Gist of Yojana Magazine February 2019

Chapter 1:Introduction

Infrastructure development can be considered the key to the life of the common man. It is also a crucial factor in the economic development of the nation. Therefore, infrastructure development has been the priority of the Government and it has taken numerous initiatives towards better infrastructure creation.

- Creating housing infrastructure is one of the key priorities of the Government. A roof over one's head is the dream of every person and the Government's Pradhan Mantri Awas Yojana was introduced to realize this dream. The PMAY aims at 'Housing for All' by 2022.
- Ensuring electricity connectivity to the villages is another important programme of the Government. The Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) and Pradhan Mantri Sahaja Bijli Har Ghar Yojana-Saubhagya schemes are transforming the lives of people in rural India.
- Creation of smart Cities is yet another major protect of the Government. The basic idea behind the Smart Cities project is not only to create cities with better civic amenities or improved infrastructure but also help create inclusive and collaborative cities, with the aim of transforming the lives of the people living there.
- Creation of infrastructure in various fields such as education, health etc. has also been the focus of the Government.
- Connectivity is a crucial aspect of infrastructure. Good roads and highways help to reach places faster. Therefore, Government aims at creating improved road and highways infrastructure under the Bharatmala scheme. Similarly, Government has given a big push to transformational in rail infrastructure as well as development of inland waterway routes. Through the UDAN scheme, the Government seeks to make air travel affordable for the common man in small cities.

Thus, creating facilities for the common man through improved infrastructure has been the priority of the Government. The various Government schemes and programs will go a long way in the process of transforming the life of citizens and ensuring all round progress of the nation.

Chapter 2: Power for All – A Dream Coming True

Access to reliable and affordable energy increases the ease of living and generates employment. It powers the development of the country. It is a prerequisite to digital connectivity in rural India. The huge addition in the consumer base at the rate of one lakh households per day, coupled with growth in the economy has meant that our electricity demand has been growing at the rate of more than 10 per cent in the past months.

Challenges faced in ensuring power for all:

- Most of these villages were located in remote inaccessible areas with difficult terrain in hilly areas, forest areas severely affected with Left Wing Extremism activities etc. and transportation of material / equipment and mobilization of manpower for execution works required determination and perseverance.

- About 350 villages located in remote and difficult terrains in Arunachal Pradesh, J & K, Meghalaya and Manipur required head loading of materials and trekking up to 10 Days.
- Materials in some villages of J & K and Arunachal Pradesh had to be transported by helicopter.
- In many villages, extending grid network was not feasible due to remote and inaccessible locations; solar based standalone systems were provided.
- Enormous challenges were confronted in electrification of Left Wing Extremism affected villages in Bihar, Jharkhand, Chhattisgarg, Madhya Pradesh and Odisha.

Steps taken by the government:

- To achieve this feat, extensive infrastructure was created under Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY).
- Special focus was on feeder separation (rural households and agricultural) and strengthening of sub-transmission and distribution infrastructure including metering at all levels in rural areas.
- The electrification of these remaining villages has paved the path for their socio-economic growth. This program has also set an example of effective cooperative federalism wherein Union Government, State Governments, Distribution Companies and administration synergized their efforts for common goal.
- The International Energy Agency called India's electrification Journey as one of the greatest success stories of the Year- 2018.
- In addition to providing mile connectivity in rural areas, the Government launched Integrated power Development Scheme (IPDS) with an aim to strengthen power infrastructure in urban areas. Focus areas of IPDDS are
    1. Strengthening of sub-transmission and distribution network in urban areas.
    2. Metering of distribution transformers / feeders / consumers in the urban areas.
    3. IT enablement and automation of distribution sector.

Other Developments:

Over the years there has been a transformational change in the Power Sector. Regulatory frame work is being reformed with a new Tariff Policy and amendments to the Electricity Act. In sum, the Indian Power sector has undergone a paradigm change.

- More than one lakh megawatts of new generation capacity has been added.
- Energy deficit has been brought down from 4.2 per cent to almost zero.
- India has become an exporter of electricity exporting electricity to Nepal and Bangladesh.
- One lakh circuit kilometres to the inter-state transmission capacity-connecting the entire nation to one grid.
- Now, for the first time we have One nation- One Grid –the entire network operating on one frequency. Power can be transferred seamlessly from one corner of the country to another.
- A major landmark to universal access to electricity was crossed when our country achieved 100% village electrification on 28th April, 2018.

Saubhagya:

- The 'Pradhan Mantri Sahaj Bijli Har Ghar Yojana' – Saubhagya was launched in 2017 with the aim to achieve universal household electrification.
- As the name of the scheme itself suggests, it has inherent features of 'Sahaj' i.e. Simple / Easy / Effortless and 'Har Ghar' i.e. inclusive universal household electrification.
- A targeted program of such a scale has never been attempted in the world. The progress is again exemplary in terms of speed and innovation.

Read more about Saubhagya

Renewable Energy:

- India is in the process of changing its energy mix.
- To make our electricity clean and green, we have developed a roadmap to achieve 175 GW capacity in the renewable energy sector by 2022, which includes 100 GW of solar power and 60 GW of wind power.
- The overall installed capacity of Renewable Energy has been more than doubled in the last four and a half years – from 34,000 MW to 75,000 MW.
- Solar capacity increased 8 times in last 4 years. Today, India stands at 5th position in the world in installed wind capacity and at 5th position in overall renewable energy.

Promoting Energy Efficiency:

- Households LED bulb distribution program UJALA and SLNP (Streetlight National Project) for replacing conventional streetlights with smart and energy efficient LED street lights have saved billions of unit electricity per year.
- Star Labelling program, Energy Conservation Building Code and energy efficiency measures through Perform, Achieve and Trade (PAT) are also important initiatives in the field of energy efficiency.

Way Forward:

- A new Tariff Policy is being finalized. It contains several consumer friendly provisions to ensure reliable and 24x7 supply of power. This policy makes it mandatory to provide reliable and 24x7 power supply for all from 1st April, 2019. If a power outage occurs without a valid reason the concerned power distribution company (DISCOM) will face penalties. This would effectively put an end to gratuitous load shedding by DISCOMs.
- Another futuristic area we are working on is –Smart Electricity Meters. This will revolutionise the power sector by way of reduced AT&C losses, better health of DISCOMs, incentivisation of energy conservation and ease of bill payments etc. Further, it will generate skilled employment for the month.
- Electrical vehicles (EVs) are another major emerging area we are focusing on. The Government has launched the National E-Mobility programme to promote electric vehicles in a big way. Creation of extensive charging infrastructure is a prerequisite for large scale adoption of EVs. The Ministry of Power is creating an enabling regulatory framework for rapid expansion of charging and storage infrastructure.

Our country jumped to 24th rank in 2018 on World Bank's Ease of Getting Electricity in the world as against 111th rank in 2014. This is a quantum leap.

Chapter 3: Multi-Pronged Approach to Urban Transformation

India's urban population was over 31% in 2011 census. This is expected to rise to 40% by 2030 and 50% by 2050. As per 2011 census, urban India contributed 63% to the GDP; it is projected to grow over 75 per cent by 2030. Due to high densities of people and assets, cities' vulnerability to the impacts of climate change, disasters and conflicts increases manifold. However, when planned and managed well, cities become engines of growth and sustained development.

Opportunities to drive the economy forward – investments in infrastructure will create jobs, improve ease of living and employ citizens to best of their abilities in the service of the nation.

Three-level strategy for Urban Transformation:

- At the first level: poverty alleviation, affordable housing and sanitation were the three biggest challenges. Deen Dayal Antyodaya Yojana-National Urban Livelihood Mission (DAY-NULM), Pradhan Mantri Awas Yojana-Urban (PMAY-U) and Swachh Bharat Mission Urban (SBM-U) are being implemented in all the urban local bodies (ULBs).
- At the second level: basic infrastructure like water supply sewerage/septage projects and green parks became the focus. To achieve this, Atal Mission for Rejuvenation and Urban Transformation (AMRUT) was introduced.
- Finally at the third level: 100 cities are being developed under Smart Cities Mission (SCM) to address the issue of ease of-living by evolving new paradigms of urban governance with communities at the core and increased-use of digital technology to improve the urban infrastructure, services and utilisation of resources.

What do we mean by Smart Cities?

- Smart Cities Mission was launched in 2015.
- Smart cities in common parlance are understood to be cities that use appropriate technologies for improving quality of lives of their citizens. Our smart Cities are woven around the following principles:
  - Citizens at the Core: Citizens and the communities are at the centre of development.
  - More from Less: Being conscious of resource constraints, they have to generate more impact/outcomes from use of less resource- energy, finance and others.
  - Cooperative and Competitive Federation: Cities are selected through competition in two stage challenges at State and Central levels.
  - Integration, Innovation, Sustainability: It is not merely about the use of technology, but creation of integrated infrastructure and services.
  - Technology is the Means, and Not the Goal: Careful selection of technologies, relevant to the context of particular cities, built around specific needs of their communities, is important for the cities to work out solutions. And
  - Inclusiveness is a Guiding Philosophy: Cities are for the people and hence they have to be built around the principles of inclusiveness.
  - Broadly, Smart Cities address three core issues; live-ability, economic-ability and sustain-ability.

The major issues which confront urban areas:

As expressed by most citizens the major issues which confront urban areas were:

- Urban mobility, affordable housing, water and waste-water management, sanitation, safety and security, health and education, and energy security.
- The power of cities to drive economic growth has been well researched and accepted.
- Creating a better investment climate, enabling creation of jobs as per needs of available talent, attracting more investment and talent, breeding innovation, reducing levels of unemployment are some of the important aspirations of smart cities.

While cities invest in infrastructure, products and services for providing a better quality of life to their citizens and create robust economics for sustained growth, they have to be conscious of sustainability. Such development is not in a fixed state of harmony, but requires a dynamic equilibrium in which everyday decisions on technology, infrastructure, processes and investments are taken in a manner which balances both present and future concerns of the society. Smart cities promote sustainable development through different initiatives.

Smart Cities Mission Strategy:

Broadly, the Mission tries to meet the major goals highlighted earlier through a two-fold strategy:

- Area Based Development: this focuses on development of world class localities within the cities to act as replicable models through redevelopment, retrofitting or green development.
- Pan City development: wherein cities identify few key areas of intervention with use of digital technologies to create impacts on basic infrastructure and services with intent to improve quality of life for their citizens.

Smart Cities Mission Evolution:

- 100 Smart Cities have been selected across all states and Union Territories of India.
- Financial innovation is built in the design of their capital investment plans.
- The distribution of funding envisaged from different sources is as follows: Central and state government, convergence funding from other missions, programs of the Central/State Governments and/or ULBs, funds from PPP, loans/debt, own sources, Other sources projects under the Mission fall under multiple sectors.
- Some of the key sectors within the overall project portfolio are: solid waste management, social sectors, storm water drainage, environment, complete streets, waste water/ sewerage, water supply, affordable housing, energy, IT connectivity/ICT solutions, economic development, urban mobility, area development.

Use of technology as a Means, and not the End:

- Every Smart City under the Mission will have a Smart City Centre (also referred to as Integrated Command and Control Centre). This is and will be the city's brain and nervous system where digital technologies are integrated to social, physical and environmental aspects of the city to provide centralised monitoring and decision making.
- In a very short period, the results are encouraging.
  - Rajkot recorded an increase in on-line issuance of birth/death certificates; and through surveillance, crime rate has gone down.
  - There is an improvement in traffic challans in Ahmedabad.

- Pune has installed flood sensors at key points around the city which feed data to the Smart city centre thereby enabling timely warning and response mechanism.
- In Vishakhapatnam, CCTV and GPS enabled buses are being tracked online through the Smart City Centre.
- Bhopal has seen a rise in its property tax collections and is able to track its transport services online.

Quality of Life and Economy: Impact

- Smart cities' projects are not only promoting sustainable development but also helping create vibrant, inclusive healthy and collaborative cities, thus enhancing quality of life.
- The Mission promotes mixed land-use in area-based developments as proximity and density reduce the per capita costs of providing and maintaining infrastructure and services, while creating knowledge spill-overs and specialisation that hugely enhance the urban productivity.
- Smart Cities are implementing projects with a strong focus on economic returns.
- The primary focus of initiatives relating to local economic development is on commercial and retail activities, with a strong focus on market redevelopment projects and the new construction of offices, homes and allied institutions such as convention centres, etc., as part of mixed-use development.
- Few other project interventions being implemented by Smart Cities include setting up of skill development centres, incubation centres and vending zones.

Innovation as Key Driver:

- Recognising the role of Start-ups, the Smart Cities Mission will work to create an innovation eco-system in Smart Cities through SPIRIT—Smart Cities Promoting Innovation Research and Incubation in Technology.
- It is an initiative in collaboration with Atal Innovation Mission (AIM) and Start-up India program harnessing the strengths of the three initiatives.
- This will foster creation of eco-system for innovations in Smart Cities, enabling local area development, harnessing technology and providing boost to the economy.

Impact on Sustainability:

- Smart Cities have proposed investments to ensure assured electricity supply with at least 10 per cent of the Smart City's energy requirement coming from Solar Energy.
- Diu has become the first city to completely switch over to solar power during the day-time.
- Smart Cities have identified initiatives to strengthen their distribution systems through Smart Metering.
- Promotion of energy efficient green buildings and green transport options to reduce need for electricity are some other initiatives taken up by Smart Cities.

Key Enablers for the Smart Cities Mission:

- Smart Governance, improved urban finance, capacity building and technology driven innovation are key enablers of Smart Cities.

1) **Smart Governance:**

- Smart Cities leverage ICT based technologies and digitalisation to make governance citizen-friendly and cost effective; bring about accountability and transparency; provide services

without having to go to municipal offices; form e-groups to listen to people and obtain feedback; and use online monitoring of programs and activities with the aid of online tools.

- 'Data Smart Cities', an evolving policy framework on data for smart cities, which aims to be a catalyst for the entire eco-system comprising of people, processes and technology.
- Making ULBs financially self-sufficient is very important for sustainable development.
- The ministry started credit rating of cities. It has incentivized ULBs through cash incentive of Rs.13 crore for every Rs.100 crore of municipal bonds issued, equivalent to 2% interest subversion.
- Cities are implementing projects in PPP mode for Housing, Waste-to-Energy, Solar Rooftop, Public Bike Sharing, Parking Management, Smart Cards and Transport Hubs.

2) **Capacity Building and Knowledge Management**:

- The Ministry has launched the Cities Investment To Innovate, Integrate and Sustain (CITIIS) Challenge in collaboration with the French Development Bank (AFD).
- AFD will provide investment support to selected cities in key sectors of Sustainable Mobility, Public Open Spaces, Urban Governance and ICT and Social & Organisation Innovation in Low Income Settlements.
- India Smart Cities Fellowship and Internship Program have been launched to engage brilliant youth with the Mission.
- This will promote knowledge management within the Mission and provide young professionals with an opportunity to experience various aspects of urban planning and governance.
- SmartNet is an initiative to support the development of cities across India and to create a resource-rich ecosystem of learning, sharing and disseminating for city managers and primary stakeholders in the urban transformation of India.

3) **National Urban Innovation Hub**

- A new entity titled the 'National Urban Innovation Hub' (NUIH) – is being proposed at the national level to consolidate existing resources and to expand the footprint of innovation development and capacity building for the urban sector.
- NUIH would catalyse the creation of an enabling ecosystem for transformation of the urban sector through a culture of continuous and comprehensive innovation.
- NUIH will anchor the National Smart Cities Capacity Building Program to produce empowered functionaries and stronger institutions.
- NUIH will be powered by the National Urban Innovation Stack (NUIS).
- The NUIS is envisaged to provide the foundational components that are required across various urban programs.
- NUIS is a nationally shared digital infrastructure usable by the Governments, both at Centre and States and across public and private sectors.

Mission Progress:

- Over the last 3 years, following the launch of Smart Cities' Mission guidelines, all 100 cities have been selected through Challenge process.
- All of them have established the Special Purpose Vehicles (SPVs) to support implementation of the Mission.

- All of them have hired Project Management Consultants (PMCs) to design and develop projects for implementation in multiple sectors covering smart roads, water supply, heritage and place making, smart IT and communication, app based citizen service delivery system etc.
- The Mission is closely working with Bureau of Indian Standards (BIS) in an effort to come up with smart ICT infrastructure standards and they are hopeful that they should be able to release the first version of these standards.

Way Forward
- The Smart Cities have to build capacity at city level to take up innovative technology solutions.
- A major challenge is to build urban finance capacities in order for cities to be able to leverage grants being provided by the governments.
- Innovative financing models like issuance of municipal bonds, developing PPP projects and formulating land value capture finance (VCF) policies are required.
- Lack of standards results in problems of vendor lock-in and solution silos.

In the new-urban India, every Indian should find fruitful occupation, livelihood and self-fulfilment. This can be the model of sustainable urbanism that India can offer to the world.

TID BITS:
Pradhan Mantri Ujjwal Yojana
Context: Pradhan Mantri Ujjwal Yojana achieves 6 crore mark
- The Government had launched "Pradhan Mantri Ujjwal Yojana" (PMUY) scheme to provide 5 crore LPG connections to Below Poverty Line(BPL) families.
- The initial target of 5 crore connections was achieved well before the target date i.e. 31st March, 2019.
- Recently, the Vice President handed over the 6 croreth LPG connection.

Impact:
- Implementation of PMUY has resulted in significant increase in national LPG coverage, in general and Eastern States, in particular.
- The scheme has resulted in mass coverage of rural poor households and 48 per cent of the beneficiaries are SC/STs.
- While 74 per cent and first refill, were provided loan facility by the OMCs.
- LPG Panchayats are being observed to promote learning through peer group interaction – Kuch Seekhein, Kuch Sikhayein, where apart from experience sharing, it also aims at safe and sustained usage of LPG.
- PMUY implementation has been appreciated by the World Health Organisation (WHO) who have learned it as a decisive intervention to check the indoor health pollution being faced by the women of the country.

Chapter 4: National Water Ways: Integrated Transport Network
The Government of India is aggressively pushing for the development of inland waterway routes as part of an integrated transport network strategy. 106 new national waterways were announced under the National Waterways Act, 2016. With the five existing National Waterways (NW), the addition of the new ones takes the total number to 111 in the country.

A developed IWT will not only augment the overall transport capacity of the country, but will also help correct the transport modal mix that impose huge logistics costs on the Indian economy.

Jal Marg Vikas Project (National Waterway-1, River Ganga):
- Jal Marg Vikas Project (JMVP) is being implemented for capacity augmentation on Haldia -Varanasi stretch with technical and financial assistance from the World Bank.
- NW-1, along with the proposed Eastern Dedicated Freight Corridor and NH-2, constitute the Eastern Transport Corridor of India connecting the National Capital Region (NCR) with the eastern and North-eastern states.
- This will function as a link to Bangladesh, Myanmar, Thailand, Nepal and other east and Southeast Asian countries through the Kolkata Port and Indo-Bangladesh Protocol Route.
- Inland Waterways Authority of India (IWAI), the nodal agency under the Ministry of Shipping is mandated to make National Waterways commercially navigable.
- IWAI aims to increase the cargo transportation through IWT on National Waterways in the country.
- According to a World Bank economic analysis, approximately 1.5 lakh direct and indirect employment opportunities will be created due to interventions under the Jal Marg Vikas Project.

JMVP is a wholly inclusive, economic and environment friendly game changer intervention on river Ganga. Along with giving a fillip to trade and commerce, it will help rejuvenate the river. The project not only creates an alternative, cost effective mode of transport but will create 'Room for River' which has proved to be an effective flood mitigating and river conservancy measure internationally, especially in low lying Netherlands.

State-of-the-art Vessel Design:
- In August, 2018, IWAI made public 13 standardised state- of- the- art ship designs suitable for large barge haulage on river Ganga (National Waterway-1).
- This marked attaining of a critical milestone in the growth of the country's Inland water Transport (IWT) sector.
- It will help overcome the unique navigation challenges river Ganga throws up due to its complex river morphology, hydraulics, acute bends, shifting channels, meanders and currents.
- It will serve as an enabler for the domestic shipbuilding industry working on inland vessels and open huge possibilities for cargo and passenger movement on National Waterway-1.
- For the shipbuilding industry, the new designs will translate into a savings. It will lead to reduced fuel costs and in turn lesser logistics costs.
- Some of the designs would enable movement of bulk cargo carriers with capacity of 2500 tonnes at three metres depth, thereby removing almost 150 truckloads of pressure form the road or one full rail rake with the plying of just one such vessel.
- The new designs will obviate the dependence of Indian ship builders on foreign ship designs for IWT and prove to be a boost to the 'Make in India' initiative of the Government.

Benefits of Inland Water Transport:

IWT provides supplementary mode of transport which is cost effective, fuel efficient and environment friendly.

1. Low emissions- CO_2 equivalent greenhouse gases emission per tonne-km of cargo transportation is 15g by IWT, 28g by Rail and 64g by Road transport.
2. Low energy consumption -1 HP can carry 4000 kg load in Water, 500 kg by Rail and 150 kg on Road.
3. Low fuel cost -1 litre fuel can move 105 tonne- km by IWT, 85 tonne – km by Rail and 24 tonne – km of freight by Road.

● IWT can provide optimal modal mix by integrating river transport with other modes thereby reducing total logistics cost.
● It eases congestion on Road and Rail networks.
● IWT requires very little land acquisition as compared to Road and Rail modes.
● Caters to the needs of relatively under developed hinterland.

Business Opportunities:
The development works being undertaken by IWAI provide business opportunities to players involved in waterways in the fields of:
- Cargo Movement
- Dredging Works
- Construction, Operation and Maintenance of Terminals
- Barge Construction and Operations
- Navigation Aids
- Hydrographic Surveys
- Manpower Supply for Vessels and Terminals. Training of Vessel Crews
- Stevedoring and Forwarding
- Cruise Operations
- Consultancy Services for Techno-Economics Feasibility, Environmental and Social Impact and Market Analysis Studies, Preparation of DPRs.
- Project Management Consultancy
- Construction Supervision
- Proof Checking of Design
- Model Studies.

Promoting River Tourism:
● International publication 'Condé Nast Traveller' listed Ganga cruise as one of the 'six river cruises to take in 2017'.
● In addition to becoming one of the principal cargo movement routes in India, this stretch on NW-1 has good potential for river cruise tourism.

Achievements of Major Ports:
Some of the major policy and procedural steps and achievements in the recent past are:

(i) To bring the major ports at par with the International standards, a study on Benchimarking of efficiency and productivity of major ports was carried out.

(ii) A new Special Purpose Vehicle, namely Indian Port Rail Corporation Ltd. has been set up as a public limited company to undertake last mile rail connectivity projects in major ports so as to improve their handling capacities and efficiency.

(iii) Operating, Surplus of major ports increased.

Chapter 5: UDAN – Giving New Meaning to Air Connectivity

It is about two years since UDAN was conceived. The Union Government's flagship regional Connectivity scheme has, by now, become an important means for making low cost flying available to people in smaller Indian cities. In these two years, the scheme has brought first time air connectivity to people of 35 tier-II and tier-III cities the scheme starts now to link tourist places and international destinations.

- Since the last 10 years, air traffic has grown three folds in India and it has the potential to be among the global top three nations in terms of domestic and international passenger traffic.
- There is a need to promote the growth of the Indian aviation sector in a significant manner as the development of this sector has a multiplier effect on the economy.
- In 2016 Government of India launched the National Civil Aviation Policy (NCAP) to provide an ecosystem for the harmonized growth of various aviation subsectors like airlines, airports, cargo, etc.
- The policy envisions creating an eco-system to make flying affordable for the masses and to enable 30 crore domestic ticketing by 2022.

Making Air Travel Convenient:

- UDAN (Ude Desh Ka Aam Naagrik) is a fulcrum under NCAP to make air travel convenient and affordable for the common man in small cities, and through this, push regional growth.
- UDAN addresses the challenges relating to the issue of lack of infrastructure and affordability by upgrading the airports and cutting down on the cost of operations by extending various incentives to airlines and thus making air tickets affordable.
- The scheme is, therefore, crucial for ensuring that the Indian aviation sector's success story touches one and all and the tier-II and tier-III cities also join the aviation revolution.

Salient Features of RCS-UDAN:

- The Regional Connectivity Scheme-UDAN intends to enable air operations on unserved routes connecting regional areas, promote balanced regional growth and make flying affordable for the masses.
- RCS-UDAN, which would be in operation for a period of 10 years, envisages providing connectivity through revival of existing air-strips and airports.
- Financial stimulus in the form of concessions from Central and State governments and airport operations and the Viability Gap Funding to the selected airlines to kick-off operations from unserved / underserved airports, so that the passengers fares are kept affordable.

- RCS-UDAN is a demand driven scheme where the interested airlines and helicopter operators are selected through competitive bidding process.
- The fare for one hour journey of approximately 500 km on a fixed wing aircraft or for a 30-minute journey on a helicopter would be approximately Rs.25,000, with proportionate pricing for routes of different stage length / flight duration.
- On RCS route, the minimum frequency would be three and maximum of seven departures per week in other than priority areas.

Implementation Mechanisms:
- Implementation challenges not only involve monitoring and assisting for revival of airports but also facilitation for obtaining Air operator permits for selected airlines and helicopter operators under the scheme.
- Few small airline operators who have bid under UDSN are facing teething problems due to their limited capacities.
- Availability of qualified crew is also a major challenge for airlines and significant efforts are needed to create a pool of skilled professionals.
- A positive outcome of UDAN also includes the regulatory framework for 'no-frill airports and 'aircrafts-centric security' approach which has cut down the cost of infrastructure and operations that will help sustainability of air connectivity to smaller cities.

Desirable changes in future UDAN is poised to offer wings to the common man to fly, literally.

Chapter 6: Bharatmala Pariyojana: The Biggest Revolution in Indian Highways
The first major policy push to widen the National Highways was made in 1998 during Atal Bihari Vajpayee government by launching the National Highways Development programme (NHDP). Which had two major components of Golden Quadrilateral (GQ) connecting the four metro cities of Delhi, Mumbai, Chennai and Kolkata and Kanyakumari and Silchar to Porbandar. These networks are known as North-South and East-West corridors.

The second big revolutionary decision to upgrade NHs was taken in October 2017 when the Central government approved the phase-I of Bharatmala Pariyojana.
Details:
- The massive highway development programme has many firsts to its credit.
- Starting from preparation of the plan to identifying the highway stretches and the new approach of building roads on new alignment. The Road Transport and Highways Ministry has termed as "crow flight" alignments.
- Improved logistics movement has a force multiplier effect on the economy.
- Moreover, to cater to the need for infrastructure development in the border and coastal areas to India's Export-Import (EXIM) trade, the highway development programme has provisioned for improving border roads based on strategic importance, particularly the ones connecting to trading points with India's neighbours-Nepal, Bangladesh and Bhutan.

- The coastal road development and port-connectivity roads enhancement have been synergized with the Sagarmala programme.

Components of Bharatmala Pariyojana:

1) Economic Corridors:
- The origin-destination study which was commissioned with the aim of improving logistics efficiency identified 44 new Economic Corridors.
- As per the plan, these corridors along with national corridors (GQ and North South and East West) would form India's new Highway Grid.
- As per estimates, the National and Economic Corridors along with their inter-corridors and feeder routes would be able to carry 80 per cent of our freight traffic.

2) Inter Corridor and Feeder Routes:
- The effectiveness of the corridors can be improved by development of the feeder routes.

3) Improvement in Efficiency of National Corridors:
- In the past few years, these National Corridors have also developed choke points impacting logistics efficiency. So, to decongest and do away with these choke points, new Ring Roads and bypasses/elevated corridors will be built.
- In addition, multimodal logistics parks will be developed at critical economic nodes along GQ and North South and East West corridors to enable efficient modal transfers, freight aggregation and disaggregation.

4) Development of Border and International Connectivity Roads:
- Around 3,300 kilometres of border roads have been identified to be built and widened along the international border for their strategic importance.

5) Development of Coastal and Port Connectivity Roads:
- Under Bharatmala programme, about 2,100 kilometers of coastal roads have been identified to be built along the coast.
- These roads would boost both tourism and industrial development of the coastal region.
- A major focus will be to improve linkage to state government owned and private ports.

6) Development of Green-field Expressways:
- NHAI Board is an inter-ministerial entity, which has representation from Highways and Finance Ministries, Niti Aayog and the Highway Authority.

Benefits:
- Bharatmala Pariyojana once implemented will enable improvement in efficiency of freight and passenger movement of NHs.

- The Network as identified under the Bharatmala network, will cater to 80 per cent of the inter-district freight movement in the country.
- The development of economic corridors and the associated inter corridor and feeder routes will enable improvement in average speeds.
- Improvement in average speed of the freight vehicles will, in turn, have three major benefits; improved vehicle utilization resulting in faster breakeven and hence lower freight cost per tonne per km; improvement in fuel efficiency of the vehicles due to lower idling time, resulting in lower freight cost and faster and reliable freight transit, leading to a reduction in average inventory carried in freight.
- In addition up gradation of NH Network in the first phase is expected to generate employment during the construction phase driven by increased level of economic activities due to development of the Economic Corridor network.

Funding for Programme:
- About one-third of the fund will come other from fuel cess and will come as budgetary support.
- This scheme is known as Toll Operate Transfer (TOT), which means completed stretches are bid out to private players make upfront payment to NHAI to get these works. They are responsible for maintenance of the highway stretches as well.

Chapter 7: Transforming Connectivity: Indian Railways on the Go
Indian Railways, the third largest railway network in the world, has, in the past few years, undergone transformational changes to expand its reach to every corner of the country at a remarkable speed, and to provide passenger and freight services with safety and punctuality.

Connecting the Seven Sisters:
- In the North East rail connectivity has come to all the Seven Sister States of Assam, Meghalaya, Nagaland, Tripura, Mizoram, Manipur and Arunachal Pradesh.
- The North-East is witnessing historic changes. The Bogibeel Bridge, the longest Rail-cum-Road Bridge of the country running across river Brahmaputra near Dibrugarh in Assam has been commissioned, connecting Assam and Arunachal Pradesh.
- India's tallest bridge with pier height of 141 m is being constructed on Irang River at Noney in Tamenglong district, Manipur as part of the Jiribam-Tupul-Imphal new line, a marvel of railway engineering.

Capacity Augmentation:
- Capacity augmentation was essential on the Indian Railways, and the railways launched two Dedicated Freight Corridor (DFCs) projects: Eastern and Western Dedicated Freight Corridors (EDFC and WDFC), for the purpose.
- When the two freight corridors operate, the railways freight operation will see a fundamental change brought about by reduction in unit cost of transportation, smaller organisation and management cost, with higher efficiency and lower energy consumption.

- To overcome the problem of congestion and over-saturation of routes, doubling of tracks and laying of additional lines has been going on.
- Based on physical progress of projects, last mile connectivity projects for projects decongesting the existing routes, sufficient funds are being allotted to each project.

Speeding up Electrification:
- To reduce dependence on imported diesel fuel and carbon emission, Indian Railways have embarked upon a major programme to speed up electrification of railway lines.
- Currently, around two thirds of freight and more than half of passenger traffic in Indian Railways moves on electric traction.
- Electric traction accounts for just 37 per cent of the total energy expenses of Indian Railways. Due to this advantage, through electrification, Indian Railways is likely to save Rs.13,510 crore per annum in fuel bills and the same will improve its finances.
- During the period of construction, the electrification projects will generate direct employment of crores of mandays.
- Electrification will reduce the use of imported fossil thereby improving energy security to the nation. Consumption of high speed diesel oil will be reduced and there will be a reduction in greenhouse gas emissions. This will also reduce environmental impact of Railways.
- Hundred per cent electrification will provide seamless train operation by eliminating detention of trains due to change in traction from diesel to electric and vice versa.
- It will help Railways in enhancing line capacity due to higher speed and higher haulage capacity of electric locomotives. There will be improves signalling systems, which will lead to enhanced safety in train operations.

Ensuring Safety:
- To ensure connectivity with safety, the railways created the Rashtriya Rail Sanraksha Kosh (RRSK), a dedicated fund for safety projects during 2017-18, with a corpus of Rs 1 lakh crores over a period of five years, specially for clearing the backlog of critical safety related works.
- This includes track renewals and safety, strengthening of bridges, elimination of unmanned level crossings, upgradation of maintenance facilities, signalling improvement and complete switchover to shock-resistant Linke Hofmann Busch (LHB) coaches with greater safety features, along with retro fitment of ICF coaches.
- Apart from elimination of unmanned Level Crossing on all busy routes and shift to production of safer LHB coaches, there is focus on track renewal with the highest outlay ever.
- Addressing the issue of unsafe crossing on a war footing, 5,479 Unmanned Level Crossing have been eliminated in the last four years. Safety posts running into over a lakh are also being filled-up.
- It had been decided to completely stop the manufacture ICF Coaches from 1st April, 2018 and shift to safer LHB design coaches having anti-climbing features.

- The railways signalling system is being completely modernized and included in the works programme of 2018-19 for the renewal programme on the complete 60,000 Route Kilometers (RKMs) of the Broad Gauge (BG) network of Indian Railways.

Offering Better Services:
- To make the railways smart, for punctuality, instead of the station master recording the time, data loggers have been put at interchange points which would be computer generated.
- Indian Railways is working on putting a GPS device on every locomotive so that every train can be tracked on mobile phones knowing exactly where they are.
- Railways are reviewing to engage itself with artificial intelligence.
- The Railways believe that there is a lot which can be done with data being put to use with predictive maintenance, better monitoring and utilization of assets and better monitoring and utilization of assets and better passenger service.
- Railways is improving passenger services including a complete makeover of stations by installing modern facilities including escalators, lifts, free with etc. while instilling local art and culture in the design.
- 'Make in India' has been given a boost by indigenous manufacturing of Semi High Speed (160 kmph) self-propelled Train 18.
- Work has started on Mumbai-Ahmedabad Bullet train project on Japanese model.
- Catering has also been a focus area with compulsory printing of MRP on all food items started on more than 300 trains, and use of artificial intelligence to monitor food production in base kitchens for improving quality and hygiene.
- To make rail transportation attractive to its customers various initiatives were taken in 2017-18 which includes tariff rationalisation, classification of new commodities, expansion of freight basket through containerisation, new delivery models like RO-RO services, Long Term Tariff Contract policy with key customers, Station to Station rate, Double Stack Dwarf Container (DSDC), customer friendly rationalization of weighment policy, Electronic Registration for Demand of Wagons (e-RD) etc.
- Decision has been taken to transport empty containers and empty flat wagons for private container and empty flat wagons for private container rakes at a discount of 25%. The move is likely to give a thrust to movement of empty containers by rail towards ports to return as loaded, thus profiting Indian Railway with higher container share.

TID BITS
Constitution (103rd) Amendment Act, 2019
- The President has given his assent to the Constitution (one Hundred and Twenty Fourth Amendment) Bill, 2019.
- The Act providing 10 per cent reservation in Government jobs and educational institutions to Economically Weaker Sections (EWS) among upper castes has come into effect.

- The Act amends Articles 15 and 16 of the Constitutions by adding a clause which allows States to make Special provisions for the advancement of economically weaker sections in the general category.

Chapter 8: Connected North East: Building Pan India Ties

The vastly unexplored slice of paradise – North East, connected to the rest of the country through Siliguri Corridor, popularly known as the chicken neck area in North West Bengal flanked by Nepal and Bangladesh, is on a resurgent path as far as road connectivity is concerned. The North Eastern Region (NER) consists of eight states, namely Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura.

- The region accounts for 3.78 per cent of India's population and covers 7.98 per cent of its total geographical area. Its contribution to national GDP is 2.5 per cent.
- The region is strategically important for India both for its geographical location and its resources and shares about 5,437 km of international boundaries with Bangladesh, Bhutan, China, Myanmar and Nepal.
- Government of India has recognised the need to augment infrastructure in the region.

Accelerating Infrastructure Development:
- The projects are being executed by National Highways & Infrastructure Development Corporation (NHIDCL) cover 10,892 km of roads in all the eight NE states.
- To accelerate the sluggish pace of implementation of infrastructure projects in hilly and tough terrains like NER, NHIDCL was incorporated in 2014 as a public sector undertaking under the Ministry of Road Transport and Highways and has bolstered highways construction as a specialised agency.
- Special Accelerated Road Development Programme for the North-Eastern region (SARDP-NE) is another initiative of the government to fast-track infrastructure projects in the region.

Indo Myanmar Connectivity:
- India and Myanmar are keen on bus service after operationalizing the Land Border Crossing Agreement, which allows nationals from the two countries holding valid passport and visa to cross over without requiring special permission.

Bharatmala Project:
- The Government's focus on the North East could also be understood from the fact that it plans 28 Ring Roads under Bharatmala project in the region.
- Bharatmala project is an umbrella programme for roads under which highways will be constructed.

North East Special Infrastructure Development Scheme (NESIDS):
- In addition to other programmes, the Centre has approved a scheme named North East Special Infrastructure Development Scheme (NESIDS).
- It is a 100% Central Sector Scheme to be implemented till March 2020.

The Prime Minister has stressed that North East's links with Southeast Asia will accelerate its progress "In turn, a connected Northeast will be a bridge to ASEAN-India ties of our dreams," he has said.

Chapter 9: Affordable Housing: Taking Centre Stage

The quality of a nation's infrastructure is a critical index of its economic vitality. The Indian real estate and construction industry is an integral part of the economy and is responsible for a considerable part of its development investment. The industry plays an important role in the development of the country's infrastructure base and is one of the largest generators of economic activity. The construction sector has strong linkages with various industries such as cement, steel, chemicals, paints, tiles, fixtures and fittings, etc.

Faster clearances and dispute resolution, last mile funding and easier exits for companies are among steps taken by the present Government to help the sector with the Government permitting 100 per cent FDI in the road sector, several foreign companies have formed partnership with Indian players to capitalize on the sector's growth.

Population Growth and Housing:

Housing has been a concern of individuals, families, groups and government since the dawn of urban civilization. As we have witnessed over the last few decades, due to massive urbanization, increasing income levels and changing demographics, there has been increasing pressure on transportation, housing land and other urban services to accommodate the future population.

- Whilst the overall population growth has declined over the last decade, urban population growth continues to be almost twice the annual national population growth rate.
- The urban share of the GDP is projected to increase to 75 per cent in 2031 from an estimated 62-63 per cent in 2009-2010. (The High Powered Expert Committee (HPEC), 2011).
- Consequently, there is a dire need to improve the quality of life in our cities and to address the current and anticipated future shortage of housing along with other infrastructure deficit prevalent in our urban centers.
- Transformational scheme of "Housing for All by 2022" was launched by Government of India in 17the June 2015 under Prdhan Mantri Awaas Yojana (PMAY) with an aim to provide affordable housing to urban poor.

Pradhan Mantri Awaas Yojana (PMAY) – Housing for All 2022

The PMAY Urban (PMAY-U) subsumes all the previous urban housing schemes and aims at 'Housing for All' to be achieved by the year 2022. The mission has four components:

- In-situ slum redevelopment(ISSR):

This uses land as a resource. The scheme aims to provide houses to eligible slum dwellers by redeveloping the existing slums on public/private land. A grant of INR 1 lac per house is provided by the Central Government to the planning and implementing authorities of the States/UTs under this scheme.

- Affordable housing in partnership (AHP):

This aims to provide financial assistance to provide developers to boost private participation in affordable housing projects; central assistance is provided at the rate of INR 1.5 lac per EWS house in private projects where at least 35 per cent of the houses are constructed for the EWS category.

- Credit-linked subsidy scheme(CLSS):

This scheme facilities easy institutional credit to EWS, LIG and MIG households for the purchase of homes with interest subsidy credited upfront to the borrower's account routed through primary lending institutions (PLIs). This effectively reduces housing loans and equated monthly instalments (EMI).

- Beneficiary-led construction or enhancement (BLC):

Pradhan Mantri Awas Yojana scheme involves central assistance of INR 1.5 lakh per family for new construction or extension of existing houses for the EWS/LIG.

Urban Housing Initiatives:

The Government envisages building affordable pucca houses with water facility, sanitation and electricity supply round-the-clock. This scheme is converged with other schemes to ensure houses have a toilet, Saubhagya Yojana electricity connection, Ujjwala Yojana LPG gas connection, access to drinking water and Jan Dhan banking facilities, etc.

The scheme is aimed for urban areas with following components/options to states/Union Territories and cities:

- Slum rehabilitation of Slum Dwellers with participation of private developers using land as a resource;
- Promotion of affordable housing for weaker sections through credit linked subsidy;
- Affordable housing in partnership with Public and Private sectors and
- Subsidy for beneficiary-led individual house construction or enhancement.

Besides this, Government of India has been taking several initiatives through the budget to provide housing for all.

Announcements of measures in the Union Budget 2017-18 to boost affordable housing:

- Affordable Housing has been given Infrastructure status.
- National Housing Bank to refinance Rs. 20,000 crore loans.
- Pradhan Mantri Awas Yojana to get Rs. 23,000 crore.
- Real estate developers to get tax relief on unsold stock as liability to pay capital gains will arise only in the year a project is completed.
- Holding period for capital gains tax for immovable property reduced from 3 years to 2 years.
- Indra Awaas Yojana will be extended to 600 districts
- Indexation for capital gains shifted from 01-04-81 to 01-04-2001.

Housing Finance:

- Under PMAY, government has announced that an interest rate of only 4 per cent would be charged on loans above Rs 9 lakh and 3 per cent on amount above Rs 12 lakh.
- The government has also extended the time of completion of such projects from 3 years to 5 years.
- Thus, more projects will now be eligible for profit-linked income tax exemption.
- Profit-linked exemption along with infrastructure status for affordable housing will push developers to undertake more affordable housing projects, thus increasing private player's participation in the sector.
- With the change in criteria from built-up area to carpet area, the purchases get more spacious homes and the builder is able to market the property to a larger segment of buyers.

With all these initiatives, the Government of India envisions ensuring shelter for all by 2022, which would in-turn give a tremendous boost to GDP as the housing sector growth is directly related to around 265 other ancillary industries.

Chapter 10: Investing in Children: Investing in the Future

In a country where education was not even accessible to all, an Act of Right to Free and Compulsory Education to all children in the age group of six to fourteen years was passed in 2009, was a very progressive step indeed. In a report released by the NCERT in December 2017, that included a 700-district study, found that students are learning less as they move to higher classes. On an average, a class VIII student could barely answer 40 per cent of the questions in maths, science and social studies. The national average score for language was a little better at about 56 per cent.

Integrating schemes like Sarva Shiksha Abhiyan, Rashriya Madhyamik Shiksha Abhiyan and teacher education must be done only if a gap analysis shows unfinished or undelivered agenda.

Integrating Skills Education:

- To counter roadblocks that could hamper progress, adoption of new technology is the only solution.
- There must be an integration of skills and education in our schools and colleges, providing for multi-point entry and exit from the formal education system to the vocational education system and job markets.
- Further, setting up a National Skills-based initiative of the Government to optimise return on investments must be a stated goal.
- Black board to Digital board is another concept that stands out. Digital technology can seamlessly transform even a small paddy field into a classroom, in less than few minutes. Children in these new setups can easily learn.
- In order to create this wider channel of change, creating Wi-Fi bells in villages, using television aids while also assigning a bunch of tech enthusiasts to move around and set these up could definitely be a step towards success.
- The flipside however is, teaching should never be left out from the purview of a teacher, as character building and personality development are not digital outcomes.

Initiatives so far:

- The Central Government has taken several proactive steps to redeem school education under SSA, RMSA.
- Further, the States/UTs are supported on several interventions to improve quality of education including regular in-service teacher's training, induction training for newly recruited teachers, recruitment of additional teachers for improving pupil teacher ratio, academic support for teachers through block and cluster resource centres.
- Section 23(2) of the RTE Act, 2009 has been amended to ensure that all untrained in-service teachers working in Government, Government aided, and Private un-aided schools should acquire minimum qualification as laid down by an academic authority, further includes reference on class-wise, subjective-wise Learning Outcomes.
- The learning Outcomes for each class in Languages (Hindi, English and Urdu), Mathematics, Environmental Studies, Science and Social Science up to the elementary stage have, accordingly, been finalized and shared with all States and UTs. These would serve as a guideline for State and UTs to ensure that all children acquire appropriate learning levels.

- A National Achievement Survey (NAS) based on learning outcomes has been conducted on 13th November, 2017 for class III, V and VIII with a sample frame up to district level to enable States/UTs to identify gaps in learning outcomes at district level and design strategies to address those gaps. S
- Similarly, National Achievement Survey for Class X students has been conducted in 2018.

Way forward:

School improvement and teachers development is a multifaceted approach. Therefore, school reforms and initiatives need to be carefully planned and executed by involving all stakeholders.

TID-BITS:

National Youth Parliament Festival 2019

- Youth Parliaments is to provide a chance to the youth to brainstorm about new India and to find ways and chalk out plans to realize our resolves before 2022.
- National Youth Parliament Festival 2019 is organised on the theme of "Be The Voice of New India" and "Find solutions and contribute policy".
- The National Youth Parliament Festival will encourage the youth to engage with public issues, understand the common man's point of view, form their opinion and express these in an articulate manner.
- It is expected that more than 50 thousand youth will participate through Youth Parliaments at all levels and the narrative will be strengthened and made more vibrant by their voices and ideas and suggestions.

Chapter 11: Creating Adequate Infrastructure in Health Care

Health infrastructure is an important indicator for understanding the health care policy and welfare mechanism in a country. It signifies the investment priority with regard to the creation of health care facilities. Infrastructure has been described as the basic support for the delivery of public health activities. India has systematically improved health conditions.

- Life expectancy has doubled from 32 years in 1947 to 66.8 years at present.
- Infant Mortality Rate (IMR) has fallen to 50 per thousand live births.

Further, it is estimated that public funding accounts for only 22 per cent of the expenses on healthcare in India. Most of the remaining 78 per cent of private expenditure is out-of-pocket expense.

Healthcare System and Structure:

- Healthcare has become one of India's largest sectors–both in terms of revenue and employment. Healthcare comprises hospitals, medical devices, clinical trials, outsourcing, telemedicine, medical tourism, health insurance and medical equipment.
- Indian healthcare delivery system is categorised into two major components-public and private.
- The Government i.e. public healthcare system comprises limited secondary and tertiary care institutions in key cities and focuses on providing basic healthcare facilities in the form of Primary Healthcare centres (PHCs) in rural areas.
- The private sector provides majority of secondary, tertiary and quaternary care institutions with a major concentration in metros, Tier I and tier II cities.

- India's competitive advantage lies in its large pool of well-trained medical professionals.
- India is also cost competitive compared to its peers in Asia and Western countries.
- The cost of surgery in India is about one-tenth of that in the US or Western Europe.

Towards Universal Access to Health Care:
- Universal access to health care is a well-articulated goal for both global institutions and national governments.
- India's National Health Policy, 2017 envisions the goal of attaining highest possible level of health and well-being for all at all ages through a preventive and promotive health care orientation health care services without financial hardship to the citizens.
- Under health related Sustainable Development Goal (SDG) No.3, (Good Health and well-Being), a commitment towards global effort to eradicate disease, strengthen treatment and healthcare, and address new and emerging health issues has been pronounced.
- The gains of India in many health related indicators helped the country to make progress in achieving MDGs.
- Ayushman Bharat Mission, world's largest health scheme announced in the Union Budget 2018-19, is the latest initiative for expanding the health insurance net and targets 10 crore poor and deprived rural families.
- There has been a concerted effort to improve the health care infrastructure as well as delivery mechanism in the last couple of years.
- Several schemes, programmes and initiatives have been undertaken to bridge the gap to make the quantity as well as quality of the health services available to the last mile.

Major Government Initiatives:
- Government of India has taken some major initiatives to promote Indian healthcare industry.
- Government of India launched Pradhan Mantri Jan Arogya Yojana (PMJAY), to provide health insurance worth Rs.500,000 to over 100 million families every year.
- In August 2018, the Government of India has approved Ayushman Bharat-National Health Protection Mission as a Centrally Sponsored Scheme Contributed by both Centre and State governments at a ratio of 60:40 for all States, 90:10 for hilly North Eastern States and 60:40 for Union Territories with legislature. The Centre will contribute 100 per cent for Union Territories without legislature.

Pradhan Mantri Swasthya Suraksha Yojana (PMSSY):
The Pradhan Mantri Swasthya Suraksha Yojana (PMSSY) has the objectives of correcting regional imbalances in the availability of affordable/ reliable tertiary healthcare services and also to augment facilities for quality medical education in the country.

PMSSY has two components:
(i) Setting up of AIIMS like institutions.
(ii) Upgradation of Government Medical College Institutions.

PMSSY also envisaged Up-gradation of several existing medical institutions in different stated in the country

Ayushman Bharat, Pradhan Mantri Jan Arogya Yojana (PMJAY)
- One of the most ambitious health insurance programmes in the world today, the Pradhan Mantri Jan Arogya Yojana (PMJAY).
- Ayushman Bharat, gives India the chance to transform its healthcare and PMJAY aims to address the healthcare needs of India's poorest 100 million households.
- The path to success, however, is strewn with several challenges.
- If these hurdles are overcome and if PMJAY succeeds, India's largest health insurance scheme would also become its most effective healthcare initiative.
- PMJAY has the potential to institute reforms to the country's healthcare and health insurance systems at a lower cost to the exchequer.
- If streamlined, health information and monitoring systems can arrest the possibility of over-provisioning and cost-inflation.
- The idea to shift away from a decaying system of government health care, governed by common principles and financed by low-cost health insurance-is a step in the right direction.

Kayakalp:
- The Swachh Bharat Abhiyan focuses on promoting cleanliness in public spaces.
- Public health care facilities are a major mechanism of social protection to meet the health care needs of large segments of the population.
- Cleanliness and hygiene in hospitals are critical to preventing infections and also provide patients and visitors with a positive experience and encourages moulding behaviour related to clean environment.
- As the first principle of healthcare is "to do no harm" it is essential to have our health care facilities clean and to ensure adherence to infection control practices.
- Swachhta Guidelines for Public Health Facilities have been issued separately. T
- o complement this effort, the Ministry of Health & Family Welfare, Government of India has launched a National Initiative to facilities that demonstrate high levels of cleanliness, hygiene and infection control.
- "Kayakalp" is an initiative to promote sanitation and hygiene in public healthcare institutions. Facilities which outshine and exceed the set measures are awarded and incentivized under Kayakalp.
- Till date, "Kayakalp" initiative has been able to encourage public health facilities in the country to work towards attainment of excellence in cleanliness and hygiene.
- "Kayakalp" is becoming instrumental in building confidence of the users in public health facilities.

Mission Indradhanush:
- The Government of India has launched Mission Indradhanush with the aim of improving coverage of immunisation in the country.

- It aims to achieve at least 90per cent immunisation coverage by December 2018 which will cover unvaccinated and partially vaccinated children in rural and urban areas of India.

Private sector in Health Care:
- The Supreme Court in a recent judgement directed government hospitals in Delhi to refer poor patients to private hospitals.
- This decision has been described as a pro-poor decision which aims at bringing the poor rural patients at pat with the urban rich patients who till now had been the sole beneficiaries of such private institutions.
- The private institutions would provide medical care free of cost to the poor, pending preparation of a scheme which would involve private players in treating the poor.
- The appeal was filed against an earlier decision of the Delhi High Court whereby, the High court had directed certain private hospitals to ensure free treatment to 10 percent in-patients and 25 percent outpatients, this mandatory ruling was given on the ground that the land for construction was given on an undertaking which bound the private players to provide free health care to people who belong to economically weaker sections of the society.
- The apex court directed that the Delhi Government and Private Health institutions should come together and draw up a plan for serving the poor.
- This decision would go a long way in strengthening the public health system. The issues of access to quality health care may be addressed by collaboration between State Governments and private players.

Market size expansion:
- The healthcare market can increase three fold to Rs 8.6 trillion (US 133.44 billion) by 2022.
- India is experiencing 22-25% growth in medical tourism and the industry is expected to double its size from present by 2018.
- There is a significant scope for enhancing healthcare services considering that healthcare spending as a percentage of Gross Domestic Product (GDP) is rising.
- The government's expenditure on the health sector has grown to 1.4 per cent in FY18F. The government of India is planning to increase public health spending to 2.5 per cent of the country's GDP by 2025.

Investment:
The hospital and diagnostic centers attracted Foreign Direct Investment (FDI) worth US 5.25 billion between April 2000 and June 2018, according to data released by the Department of Industrial Policy and Promotion (DIPP).

Achievements:
- In 2017, the Government of India approved National Nutrition Mission (NNM), a joint effort of Ministry of Health and Family Welfare (MoHFW) and the Ministry of Women and Child

Development (WCD) towards a lifecycle approach for interrupting the intergenerational cycle of under nutrition.

- The world's largest government funded healthcare scheme, Ayushman Bharat was launched. Million patients were benefitted from Affordable medicines and Reasonable Implants for Treatment (AMRIT) Pharmacies.
- The Government of India approved the National Medical Commission Bill 2017. It aims to promote medical education reform.

Road Ahead: Healthcare infrastructure and services:

- India's healthcare industry is one of the fastest growing sectors and it is expected to reach 280 billion by 2020. The country has also become one of the leading destinations for high end diagnostic services with tremendous capital investment for advanced diagnostic facilities, thus catering to a greater proportion of population. Besides, Indian medical service consumers have become more conscious towards their healthcare upkeep.
- Indian healthcare sector is much diversified and is full of opportunities in every segment which includes providers, payers and medical technology. With the increase in the competition businesses are looking to explore for the latest dynamics and trends which will have positive impact on their business.
- India's competitive advantage also lies in the increased success rate of Indian companies in getting Abbreviated New Drug Application (ANDA) approvals.
- India also offers vast opportunities in R&D as well as medical tourism. To sum up, there are vast opportunities for investment in healthcare infrastructure in both urban and rural India.
- Public healthcare service in India should ensure three "Es- Expand - Excellence".
- Access to adequate health care would need expansion of tertiary care facilities.
- Tertiary care should be equitably distributed to different segments of population.
- The setting up of new facilities will have to address imbalances at three levels- regional, specialities, and ratio of medical doctors to nurses and other healthcare professionals.

Atal Mission for Rejuvenation and Urban Transformation (AMRUT)

The Government of India launched the Atal Mission for Rejuvenation and Urban Transformation (AMRUT) with the aim of providing basic civic amenities like water supply, sewerage, urban transport, parks as to improve the quality of life for all especially the poor and the disadvantaged. The focus of the Mission is on infrastructure, creation that has a direct link to provision of better services to the citizens.

The purpose of "AMRUT" mission is to
(i) Ensure that every household has access to a tap with assured supply of water and a sewerage connection.
(ii) Increase the amenity value of cities by developing greenery and well maintained open spaces.e.g. parks and.
(iii) Reduce pollution by switching to public transport or constructing facilities for non-motorized transport e.g. walking and cycling.

Mission Components :

- The components of the AMRUT consist of capacity building, reform implementation, water supply, sewerage and septage management, storm water drainage, urban transport and development of green spaces and parks.
- During the process of planning, the Urban Local Bodies (ULBs) strive to include some smart features in the physical infrastructure components.
- The details of the Mission components are given below:

1. Water Supply
2. Sewerage
3. Septage
4. Storm Water Drainage
5. Urban Transport

First Central University in India, focusing solely on sports education

Nelson Mandela, the Nobel laureate for peace and former president of South Africa, said in one of his speeches "Sport has the power to change the world. It has the power to inspire. It has the power to unite people in a way that little else does. It speaks to youth in a language they understand. Sport can create hope there was only despair…." But to inspire the next generation, we need the right professionals to lead and coach them in sports.

- It is with this as one of the missions that the National Sports University, Manipur, was set up in 2018.
- The National Sports University will have the flexibility to open new schools/departments in consonance with the advances and developments in sports science, sports medicine, and allied areas.
- The university, once developed, will be the first one of its kind to promote sports education in the areas of sports sciences, sports technology, sports management, and sports coaching.
- It will also function as the national training centre for selected sports disciplines by adopting the best international practices by signing Memoranda of Understanding (MoU) with international Universities.
- National Sports University aims to become the pioneering university in country to prepare world-class athletes, sports managers, sports architects, and sports journalists, physical educationists with the help of path-breaking research & diverse programs that inspire leadership, teamwork, and resilience among its students, thereby profoundly impacting our society in meaningful ways:

- To produce top athletes, sports scientists, competent physical educationists by offering programs that cultivate learning through competition, recreation, physical activity in addition to classroom learning.
- To mentor students by inculcating values & leadership skills in them by providing diverse opportunities that develop character to succeed in all facets of their lives.

- To study human potential holistically by conducting pioneering research in the field of sports science & use its findings to boost public health & enhance international performance of Indian athletes.
- To develop the entire sports eco-system including sports management, sports journalism, sports architecture sports equipment manufacturing etc.
- To contribute towards promoting international peace with the power of sports by helping build a society & country healthy in mind and body.

National Heritage City Development and Augmentation Yojana (HRIDAY)

The Ministry of Housing   and Urban Affairs, Government of India, launched the National Heritage City Development and Augmentation Yojana (HRIDAY) scheme in 2015, with a focus on holistic development of heritage cities. The main objective of HRIDAY is to preserve character of the soul of heritage city and facilitate inclusive heritage linked urban development by exploring various avenues including involving private sector. Specific objective are given below:

- Planning, development and implementation of heritage sensitive infrastructure.
- Service delivery and infrastructure provisioning in historic city core areas.
- Preserve and revitalize heritage wherein tourists can connect directly with city's unique character.
- Develop and document a heritage asset inventory of cities –natural, cultural, living and built heritage as a basis for urban planning, growth and service provision and delivery.
- Implementation and enhancement of basis services delivery with focus on sanitation services like public conveniences, toilets, water taps, street lights with use of latest technologies in improving tourist facilities/ amenities.
- Local capacity enhancement for inclusive heritage-based industry.
- Create effective linkages between tourism and cultural facilities and also the conservation of natural and built heritage.
- Urban heritage adaptive rehabilitation and maintenance, including appropriate technologies for historic buildings retrofitting.
- Establish and manage effective public private partnership for adaptive urban rehabilitation.
- Development and promotion of core tangible economic activities to enhance avenues of livelihoods amongst stakeholders. This would also include necessary skill development amongst them including making public spaces accessible and developing cultural spaces.
- Making cities informative with use of modern ICT tools and making cities secure with modern surveillance and security apparatus like CCTV etc.
- Increase accessibility i.e., physical access and intellectual access.

The scheme is implemented in 12 identified Cities namely, Ajmer, Amaravati, Amritsar, Badami, Dwarka, Gaya, Kanchipuram, Mathura, Puri, Varanasi, Velankanni and Warangal.

Shyama Prasad Mukherjee Rurban Mission (SPMRM)

"Shyama Prasad Mukherjee Rurban Mission (SPMRM)" was launched February 2016. The aim of the Mission was to develop rural growth clusters in all States and Union Territories (UTs) so that overall

development in the region can be triggered. These clusters are to provide economic activities, developing skills and local entrepreneurship and providing infrastructure amenities.

- This unique programme is designed to deliver catalytic interventions to rural areas on the threshold of growth.
- Upon being re-classified Centrally Sponsored Scheme, the CGF is now shared between the Centrally Sponsored Scheme, the CGF is now shared between the Centre and the State in a ratio of 60:40 for Plain area States and 90:10 for Himalayan and NE States.
- Substantial part of the works identified for development in the clusters is focused on provision of basic and economic amenities.
- Provision of basic amenities in a cluster typically comprise; provision of 24/7 Water Supply to all households, Solid and Liquid Waste Management facilities at the household and cluster level, provision of Inter and Intra village roads within the cluster, adequate Street Lights and Public Transport facilities using green technologies.
- Provision of Economic Amenities in a cluster comprises of various thematic areas in the sectors of Agri Services and Processing, Tourism, and Skill development to promote Small and Medium Scale Enterprises.

The Sanitation Revolution – Creating Infrastructure

Creating a sanitation revolution has been high on the agenda of the government. The Swachh Bharat Mission (SBM) was launched on 2nd October, 2014 to accelerate the efforts to achieve universal sanitation coverage in India and promote access to safe sanitation in India.

Swachh Iconic Places (SIP):
- Ministry of Drinking Water and Sanitation has undertaken a multi-stakeholder initiative focusing on cleanliness in 100 location across the country which are "iconic" due to their heritage, religious and / or cultural signification. So far, in the first three phases, 30 iconic places have been identified.

Namami Gange:
- The Namami Gange Programme is an initiative of Ministry of Water Resources (MOWR).
- As an inter-ministerial initiative, making village on the bank of river Ganga ODF and interventions dealing with solid and liquid waste management (SLWM) are being implemented by MDWS.
- All villages located across districts of Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal have been declared ODF with active help of state governments.
- Now the Ministry has taken up 25 villages on the bank of River Ganga to transform them as Ganga Grams in coordination with NMCG.

GOBHARdhan scheme:
- MDWS launched the Galvanising Organic Bio-Agro Resource dhan or "GOBHARdhan" scheme on 30th April 2018, at Karnal, Haryana.

- The scheme is aimed at keeping villages clean while increasing the income of farmers and cattle owners by promoting local entrepreneurs to convert cattle dung, and other organic resources, to biogas and organic manure.

Swajal:

- Ministry of Drinking Water and Sanitation launched Swajal, a community demand driven, decentralized, single village preferably solar powered, mini PWS programme for the 117 aspirational districts identified by NIIT Aayog.

Water Resources and Ganga Rejuvenation – Recent Milestones

National Mission for Clean Ganga (NMCG)

Ganga Rejuvenation: Under Namami Gange programme, projects have been sanctioned for various activities such as sewage infrastructure, ghats & crematoria development, river front development, river surface cleaning, institutional development, biodiversity conservation, afforestation, rural sanitation, and public participation.

- For River Front Development, works at ghats crematoria are in progress.
- On rural sanitation front, villages on the bank of river Ganga have been made Open Defection Free (ODF). Individual Household Toilets have been constructed by Ministry of Drinking Water and Sanitation (MoDWS).
- Totally 6 projects on biodiversity conservation and restoration of aquatic biodiversity of river Ganga including Dolphin, Ghariyal, Otter, water birds and fish & fisheries have been taken up.

Dam Projects:

1. **Shahpur Kandi Dam Project:**

An agreement was reached between Punjab and J & K states under the aegis of MoWR, RD&GR to resume works of Shahpur Kandi Dam project in Punjab on river Ravi. This project had been declared as a National Project. This project will help in creation of additional irrigation potential Punjab State J&K State and also efficient management of area under UBDC system in Punjab. Consequently, this project would help minimising some of the water of the River Ravi which at present is going waste through the Madhopur Headworks downstream.

2. **Lakhwar Project:**

Multi-Purpose project in the Upper Yamuna Basin, The Lakhwar project envisages construction of a concrete dam across river Yamuna near Lohari village in Dehradun district of Uttarakhand. This storage will provide irrigation and water for domestic, drinking and industrial use in the six basin states. The project will also generate 300MW of power. The projects is to be executed by M/s Uttarakhand Jal Vidyut Nigam Limited (UJVL)

3. **Completion of balance works of North Koel Reservoir Project, Bihar and Jharkhand:**

The Ministry of Water Resources, RD & GR has taken up the work on completion of balance works of North Koel Reservoir Project, Bihar and Jharkhand which was halted in 1993.

4. **Dam Rehabilitation and Improvement Programme (DRIP):**

In the year 2018-19 Dam Break Analysis were conducted on 38 Dams for preparation of Inundation maps. DHARMA, a web base dam inventory management software has been completed.

Interlinking of River(ILRs):

5. National Perspective Plan (NPP) proposals:

Detailed Project Reports (DPRs) of three priority links have been completed viz. Ken-Betwa link project (Phase –I &II), Damanganga –Pinjal link project and Par-Tapi-Narmada link project. And the project report is ready for implementation.

6. Intra- State link proposals:

DPRs of four intra-state link projects viz., Burhi Gandak-Noon-Baya-Ganga link and Kosi-Mechi link of Bihar State, Ponnaiyar-Palar link of Tamil Nadu and Wainganga (Gosikhurd)-Nalaganga (Purna/Tapi) link project of Maharashtra have been completed and sent to respective States. Preparation of DPRs of Damanganga (Ekdare)-Godavari and Damanganga(Vagh/Val)-Vaitarna-Godavari (Kadva Dev) link projects of Maharashtra are under progress.

7. Proposal for Diversion of Godavari water upto Cauvery basin:

As per the Planning of Peninsular Component of the national Perspective Plan (NPP) water from Mahanadi and Godavari rivers is to be transferred through the nine link system namely

(i) Mahanadi –Godavari link

(ii) Inchampalli –Nagarjunasagar link

(iii) Inchampalli –Pulichintala link

(iv) Polavaram- Vijayawada link (implemented by Government of Andhra Pradesh)

(v) Almatti – Pennar link

(vi) Srisailam –Pennar Link

(vii) Nagarjunasagar – Somasila link

(viii) Somasila – Grand Anicut link and

(ix) Cauvery- Vaigai –Gundae link to Krishna, Pennar, Cauvery, Vaigai and Gundar basins.