to encourage private sector investments and innovation.

WATER CONSERVATION AS A NATIONAL MOVEMENT

India is fast moving towards pro-people, Participatory, visible and responsive economic prosperity while aiming to **safeguard its long-term interests** of ecological security by protecting the country's diverse and unique natural heritage.

Water Crisis –A Major Impediment

- India has just **2.4% geographical area** of the world while harboring nearly **one sixth of the global population** and the **world's highest owner of livestock** (512million heads).
- India harbors only **4% of world's freshwater** resources. Less than 1% of the freshwater is easily accessible in lakes and rivers. Agriculture sector alone consumes nearly 70% of the freshwater used by humans.

Factors Responsible for water Crisis

- Enhanced runoff due to deforestation and loss of green cover; urban grey' environment;
- Changing life styles and enhanced consumption patterns; Expansion of irrigated agriculture and resultant exploitation of depleting ground water;
- Creation of physical barriers leading to storage of water in large reservoirs/ barrages and diversion of water by canals; Wastage of water by leakage and neglect;
- Inadequate facilities for recycling and rainwater storage; and more importantly, pollution of water by sewage and dumping of urban wastes and unchecked flow of industrial effluents.

Impact

- India faces several limitations as far as **water and food security** are concerned. Signs of water scarcity by way of limited access, declining quantity and deteriorating quality are evident.
- The country is expected to become '**water stressed**' as per capita surface water availability is on the decline. Several metropolis and rural areas face acute shortage of even drinking water.
- Several parts of the country are **prone to water- borne diseases** and human health is a major concern in such pockets. It is increasingly becoming a **cause of drudgery** as fetching water from long distances excessively affects women and takes away their considerable time from work, family care.

Towards Conservation:**A. Nature, Water and People**

- Nature acts as a **regulator, a cleaner and/or a supplier** of water. Maintaining healthy forests and other natural ecosystems (grasslands and wetlands) directly leads to improved water security for all.
- We must not focus only on forests. **Grasslands, wetlands and agriculture lands also play significant roles in water cycling**. Soils are critical in controlling the movement, storage and transformation of water. Biodiversity has a functional role as it underpins ecosystem processes and functions and, therefore, the delivery of ecosystem services.

B. Water Conservation - It primarily involves the following three objectives:

1. Enhance water availability
2. Improve water quality
3. Reducing water-related risks

C. A National Movement

- The Government has realized the merit of adopting a **comprehensive approach** towards water conservation. As a result, the **unified Central 'Ministry of Jal Shakti'** has been made responsible for laying down policy guidelines and coordination of programmers for the development.
- The ministry launched '**Jal Shakti Abhiyan**', a campaign for water conservation and water security. The campaign will run through citizen participation while focus of the campaign would be on water-stressed districts and blocks in the country.
- India has made huge investments towards implementation of 'integrated watershed development programme'. Some of the other prominent programmes/schemes launched by concerned Ministries are:
 - PMKSY- 'Har Khet ko pani' and 'More Crop Per Drop'; jal Shakti Abhiyan; River Basin Management; National Water Mission;
 - National Mission for Clean Ganga-Namami Gange, National Mission for Sustainable Agriculture, National mission for Sustainable Himalayas;
 - Dam Improvement and Rehabilitation Programme; Interlinking of Rivers, Ground Water Management, Flood Control and Forecast, Biodiversity Conservation, Wetland Conservation, Green India Mission, CAMPA and National and State Level Action Plans on Climate Change.
- Government during the period 2014-19 has implemented the ambitious programme of Namami Gange aiming for Ganga rejuvenation (Aavrit and Nirmal Dhara) by way of forestry interventions, establishment and maintenance of STPs, conservation of aquatic life, etc.

- **Several States** have also initiated their own flagship programmes related to water management. Some prominent ones are: '**Mukhya Mantri Jal Swavlamban Abhiyan (MJSA)**' by Rajasthan Government and '**Green Mahanadi Mission** of Odisha Government focusing on water development in water starved desert region and rejuvenation of Mahanadi River, respectively.
- Participatory irrigation management backed by the '**Pani Panchayat Act, 2002**' in Odisha is flourishing through efficient and equitable supply and distribution of water ensuring optimum utilization by farmers.

Future Direction:

- Following six priority actions are visualized for making water management sustainable in the country as a reality through an aggressive national movement:
 - a. **Institutions and Governance** processes need to be strengthened. Also augmentation of manpower and financial resources is required.
 - b. **Participatory Approach** to establish a mechanism to implement and enforce judicious use of water and efficient management of precious water resources.
 - c. **Knowledge Management** for collaborations/networking and institutionalizing synergies between various entities for development and exchange of evidence-based knowledge on ecosystem functions and development of suitable technologies to improve water resource management to ensure source sustainability. Development of 'Nature-Based Solutions for various aspects of water management offer better opportunities and would be of immense help.
 - d. **Ecosystem-Based Management Approach**-The move from isolationist approaches to holistic approaches are desirable on a priority basis. Thereby, greater focus on river basins and rivers capes for planning, assessment and interventions ate the need of the hour.
 - e. **Continuous Care**- This aspect seeks concerted efforts towards conservation of existing water sources as well as rejuvenation of rivers/restoration/recharging of depleted water resources.
 - f. **Capacity Development**- Success towards countering water wastage and degradation of natural ecosystems could be accomplished by creating awareness and appropriate capacity development of various stakeholders.

REFORMING GOVERNANCE

- The avowed objectives of "Sabka Saath,Sabka Vikaas And Sabka Vishwaas" and the clarion call of achieving a 5 trillion dollar economy by 2024-25 necessitates putting in place a whole set of initiatives towards good governance.
- As many as **7 out of 41** chapters of the "**Strategy for New India @75**" document released by NITI Aayog, **focused exclusively on governance** while in remaining chapters, most had emphasized on good governance for better service delivery and more effective outcomes.

Steps taken in this Regard:

A. Cooperative And Competitive Federalism

- A number of initiatives have been taken to foster cooperative federalism. These include:
 - Meetings between Prime Minister/Cabinet Ministers with all chief ministers; Sub-groups of chief Ministers on subjects of national importance; Sharing of best practices;
 - Policy support and capacity development of State/UT functionaries; Aspirational Districts programme for development of 115 most backward districts;

- Theme based extensive engagements in various sectors; framing model laws for land leasing and agriculture marketing reforms; and
- Area specific interventions for North Eastern, Himalayan States, and Island development.
- A unique feature of this new strategy is to improve States'/UT' performances **by encouraging healthy competition** through transparent ranking in various sectors **with a handholding approach**.
- Some of the indices launched include Health Index, Composite Water Management Index, SDG Index and Performance of Aspirational Districts.
- Once districts compete amongst themselves, States would emerge stronger and when States compete amongst themselves, the nation becomes stronger.

B. Direct Benefit Transfer And Use Of Aadhaar

- Currently about 439 schemes across 55 Ministers are covered by DBT. Cumulatively about rs. 7.66 lakh crore has been transferred to beneficiaries through DBT mode with estimate gains of Rs. 1.42 lakh crore.
- In 2018-19 there were 59 crore beneficiaries of DBT who got benefits in cash while more than 70 crore beneficiaries got it in kind (for instance, food and fertilizers).

C. Outcomes Based Monitoring

- There has been a structural change in the budget making process with removal of Plan/Non-Plan distinction and rationalization of Centrally Sponsored and Central Sector Schemes.
- A major step in this direction is **introduction of Outcomes Based Budgets** since Union Budget **2017-18**.
- This is a major step in improving governance as the thrust is on meeting the expectations of the people by focusing on outcomes and not merely on how much expenditure has been incurred under the respective schemes.
- The Outcome Budget 2019-20 covers 163 major central sector schemes. Currently, a major exercise of independent evaluation of 28 Centrally Sponsored Schemes is underway in NITI Aayog.

D. E-Governance

- With advancements in ICT coupled with penetration of Aadhaar and mobile phones, it has been possible to provide many public services through online modes.
- **Digital India programme** being implemented by the Ministry of Electronics and Information Technology. Besides, portals such as **Centralized Public Grievance Redressal And Monitoring System (CPGRAMS)**, The **Unified Mobile Application for New-age Governance (UMANG)** and **MyGov** are in place providing information to citizens seeking feedback and resolving grievances.
- The extent of successful penetration of E-services in India can be gauged by the fact that under Electronic Transaction Aggregation and Analysis Layer (E-Taal), more than 3700 services across Central Ministries and State Governments have been integrated.

E. Administrative Reforms

- Reforms in civil services are a continuous process and several initiatives have been undertaken, such as introduction of a multi-stakeholder feedback performance evaluation, dispensing with interviews for lower level positions, introduction of online mechanisms for appraisals and filling of various returns by employees, implementation of e-office, and strengthening training and merit-based postings.

- NITI Aayog has taken the initiative of inducting highly motivated **Young Professionals and Consultants on contractual basis** in its workforce so as to provide a fresh perspective in the way Government thinks and operates.
- The **Strategy for New India @75 documents** of NITI Aayog has **proposed transformative measures**. These include:
 - Improving teeth to tail ratio; Promoting officers oriented culture; Bringing down number of civil services and allocating candidates as per competencies;
 - Encouraging lateral entries and specialization; Bringing down entry age; Strengthening municipal cadres; Training and skill assessments;
 - Institutionalization of goal setting and performance evaluation; Greater suo motu disclosures; Protection of civil servants; E-initiatives and probity.
 - Measures have also been proposed to improve governance without compromising on the data security for citizens.

F. Law and Order

- Though law and order is a state subject, Gol would need to continue engaging states to reform their policing. Some of the suggestions include **adoption of the Model Police Act of 2015**, filling up vacancies and **greater representation of women, reforms in FIR system** with greater usage of IT, training/sensitization of police personnel and inducting a separate cadre for cyber-crimes, cyber threats and fraud.
- In the area of judicial reforms, there is again a significant scope for improvement especially with the use of IT. **Focus needs to be more on arbitration** so that most cases get resolved out of court.
- The court processes all across the country **need to be automated with electronic court** and case management. **Redundant laws need to be repealed** and new laws need to be written in a simple manner. **Forensics and ballistics** testing need significant improvements.
- Besides an **All India Judicial Services Examination** on ranking basis, an **Indian legal service** may also be considered.

Conclusion:

- Transforming India requires clarity of vision, well thought out strategy and action plans dovetailed to achieve that larger vision. Government needs collaborative approach of all stakeholders be it judiciary, civil society, or citizens themselves.

DEVELOPING A KNOWLEDGE-BASED SOCIETY

- On July 22, 2019 ISRO commenced its historic journey to the moon by lofting its most complex satellite Chandrayaan-2 along with a lander and a rover for lunar exploration. The GSLV MKIII, nicknamed as Bahubali, placed the Chandrayaan-2 in a highly elliptical orbit around the earth.
- This lander named as Vikram is going to soft land in a totally unknown territory with uncertainties about its trajectory and performance. Hence, this mission is marked as India's maiden effort to land on the uncharted surface cluttered with meteors and rocks. Through this India will reaffirm its well-established fourth position in the elite space club of development nations.

Background:

- India was flourishing in the scientific thoughts and inventions starting from 5000 BC. There were ample examples of excellent town planning, agricultural practices, Ayurveda, astrology and use of

metals as seen in the relics from Harappa and Mohenjodaro on the banks of Sindhu and Saraswati rivers

- After independence, initiatives taken by the government for setting up national, education institutes like IITs and research establishments for atomic energy, space research defence, agriculture etc, are paying rich dividends today.
- The R&D activities in atomic energy have enabled us to achieve self-reliance and use the energy for peaceful and military applications.
- The most important achievement is in the field of agriculture. In the mid-sixties a **green revolution** was brought in by Dr. **M.S Swaminathan** and his team.

Recent Steps:

- Government is taking a number of initiatives in creating a knowledge society by spreading digital connectivity and services in rural areas. The **current year's budget has identified thrust areas like bio-technology, science education and industrial application of R&D results.**
- However, the budget allocation for the S&T sector is less than **0.8% compared to about 3-5% by developed countries**, including china.
- The decision taken by the government to have a **science council** to focus and guide scientific activities in an integrated manner in the country is welcome. To cite the example, atomic energy and space are having total autonomy with the respective empowered commissions to set guidelines and overseeing their activities.

Way Forward:

- A similar model in other key sectors integrating related activities enabling them with empowered commissions is the need of hour. A few examples of aggregating can be in the following areas:
 - Climate change; Water resource management;
 - Agricultural land use; Medicine including Ayurveda; and Science Education.
- About half a dozen empowered commissions will definitely bring in required focus on the research activities to be taken-up for solving the day-to-day problems of the people.
- The investment in human resource development aiming at enabling the youth power with the scientific temper has to be given top most priority.
- The STEAM (Science, Technology, Engineering, Arts and Mathematics) method could be implemented so that the children are enabled to think independently and analyze and take decisions in a logical manner.

ENERGY – A KEY DRIVER PF SOCIO-ECONOMIC GROWTH

Access to **affordable, stable and sustainable energy supply**, is essential for maintaining a high growth trajectory. Energy access also enables the fruits of economic growth to trickle down to the bottom of the pyramid – transforming lives of the disadvantaged sections of society.

Statistics

- India is the **sixth largest economy** in the world and is poised to become the second largest economy by 2030.
- It is also the **third largest consumer of energy** in the world, with demand rising by five percent annually. With **energy demand set to double by 2040**, India needs a robust and healthy energy sector.

Access to Clean and Affordable Energy: Need of the Hour

- **UN Sustainable Development Goal 7** pertaining to Access to Clean and Affordable Energy, has undeniable positive spill-over in the achievement of other SDGs, including those pertaining to gender equality, poverty elimination, clean water and sanitation, and most importantly, environmental sustainability.
- More than **one-quarter of our population** or about 311 million people, the vast majority of whom live in rural areas, **still lack an electricity connection**.
- Another key issue is the **per unit cost of power**, that determines whether it is affordable for households that need it most.
- In 2017, the government launched the **Saubhagya scheme** targeting universal electrification and till date it has covered more than 99% till rural households, thus ushering a new era of progress.
- Similarly, on the distribution side, a **major deterrent has been the poor financial and operational health of state discoms** affecting their performance. The Government has announced the **UDAY scheme** to spark a financial revival of discoms.
- Since 2014 the Government has focused on creating a favorable policy environment for boosting the renewable energy sector. India is looking to achieve the target of 175 GW by 2022.

Benefits of improved energy.

- Energy access is essential **for commerce and industry-** to thrive and create income-generating opportunities. Firms with energy access have higher labor productivity.
- Improved energy access will **inject necessary momentum** into the Government's flagship schemes like **Make In India**, which was launched to boost domestic manufacturing.
- Energy access can also help realize the **Government's goal of augmenting farmer income** through better irrigation, mechanized ploughing and harvesting and by ensuring a wider market for their output.
- Energy also has a key role to play in ensuring universal access to **clean water and sanitation**.
- The treatment of waste water through energy, and then using energy to transport the water illustrates the **critical water-energy nexus**.
- Decentralized, clean energy solutions can greatly enhance the **efficiency of primary health services delivery** to the marginalized, low income sections of the population residing in remote corners of the country.
- As the **healthcare ecosystem in India gets increasingly digitized**, energy access will **accelerate the growth of tech enabled services** like telemedicine and mobile health applications, and bring quality healthcare to the doorstep of the common man.

Energy Access: A tool for Women Empowerment

- Our energy economy is also closely linked with a critical development indicator – **women development**. Energy access has the potential to **positively influence women's health, education, finance, and access to information, especially in backward regions**.
- A steady growth in renewable energy has **opened up a lot of avenues for women entrepreneurship** especially in rural India.
- Off-grid solutions and decentralized RE systems have enabled **women to get trained in installing, operating and maintaining** these units, providing them with much needed income, which translates into enhanced self-esteem and social standing.

- Energy access can catalyse a more **gender equal society**, where women are well-integrated into the economic mainstream, thus resulting in holistic and inclusive.
- Today, solar energy powered schools in rural India have given **young girls the opportunity to pursue quality modern education** (ICT enabled), turn digitally literate and brighten their career prospects. Further, **children can now return home** in the safety of solar powered street lights and continue to study at their homes which are now electrified.

Conclusion

Sustainable energy available in the right amount, at the right place, and affordable for the entire society, can yield major socio-economic benefits, as enlisted above.

SKILLS FOR A \$5 TRILLION ECONOMY

The Prime Minister has set a target for India to be \$5 trillion economy by 2024. A Key enabler to this is having the requisite skilled manpower in the various sectors that would drive this growth.

Opportunities:

- With half of its population below the age of 25, the country has the **World's youngest population**.
- Along with this, India is also slated to go through a phase of sharp slowdown in population growth in the next two decades, as pointed out in the Economic Survey for 2018-19. This means that while the country as a whole will enjoy the "**demographic dividend**" phase, parts of it will witness the transition to 'an ageing society by the 2030s'.
- The big challenge today, therefore, is of **converting this transition into a dividend**- the number of those gainfully contributing to economic growth equaling the number of those dependent.

Steps Taken:

- The National Skill Development Policy in FY2009 and the National Skill Development Fund (NSDF) and the National Skill Development Corporation (NSDC) was established under the Ministry of Finance, Government of India. The National Skill Development Authority (NSDA) and The National Skills Qualification Framework (NSQF) were established in FY2013.
- A comprehensive skill development programme has been implemented in the last five years with the setting up of the **Ministry for Skill Development and Entrepreneurship (MSDE)** in November 2014. The Government formulated the **National policy on Skill Development and entrepreneurship, 2015**, under which the **Skill India Mission by 2022** was formulated.
- The **Skill India Initiative** was launched in 2015. A flagship programme **Pradhan Mantri Kaushal Vikas Yojana (PMKVY)** is aimed at mobilizing the youth to take up industry-relevant skill training and recognize and certify prior learning. **PMKVY's second version** for 2016-20 brought in mandatory provisions for placement tracking.
- Other flagship initiatives of the Government to promote skill development include Deen Dayal Upadhyaya Gramin Kaushalya Yojana (DDUGKY), Pradhan Mantri Kaushal Kendras (PMKK) and National Apprenticeship Promotion Scheme (NAPS).
- **National Apprenticeship Promotion Scheme** was initiated in 2016 to promote apprenticeship with provision for basic training and on-the job training or practical training at workplace.
- **SANKALP**, launched in 2017 aims to create convergence among all skill training activities, improve quality of skill development programmes and create industry-led and demand-driven skill training capacity.

- **STRIVE**, another initiative launched in 2017, aims to create awareness through industry clusters, integrate and enhance delivery quality of ITIs.

NSDC Contribution

- The NSDC, one of its kind, Public-Private Partnership Company, has **acted as a catalyst in skill development**. FICCI is a shareholder of NSDC.
- To enable industry led competency building **38 Sector Skill Councils (SSC) are there**, some of which are promoted by FICCI. Additional qualifications for meeting the needs of industry 4.0 are being created.
- To increase aspirations of youth for skill development a comprehensive programme for skill competitions at the State level followed by **national competition are being organized**. The winners of the national competition represent India in the World Skills Competition. The last one was held in Kazan in August 2019.
- NSDC launched a **recognition of prior learning scheme** to enable those who are in work to obtain a certificate that serves as a recognition of their skill level and helps them in the labor market.
- To enable India to be the skill capital of the world, **youth are being trained for specific skills for overseas markets. Agreements with Japan, UAE and other countries** are enabling youth in India to be trained to their skill and language levels for specific jobs in those countries.

Impact:

- The impact analysis of the short-term training under PMKVY on employment shows that training and certification has led to a **nine-percentage point increase** in proportion of employed individuals.
- In terms of income, PMKVY training and certification has contributed 15 per cent to the mean monthly income.

Change on the anvil:

The **New Education Policy** aims to introduce skills in schools, colleges and Universities. The MSDE is in the process of restructuring the NQSF and the National Council for Vocational Training. There are also discussions on revamping the PMKVY.

Conclusion

The skills ecosystem that has been create could also address the needs of those firms who find it difficult to identify the right people to employ. It could be done by developing the qualification pack for the job role, getting it approved and then working with a training partner and recruited. Similarly, we could train for the world.

BEST PRACTICES FOR GROUND WATER HARVESTING

- **Dobha Construction For Rain Water Harvesting, Jharkhand** - Dobhas store rainwater which can be used for irrigation purposes during non-rainy months. This reduces the dependence of the farmers on monsoons and helps them diversify their cropping patterns.
- **Kapil Dhara Construction Of Dug Wells Under MGNREGA, Madhya Pradesh** - Construction of dug wells for irrigation purpose and various water conservations structures like check dams, stop dams, contour trenches etc. have enable farmers to irrigate their fields. Now they are able to sow wheat and rice in place of jowar and maize.

- **Farm Pond On Demand Scheme, Vidarbha And Marathwada Region, Maharashtra** - It has reduced dependence on ground water, reduced power required to pump water as compared to ground water. Cultivation on bunds generates extra income and recharges ground water.
- **Jalyukta Shivar Abhiyan, Maharashtra** - This includes arresting rain water within the village boundaries, increasing ground water level, creation of decentralized water bodies, restoring the storage capacity, increasing area under protective irrigation by efficient water use, implementation of ground water act, de-silting of structures with people participation, creation of water awareness, publicity and sensitization among the people, people's participation in water budgeting. Jalyukta Shivar Abhiyan was launched in 2015-16.
- **Sujalam Sufalam Jalsanchay Abhiyan 2018, Gujarat** - The aim was to increase the storage capacity of the existing reservoirs by de-silting of check-dams and deepening the ponds, lakes and riverbeds, besides cleaning the rivers to accommodate more rain water.
- **Pani Panchayat: Odisha Water Resources Consolidation Project**

The main objection of the intervention were to promote and secure equitable distribution of water among its users, adequate maintenance of irrigation of system and to protect the environment and ensure ecological balance, inculcating a sense of ownership of the irrigation system in accordance with the water budget and the operational plan.

- **Mukhyamantri Jal Swavlamban Abhiyan, Rajasthan** - Rain water harvesting- construction of various water conservation structures, Participatory Approach, IEC activities.
- **Artificial Recharge For Spring Rejuvenation, South Sikkim District, Sikkim**
- **Mission kakatiya, telangana** - for restoring all the minor irrigation tanks and lakes in Telangana State.

STEPS TAKEN TO IMPROVE JOB ORIENTATION OF HIGHER EDUCATION

In order to enhance job orientation and employability, the following steps have been taken:

- I. There are 1109 skill-oriented courses being run by UGC and AICTE through 556 institutions.
- II. New and updated vocational curricula are being development
- III. AICTE has launched an internship portal to facilitate industry internship to students
- IV. **Wheebox Employability Skill Test (WEST)** for all pre-final and final year graduates of AICTE approved institutions to identify the core strengths of students and certify the same.
- V. **Technical Education Quality Improvement Programme (TEQIP) Phase-III** is under implementation to enhance quality, equity and employability in selected engineering education institutions.
- VI. **National career service (NCS)** portal has been launched as a common platform to bring together stakeholders to facilitate convergence of information and link job seekers with job providers.

TRANSFORMING INDIAN HEALTH SYSTEMS

- The nation health policy (NHP) 2017 has provided a concrete shape giving direction to health sector and has universal health coverage as its central goal.
- Despite various efforts, health outcomes in India are yet to catch up with countries. Few action-steps to ensure that the country is on track for better health outcomes can be:

A. Put Primary Health Care (PHC) First

- Indian states have an elaborate network of nearly 200,000 Government Primary Health Care Facilities (GPHCFs), which deliver around 10% of total out-patient services (excluding Mother and child health services). The NHP 2017 has proposed to increase overall utilization of government health services from 30% to 50%.
- **Thailand started on** strengthening PHC in 1971, nearly 30 years before starting on famed universal coverage scheme in 2001.
- This concept has been reiterated time and again since **Alma Ata in 1978 and more recently in Astana in 2018.** India needs to consider adopting similar approach to deliver comprehensive primary healthcare.

B. Stronger Health System through Stronger PHC System

- **Re- design PHC system based upon available local evidence :** The functioning of best performing PHC in 4 states of India (Kerala, Tamil Nadu, Maharashtra and Meghalaya) should be studied. The proposed Health and Wellness Centres have been derived from these learnings.
- **Correct ‘the inverted pyramid’ of health services provision and utilization:** A large proportion of health services in India are delivered and used at secondary and tertiary level. Ideally, these services should be available at PHC level facilities.
- **Start focussed initiatives to tackle social determinants of health (SDH):** A lot of determinants for better health- improved drinking water supply and sanitation; better nutritional outcomes ,health and education for women and girls; improved air quality and safer roads-are **outside the purview of Health Ministry.** These issues are increasingly being recognized with emerging challenges such as Anti-microbial resistance (AMR), air pollution and non-communicable diseases (NCDs). There is need for multi-sector planning and ‘Health in all policies’ approach. An approach could be that **initiatives to tackle SDH is added as third component under ABP**, in addition to existing HWCs and Pradhan Mantri Jan Arogya Yojana (PMJAY).
- **Strengthen urban health governance for multi-sectoral collaboration:** the PHC system in urban areas need faster and effective interventions, if inverted pyramid of service delivery need to be tackled.
- **Use of Behavioral Economics for Better Health Outcomes:** The Economic Survey of India 2018-19 has underscored the importance of behavioral economics. This is needed to ensure that people seek early care at appropriate level, which will reduce burden from higher level of facilities.
- **Focus on public health cadre:** Public awareness and education is an integral part of health service delivery. Many countries have dedicated cadres and workforce to deliver public health services. Tamil Nadu, West Bengal and Maharastra have a dedicated cadre. Thailand has a vast cadre of health workers delivering services.

Conclusion

Clearly, India is at a juncture, where it can build on past initiatives to transform health outcomes so as to have a healthy and prosperous nation, with minimal inequities. This would ensure that India achieves Universal Health Coverage as envisaged in the National Health Policy 2017 as well as achieves health-related Sustainable Development Goals well before the proposed timeline of 2030.

INFRASTRUCTURE DEVELOPMENT FOR THE NEXT GENERATION

The government has emphasized on creating world-class infrastructure for building a New India. It has undertaken various projects to improve the present conditions of infrastructure.

A. PRADHAN MANTRI AWAS YOJANA (PMAY)

- The Government has launched a comprehensive mission "housing for all by 2022". It is implemented as a Centrally Sponsored Schemes(CSS).

B. ENERGY

- The Government's ongoing energy sector policies intends to hit the following milestones: Make available **24*7 power to all by 2019**; Achieve **175 GW of renewable energy** generation capacity by 2022; and **Reduce imports of oil and gas by 10** per cent by 2022-23.
- India is the **world's third largest energy** consumer. However, in 2017 **its per capita energy consumption was about 625.6 kilogram of oil equivalent** (kgoe) against the world average of 1860 kgoe.
- The all-India **installed power capacity** is about 334 GW, including 62 GW of renewable energy. India imported approximately 82 per cent of crude oil and 45 per cent of natural gas requirements during 2017.

Some of the **major challenges** on achieving the milestones set for 2022-23 are:

1. **Overall energy:** A variety of subsidies and taxes distort the energy market and promote the use of inefficient/over efficient fuels and also make Indian exports and domestic production uncompetitive as energy taxes are not under GST, and hence, no input credit is given.
2. **Power:** The high industrial/commercial tariff and the cross-subsidy regime have affected the competitiveness of the industrial and commercial sectors.
3. **Oil & Gas:** Lack of market-driven gas prices for old fields disincentivises further production. Also the gas pipeline infrastructure is not adequate.
4. **Coal:** There is a tendency to expand open-cast mining and discourage underground operation even for better quality coal reserves.
5. **Renewable energy:** High energy costs result in renegeing on old Power Purchase Agreements and erode their sanctity. This leads to uncertainty regarding power off-take and consequently endangers further investments.
6. **Energy efficiency:** Limited technical capabilities, high initial capital expenditure, limited market and other issue have affected efforts to achieve energy efficiency.

Way Forward

- **Power:** All PPAs including those with state generation companies should be based on competitive bidding. For agriculture, **an upfront subsidy per acre of land** through DBT may be considered instead of providing separate subsidies for fertilizers, electricity, crop insurance etc.
- **Oil & Gas:** It is important to provide for a **common carrier and open access** to gas pipelines and separate the development and regulatory functions of the PNGRB. In addition, providing for shared infrastructure for evacuation of oil and gas from small and scattered on-shore and offshore fields should be made possible.
- **Energy efficiency:** Promote the mandatory use of LED and the replacement of old appliances. Focus the UJALA (Unnat Jyoti by Affordable LEDs for All) programme on lower-income households and small commercial establishments. Widen and deepen the **Perform, Achieve and Trade (PAT) programme**; make **Energy Saving Certificate** trading under the PAT scheme effective by ensuring strict penalties against defaulters. Promote the use of the public transport system.

C. TRANSPORT

Roads

The road sector in India accounts for the largest share in the movement of both passengers and freight.

Over the years, both accessibility and mobility have improved through construction of new roads and development of existing roads.

Challenges

1. **Capacity:** the existing length of the NH network is 1.22 lakh km, which is **2.2 per cent of the country's total road network**.
2. **Maintenance:** regular preventive maintenance has to be an integral element of road investment.
3. **Land acquisition:** Existing land laws should be amended to complete infrastructure project at a fast pace.
4. **Inter-agency co-ordination:** Horizontal and vertical inter agency cooperation is needed for planned land use to ensure inter-modal connectivity and to connect well with other parts of the network to boost overall capacity.
5. **Funding:** Sources for road funding are principally commitments from gross budgetary outlays, though these may stem from earmarked revenue streams, taxes and cess, dedicated road funds, or special development programmes such as the Pradhan Mantri Gram Sadak Yojana (PMGSY).

Way Forward

1. **Increase connectivity** by expanding the road network:
2. **Improve road maintenance and safety** by adopting a maintenance management system
3. **Streamline land acquisition**
4. **Skill development:** Introduce vocational training courses on road construction in industrial training institutes and ensure stringent testing of driving skills before granting driving licences.
5. **Increase emphasis on research and development (R&D):** Earmark 0.1 per cent of MORTH's annual budget for R&D, establish a transport data centre at the national level for applied research on roads etc.
6. **Increase the capacity and reach of public transport:** The Central Government will have to work with states to develop bus terminals and provide support on technologies/software such as **VAHAN** (for vehicle registration) and **Saarthi** (for driving licences).
7. **Expand the reach of the electronic toll collection (ETC) system:** Streamline the 'FASTag' charging system, and engage with stakeholders and concessionaries (for PPP toll plazas) to ensure that all toll plazas have the requisite infrastructure for ETC.

Railways

- The Indian railways (IR) is the third largest railway network in the world under a single management and is the fourth largest network in the world in terms of route km (67,368 km in FY17).
- IR's golden quadrilateral and its diagonals make up only 15 per cent of the total route of the railways but it transports 52 percent of passenger traffic and 58 per cent of total freight load.
- For efficient transportation there is need to achieve the following objectives:
 - **Augment the capacity** of existing railway infrastructure.
 - Increase **the speed of infrastructure creation** from the present 7 km/day to 19 km/day by 2022-23.

- **Achieve “100 per cent” electrification** of broad-gauge track by 2022-23 from the 40 per cent level in 2016-17.
- **Increase the average speed** of freight and mail/express trains to 50 km/hr (from about 24 km/hr in 2016-17) and 80 km/hr (from about 60 km/hr), respectively.
- **Improve the safety of the railways**, achieving zero fatalities.
- Enhance services delivery, achieving 95 per cent on-time arrivals by 2022-23.
- **Increase the share of non-fare revenues** in total revenues to 20 per cent.

Challenges

- **Over-stretched infrastructure** with 60 per cent plus routes being more than 100 per cent utilized, leading to a **reduction in average speed** of passenger and freight trains. Moreover, negligible non-fare revenues and high freight tariffs have led to a sub-optimal freight share.

Way Forward

- Improve capacity utilization and timely completion of maintain and upgrade the existing network to ensure that supply keeps up with demand.
- Ensure that the dedicated freight corridors (DFCs) earlier planned and the Mumbai-Ahmedabad High Speed Rail (MAHSR) are completed on schedule.
- Opening up the ownership and operations of freight terminals and ownership of locomotives and rolling stock and consider transferring coach and locomotive manufacturing and repairs to the private sector under a transparent, neutral (non-railway) and fair regulatory mechanism.
- Monetize land resources with the railways, particularly through developing non-railways, revenues such as through retail or other activities.
- Focus must be on increasing the use of proven, advanced technologies such as automatic train protection, fog safety devices and on-board/online condition monitoring systems.

Civil Aviation

- India’s civil aviation sector has been growing steadily; the number of passengers was 158 million in 2016-17.
- There has been an increase in air cargo, both domestically and internationally, in 2016-17. IATA has forecast that India will cross over into the top 10 air freight markets in 2018-19.
- The World Economic Forum’s Global Competitiveness Report, 2018 ranks India as 53rd out of 140 countries worldwide in air transport infrastructure.

Objectives

- **Enhance the affordability** of flying to enable domestic ticket sales from 103.75 million in 2016-17 to 300 million by 2022.
- **Double air cargo** handled from about 3.3 million tons in 2017-18 to about 6.5 million tonnes.
- Expand the maintenance, repair than overhaul (MRO) industry.
- Expand airport capacity more than five times to handle one billion trips a year.
- **Enhance availability and affordability of regional air connectivity** and revive/upgrade 56 unserved airports and 31 unreserved helipads through the regional connectivity scheme – Ude Desh Ka Aam Naagrik (RCS-UDAN).

Challenges

- Adequate hanger space and availability of land to expand airports at their current sites.
- Skilled workers: about 0.25 million persons will need to be skilled over the next 10 years
- The ministry of civil aviation has mandated that all airports move from a single to a hybrid till structure.
- Aviation turbine fuel (ATF) is relatively expensive in India.
- The number of aviation safety violations needs to be controlled.

Way Forward

- Enhance aviation infrastructure; Increase investment in the sector through financial and infrastructure support; Increase skilled manpower, promote collaboration between original equipment manufacturers (OEMs), industry and educational institutes.
- ease the regulatory environment for airports: adopt a consistent model for tariff determination so that it reduces passenger cost and align taxation and pricing structure to global benchmarks by considering bringing aviation turbine fuel (ATF) under the rubric of GST.

Ports & Shipping And Inland Water Transport (Iwt)

Objectives

- Double the share of freight transported by coastal shipping and inland waterways from 6 per cent in 2016-17 to 12 per cent by 2025.
- Increase the port handling capacity to 2,500 million metric tonnes (MMT) by 2022-23.
- Reduce the turnaround time at major ports from about 3.44 days (2016-17) to 1-2 days (global average) by 2022-23.
- Augment the capacity of inland water transport by increasing the least available depth.

Ports and Shipping

- Around 90 per cent of India's external trade by volume and 70 percent by value are handled by ports. Twelve major ports and 205 non-major ports operate on India's coast.
- The **Ministry Of Shipping's Sagarmala Programme** focuses on modernizing and developing ports. It aims to reduce the logistics costs for foreign and domestic trade, leading to an overall cost savings of rs. 35,000 to rs. 40,000 crore annually by 2025. It also aims to double the share of water transportation in the modal mix.
- The government has set up the **Sagarmala Development Company Limited (SDCL)** to undertake port-rail connectivity projects under Sagarmala.

Inland Waterways

- IWT carries less than 2 per cent of India's organized freight traffic and negligible passenger traffic. Until 2015, there were only five National Waterways in the country.
- In April 2016, 106 more waterways spread over 24 states were declared as NWS. The Ministry is augmenting the capacity of NW-1 under the **Jal Marg Vikas project**.

Challenges

- A minimum draft depth of 18 meters is needed to enable mother vessels to dock at ports.
- It is difficult to attract capital for building inland vessels as it is a significant investment.

Way Forward

- Dredging market to open up attracting more players particularly international players, in dredging activities.
- Expedite the completion of various projects under sagarmala.
- IWT should be integrated to multimodal/ intermodal connectivity.

Logistics

- The contemporary definition of logistics involves the integration of information, transportation, inventory, warehousing, materials handling and packaging.
- Logistics management includes the design and administration of system to control the flow of material, work-in-progress, and finished inventory to support business unit strategy.

Objectives

- Achieve multi-modal movement of cargo on par with global logistics standards.
- Reduce the logistics cost to less than 10 per cent of GDP from the current level of 14 per cent.
- Improve logistics skilling and increase jobs in the sector to 40 million by 2022-23.

Challenges

- Absence of last mile connectivity and infrastructure, competition and underutilized capacity, lack of interoperability of software systems used by the authorities governing different modes of transport leads to increase in transit time.

Way Forward

- Rationalize tariffs and determine prices in an efficient manner across different modes, create an overarching body that maintains a repository of all transport data to internal stake-holders and conduct robust analysis of the data, setting up multimodal logistics parks etc. will help address issues related to infrastructure development.

Development With Inclusive Policy**Sustainable Development Goals (SGDS) and Inclusion**

- SDGs came into effect in January 2016. India is signatory to it and is committed to global society agenda to reduce all forms of inequality. The SGDS are focusing on global efforts to end poverty, to end discrimination and ensure peace and well-being of all.
- In the context of inclusion, the goal 10 of sustainable development is "to reduce inequality within and amongst countries".
- The goal 16 of the sustainable development is dedicated to the promotion of peaceful and inclusive societies for sustainable development, the provision of access to justice for all, and building effective, accountable institutions at all levels.