



HYPERLOOP 2019

INDUSTRIAL DEVELOPMENT

CONSOLIDATED CURRENT AFFAIRS FOR ESE 2019

Contents

1. INFRASTRUCTURE	6
1.2 Transportation	6
1.2.1 India's Expressways	6
1.2.2 The Zojila Tunnel	6
1.2.3 New Airports.....	7
1.2.4 Water aerodromes	7
1.2.5 Sagarmala receives Gold Award	7
1.2.6 Jal Marg Vikas Project (JMVP).....	8
1.2.7 National Waterways.....	8
1.2.8 Chabahar Port.....	8
1.3 Railways	8
1.3.1 Indian Railways' first engine-less train	8
1.3.2 World's highest railway line.....	9
1.4 Others	9
1.4.1 The Kaleshwaram project.....	9
1.4.2 India rolls out world's largest UPS project	9
1.4.3 Talcher fertiliser plant	9
1.4.4 Medical Cyclotron Facility Cyclone-30	9
1.5 Institutes	10
1.5.1 New National Institutes of Design	10
1.5.2 National Council for Vocational Education and Training	10
1.6 Funds	10
1.6.1 Infrastructure fund NIIF takes off	10
2. AGRICULTURE AND ALLIED SECTORS	11
2.1 Schemes	11
2.1.1 Operation Greens	11
2.1.2 Krishi Kalyan Abhiyan.....	11
2.1.3 Paramparagat Krishi Vikash Yojana to promote organic farming.....	11
2.1.4 Integrated Farming Systems (IFS)	11
2.1.5 Micro Irrigation Fund with NABARD	12
2.1.6 Reconstitution of National Bamboo Mission.....	12

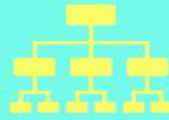
2.1.7 Pradhan Mantri Annadata Aay SanraksHanAbhiyan (PM-AASHA)	13
2.1.8 Project Arya	13
2.1.9 Krishonnati Yojana	13
2.1.10 Water productivity in farming	13
2.1.11 Watershed development projects	13
2.1.12 2018 as 'national year of millets'	14
2.2 Acts and Policies	14
2.2.1 Pesticides Management Bill	14
2.2.2 Model Act on Contract Farming	14
2.2.3 Draft Mariculture policy	14
3. MSME SECTOR	15
3.1 Support to the Sector	15
3.1.1 Support and Outreach Initiative for MSME Sector	15
3.1.2 Online system for Limited Liability Partnership (LLP) incorporation	16
3.1.3 Udyam Abhilash	16
3.1.4 Udyam Sakhi Portal for Women Entrepreneurs	17
3.1.5 Solar Charkha Mission	17
3.1.6 SAATHI Initiative	17
3.1.7 Hunar Haat	17
3.1.8 Mega SEZs to spur electronics exports	17
3.1.9 National Electronics Policy 2018	17
3.2 GI tags	18
3.2.1 GI tagged items this year	18
3.2.2 About GI	18
4. OTHER SECTORS	18
4.1 Defence Sector	19
4.1.1 Defence Offset Policy	19
4.2 Transport Sector	19
4.2.1 UDAN International	19
4.2.2 The new National Auto Policy	19
4.2.3 New policy to promote electric vehicles	19
4.2.4 FAME-India	20

4.2.5 Amendments Proposed to Central Motor Vehicles Rules.....	20
4.2.6 Vahan and Sarathi	20
4.2.7 Privatisation of Airports	20
4.2.8 Amendments to the Major Port Authorities Bill	21
4.2.9 IWAI Makes India’s First Standardised Modern Ship Design	21
4.3 Service Sector	21
4.3.1 Action Plan for Champion Sectors in Services	21
4.3.2 BIS to set standards for the services sector	21
5. INNOVATIONS AND R&D	22
5.1 Advanced Technologies	22
5.1.1 ISRO to transfer tech on low-cost e-vehicle batteries.....	22
5.1.2 Nanomotors for targeted cancer therapy.....	22
5.1.3 Japan to test mini ‘space elevator’	22
5.1.4 World’s first Hyperloop passenger capsule unveiled	22
5.1.5 Green process cuts water use, pollution in textile industry	23
5.2 Promotion of Innovation	23
5.2.1 105th Session of Indian Science Congress	23
5.2.2 State Startup Ranking Framework 2018	23
5.2.3 CSIR bags National Intellectual Property (IP) Award 2018.....	23
5.2.4 Intellectual Property mascot – IP Nani	24
5.2.5 ITU South Asia Area Office and Technology Innovation Centre.....	24
5.2.6 Centre for the Fourth Industrial Revolution	24
6. ENVIRONMENT PROTECTION	25
6.1 Low carbon Strategies	25
6.1.1 Methanol Economy	25
6.1.2 Ban of BS-IV vehicles	25
6.1.3 MOBILISE YOUR CITY (MYC) initiative.....	26
6.2 Protection	26
6.2.1 New Coastal Regulation Zone 2018 draft	26

TEST SERIES ESE 2019 GS&APTITUDE



Integrated with
the study plan



Individual and
Cumulative Tests



Detailed
Solutions



Simulating Actual
Exam Environment



Detailed Post
Exam Analysis

Registrations are now open
testseries.adapala-academy.com

VIDEO LECTURES

ESE General Studies & Aptitude

Study from

Anywhere

Anytime

Any number of times in an year

Features

- Extensive syllabus coverage
- One year doubts support
- Free test series
- Money back guarantee



www.iesgeneralstudies.com/video-lectures/

1. INFRASTRUCTURE

1.1 What is Infrastructure?

Infrastructure can include a variety of systems and structures as long as there are physical components required.

Types of Infrastructure

- **Soft infrastructure:** These types of infrastructure makeup institutions that help maintain the economy. Examples include the healthcare system, financial institutions, governmental systems, law enforcement and education systems.
- **Hard Infrastructure:** These make up the physical systems that make it necessary to run a modern, industrialized nation. Examples include roads, highways, bridges, as well as the capital/assets needed to make them operational (transit buses, vehicles, oil rigs/refineries).
- **Critical Infrastructure:** These are assets defined by a government as being essential to the functioning of a society and economy, such as facilities for shelter and heating, telecommunication, public health, agriculture, etc.

1.2 Transportation

1.2.1 India's Expressways

Delhi-Meerut Expressway:

- The Delhi-Meerut route is India's first 14 lane expressway and spans from Nizamuddin Bridge to the Uttar Pradesh border.
- The expressway gets vertical gardens with solar panels for lighting and drip water irrigation in order to keep the pollution levels low.
- The expressway also gets Advanced Traffic Management Systems (ATMS) and CCTVs to monitor the traffic and safety of commuters

Eastern Peripheral Expressway

- It is India's first highway to be lit by solar power besides provisions of rainwater harvesting have been made on every 500 metres on either side.
- The EPE is equipped with smart and intelligent highway traffic management system (HTMS) and video incident detection system (VIDS), while there is also Electronic Toll Collection (ETC) system
- The six-lane expressway will connect Kundli with Palwal in Haryana, via Ghaziabad and Greater Noida in Uttar Pradesh.

Bengaluru Expressway project

- The 262-km greenfield Bangalore-Chennai Expressway (BCE)
- Executed under the hybrid annuity mode (HAM). Under HAM, a portion of the costs is borne by the government and the contractor is paid an annuity.

1.2.2 The Zojila Tunnel

Prime Minister on Saturday inaugurated the Zojila tunnel project, which will provide all-weather connectivity to Srinagar, Kargil and Leh.

Highlights:

- The tunnel will cut down the time taken to cross the Zojila pass from the three hours 30 minutes to 15 minutes.

- The tunnel will have a transverse ventilation system, uninterrupted power supply, emergency lighting, CCTV monitoring, pedestrian cross passages at every 250 metres and emergency telephones and fire-fighting cabinets at every 125 metres.
- At 14.15 km, it will be the country's longest road tunnel.

1.2.3 New Airports

Pakyong Airport in Sikkim

- Pakyong Airport will bring the State of Sikkim on the country's aviation map.
- Pakyong Airport is a greenfield airport near Gangtok

New airport at Jharsuguda

- The new airport has been named after freedom fighter Veer Surendra Sai.
- This is the second major airport in Odisha
- The airport has been developed under the Centre's UDAN scheme

About Greenfield airports:

Using previously undeveloped land and commissioning, planning and construction processes that are generally carried out from scratch.

1.2.4 Water aerodromes

The aviation regulator DGCA(Directorate General of Civil Aviation) is issuing licensing norms for setting up such facilities.

- Water aerodromes will help pave the way for operations of seaplanes, which are also known as amphibian aircraft
- Water bodies can be coastal/ river/ canal as well as terrestrial
- Water aerodrome is a defined area on water, including any buildings, installations and equipment, intended to be used either wholly or in part for the arrival, departure and movement of aircraft, as per the DGCA

1.2.5 Sagarmala receives Gold Award

The Ministry of Shipping's flagship programme for port-led-prosperity 'Sagarmala' received the 'Gold Award' in infrastructure sector in the recently concluded 52nd Skoch Summit 2018 in New Delhi.

Skoch Awards:

- The Skoch Awards recognize leadership and excellence in accelerating socio-economic changes.

About Sagarmala :

- It is the flagship programme of the Ministry of Shipping for port-led-development of the country through harnessing India's 7,500 km long coastline.
- India has potentially navigable waterways
- India is strategically located on key international maritime trade route.
- The programme hinges on four pillars, namely; Port Modernization, Port Connectivity, Port-linked Industrialization and Coastal Community Development.
- The programme aims to double the share of domestic waterways (inland & coastal) in the modal mix and generate logistic cost savings



1.2.6 Jal Marg Vikas Project (JMVP)

The 'Jal Marg Vikas' (National Waterway-1) project envisages to develop a fairway with 3 meters depth between Allahabad to Haldia covering a distance of 1620 kms.

Highlights:

- For implementation of the Jal Marg Vikas Project, technical assistance and investment support is being provided by the World Bank
- Phase-I of the project covers the Haldia-Varanasi stretch which includes development of fairway, Multi-Modal Terminals, strengthening of river navigation system, conservancy works, modern River Information System (RIS), Digital Global Positioning System (DGPS), night navigation facilities, modern methods of channel marking etc.

1.2.7 National Waterways

111 inland waterways (including 5 existing) have been declared as 'National Waterways' (NWs) under the National Waterways Act, 2016.

Operational Waterways

- NW-1 (River Ganga)
- NW-2 (River Brahmaputra)
- NW-3 (West Coast Canal from Kottapuram to Kollam along with Udyogmandal and Champakara Canals)
- NW-16 (River Barak)
- NW-27, 68 and 111 (in Goa)
- NW-9 (in Kerala) and
- NW-97

20 National Waterways out of 111 are in North Eastern Region (NER).

- NW-2 (river Brahmaputra) from Dhubri to Sadiya (891 km) is operational for transport and cruise and cargo vessels are moving on it.
- NW-16 is on river Barak

1.2.8 Chabahar Port

Iran is going to handover the strategic Chabahar port to an Indian company within a month for operation as per an interim pact.

About Chabahar port:

- Iran's Chabahar port is located on the Gulf of Oman and is the only oceanic port of the country.
- The port gives access to the energy-rich Persian Gulf nations' southern coast and India can bypass Pakistan with the Chabahar port becoming functional.

1.3 Railways

1.3.1 Indian Railways' first engine-less train

- Made-in-India, estimated cost of the engine-less train is Rs 100 crore
- Named as Train 18. It can run at 160 kmph speed and has swanky interiors
- Developed by Chennai-based Integral Coach Factory
- The train will be equipped with modular toilets with a bio-vacuum system and there will be accessible toilets for persons with disability.

Engine-less train

- There is electric motor at each bogies.
- There is no engine in front like that of normal train.

- It is called self-propelled train

1.3.2 World's highest railway line

India railways is planning to link New Delhi and Ladakh by means of a railway line that will run along the India-China Border.

- The proposed Bilaspur-Manali-Leh Line will be the world's highest at 5,360 metres above mean sea level which is comparable to China's Qinghai-Tibet Railway Line at 5,072 metres.
- It will provide quick all-weather access to the armed forces
- The project will include 74 tunnels, 124 major bridges and 396 minor bridges

1.4 Others

1.4.1 The Kaleshwaram project

- The country's biggest irrigation project, the Kaleshwaram Lift Irrigation Scheme is in Telangana
- It will harness water at the confluence of three rivers with Godavari
- And reverse pump the water into the main Godavari River and divert it into a huge and complex system of reservoirs, water tunnels, pipelines and canals.

Lift Irrigation

- The project had to be built at such a size and scale because while the Godavari flows at 100 metres above mean sea level (MSL), Telangana region is located at 300 to 650 metres above MSL.
- The pumps would operate at a cavern and surge pool which also holds a record for being the biggest in the world
- The first time in the world an irrigation project is using 139 MW pumps to lift huge volume of 2 TMC of water.

1.4.2 India rolls out world's largest UPS project

The world's largest deployment of lithium-ion UPS solution is coming up in Andhra Pradesh.

Li-ion battery:

- Lithium-ion battery technology can withstand higher ambient temperatures
- It has five times more cyclic life than valve-regulated lead acid batteries
- It has lower weight and smaller footprint compared to lead acid batteries than conventional lead acid batteries.

1.4.3 Talcher fertiliser plant

Talcher Fertilizers Ltd is a joint venture between state run GAIL (India) Ltd, Rashtriya Chemicals & Fertilizers Limited (RCF) and Coal India Ltd (CIL).

- Once commissioned, it will produce 1.26 million metric tonne per annum of neem-coated urea.
- The plant will promote alternative use of domestic coal in an environment friendly manner
- Coal being converted into syngas for use as a feedstock and for producing neem-coated urea
- It will help cut import of natural gas(LNG) and fertiliser
- Gas-based fertiliser units will also add to the customer base of gas trading and energy infrastructure firms such as Gail India Ltd.
- The first such plant in eastern India.

1.4.4 Medical Cyclotron Facility Cyclone-30

Cyclotrons are used to produce radioisotopes for diagnostic and therapeutic use for cancer care.

Cyclone-30

- Cyclone-30, the biggest cyclotron in India for medical application
- At VECC (Variable Energy Cyclotron Centre), Kolkata, a Department of Atomic Energy (DAE) unit

1.5 Institutes

1.5.1 New National Institutes of Design

The Union Cabinet approved amendments to the National Institute of Design (NID) Act of 2014 for the setting up of four new institutes in Amaravati, Bhopal, Jorhat and Kurukshetra.

Objectives:

- Promotion of quality and excellence in education, research and training in all disciplines relating to design
- These institutes are meant to provide “sustainable design interventions for crafts, handloom, rural technology, small, medium and large scale enterprises; and outreach programmes for capacity, capability and institution building”.

National Design Policy 2007:

- The policy called for promotion of Indian design through a well-defined and managed regulatory, promotional and institutional framework.
- The setting up of specialised design centres or ‘innovation hubs’ for sectors such as automobile and transportation, jewellery, leather and soft goods.
- The policy document had called for the formulation of a scheme to set up these hubs in select locations, especially in backward States, and particularly in the Northeast.

1.5.2 National Council for Vocational Education and Training

The Union Cabinet has approved the merger of the existing regulatory institutions in the skills space - National Council for Vocational Training (NCVT) and the National Skill Development Agency (NSDA) into the National Council for Vocational Education and Training (NCVET).

About NCVET:

- NCVET will regulate the functioning of entities engaged in vocational education and training, both long-term and short-term and establish minimum standards for the functioning of such entities.
- Functions:
 1. Recognition and regulation of awarding bodies, assessment bodies and skill related information providers
 2. Approval of qualifications developed by awarding bodies and Sector Skill Councils (SSCs)
 3. Indirect regulation of vocational training institutes through awarding bodies and assessment agencies
 4. Research and information dissemination
 5. Grievance redressal.

1.6 Funds

1.6.1 Infrastructure fund NIIF takes off

- Abu Dhabi Investment Authority (ADIA) became the first institutional investor in NIIF’s Master Fund and a shareholder in the NIIF’s investment management company

About NIIF:

- In December 2015 government had approved the creation of NIIF with an aim to maximize economic impact through infrastructure development in commercially viable projects, both greenfield and brownfield, including stalled projects.

- The government is also considering investments in third-party managed funds focused on clean energy, affordable housing and medium-sized infrastructure companies

2. AGRICULTURE AND ALLIED SECTORS

2.1 Schemes

2.1.1 Operation Greens

- In the budget speech of 2018-19, a new Scheme “Operation Greens” was announced on the line of “Operation Flood”.
- To ensure availability of Tomato Onion Potato(TOP) crops throughout the country round the year without price volatility.
- To promote Farmer Producers Organizations, agri-logistics, processing facilities and professional management.

Series of measures:

1. Short term Price Stabilisation Measures:
2. Long Term Integrated value chain development projects

2.1.2 Krishi Kalyan Abhiyan

- The Krishi kalyan Abhiyaan will be undertaken in 25 Villages with more than 1000 population each in Aspirational Districts identified in consultation with Ministry of Rural Development as per directions of NITI Ayog.
- The overall coordination and implementation in the 25 villages of a district is being done by Krishi Vigyan Kendra of that district.
- The demonstration programmes on Micro Irrigation and Integrated Cropping Practice will also take place so as to familiarize farmers with the latest techniques and how they can be incorporated at the grass root level.
- Women participants and farmers will be given preference for the training program.

About Krishi Vigyan Kendra:

- Krishi Vigyan Kendras (KVKs) are agricultural extension centers created by ICAR to provide various types of farm support to the agricultural sector.
- KVK operates under the administrative control of State Agricultural University (SAU) or central institute.

2.1.3 Paramparagat Krishi Vikash Yojana to promote organic farming

- To promote organic farming in the country.
- Government institutions like APEDA and Ministry of Commerce, while playing a leading role in improvement and control of certification system, are promoting the export of organic products.
- The government has initiated the Organic Value Chain Development for North Eastern region.
- The aim of the Ministry is to promote organic farming in hilly and tribal areas as the use of chemical fertilizers and pesticides in these areas is very low.

2.1.4 Integrated Farming Systems (IFS)

Scientifically designed and tailor-made Integrated Farming Systems (IFS) is being promoted to achieve the vision of “Doubling Farmers’ Income by 2022”.

- IFS can be classified as natural and intentional integrated systems.

- The intentional integrated systems are one which addresses the multiple objectives of increased production, profit, cost-reduction through recycling, family nutrition, sustainability, ecological security, employment generation, economic efficiency and social equity.
- The location specific integration of field crops, orchard, floriculture, agro-forestry, livestock such as dairy, poultry, piggery, fishery and other less land requiring activities such as mushroom, apiary Boundary plantations is being done for improving the livelihood of marginal and small households.

2.1.5 Micro Irrigation Fund with NABARD

Setting up of a dedicated “Micro Irrigation Fund” (MIF) with National Bank for Agriculture and Rural Development (NABARD) under Pradhan Mantri Krishi Sinchayee Yojana (PMKSY).

- The Fund will facilitate States to mobilise resources for their initiative to achieve the annual target of about 2 Million ha/year under Per Drop More Crop Component of PMKSY
- The approval shall have Pan India coverage.

About Pradhan Mantri Krishi Sinchayee Yojana :

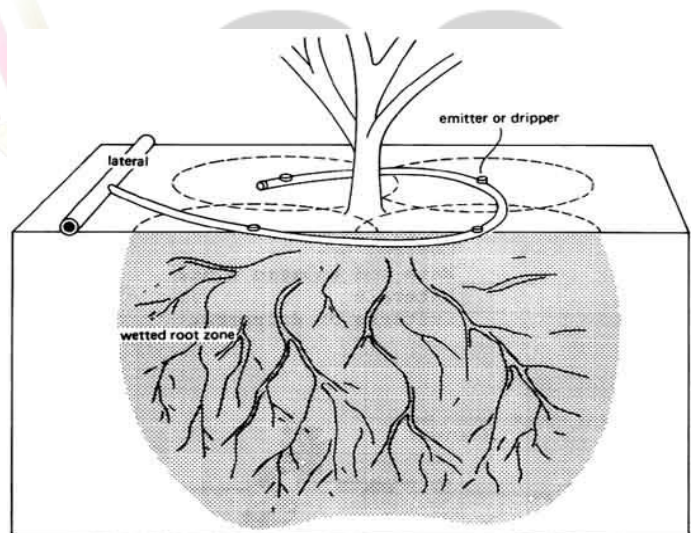
Main objectives are

1. Extending the coverage of irrigation
2. Improving water use efficiency
3. End to end solution on source creation, distribution, management, field application and extension activities.

Implementation - Decentralised manner through State Irrigation Plan and District Irrigation Plan

Micro Irrigation

- Micro irrigation is defined as the frequent application of small quantities of water directly above and below the soil surface.
- Advantages are Increased yield, Early maturity, Water saving, Fertilizer saving, Increased Fertilizer efficiency, Energy saving, Labor saving, Marginal lands can be irrigated, Use of saline water is possible for irrigation, Reduced weed growth, Less problem of disease and pest etc
- Micro Irrigation Systems are Drip Irrigation, Sprinkler Irrigation System, Micro sprinklers, Micro jets, Rain Guns, Gravity fed Drip System etc



2.1.6 Reconstitution of National Bamboo Mission

The restructured National Bamboo Mission (NBM) has been launched under the National Mission for Sustainable Agriculture (NMSA).

Objectives:

- To increase the area under bamboo plantation in non forest Government and private lands.
- To supplement farm income and contribute towards resilience to climate change as well as availability of quality raw material requirement of industries.
- To improve post-harvest management through establishment of innovative primary processing units
- To rejuvenate the underdeveloped bamboo industry in India.

2.1.7 Pradhan Mantri Annadata Aay SanraksHanAbhiyan (PM-AASHA)

The Union Cabinet has approved a new Umbrella Scheme "Pradhan Mantri Annadata Aay SanraksHan Abhiyan' (PM-AASHA).

Key Facts:

- The Scheme is aimed at ensuring remunerative prices to the farmers for their produce as announced in the Union Budget for 2018.
- To ensure that farmers growing oilseeds, pulses and copra actually get the minimum support prices (MSP)
- It clubs together an existing procurement scheme with newly introduced options

2.1.8 Project Arya

To attract the youth of the country towards agriculture, a project called 'Arya' is being run through Krishi Vigyan Kendras and the Farmer Fest program.

Highlights:

- Skill development internships for youth are provided at the graduation level.
- Startups in the fields of seed and plant production, food processing and post-mortgage management, veterinary, farm machinery, poultry, fish production, biological products and bioplasty.

2.1.9 Krishonnati Yojana

The Cabinet Committee on Economic Affairs has given its approval for the Umbrella Scheme, "Green Revolution – Krishonnati Yojana" in agriculture sector.

Highlights:

- The Umbrella scheme comprises of 11 Schemes/Missions.
- These schemes look to develop the agriculture and allied sector in a holistic and scientific manner to increase the income of farmers by enhancing production, productivity and better returns on produce.
- All these schemes/missions were appraised and approved independently as separate scheme/mission

2.1.10 Water productivity in farming

A report released by the National Bank for Agriculture and Rural Development (NABARD) says that changing the objective of agriculture development to increasing productivity per unit of water, especially irrigation water, is crucial.

The report:

- The productivity per unit of water is called water productivity.
- The stark differences between land and water productivity are seen in rice and sugarcane cultivation
- Punjab reports the highest land productivity for rice, however it only produces 0.22 kg of rice for every metre cube of irrigation water.
- Jharkhand and Chhattisgarh, on the other hand, produce 0.75 and 0.68 kg for the same amount of water.

2.1.11 Watershed development projects

Watershed management is an attempt to halt land degradation and a holistic process for getting maximum production out of land.

Objectives

- It implies rational utilisation of land and water resources for optimum and sustained production, with the minimum of hazard to natural resources.
- The rain water can be made to move down the slopes slowly, ensuring optimum infiltration and percolation, automatically solving the problem of soil erosion.

- Reducing the impact of the rain on the soil, checking its speed at various intervals, taking up all operations on the contour and diverting the excess to prevent the, pressure, are some of the procedures one could adopt; a process that starts at the highest point of the watershed and ends right down in the lower parts.
- To facilitate water conservation and recharge, and to prevent soil degradation

2.1.12 2018 as 'national year of millets'

- Millet is a common term to categorize small-seeded grasses that are often termed nutri-cereals or dryland-cereals.
- It includes sorghum, pearl millet, ragi, small millet, foxtail millet, proso millet, barnyard millet, kodo millet and other millets.
- Millets are highly nutritious and useful in various lifestyle diseases, enhancing resilience and risk management in face of climate change especially for small and marginal farmers

Year of Millets

- India is celebrating 2018 as the National Year of Millets
- It is promoting cultivation by amending cropping pattern of areas which are especially susceptible to climate change

2.2 Acts and Policies

2.2.1 Pesticides Management Bill

Is intended to replace and update the Insecticides Act, 1968.

Objectives:

- Ensuring availability of quality pesticides
- Minimizing the contamination of agricultural commodities by pesticide residue
- Creating awareness among users regarding safe and judicious use of pesticides.
- The bill has tightened the guidelines for registration and licensing of new molecules.
- It provides for paying compensation to the affected farmers or users under the provisions of the Consumer Protection Act, 1986.

2.2.2 Model Act on Contract Farming

The Government has formulated and released a progressive and facilitative Model Act "The State/ UT Agricultural Produce & Livestock Contract Farming and Services (Promotion & Facilitation) Act, 2018.

Key Facts:

- The Model Contract Farming Act covers the entire value and supply chain from pre-production to post harvest marketing including services contract for the agricultural produce and livestock.
- To engage private players including Farmer Producer Organizations (FPOs) in the contract farming and services contracts under the Act
- It will help in mitigating the price risk and market uncertainties through advance agreements and would encourage entry of private players into the farm sector.

About Contract Farming:

Contract farming can be defined as agricultural production carried out according to an agreement between a buyer and farmers, which establishes conditions for the production and marketing of a farm product or products

2.2.3 Draft Mariculture policy

The centre recently released a draft policy on mariculture.

The provisions of the draft policy:

- It aims to enhance mariculture production, increase income and employment opportunities in a sustainable way and to promote entrepreneurship by facilitating technical and financial inputs.
- The policy has mooted mariculture zones by demarcating special areas in the sea for activities such as cage farming, bivalve farming, pen culture, seaweed culture, hatcheries and nurseries based on scientific criteria.
- The policy has also suggested farming of genetically modified (GM) species only in closed mariculture systems after stringent risk assessment and monitoring. It will not be permitted in open sea culture.
- Satellite remote sensing data and GIS will be used to identify potential zones for mariculture on the basis of scientific evaluation of environmental parameters suitable for various types of farming.
- Efficient market logistics would be promoted to minimize post-harvest losses and preserving the nutritional quality and value of fish.

About mariculture:

- Mariculture is a specialised branch of aquaculture involving the cultivation of economically important marine plants and animals in the sea or any other water body having tidal influence.

3. MSME SECTOR**3.1 Support to the Sector****3.1.1 Support and Outreach Initiative for MSME Sector**

As part of this programme, the Prime Minister unveiled 12 key initiatives which will help the growth, expansion and facilitation of MSMEs across the country.

The Key Initiatives:

- Easy access to credit: to enable easy access to credit for MSMEs. The web portal www.psbloansin59minutes.com will enable in principle approval for MSME loans up to Rs. 1 crore within 59 minutes from SIDBI and 5 Public Sector Banks (PSBs).
- A 2% interest subvention for all GST registered MSMEs, on fresh or incremental loans.
- All companies with a turnover more than Rs. 500 crore, must now compulsorily be brought on the Trade Receivables e-Discounting System (TReDS). This will resolve their problems of cash cycle.
- The public sector companies have now been asked to compulsorily procure 25 percent, instead of 20 percent of their total purchases, from MSMEs.
- Out of the 25 percent procurement mandated from MSMEs, 3 percent must now be reserved for women entrepreneurs.
- All public sector undertakings of the Union Government must now compulsorily be a part of GeM.
- 20 technological hubs will be formed across the country.
- Clusters will be formed of pharma MSMEs.
- The return under 8 labour laws and 10 Union regulations must now be filed only once a year.
- Now the establishments to be visited by an Inspector will be decided through a computerised random allotment.
- Under air pollution and water pollution laws, now both these have been merged as a single consent.
- An Ordinance has been brought, under which, for minor violations under the Companies Act, the entrepreneur will no longer have to approach the Courts, but can correct them through simple procedures.

The key features of the platform include:

- MSME borrowers can connect with multiple banks without visiting the branch.
- Only Platform that enables Bankers to create Loan Products in line with the Scoring models & assessment methods within their approved credit policy
- Only Platform that has an integrated GST, ITR, Bank Statement Analyzer, Fraud Check and Bureau Check as well as host of other features which at present is not available with any other player in the market.

3.1.2 Online system for Limited Liability Partnership (LLP) incorporation

Ministry of Corporate Affairs has launched a process re-engineering by making incorporation of Limited Liability Partnership (LLP) through a complete online system through a web service titled “RUN-LLP (Reserve Unique Name – Limited Liability Partnership)”

The amendments:

- New integrated form- FiLLiP (Form for incorporation of Limited Liability Partnership) replacing the erstwhile Form 2 combining therein 3 services i.e.
 1. Name reservation
 2. Allotment of Designated Partner Identification Number (DPIN/DIN).
 3. Incorporation of the LLP

About LLP:

- LLP is an alternative corporate business form that gives the benefits of limited liability of a company and the flexibility of a partnership.
- The LLP can continue its existence irrespective of changes in partners.
- It is capable of entering into contracts and holding property in its own name.
- The LLP is a separate legal entity, is liable to the full extent of its assets but liability of the partners is limited

3.1.3 Udyam Abhilash

Small Industries Development Bank of India (SIDBI), had launched a National Level Entrepreneurship Awareness Campaign, Udyam Abhilasha.

Highlights:

- The campaign would create and strengthen cadre of more than 800 trainers
- To provide entrepreneurship training to the aspiring youths across these districts
- To impart trainings through digital medium across the country
- To create business opportunities for CSC VLEs
- To focus on women aspirants in these aspirational districts to encourage women entrepreneurship
- To assist participants to become bankable and avail credit facility from banks to set up their own enterprise.

About SIDBI:

- Small Industries Development Bank of India (SIDBI), is the Principal Financial Institution for the Promotion, Financing, Development and Coordination of the Micro, Small and Medium Enterprise (MSME) sector
- SIDBI, under its revamped strategy SIDBI 2.0, has adopted the theme of ease of access to MSEs and being Impact Multiplier & Digital Aggregator

3.1.4 Udyam Sakhi Portal for Women Entrepreneurs

- The portal is a network for nurturing entrepreneurship and creating business models for low cost products and services in order to empower women and make them self-reliant and self-sufficient.
- The portal provides assistance through its platform for entrepreneurship learning tools, incubation facility, training programs for fundraising, providing mentors, one-on-one investor meet, provide market survey facility and technical assistance.

3.1.5 Solar Charkha Mission

The Solar Charkha Mission of the Ministry of Micro Small & Medium Enterprises (MSME)

- The objective is to link 5 crore women to this initiative.
- The mission is expected to create one lakh jobs during the first two years
- 15 new state-of-the-art technology centers are being set up all over the country including North-East, of which 10 centers will become operational by March 2019
- The Mission will cover 50 clusters and every cluster will employ 400 to 2000 artisans.

3.1.6 SAATHI Initiative

Ministry of Textiles and Ministry of Power have joined hands under the initiative SAATHI (Sustainable and Accelerated Adoption of efficient Textile technologies to Help Small Industries).

- The adoption of energy efficient textile technologies in the powerloom sector and achieve cost savings due to use of such technology.
- Powerloom clusters at Ichalkaranji, Bhiwandi, Erode, Surat, Bhilwara and Panipat have been identified for pilot study.

3.1.7 Hunar Haat

Hunar Haat, being organised across the country by the Ministry of Minority Affairs has proved to be "Empowerment & Employment Exchange" for master artisans and craftsmen.

- Encouraged and promote the rich traditional heritage of master artisans.
- Providing national and international markets and employment-marketing opportunities to master artisans and craftsmen.

3.1.8 Mega SEZs to spur electronics exports

In a bid to make India an export hub for electronics, the government plans to set up at least one Special Economic Zone (SEZ) or special economic zone in every State under the proposed electronic policy.

Highlights:

- The new policy will focus on making India an export hub
- It has been proposed that at least one mega SEZ be set up in each state, with emphasis on coastal economic zones
- The government also plans to sign free trade agreements (FTAs) with countries, including those in Africa and Europe, to which India can export smaller electronic products.
- The draft of the policy will outline a framework to make India a global leader in product verticals such as medical and automotive electronics, besides mobile phone and consumer electronics.

3.1.9 National Electronics Policy 2018

The Union Ministry of Electronics and Information Technology (MeitY) has released the draft of the National Electronics Policy 2018.

The draft:

- The policy aiming for a turnover of \$400 billion in domestic electronics manufacturing by 2025

- Promoting ease-of-doing business for the entire electronic system design manufacturing or ESDM sector
- Encouraging industry-led research and development and innovation in all sub-sectors of electronics.
- Push the startup ecosystem in emerging technology areas
- Provision of suitable direct tax benefits
- Replacing the M-SIPS (Modified Special Incentive Package Scheme) with schemes that are easier to implement such as interest subsidy and credit default guarantee, etc.

3.2 GI tags

3.2.1 GI tagged items this year

- Five rural crafts from the West Bengal
 - a. The Chau mask of Purulia
 - b. The wooden mask of Kushmandi
 - c. The Patachitra
 - d. The Dokras of Bengal
 - e. Madhurkathi (a kind of mat)
- Bihar's Shahi litchi
- Alphonso mango from Konkan
- Madhya Pradesh **Kadakhnath**, a black-feathered chicken known for its flavourful meat.
- Adilabad Dokra and Warangal Durries from Telangana

3.2.2 About GI

- A Geographical Indication or a GI is an indication used on products that have a specific geographical origin and possess qualities or a reputation that are due to that origin.
- The name conveys an assurance of quality and distinctiveness.
- GI products can benefit the rural economy in remote areas, by supplementing the incomes of artisans, farmers, weavers and craftsmen.
- The first product to get a GI tag in India was the Darjeeling tea in 2004.
- GI tags are given on the basis of the Geographical Indications of Goods (Registration and Protection) Act, 1999
- In order to function as a GI, a sign must identify a product as originating in a given place.
- In addition, the qualities, characteristics or reputation of the product should be essentially due to the place of origin.
- It also ensures that none can use their name, giving them exclusivity.
- The registration of a GI is valid for 10 years after which it needs to be renewed
- Violation of GI tags is punishable offence under law.

Who accord GI tag?

- Chennai based Geographical Indication Registry and Intellectual Property of India accord locally.
- At international level, GI is governed by WTO's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).

4. OTHER SECTORS

4.1 Defence Sector

4.1.1 Defence Offset Policy

The Offset Policy was formally announced for the first time in 2005

Objectives

- In order to develop a strong indigenous industry in defence sector.

What is offset?

- A flow-back arrangement is made in the defence contracts, known as offsets, and constitutes a certain percentage of the contract value.
- The offset can be discharged by many means such as direct purchase of eligible products/services, FDI in joint ventures and investment towards equipment and transfer of technology.
- As per Defence Offset Guidelines, the foreign Original Equipment Manufacturer (OEM) is free to select any Indian company as its offset partner.

4.2 Transport Sector

4.2.1 UDAN International

- The scheme is designed for State governments that are keen to promote air connectivity on international routes identified by them
- The key difference between this scheme and the regional connectivity scheme (RCS) for domestic routes is that there is no capping of fares

About UDAN-RCS:

- UDAN-RCS, UDAN (Ude Desh ka Aam Naagrik) is a regional airport development and “Regional Connectivity Scheme” (RCS) of Government of India.
- It aimed at making air travel affordable and widespread, to boost inclusive national economic development, job growth and air transport infrastructure development of all regions and states of India

4.2.2 The new National Auto Policy

Highlights:

- It envisages having a single nodal regulatory body for the automobile industry.
- Strengthening the FAME India (Faster Adoption and Manufacturing of Electric & Hybrid Vehicles) scheme further for the faster adoption of eco-friendly automobile technologies.
- Emission-linked taxation on automobiles
- Rationalisation of the GST structure for automobiles that is currently based on length, engine displacement, engine type and ground clearance.

4.2.3 New policy to promote electric vehicles

The government is preparing a fresh policy for promotion of electric vehicles, which will be rolled out initially on a smaller scale to ensure smoother transition and better cooperation from the automobile sector.

Highlights:

- Government will first begin creating favourable ecosystems in nine polluted cities with a population of over four million, and gradually move to cities with populations of one million-plus
- The government could also consider throwing a 100-day global challenge to automakers for setting up manufacturing facilities for e-vehicles, batteries and charging infrastructure in India
- The second phase of Faster Adoption And Manufacturing of (Hybrid &) Electric Vehicles in India (Fame India) scheme
- The non-fiscal incentives to electric vehicle firms for five years

4.2.4 FAME-India

The government announced the extension of phase 1 of the FAME-India scheme.

FAME India II

- Spanning five years, offer subsidy to all categories of electric vehicles, including two-wheelers, three-wheelers and four-wheelers including taxis and electric buses used in public transportation
- It will envisage setting up massive charging infrastructure to support electric vehicles

About FAME India scheme:

- The Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles (FAME) India was launched in 2015 under National Electric Mobility Mission (NEMM).
- It aims at promoting eco-friendly vehicles in the country.
- The scheme is being administered by the Heavy Industries Ministry.
- The four focused areas: Technology development, demand creation, pilot projects, and charging infrastructure
- It provide fiscal and monetary incentives for adoption and market creation of both hybrid and electric technologies vehicles in the country.
- It incentivise all vehicle segments, including two-wheelers, three wheeler auto, passenger four-wheeler vehicle, light commercial vehicles and buses.

4.2.5 Amendments Proposed to Central Motor Vehicles Rules

Rules:

- The FASTags and Vehicle Tracking System device mandatory for all commercial vehicles obtaining national permit.
- The draft amendments also stipulate other additional conditions for obtaining national permit.
- The body of a tanker carrying dangerous or hazardous goods has to be painted in white colour and display the prescribed class label on both the sides and rear of the tanker.

FASTags:

- FASTag is an electronic toll collection system in India, operated by the National Highway Authority of India (NHAI).
- It employs Radio Frequency Identification (RFID) technology for making toll payments directly from the prepaid or savings account linked to it.
- It is affixed on the windscreen of the vehicle and enables to drive through toll plazas without stopping for transactions

4.2.6 Vahan and Sarathi

- VAHAN and SARATHI are e-governance initiative of Ministry of Road Transport and Highways
- It aims at facilitating computerization of Road Transport Offices (RTOs) across the country and a common pan-India level same standard for Registration certificate and driving licenses.
- The software VAHAN is for Vehicle Registration and SARATHI for Driving Licenses

4.2.7 Privatisation of Airports

Union Cabinet has recently given in principle approval for operating, managing and developing 6 non-metro airports under Public Private Partnership (PPP).

Key Facts:

- The airports are Ahmedabad, Jaipur, Lucknow, Guwahati, Thiruvananthapuram and Mangaluru.
- At present, airports at Delhi, Mumbai, Bangalore, Hyderabad and Cochin are managed under the PPP model.

- PPP bidding model - It will be held in a revenue-sharing model, where bidders are required to pay a specified share of gross revenue to the AAI.

4.2.8 Amendments to the Major Port Authorities Bill

Amendments approved by the Union Cabinet to the Major Port Authorities Bill, 2016 are meant to make employee representation stronger.

About Major Ports:

- Indian Ports are broadly classified as Major Ports and Non-Major Ports.
- The Major Ports are under the Union List while the Non Major Ports are under the Concurrent List of the Constitution of India.
- India has 12 major ports, which handle about 58% of sea-borne traffic.
- These are Kolkata (including Dock Complex at Haldia), Visakhapatnam, Chennai, V.O. Chidambaranar (Tuticorin), Cochin, New Mangalore, Mormugao, Jawaharlal Nehru Port Trust (JNPT), Mumbai, Kandla and Ennore.
- Ennore Port Ltd is a company and the remaining 11 are Port Trusts, governed by the provisions of the Major Port trusts Act, 1963.

4.2.9 IWAI Makes India's First Standardised Modern Ship Design

Inland Waterways Authority of India (IWAI) made public 13 standardised state-of-the-art ship designs suitable for large barge haulage on river Ganga (National Waterway-1).

Advantages:

- It will help overcome the unique navigation challenges river Ganga throws due to its complex river morphology, hydraulics, acute bends, shifting channels, meanders and current.
- It will serve as an enabler for domestic shipbuilding industry working on inland vessels and open huge possibilities for cargo and passenger movement on National Waterway-1.
- It will be a boost to 'Make in India' initiative of the Government.
- It will help in Government is implementing Jal Marg Vikas Project (JMVP)

4.3 Service Sector

4.3.1 Action Plan for Champion Sectors in Services

The Union Cabinet chaired approved the proposal of the Department of Commerce to give focused attention to 12 identified Champion Services Sectors for promoting their development, and realizing their potential.

Highlights:

- A dedicated fund of Rs. 5000 crores has been proposed to be established to support initiatives for sectoral Action Plans of the Champion Sectors
- Promoting GDP growth, creating more jobs and promoting exports to global markets.
- These include IT, tourism and hospitality, transport and logistics, accounting and finance services, legal services, communication services and construction

4.3.2 BIS to set standards for the services sector

The Bureau of Indian Standards (BIS) has started the process to set new standards to measure quality of services offered to consumers across different sectors, including telecom, aviation, e-commerce and healthcare.

- The initial focus will be the 12 champion services sectors identified by the government.

About BIS:

- The Bureau of Indian Standards (BIS) is the national Standards Body of India working under the aegis of Ministry of Consumer Affairs, Food & Public Distribution, Government of India
- The BIS, which sets the quality regulations for various products from gold to bottled water

5. INNOVATIONS AND R&D

5.1 Advanced Technologies

5.1.1 ISRO to transfer tech on low-cost e-vehicle batteries

- ISRO has developed four types of cells for space applications—1.5Ah, 5Ah, 50Ah and 100Ah.
- ISRO had earlier allowed Automotive Research Association of India (an industrial automobile research association) to use 50Ah and 100Ah cells for developing prototypes of an e-scooter and an e-car, respectively.
- ISRO's move comes as a huge relief for the industry as Li-ion batteries are currently not manufactured commercially in the country but are imported from Japan or China.

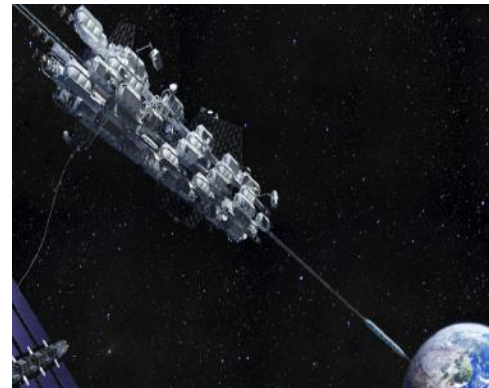
5.1.2 Nanomotors for targeted cancer therapy

The researchers have developed a new type of zinc-ferrite-coated magnetic nanomotors that are highly stable and can generate localised heating to kill cancerous cells.

- Measure just about 3 microns in size
- Controlled using rotating magnetic fields of less than hundred Gauss (safe level for human beings) and targeted to the area of interest in the body.

5.1.3 Japan to test mini 'space elevator'

Japan has developed the world's first experiment "space elevator" to test elevator movement in space.



- The test equipment will ride on an H-2B rocket being launched by Japan's space agency
- The test involves a miniature elevator stand-in — a box just 6 cm long, 3 cm wide, and 3 cm high.
- It will provide proof of concept by moving along a 10-metre cable suspended in space between two mini satellites

5.1.4 World's first Hyperloop passenger capsule unveiled

Hyperloop Transportation Technologies Inc. unveiled its first full-scale passenger capsule, in Spain.

Hyperloop:

- It is a transportation system where a pod-like vehicle is propelled through a near-vacuum tube connecting cities at speeds matching that of an aircraft.

Hyperloop Technology in India:

- The government of Andhra Pradesh has signed a Memorandum of Understanding (MoU) with California-based Hyperloop Transportation Technologies (HTT) to develop India's first Hyperloop route in the state.
- The proposed route for the Hyperloop between the city centers of Vijaywada and Amaravati.



5.1.5 Green process cuts water use, pollution in textile industry

- By using liquid and supercritical carbon dioxide instead of water, and sucrose octaacetate in place of starch made the sizing and desizing process eco-friendly.
- Sizing removes or smoothens the projecting microfibrils that might interfere with the weaving process.
- The yarn after sizing has to be dried when water is used, making the entire process energy-intensive
- The yarn (in the fabric) becomes dry almost instantaneously when the pressure of carbon dioxide is reduced to gas phase pressure after desizing

Benefits:

- Zero-pollution
- Zero-waste as both carbon dioxide and the sizing agent
- The cane sugar, can be recycled endlessly
- Minimize water wastage

5.2 Promotion of Innovation

5.2.1 105th Session of Indian Science Congress

ISC is largest congregation of scientists in India was traditionally the first public function the Prime Minister addressed in the calendar year.

Highlights of PM's Speech

1. The government was committed to increasing share of non-fossil fuel based capacity in electricity mix above 40% by 2030.
2. Technology will allow far greater penetration of services such as education, health care and banking to citizens.
3. Government is developing city-based R&D clusters to bring together science and technology.
4. India faces major socio-economic challenges which affects us. We need science to make India clean and green. The country requires crores of new houses. 3D printing technology could meet this demand. Our rivers are polluted. We need a multi-pronged approach, clean cooking, conversion of fuels, smart grids, micro grids and bio-fuels.
5. Research should also be conducted in yoga, sports and traditional knowledge.
6. Our Government has already given the go-ahead to establish 3rd LIGO detector in the country. It will expand our knowledge in basic sciences in the areas of lasers, light waves & computing.

5.2.2 State Startup Ranking Framework 2018

The States Startup Ranking Framework was launched by Department of Industrial Policy and Promotion (DIPP) with the aim to foster competitiveness and to propel the States and Union Territories to work proactively towards promotion of their Startup eco-systems.

Highlights:

- The participating States and UTs shall now be evaluated on a score of 100, against 38 action points categorized into 7 areas of interventions
- DIPP has appointed seven dedicated evaluation committees involving members from all relevant departments and reputed players in the ecosystem, for evaluating States' responses in each area of intervention.

5.2.3 CSIR bags National Intellectual Property (IP) Award 2018

The Council of Scientific and Industrial Research (CSIR) is awarded the National Intellectual Property (IP) Award 2018 in the category "Top R&D Institution / Organization for Patents and Commercialization".

Highlights:

- CSIR Laboratories have been developing and providing Technology focused at the unmet need and the cutting edge knowledgebase and human resource on the other, for socio-economic development in the Country
- The CSIR S&T domains range from environment to health and drinking water, from food, housing, energy to specialty chemicals & petrochemicals, glass & ceramics to mining, metals & minerals, medicinal plants, leather to machinery, instrumentation and strategic sectors including aerospace.
- It is contributing for the Missions such as Swachh Bharat, Swasth Bharat, Samarth Bharat, Make in India, Innovate for India, Startup India and Skill India.

5.2.4 Intellectual Property mascot – IP Nani

The Minister of Commerce and Industry launched the Intellectual Property (IP) mascot – IP Nani.

- Mascot IP Nani is a tech-savvy grandmother who helps the government and enforcement agencies in combating IP crimes.
- The IP mascot will spread awareness about the importance of Intellectual Property Rights (IPRs) among people, especially children, in an interesting manner.



5.2.5 ITU South Asia Area Office and Technology Innovation Centre

The ITU South Asia Area Office and Technology Innovation Centre will be established in New Delhi.

- ITU is a United Nations specialized agency for Information and Communication Technologies, with membership of 193 countries and nearly 800 private sector entities and academic institutions.
- The country has also been a regular member of the ITU Council since 1952.
- The ITU South Asia Office will serve nine countries – Afghanistan, Bangladesh, Bhutan, Iran, Maldives, Nepal, Pakistan, and Sri Lanka, in addition to the host country
- The ITU Local Area Office will also impart a significant boost to technological reach and benefits for Small and Medium Enterprises (SMEs).

5.2.6 Centre for the Fourth Industrial Revolution

The World Economic Forum has announced its new Centre for the Fourth Industrial Revolution in India.

About the centre:

- It would aim to bring together the government and business leaders to pilot emerging technology policies.
- It has selected drones, artificial intelligence and blockchain as the first three project areas.
- NITI Aayog will coordinate the partnership on behalf of the government and the work of the centre among multiple ministries.

Fourth Industrial Revolution:

- Fourth Industrial Revolution is building on the Third - the digital revolution
- It is characterized by a fusion of technologies that is blurring the lines between the physical, digital, and biological spheres.
- It can fundamentally alter the way we live, work and relate to one another.

6. ENVIRONMENT PROTECTION

6.1 Low carbon Strategies

6.1.1 Methanol Economy

NITI Aayog has drawn out a comprehensive plan to replace 20% of crude imports from Methanol alone. Adopting Methanol in this scale would bring down pollution in the country by more than 40% and also benefits from import substitution.

Methanol Fuel:

- Methanol is a clean burning drop in fuel which can replace both petrol & diesel in transportation & LPG, Wood, Kerosene in cooking fuel.
- It can replace diesel in Railways, Marine Sector, Gensets, Power Generation and Methanol based reformers could be an ideal complement to Hybrid and Electric Mobility.
- Methanol burns efficiently in all internal combustion engines, produces no particulate matter, no soot, almost nil SOX and NOX emissions (NEAR ZERO POLLUTION).
- The gaseous version of Methanol – DME can be blended with LPG and can be excellent substitute for diesel in Large buses and trucks.
- To adopt Methanol as a transport fuel, it requires minimal infrastructure modifications and capital both in vehicles and in terminal and distribution infrastructure. Methanol 15 % blend (M15) in petrol will reduce pollution by 33% & diesel replacement by methanol will reduce by more than 80%.
- Methanol Economy, if adopted by India can be one of the best ways to mitigate the Environmental hazards of a growing economy.

6.1.2 Ban of BS-IV vehicles

The Supreme Court said that no Bharat Stage-IV (BS-IV) vehicle shall be sold across the country with effect from April 1, 2020.

Key Facts:

- The BS-VI emission norm would come into force from April 1, 2020 across the country.
- BS-IV norms have been enforced across the country since April 2017.

About BS-IV:

- The Bharat norms are emission control standards that are based on the European regulations (Euro norms).
- They set limits for release of air pollutants from equipment using internal combustion engines, including vehicles.
- The BS IV norms were introduced in 13 cities apart from the National Capital Region from April 2010 onwards.
- BS IV norms stipulate only 50 parts per million sulphur compared with up to 350 parts per million under BS III. Also, hydrocarbon, nitrogen oxide and particulate matter emissions are lower under BS IV.

Bharat Stage VI norms:

- NOx emission will come down by approximately 25% for the petrol engine and 68% for the diesel engines.

- The PM emission will see a substantial decrease of 80% in diesel engines.
- On board Diagnostics (OBD) will become mandatory for every vehicle and it will help monitor the pollution caused by the vehicle in real time.
- RDE (Real Driving Emission) will be introduced for the first time that will measure the emission in real-world conditions and not just under test conditions.
- Bharat Stage VI norms will also change the way particulate matter is measured. It will now be measured by number standard instead of mass standard thereby, regulating the fine particulate matter as well.

ICAT releases First BS-VI engine certificate

- ICAT has completed the first BS-VI certification for a heavy duty engine model
- The International Centre for Automotive Technology (ICAT) is a division of NATRiP implementation society (NATIS), under the administrative control of Ministry of Heavy Industries & Public Enterprises, Government of India

6.1.3 MOBILISE YOUR CITY (MYC) initiative

Mobilise Your City (MYC) is part of an international initiative which is supported by the French and the German Governments and was launched at 21st Conference of Parties (COP21) meeting in December, 2015.

Highlights:

- India and France sign an implementation agreement on “MOBILISE YOUR CITY” (NYC).
- It aims at supporting three pilot cities viz. Nagpur, Kochi and Ahmedabad for reduction of Greenhouse Gas (GHG) emissions related to urban transport.

The main components:

- To support planning and implementation of sustainable urban transport projects
- Support to strengthening institutional capacity for regulating, steering and planning urban mobility, and
- Learning and exchange formats with other cities across India for exchanges on best practices.

6.2 Protection

6.2.1 New Coastal Regulation Zone 2018 draft

The Ministry of Environment, Forest and Climate Change (MoEF&CC) has framed a new draft Coastal Regulation Zone (CRZ) Notification, 2018.

Highlights:

- The High Tide Line (HTL) has been demarcated by the National Centre for Sustainable Coastal Management (NCSCM) and shall be reckoned as a universal standard for the HTL for all regulatory purposes under the CRZ Notification, 2018.
- Hazard line mapping has also been carried out by Survey of India. The Hazard Line has, however, been delinked from the CRZ regulatory regime and shall be used only as a tool for Disaster Management and planning of adaptive and mitigation measures.
- CRZ limits on land along the tidal influenced water bodies has been proposed to be reduced from 100 meters or the width of the creek, whichever is less, to 50 meters or the width of the creek, whichever is less.
- A No Development Zone (NDZ) of 20 meters has been proposed for all Islands close to the mainland coast and for all Backwater Islands in the main land.
- Temporary tourism facilities such as shacks, toilet blocks, change rooms, drinking water facilities etc. have been proposed in Beaches.

Adapala-Academy.com



ESE Lectures



GATE Lectures



Discussion Forum



Online Test Series

IES  GS

IES GS Video Lectures



**Study from
anywhere anytime**



**Extensive
syllabus coverage**



**One year
doubts support**



Money back guarantee



Free online test series

more details at www.iesgeneralstudies.com

IES GS

Ac
Gc