Resurgent India

Addressing Rural Poverty: Livelihood Development and Diversification
India’s Journey towards a $5 Trillion Economy
Water Conservation as a National Movement
Reforming Governance
Developing a Knowledge-based Society
INCREDiBLE RESULTS

CSE 2018 Results

11 Ranks in Top 50
28 Ranks in Top 100
183 Ranks in the Final List

Rank 11 Pujya Priyadarshini
Rank 16 Dhodmise Trupti Ankush
Rank 21 Rahul Jain
Rank 24 Anuraj Jain

CSE 2017

5 Ranks in top 50
34 Ranks in top 100
236 Ranks in the final list

Rank 3 Sachin Gupta
Rank 6 Koya Sree Harsha
Rank 8 Anubhav Singh
Rank 9 Soumya Sharma
Rank 10 Abhishek Surana

CSE 2016

8 Ranks in top 50
18 Ranks in top 100
215 Ranks in the final list

Rank 2 Anmol Shek Singh Bedi
Rank 5 Abhilash Mishra
Rank 12 Tejaswi Rana
Rank 30 Prabhush Kumar
Rank 32 Avdesh Meena

CSE 2015

5 Ranks in top 50
14 Ranks in top 100
162 Ranks in the final list

Rank 20 Vipin Garg
Rank 24 Khumanthem Diana Devi
Rank 25 Chandra Mohan Garg
Rank 27 Pulkit Garg
Rank 47 Anshul Agarwal

CSE 2014

6 Ranks in top 50
12 Ranks in top 100
83 Ranks in the final list

Rank 4 Vandanara Rao
Rank 5 Suhanraha Bhagat
Rank 16 Ananya Das
Rank 23 Anil Dhameliya
Rank 28 Kushaal Yadav
Rank 39 Vivekanand T.S

CSE 2013

5 Ranks in top 50
62 Ranks in the final list

Rank 9 Divyanshu Jha
Rank 12 Neha Jain
Rank 23 Prabhav Joshi
Rank 40 Gaurang Rathi
Rank 46 Udita Singh
Gist of Yojana September 2019 Issue: Resurgent India

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Chapter 1: Addressing Rural Poverty: Livelihood Development and Diversification

Introduction:

- Poverty is multi-dimensional and therefore requires a range of interventions.
- Requirements for creating poverty-free Rural Clusters include:
  - Connectivity, Roads, Internet, LPG, IT/DBT
  - Power, Housing, ODF, Waste management
  - Water conservation
  - Health and Nutrition
  - Bank credit, Financial Inclusion
  - Education, Skill development
  - Women SHGs, Economic Activity
  - Well-being of the vulnerable
  - Non-Farm livelihood, Multiple livelihoods
  - Sports Youth Clubs Culture
  - Social Protection for old, widows and disabled

Efforts being made:

- The past 4 years have seen a considerable stepping up of financial resources for the improvement of poor households in terms of allocation.
- Annual expenditure in 2017-18 is more than double of what it was in 2012-13.
- Other additional efforts being made to address rural poverty include:
  - The Pradhan Mantri Awaas Yojana Gramin (PMAY-G)
  - Increased amount to fund transfer as mandated by the 14th Finance Commission
  - Leveraging of bank loans by Women Self Help Groups (SHGs)
  - Specific resource provision for Rural Poverty Programmes
  - Thrust on Swachh Bharat Mission (SBM)
  - Increase in the allocations of the Ministry of Agriculture and other infrastructure
  - Livelihood Programmes for the poor

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.
- The Socio-Economic Caste Census (SECC) 2011 released in 2015 provided an Evidence-Based Criteria for selection of beneficiaries.
- The application of deprivation criteria of SECC to the provision for LPG Gas connection under Ujjwala, and the free household electricity connection under Saubhagya, has ensured that the benefits of development reach the most deprived on priority.
- The use of SECC in finalization of Labour Budgets to States under Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) and insistence in enrolment of all women from households with deprivation under SHGs of Deendayal Antyodaya Yojana National Rural Livelihoods Mission (DAY-NRLM) have ensured that the regions with larger number of poor households receive top 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 Sector.

**Examples of Success:**

- 143 Lakh hectares of land have been provided for the benefit of Water Conservation works.
- 33 Lakh women farmers are being supported under non-chemical based agro ecological interventions.
- 86,000 Producer Groups and 126 Agri Producer Companies have been established.
- Over 6,000 Barefoot Technicians have been trained and given certification.
- 10,949 Rural Masons are trained and certified under the Housing Programme.

**Analysis of the Impact:**

- National Institute of Public Finance and Policy (NIPFP) was requested to assess the impact of Pradhan Mantri Awaas Yojana-Gramin (PMAY-G) on Income and Employment. The report estimates that the scheme could have generated about 52.47 crore person-days.
- For Rural Infrastructure, the Pradhan Mantri Gram Sadak Yojana (PMGSY) has been a flagship programme and during the last 4 years, 1.69 lakh km of roads were constructed.
- Studies of water conservation work under MGNREGA by the Institute of Economic Growth confirmed an increase in income, productivity, acreage, and the water table.
- The person-days generated under MGNREGS in the last 3 years have been in the range of 235 crores every year. This is higher than the past records, indicating how the thrust on durable assets and Individual Beneficiary Schemes (IBS) has generated a steady demand for MGNREGS.
- 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 (CPI) 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 CPI for Agricultural Labour.
- Evaluation studies by the Institute of Rural Management, Anand (IRMA) have also confirmed an increase in incomes, productive assets, and enterprises in villages where women Self-help groups are active under Deen Dayal Antyodaya Yojana–National Rural Livelihood Mission (DAY – NRLM).

**Factors contributing to types of poverty:**

1. **Poverty of Households**
   - 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/moneylender
   - Absence of Social Capital-collectives of women/youth/poor households

2. **Poverty of Geographies**
   - Low price for produce-distress
   - Violence/crime

https://byjus.com
- Unirrigated agri/vagaries of monsoon
- Lack of basic infra-roads, electricity, internet
- Lack of access to markets and jobs
- Lack of non-farm opportunities
Chapter 2: India’s Journey towards a $ 5 Trillion Economy

India is poised to rise steadily on the path of becoming a global power. This presents people with both opportunity and mandate to envision a New India and the world order that citizens aspire to create and 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 Sabhyata (culture and civilizational linkages). This has found a place in the global engagements through the ‘Neighbourhood First’ and ‘Act East Approach’.
  - 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”.
  - 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.
- The emphasis, however, 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.

Achieving a $ 5 Trillion Economy

- At the Governing Council Meeting of the NITI Aayog, the Prime Minister announced the target of a $5 trillion economy for India by 2024.
  - The Economic Survey has laid a road map where it stresses that India must grow at 8 percent to achieve its target of a $5 trillion economy.
  - 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 a key driver, that drives demand, creates capacity, increases labour productivity, introduces new technology and generates jobs.
- The Survey mentions two types of economies, “a virtuous cycle or a vicious cycle”. The survey states that, when the 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.

1. Focus on Micro, Small and Medium Enterprises (MSMEs) Sector
   - The significance of 65 million MSMEs that create about 120 million jobs and 30 percent of the country’s economic output and account for around 30 percent of total employment generation cannot be underestimated.

2. Focus on Agriculture Sector
   - The problem in the agriculture sector is not that of the level of productivity, but how the produce can be converted into a 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 the growers better bargaining power in the market.
   - In order to achieve this, the Government has focused on the development of a sustainable and
efficient cold-chain infrastructure in India for which the National Centre for Cold-chain Development (NCCD) has been working with the private sector, the Ministry of Agriculture and the Ministry of Food Processing Industries.

3. Focus on Services Sector

- Services contribute to 56.5 percent of GDP but create only 30 percent of jobs.
- The sector needs to develop expertise in the Internet of Things (IOT), Artificial Intelligence (AI), Virtual Reality (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 an $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 of foreign currency every year.
- There is a huge potential in the construction sector which contributes 10 percent to India’s GDP and it is the largest job-generating sector after agriculture.

4. A Trillion Dollar Opportunity in Digital India

- Through the 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 economy in 2025, up from around $200 billion that is currently generated.
- India’s digital consumer base is the second-largest in the world and is growing at the second-fastest rate amongst major economies. Its inclusive digital model is narrowing the digital divide within the country and bringing benefits of technology to all segments of people.

5. Vision for New India

The New India would be a $5 trillion economy and a model of good governance for the world. The Prime Minister has set the following Vision for New India:

1. To be free from poverty, and full of prosperity
2. To be free from discrimination, and filled with equality
3. To be free from injustices, and ensconced in justice
4. To be free from squalor, and covered with cleanliness
5. To be free from corruption completely and be governed with transparency
6. To be free from unemployment, and focus on being enriched with employment
7. To be free from atrocities against women, and build a society with respect for women
8. To be free from despondency, and be full of hope.

Conclusion:

It is 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.
Chapter 3: 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 percent of the geographical area of the world while harbouring nearly one-sixth of the global population. It is the world’s highest owner of livestock (512 million heads).
- India harbours only 4 percent of the world’s freshwater resources. Less than 1 percent of the freshwater is easily accessible in lakes and rivers.
  - The agriculture sector alone consumes nearly 70% of the freshwater used by humans.

Factors causing Water Crisis:

- The extent and severity of water scarcity in different parts of the country are on the rise owing to:
  1. Enhanced runoff due to deforestation and loss of green cover resulting in an urban ‘grey’ environment.
  2. Changing lifestyles and enhanced consumption patterns.
  3. Expansion of irrigated agriculture and resultant exploitation of depleting groundwater.
  4. Creation of physical barriers leading to the storage of water in large reservoirs/barrages and diversion of water by canals.
  5. Wastage of water by leakage and neglect.
  6. Inadequate facilities for recycling and rainwater storage.
  7. Pollution of water by sewage and dumping of industrial effluents.

Impact of water pollution:

- The country is expected to become ‘water-stressed’ as per capita surface water availability is on the decline.
- Several metropolises and rural areas face an 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.
- The water crisis in many remote rural areas, particularly in the Himalayan region, is a cause of drudgery as fetching water from long distances continuously affects women and takes away a considerable amount of their time from work, family care, and also results in the loss of economic opportunities.

Conservation

Nature, Water, and People

- Nature acts as a regulator, a cleaner and/or a supplier of water. Maintaining healthy forests and other ecosystems directly leads to improved water security not only for wild denizens but for everyone.
- While forests often receive the most attention when it comes to land cover and hydrology- the 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.

**Water Conservation**

Water conservation primarily involves three objectives:

1. Enhancing water availability
2. Improving water quality
3. Reducing water-related risks

**A National Movement - Efforts being made:**

- The Government of India has realized the merit of adopting a comprehensive approach towards water conservation.
- The Unified Central Ministry of Jal Shakti has been made responsible for laying down policy guidelines and coordination of programmes for the development and regulation of the country’s water resources.
  1. The Ministry launched ‘Jal Shakti Abhiyan’, a campaign for water conservation and water security.
  2. The campaign will run through citizen participation while the focus of the campaign would be on water-stressed districts and blocks in the country.
- India has made huge investments towards the implementation of an ‘integrated watershed development programme’.
- Some of the other prominent programmes/schemes launched by concerned Ministries are:
  1. Pradhan Mantri Krishi Sinchai Yojana (PMKSY)-‘Har Khet ko Pani’ and ‘More Crop per Drop’
  2. Jal Shakti Abhiyan
  3. River Basin Management
  4. National Water Mission
  5. National Mission for Clean Ganga-Namami Gange
  6. National Mission for Sustainable Agriculture
  8. Dam Improvement and Rehabilitation Programme
  9. Interlinking of Rivers
  10. Ground Water Management
  11. Flood Control and Forecast
  12. Biodiversity Conservation
  13. Wetland Conservation
  14. Green India Mission
  15. Compensatory Afforestation Fund Management and Planning Authority (CAMPA)
  16. National and State Level Action plans on Climate Change. (Read more on [Climate Change in India](https://www.india.gov.in).)
- The Government during the period 2014-19 has implemented the ambitious programme of Namami Gange aiming for Ganga rejuvenation by way of forestry interventions, establishment, maintenance of STPs, and conservation of aquatic life, etc.
- Several states have also initiated their own flagship programmes related to water management. Some prominent ones are:
  2. ‘Green Mahanadi Mission’ of Odisha Government focusing on the rejuvenation of
Mahanadi River.

3. 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.

Way Forward:

The following six actions are prioritized for making water management sustainable in the country as a reality through an aggressive national movement:

1. **Institutions and Governance Institutions**: Institutions working/contributing directly or indirectly towards water management would require strengthening and augmentation of manpower and financial resources.

2. **Participatory Approach**: Establishment of a mechanism to implement and enforce judicious use of water and efficient management of precious water resources.

3. **Knowledge Management**: 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.
   1. Development of ‘Nature-Based Solutions’ for various aspects of water management offers better opportunities and would be of immense help.

4. **Ecosystem-Based Management Approach**: The move from isolationist approaches to holistic approaches is desirable on a priority basis. Thereby, focus on river basins and riverscapes for planning, assessment, and interventions is the need of the hour.

5. **Continuous Care**: This aspect seeks concerted efforts towards the conservation of existing water sources as well as rejuvenation of rivers/restoration/recharging of the depleted water resources.

6. **Capacity Development**: Success towards countering water wastage and the degradation of natural ecosystems could be accomplished by creating awareness and appropriate capacity development of various stakeholders.
Chapter 4: Reforming Governance

- The avowed objectives of “Sabka Saath, Sabka Vikaas and Sabka Vishwaas” and the Prime Minister’s clarion call of achieving a 5 trillion dollar economy by 2024-25 necessitate 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 out of the remaining chapters, most had emphasized on good governance for better service delivery and more effective outcomes. The steps taken in this regard are:

1. 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 for:
       - Discussion 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/UTs’ 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.
     - It’s based on the principle that when districts compete amongst themselves, States would emerge stronger and when States compete amongst themselves, the nation would become stronger.

2. Direct Benefit Transfer and Use of Aadhaar
   - Currently, about 439 schemes across 55 Ministries are covered by DBT.

3. Outcome-Based Monitoring
   - There has been a structural change in the budget-making process with the removal of Plan/Non-Plan distinction and rationalization of Centrally Sponsored and Central Sector schemes.
   - A major step in this direction is the introduction of Outcome-Based Budgets since the Union Budget 2017-18.
     - It’s important for 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, presented in the Parliament covers 163 major central sector/centrally sponsored schemes.
   - Currently, a major exercise of independent evaluation of 28 Centrally Sponsored Schemes is
underway by the NITI Aayog.

4. E-Governance

- With advancements in Information and Communication Technology (ICT) coupled with the 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 is covering multiple projects of various Central Ministries/Departments and States/UTs.
- 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 to provide information to citizens seeking feedback and for resolution of 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 3,700 services across Central Ministries and State Governments have been integrated.

5. Administrative Reforms

- Reforms in civil services are a continuous process and several initiatives have been undertaken such as:
  - The introduction of a multi-stakeholder feedback performance evaluation
  - Dispensing interviews for lower-level positions
  - The introduction of online mechanisms for appraisals and filing of various returns by employees
  - Implementation of e-office
  - Strengthening the training
  - Merit-based postings
- NITI Aayog has taken the initiative of inducting highly motivated Young Professionals and Consultants on a contractual basis in its workforce, to provide a fresh perspective in the way the Government thinks and operates.
- The strategy for New India@75 document of NITI Aayog has proposed transformative measures, such as:
  - Improving teeth to tail ratio
  - Promoting officer oriented culture
  - Bringing down the number of civil services and allocating candidates as per competencies
  - Encouraging lateral entries and specialization
  - Reducing the 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 data security for citizens.

6. Law and Order

- Though law and order is a state subject, the Government of India would need to continue engaging states to reform their policing.
Some of the suggestions include:
  o The adoption of the Model Police Act of 2015.
  o Filling up vacancies and a greater representation of women
  o Reforms in the FIR system with greater usage of IT
  o Training/sensitization of police personnel
  o 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. The focus needs to be on arbitration so that most cases get resolved out of the 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 a 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 the larger vision. The Government needs a collaborative approach of all stakeholders which includes the judiciary, civil society, corporates, think tanks, academia, media and citizens themselves.
Chapter 5: Developing a Knowledge-based Society

ISRO had 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 'Bahubali', placed the Chandrayaan-2 in a highly elliptical orbit around the earth. India thereby reaffirmed its well-established position in the elite space club of developed nations.

Larger Background:

- India was flourishing in scientific thoughts and inventions starting from 5000 BC. There are 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 were taken by the government for setting up national educational institutes like IITs and research establishments for atomic energy, space research, defense, agriculture, etc. which are paying rich dividends till date.
- The R&D activities in atomic energy have enabled India to achieve self-reliance and use the energy for peaceful and military applications.
- The most important achievement had been in the field of agriculture. In the mid-sixties, the Green Revolution was brought in by Dr. M. S. Swaminathan and his team.

Initiatives by the government:

- The government is taking a number of initiatives to create an intellectual society, by spreading digital connectivity and services in the rural areas.
- 2019’s budget has identified thrust areas like biotechnology, science education and industrial application of R&D results.
  - But the budget allocation for the Science & Technology sector is less than 0.8% compared to about 3-5% by developed countries, and also 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. Atomic energy and space have total autonomy with the respective empowered commissions to set guidelines and in overseeing their activities.

Way Forward:

- An integrative model in other key sectors incorporating related activities and enabling them with empowered commissions is the need of the hour.
- A few examples of aggregating can be in the following areas:
  - Climate change
  - Water resource management
  - Agricultural land use
  - Medicine including Ayurveda
  - Science education
- Empowered commissions would bring in the required focus on the research activities to be taken up for solving the day-to-day problems of people.
- The investments in human resource development aiming at enabling the youth power with a scientific temper has to be given topmost priority.
- The STEAM (Science, Technology, Engineering, Arts and Mathematics) method should be implemented such that children are enabled to think independently and analyze and take decisions.
in a logical manner.
Chapter 6: Energy – A Key Driver of Socio-Economic Growth

India is the third-largest consumer of energy in the world, with the demand rising by five percent annually. With energy demand set to double by 2040, India needs a robust energy sector. The country is steadily increasing its renewable energy capacity while looking to achieve the target of 175 GW by 2022.

Importance:

- Sustainable energy that is available in the right amount, at the right time, at the right place, and when affordable for the entire society, can yield major socio-economic benefits.
- 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 the lives of the disadvantaged sections of society.

Access to Clean and Affordable Energy:

- **UN Sustainable Development Goal (SDG) 7** pertaining to Access to Clean and Affordable Energy, has undeniable positive spill-overs 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 India’s population, living in rural areas, still lack electricity connections. Another key issue is **per unit cost of power**, which determines whether it is affordable for households that need it most.
- In 2017, the government launched the Saubhagya scheme targeting universal electrification and it has covered more than 99 percent of 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 (Distribution Companies) affecting their performance. The government has announced the **Ujwal DISCOM Assurance Yojana (UDAY)** scheme to spark a financial revival of discoms.

Impacts of Clean Energy Access:

- Energy access is essential for commerce and industry to thrive and create income-generating opportunities.
- Firms with energy access have higher labour productivity due to reasons of efficiency, comfort and resource optimization.
  - 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 by ensuring a wider market for their output.
- It also has a key role to play in ensuring universal access to clean water and sanitation. The treatment of wastewater through energy, and then using energy to transport the water illustrates the critical water-energy nexus.
- 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 as a tool of Women’s Empowerment:
• Energy access has the potential to positively influence women’s health, education, finance, and access to information, especially in backward regions.
• 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. This provides them with much-needed income, which translates into enhanced self-esteem and social standing.
• Energy access can catalyze a more gender-equal society, where women are well-integrated into the economic mainstream, thus resulting in holistic and inclusive growth.
• 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.
  o 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.
Chapter 7: Skills for a $5 Trillion Economy

The Prime Minister has set a target for India to be a $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.

- With half of its population below the age of 25, India has the world’s youngest population.
- India is slated to go through a phase of a sharp slowdown in population growth in the next two decades, as pointed out in the Economic Survey for 2018-19.
  - This indicates 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 biggest challenge in the present times, therefore, is of converting this transition into a dividend—the number of those gainfully contributing to economic growth equals the number of those dependent on them.

Steps taken by the government:

- **The National Skill Development Policy** was initiated in FY 2009.
- The **National Skill Development Fund (NSDF)** and the **National Skill Development Corporation (NSDC)** were 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 FY 2013.
- The Skill India Initiative was launched in 2015.
- A flagship programme **Pradhan Mantri Kaushal Vikas Yojana (PMKVY)** aims to mobilize 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 development include:
  - Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDUGKY)
  - Pradhan Mantri Kaushal Kendras (PMKK)
  - 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 the workplace.
- **SANKALP**, launched in 2017, aims to create convergence among all skill training activities, improve the quality of skill development programmes and create an industry-led and demand-driven skill training capacity.
- **STRIVE**, is another initiative launched in 2017, which aims to create awareness through industry clusters, integrate and enhance the delivery quality of the ITIs.
- The **New Education Policy** aims to introduce skills in schools, colleges, and Universities. The **Ministry of Skill Development and Entrepreneurship (MSDE)** is in the process of restructuring the **National Quality Standards Framework (NQSF)** and the National Council for Vocational Training. There are discussions on revamping the PMKVY.
- **NSDC Contributions:**
  - The NSDC is a Public-Private Partnership Company and has acted as a catalyst in skill development. The Federation of Indian Chambers of Commerce & Industry (FICCI) is a shareholder of NSDC.
  - To enable industry-led competence 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 a National level competition is being organized.
The winners of the National competition represent India in the World Skills Competition.

- The last competition was held in Kazan, Russia in August 2019.

- NSDC has 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 labour 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 Analysis:**

- The impact analysis of the short-term training under PMKVY on employment shows that training and certification have led to a nine-percentage point increase in the proportion of employed individuals.

- In terms of income, PMKVY training and certification have contributed 15 percent to the mean monthly income.

**Steps Taken to Improve Job Orientation of Higher Education**

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

1. There are 1109 skill-oriented courses being run by the University Grants Commission (UGC) and All India Council for Technical Education (AICTE) through 556 institutions.

2. A new and updated vocational curriculum is being developed.

3. AICTE has launched an internship portal to facilitate industry internship to students.

4. 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.

5. Technical Education Quality Improvement Programme (TEQIP) Phase-III is under implementation to enhance quality, equity and employability in selected engineering education institutions.

6. National Career Service (NCS) portal has been launched as a common platform to bring together stakeholders like job seekers, employers, counsellors, local service providers and trainers, etc. to facilitate the convergence of information and link job seekers with job providers.

**Conclusion**

The skills ecosystem that has been created could 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 to enable the right person to be trained and recruited. Similarly, India could train for the world.
Chapter 8: Best Practices for Ground Water Harvesting

Some of the best practices for groundwater harvesting in different parts of the country, which are also supportive of the goal of water conservation are:

1. **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.

2. **Kapil Dhara Construction of Dug Wells under MGNREGA, Madhya Pradesh**

Construction of dug wells for irrigation purposes and various water conservation structures like check dams, stop dams, contour trenches, etc. have enabled farmers to irrigate their fields and they are able to sow wheat and rice in place of jowar and maize which were grown earlier due to shortage of irrigation facilities.

3. **Farm Pond On-Demand Scheme, Vidarbha and Marathwada Region, Maharashtra**

It reduces dependence on groundwater, reduces the power required to pump water as compared to groundwater; cultivation on bunds generates extra income and recharges groundwater.

4. **Jalyukta Shivar Abhiyan, Maharashtra**

Jalyukta Shivar Abhiyan was launched in 2015-16, and it includes:

- Arresting rainwater within the village boundaries
- Increasing groundwater level
- Creation of decentralized water bodies
- Rejuvenation of the old water storage structures
- Creation of new water bodies
- Restoring the storage capacity
- Increasing the area under protective irrigation by efficient water use
- De-silting of structures with people participation
- Creation of water awareness, publicity, and sensitization among the people
- People’s participation in water budgeting.

5. **Sujalam Sufalam Jalsanchay Abhiyan 2018, Gujarat**

The aim was to increase the storage capacity of the existing reservoirs by the de-silting of check-dams and deepening the ponds, lakes, and riverbeds, besides cleaning the rivers to accommodate more rainwater.

6. **Pani Panchayat: Odisha Water Resource Consolidation Project**

The primary objective of the Orissa Water Resource Consolidation Project (OWRCP) was to improve the planning and development process for the state’s water resources. The main objectives of the intervention are:

- To promote and secure an equitable distribution of water among its users
- Adequate maintenance of the irrigation system
- Efficient and economical utilization of water to optimize agricultural production
- To protect the environment and ensure ecological balance, while inculcating a sense of ownership
of the irrigation system in accordance with the water budget and the operational plan.

7. **Mukhyamantri Jal Swavlamban Abhiyan, Rajasthan**

Rainwater harvesting involves the construction of various water conservation structures and participatory approaches. Watershed development activities in an exhaustive and scientific manner helped in intercepting additional 11170 Mcft monsoon water that resulted in:

- Better availability of potable water during summer
- Improvement in groundwater
- The revival of defunct hand pumps, tube wells, and open wells
- Enhanced water availability for lean season irrigation resulted in an increased area under lean season crop & orchard
- Developing and sustaining flora and fauna
- Mitigating drought abuses and reducing the plight of masses

8. **Artificial recharge for Spring rejuvenation, South Sikkim district, Sikkim**

- Staggered trench for artificial recharge in the spring shed.
- Enhancing yield of springs for spring rejuvenation.

9. **Mission Kakatiya, Telangana**

Mission Kakatiya programme aims at restoring all the minor irrigation tanks and lakes in Telangana State. The objective of Mission Kakatiya is to enhance the development of agriculture-based income for small and marginal farmers.
Chapter 9: Transforming Indian Health Systems

The National Health Policy (NHP) 2017 has provided a concrete shape giving direction to the health sector and has universal health coverage as its central goal. A few action-steps to ensure that the country is on track for better health outcomes for the people of India are:

1. **Prioritize Primary Health Care (PHC)**
   - Indian states have an elaborate network of nearly 200,000 Government Primary Health Care Facilities (GPHCFs), which deliver around 10 percent of the total out-patient services (excluding mother and child health services).
   - The NHP 2017 has proposed to increase the overall utilization of government health services from 30 percent to 50 percent.
   - Thailand started on strengthening PHC in 1971, nearly 30 years before starting on the famed Universal Coverage Scheme in 2001.
   - India needs to consider adopting a similar approach to deliver comprehensive primary healthcare.

2. **Stronger Health Systems through Stronger PHC System**
   - **Re-design PHC system based upon available local evidence:**
     A study of best performing PHC in 4 states of India-Kerala, Tamil Nadu, Maharashtra and Meghalaya identified:
     a. An assured package health service with ‘limited intention to availability gap’
     b. Appropriate mix and sufficient availability of providers
     c. Continuum of care with functional referral linkages
     d. Initiatives to achieve a quality standard
     e. Stronger local level leadership
     f. Community engagement as some of the common characteristics in these facilities.
     - The proposed Health and Wellness Centres (HWCs) under Ayushman Bharat Programme (ABP) have been derived from these learnings and it can be hoped that it will improve PHC services in India.

3. **Correcting ‘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 levels. Ideally, these services should be available at PHC level facilities.

4. **Start focused initiatives to tackle the Social Determinants of Health (SDH):**
   The determinants for better health care are:
   - 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 the 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 a need for multi-sectoral planning and ‘Health in all policies’ approach.

The initiatives to tackle SDH could be added as the third component under ABP, in addition to existing HWCS and Pradhan Mantri Jan Arogya Yojana (PMJAY).

5. **Strengthen Urban health governance for multi-sectoral collaboration:**

The PHC system in urban areas needs faster and effective interventions.

6. **Use of Behavioural Economics for better health outcomes**

The Economic Survey of India 2018-19 has underscored the importance of behavioural economics. Health seeking behaviour can be influenced by behavioural change. It is required to ensure that people seek early care to prevent complications, late-stage diseases and seek care at the appropriate time, which will reduce the burden from higher level of facilities.

7. **Focus on public health cadre:**

Public awareness and education about good nutrition, improved sanitation and health-promoting behaviour 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 Maharashtra have a dedicated cadre while Thailand has a vast cadre of health workers delivering preventive and promotive health services.

**Conclusion:**

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.
Chapter 10: Infrastructure Development for the Next Generation

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

PRADHAN MANTRI AWAS YOJANA (PMAY):

The Government has launched a comprehensive mission “Housing for All by 2022”. The scheme Yojana (PMAY) is implemented as a Centrally Sponsored Scheme (CSS).

1. Energy

The Government’s on-going energy sector policies aim “to provide access to affordable, reliable, sustainable and modern energy”. At the convergence of its domestic goals and the global development agenda, it also intends to hit the following milestones:

- Make available power to all by 2019
- Achieve 175 Giga Watt (GW) of renewable energy generation capacity by 2022 and
- Reduce imports of oil and gas by 10 percent by 2022-23

Challenges:

Some of the major challenges for 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 reneging on old Power Purchase Agreements (PPAs) 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 issues have affected efforts to achieve energy efficiency.

Way Forward:

a. **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 Direct Benefit Transfer (DBT) may be considered instead of providing separate subsidies for fertilizers, electricity, crop insurance, etc.

b. **Oil & Gas:**

It’s important to provide for a common carrier and open access to gas pipelines and separate the developmental and regulatory functions of the Petroleum and Natural Gas Regulatory Board (PNGRB).
Additionally, providing shared infrastructure for evacuation of oil and gas from small and scattered on-shore and offshore fields should be made possible.

c. Energy Efficiency:

- Promotion of the mandatory use of LED and the replacement of old appliances in government buildings with five-star appliances is needed.
- UJALA (Unnat Jyoti by Affordable LEDs for All) programme must focus on lower-income households and small commercial establishments.
- The Perform, Achieve, and Trade (PAT) programme must be widened and deepened.
- Energy Saving Certificate (ESCert) trading under the PAT scheme must be made effective by ensuring strict penalties against defaulters. There is a need to promote the use of the public transport system.

2. Transport

a. Road

- India has the world’s second-largest road network, and most dense among countries according to size.
- 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 the construction of new roads and the development of existing roads.

Challenges:

1. **Capacity**: The existing length of the NH network is 1.22 lakh km, which is 2.2 percent 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 projects at a fast pace.
4. **Interagency coordination**: Horizontal and vertical interagency 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:
   1. Earmarked revenue streams
   2. Taxes and cess
   3. Dedicated road funds
   4. 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**: Maintain NH assets by adopting a Maintenance Management System (MMS).
3. **Streamline land acquisition**.
4. **Skill Development**: Introduce vocational training courses on road construction in Industrial Training Institutes (ITIs) and ensure stringent testing of driving skills before granting driving licences.
5. **Increase emphasis on research and development (R&D)**: Earmark 0.1 percent of the Ministry of...
Road Transport and Highways' (MoRTH) annual budget for R&D, and establish a transport data centre at the national level for applied research on roads.

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 Sarathi (for driving licences).

7. **Expand the reach of the Electronic Toll Collection (ETC) system:** Streamline the ‘FASTag’ charging system, and engage with stakeholders and concessionaires to ensure that all toll plazas have the requisite infrastructure for ETC.

**b. 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.
- IR’s golden quadrilateral and its diagonals make up only 15 percent of the total route of the railways but it transports 52 percent of passenger traffic and 58 percent of total freight load.

**Aim:**

- India should have a rail network that is efficient, reliable and safe. This requires achieving 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 percent” electrification of the broad-gauge track by 2022-23 from the 40 percent 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, and achieve zero fatalities.
  - Enhance service delivery, achieving 95 percent on-time arrivals by 2022-23.
  - Increase the share of non-fare revenues in total revenue to 20 percent.

**Challenges**

- Over-stretched infrastructure with 60 percent and more routes being more than 100 percent utilized, leads to a reduction in the 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 these projects. At the same time, maintenance and upgradation the existing network is needed to ensure that supply keeps up with demand.
- India has to ensure that the Dedicated Freight Corridors (DFCs) earlier planned and the Mumbai-Ahmedabad High Speed Rail (MAHRS) are completed on schedule.
  - Opening up the ownership and operations of freight terminals, locomotives and rolling stock is the need of the hour.
  - Transferring coach and locomotive manufacturing and repairs to the private sector should be considered under a transparent, neutral (non-railway) and fair regulatory mechanism.
- Monetizing land resources with the railways, particularly through developing non-railway revenues
such as through retail or other activities is recommended.

- The focus must be on increasing the use of proven, advanced technologies such as automatic train protection, fog safety devices, end of train telemetry devices and on-board/online condition monitoring systems.

c. Civil Aviation

India’s civil aviation sector has been growing steadily. There has been an increase in air cargo, both domestically and internationally, in 2016-17. 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 an increase in domestic ticket sales from 103.75 million in 2016-17 to 300 million by 2022.
- Double air cargo handled from about 3.3 million tonnes in 2017-18 to about 6.5 million tones.
- Expand the Maintenance, Repair, and 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 unserved helipads through the Regional Connectivity Scheme-Ude Desh Ka Aam Naagrik (RCS-UDAN).

Challenges:

- Adequate hangar 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

- Aviation infrastructure must be enhanced.
- Investment in the sector needs to be increased through financial and infrastructure support.
- Increase in skilled manpower is required. Promotion of collaboration between Original Equipment Manufacturers (OEMs) industry and educational institutes is needed.
- Easing the regulatory environment for airports: Adoption of a consistent model for tariff determination is recommended so that it reduces passenger cost and align taxation and pricing structure to global benchmarks by considering to bring Aviation Turbine Fuel (ATF) under the rubric of GST.

d. Ports & Shipping and Inland Water Transport (IWT)

Objectives:

- Double the share of freight transported by coastal shipping and inland waterways from 6 percent in 2016-17 to 12 percent 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.

i. Port and Shipping:

- Around 90 percent 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.
- Sagarmala 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.

ii. Inland Waterways

- Inland Water Transport (IWT) carries less than 2 percent of India’s organized freight traffic and negligible passenger traffic.
- Until 2015, there were only five National Waterways (NWs) in the country.
- In April 2016, 106 additional 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 metres 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 must be opened to attract more players, particularly international players, in dredging activities.
- The completion of various projects under Sagarmala must be sped up.
- IWT should be integrated to multimodal/intermodal connectivity.

3. 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 the system to control the flow of material, work-in-progress, and finished inventory to support the business unit strategy.

Objectives

- Achieve multi-modal movement of cargo on par with global logistics standards.
- Reduce the logistics cost to less than 10 percent of GDP from the current level of 14 percent.
- Improve logistics skilling and increase jobs in the sector to 40 million by 2022-23 from about 22 million in 2016.

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 leading to an 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 stakeholders.
- Conduct a robust analysis of the data.
- Setting up multimodal logistics parks, etc. will help address issues related to infrastructure development.
Chapter 11: Development with Inclusive Policy

Sustainable Development Goals (SDGs) and Inclusion:

The Sustainable Development Goals (SDGs) came into effect in January 2016. India is a signatory to it and is committed to the global society agenda to reduce all forms of inequality. The SDGs are focusing on global efforts to end poverty, to end discrimination and ensure peace and well-being of all.

- In the context of inclusion, Goal 10 of Sustainable Development is “to reduce inequality within and among countries”.
- Goal 16 of 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.

Way ahead:

- In view of the social and economic disparities between marginalized and the general population, a large number of initiatives have been taken by the Government. However, the participation of all stakeholders especially the local administrative bodies is required.
- The orientation and training of key personnel are important for removing attitudinal barriers and the adoption of an inclusive approach.
- The usage of all means of communication in regional languages is required for awareness generation and publicity of government schemes.
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