

August 2018 | Issue 01



WEEKLY CURRENT AFFAIRS



1-22



Seven Important Issues

India's Green Watchdog and its Effectiveness

■ The Motor Vehicles (Amendment) Bill, 2017: An Overview	
India's Quest for Ballistic Missile Defence Shield	
Ganga River Cleaning Projects: Journey So Far	
■ 100 th Birth Anniversary of Nelson Mandela	
■ Need for Evaluation of Agriculture Policy in India: OECD Report	
■ National Digital Policy-2018: Improving Digital Communications	
Seven Subjective Questions with Model Answers	23-28
Seven Important National & International News	29-34
Seven Brain Boosters & Seven MCQ's Based on Them	35-43
Seven Important Facts For Prelims	44
Seven Important Index	45
Seven Practice Questions for Main Exam	46

SIEVIEN IMPORTAINT ISSUES

I. INDIA'S GREEN WATCHDOG AND ITS EFFECTIVENESS

Why in News?

The National Green Tribunal (NGT) has directed the Central Pollution Control Board (CPCB) to constitute a two-member committee to deal with people who had defaulted in paying the environmental compensation. CPCB may set up a two-member committee to look into all such grievances and take steps for enforcement. It is to be constituted within one month.

Introduction

The National Green Tribunal (NGT) has been established under the NGT Act, 2010 on 18th October, 2010. The Tribunal has been established for the effective and expeditious disposal of cases relating to environmental protection and conservation of forests and other natural resources including enforcement of any legal right relating to environment. It also give aims to relief and compensation for damages to persons and property and for matters connected therewith or incidental thereto. The Law Commission in 186th report recognised the inadequacies of the existing appellate authorities constituted under various environmental laws and reviewed their position with a view to bring uniformity in their constitution and the scope of their jurisdiction.

The Law Commission undertook the study pursuant to the observations of the Supreme Court regarding the need for constitution of environmental courts. The Law Commission, in its said report, recommended for setting up

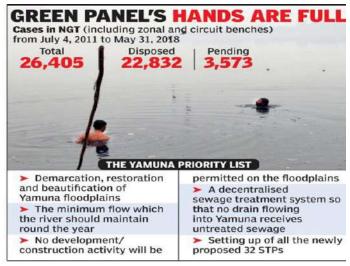
of environmental courts in each state or for a group of states for exercising all powers of a civil court in its original jurisdiction and with appellate judicial powers against orders passed by the concerned authorities under the Water (Prevention and Control of Pollution) Act, 1974; the Air (Prevention and Control of Pollution) Act, 1981; the Environment (Protection) Act, 1986 the Public Liability Insurance Act, 1991 etc. The Law Commission's report was considered in the Ministry. In view of the growing environmental challenges, it was decided to set up a green tribunal as a specialized body equipped with the necessary expertise to handle environmental disputes involving multi-disciplinary issues.

India has become the third country in the world to start a National Green Tribunal (NGT) which is a judicial body exclusively meant to judge environmental cases. Environment has become one of the most important

issues in the country affecting the broader society. Alongwith acquisition, land environment has become the most frequent conflict There flashpoint. have been numerous case where large industries have been confronted by local people fighting for the environment.

Recent cases like the Vedanta Bauxite smelter in Tamil Nadu and Orissa, thermal power plants in Andhra Pradesh, the Jaitapur nuclear power plant in Maharashtra etc. have seen huge controversy and protests.

Since its formation the NGT has emerged as an independent voice when it came to protect the environment. It has pulled up the Centre for fast-tracking approvals and corporate groups for violating green approval conditions. But several NGT orders and the multiple pending decisions have faced ire from different fronts, which have attempted to dilute or nullify the effects of the judgments. In a report it was said that till January 2015, the total number of cases before the NGT and its zonal benches located in Kolkata, Chennai, Pune and Bhopal, was 7,768. Of these, 5,167 cases were resolved and 2,601 were pending. Almost 67 per cent of cases have been disposed off within nine months from its establishment.





The National Green Tribunal Act, 2010

Due to the increasing complexity of environmental litigations, lack of dedicated jurisdiction and the rigidity of existing court procedures to deal with environmental cases there was an urgent need to establish specialised courts dealing only with environment related cases, in order to clear the long list of pending cases. The National Environment Tribunal (NET) Act, 1995 could not be enforced due to its limited mandate and thus it could not help at all in dealing with environmental cases. There is a rapid increase in industries and consumption of natural resources therefore the number of the environment related cases is also constantly increasing. It is very essential to maintain a proper balance between sustainable development and environmental regulations which can be achieved only if a body like the Green Tribunal is set up which is solely concerned with environmental issues. The Access to Justice would then be easier.

Structure

The Principal Bench of the NGT has been established in the National Capital – New Delhi, with regional benches in Pune (Western Zone Bench), Bhopal (Central Zone Bench), Chennai (Southern Bench) and Kolkata (Eastern Bench). Each Bench has a specified geographical jurisdiction covering several states in a region. There is also a mechanism for circuit benches. For example, the Southern Zone bench, which is based in Chennai, can decide to have sittings in other places like Bangalore or Hyderabad.

- Chairperson: A person who is or has been a Judge of the Supreme Court or Chief Justice of a High Court.
- Judicial Member: A person who is or has been a Judge of a High Court.

 Expert Member: Qualification and experience in relevant scientific and technological field or practical experience in dealing with environmental matters.

Main objectives of the National Green Tribunal

There are 3 major objectives of the Green Tribunal:

- The effective and speedy disposal of the cases relating to environment protection and conservation of forests and other natural resources. All the previous pending cases will also be heard by the Tribunal.
- It aims at enforcing all the legal rights relating to the environment.
- It also accounts for providing compensation and relief to effected people for damage of property.

Power and Procedure of National Green Tribunal

The NGT has the power to hear all civil cases relating to environmental issues and questions that are linked to the implementation of laws listed in Schedule I of the NGT Act. It includes the following Acts:

- The Water (Prevention and Control of Pollution) Act, 1974.
- The Water (Prevention and Control of Pollution) Cess Act, 1977.
- The Forest (Conservation) Act, 1980.
- The Air (Prevention and Control of Pollution) Act, 1981.
- The Environment (Protection) Act, 1986.
- The Public Liability Insurance Act, 1991.
- The Biological Diversity Act, 2002.

This means that any violations pertaining only to these laws, or any order / decision taken by the government under these laws can be challenged before the NGT. Importantly, the NGT has not been vested with powers to hear any matter relating to the Wildlife (Protection)

Act, 1972, the Indian Forest Act, 1927 and various laws enacted by states relating to forests, tree preservation etc. Therefore, specific and substantial issues related to these laws cannot be raised before the NGT.

National Green Tribunal is not bound by the procedure laid down by Criminal Procedure Code but is guided by the principles of natural justice. It has the power to regulate its own procedure and is not bound by the Indian Evidence Act, 1872. National Green Tribunal can exercise powers of a Civil Court. It can summon people, enforce attendance and examine on oath. It can also receive evidence on affidavits and decide matters ex-parte. It also has the power to grant interim orders, injunctions or stay.

The Civil Court has been given the responsibility to execute the order or award made by the NGT. Any payment or deposit of the amount directed by the NGT, as award, shall be recoverable as arrears of land revenue or of public demand. The decision taken by the NGT, by majority, shall be binding but an aggrieved person can make an appeal to the Supreme Court against the order of the NGT within 90 days. The Green Tribunal can also award cost for filing false or vexatious claims. For non-compliance with the orders of the NGT there is a punishment of 3 years of imprisonment or a fine of not more than 10crore rupees, or both. If non-compliance continues there is an additional fine of 25000 rupees per day. For companies the fine can be 25crore rupees with additional fine of 1lac rupees per day.

Some of the Most Notable Orders given by the NGT are:

1. Yamuna Conservation Zone: On 25th April 2014, the NGT said that the health of Yamuna will be affected by the proposed recreational facilities on the river. The NGT also recommended the government to declare a 52 km stretch of the Yamuna in Delhi and Uttar Pradesh as a conservation zone.



- 2. Coal Blocks in Chhattisgarh Forests: The National Green Tribunal cancelled the clearance given by the government to the Parsa East and Kante-Basan captive coal blocks in the Hasdeo-Arand forests of Chhattisgarh, overruling the statutory Forest Advisory Committee.
- 3. World Culture Festival in Delhi: On 9 March 2016, the environment tribunal had allowed the Art of Living Foundation to hold its massive World Culture Festival on the banks of river Yamuna, and imposed a cost of Rs. 5 crore to be paid by the foundation as "restoration costs" for damaging the environment. It also imposed a fine on various authorities.

Challenges before NGT

While the National Green Tribunal has acted as an "effective deterrent" to violations of environmental norms, recent challenges to its decisions in several High Courts is a growing concern. The NGT came under criticism for its handling of Sri Sri Ravi Shankar's World Culture Festival on the floodplains of Yamuna. According to the NGT Act, its decision can be challenged before the Supreme Court, as the NGT has been given enormous powers. But petitioners have been invoking Article 226 (power of High Courts to issue certain writs) to challenge decisions before the High Courts. No doubt, this provision is there, but this is one of the weaknesses of the Act. The Supreme Court is yet to decide on what decisions of the NGT can be challenged before the High Courts and on what grounds. The paper also raises the concern that in cases where the NGT's decisions are not complied with, it was pointed out that its decisions were "not feasible to implement within a given timeframe".

Last year the government modified the process of appointments to the NGT: Instead of a senior judge, its

chairperson will now be recommended by a five-member panel, which will be led by the chief justice of India (CJI) or a nominee of the CJI, but a majority of the other members in the panel will be recommended by the environment ministry. The government has been trying to curtail the NGT's powers for some time. It set up the TSR Subramanian committee to review the country's environment laws in 2014, which recommended dilution of the tribunal's powers. The government, however, could not act as it would have lead to a political backlash. But it later merged eight autonomous tribunals with other tribunals and also gave itself the power to appoint and remove the members in another 17 such bodies. The new uniform appointment rules for 19 tribunals were notified on June 1, 2017. They have taken away powers of the CJI to appoint and remove chairperson and judicial members to the tribunal; now it will be the Environment Ministry's call.

Giving power to the executive to sack a retired judge is unprecedented. All this would ensure that judges may not join the tribunal and it could become a parking lot for retired bureaucrats, rendering the NGT ineffective for protecting the citizens' rights to a clean, healthy and pollution-free environment.

There is a real danger of the National Green Tribunal (NGT) becoming an ineffective institution. This may happen due to weaknesses in NGT's own internal procedures as well as due to non-cooperation from the government, especially the Union Ministry of Environment, Forest & Climate Change (MOEF&CC). Polluter pays principle is an important tool to address environmental violations. Seeing a polluter being made to pay for its offences instils confidence and a sense of justice in the society. Therefore, it is important that this principle is applied in a fair and objective manner. As things stand today, compensations and fines imposed by NGT using the polluter pays principle lack clarity and objectivity. In several instances, it has applied "guess work" to impose penalty. The tribunal needs to establish clear guidelines and thumb rules to estimate fines, damages and compensations. This will help it bring objectivity in its verdicts, make them less contentious and ensure timely actions on the ground. If it fails to do so, NGT will be in the danger of being perceived as arbitrary; and its orders would be challenged in higher courts and get caught in legal wrangles.

Way Forward

India at present faces a huge challenge accounting for the millions that are affected each year by national development projects. In addition to this, industries are a burgeoning factor in the Indian economic scene so one cannot sensibly ask for capping such endeavours as they are spearheading the economic development of this still developing nation. Also the largest industries have the best lawyers in their pockets and the others are unaccounted for. Therefore the only way to ensure the success of the NGT is a well-defined and at this stage draconian means of judgement.

The judiciary has a key role in environmental governance. To become effective, NGT's internal procedures have to be strengthened. Also, a coordination mechanism needs to be institutionalised between NGT and the environment ministry where conflicting issues are discussed and resolved.

General Studies Paper-II

Topic: Appointment to various Constitutional posts, powers, functions and responsibilities of various Constitutional Bodies.

OOO



2.THE MOTOR VEHICLES (AMENDMENT) BILL, 2017:AN OVERVIEW

Why in News?

A vital Bill stuck in Parliament can have revolutionary impact on our life on the road. The Bill has already been passed in the Lok Sabha. The Motor Vehicles (Amendment) Bill is being debated in Rajya Sabha to address the issues of third party insurance, regulation of taxi aggregators like Ola and Uber and road safety. The bill which was passed in the Lower House of the Parliament is seeking 68 amendments and insertion of 28 new sections in the Motor Vehicles Act, 1988.

Introduction

It is a matter of some pride that India boasts of the world's second-largest road network and the densest amongst countries of similar size. Over the years, both accessibility and mobility have improved through construction of new roads and development of existing roads. However, as a very broad characterisation, our roads still suffer from a litany of ills. They are capacity constrained, slow, unsafe, environmentally unfriendly, maintained or non-maintainable and patchily administered. Meanwhile, efforts to improve the situation are hampered by delayed clearances, multiple overlapping authorities and jurisdictions, frequently changing rules of engagement with the private sector, unyielding land laws and skill shortages. Over the next 20 years, India's roads must address these issues to accommodate an economy that will both be substantially larger and structurally different in economic, social and demographic terms.

In the last few years, with growing urbanisation and rising incomes, the number of motor vehicles in India has been increasing steadily. The number

of registered motor vehicles in India grew by 123% between 2005 and 2013. Between 2005 and 2015, the number of road accidents increased by 14% and road accident fatalities increased by 54%. During the same period, the road network grew by 44%.

Overview of Road Accidents in India

- Since 2000, while road length has increased by 39%, number of motor vehicles have increased by 158%.
- National highways comprise 2% of the total road network, but witness 28% of the road accidents.
- Accidents per capita are increasing; Goa and Kerala have most share of accidents per lakh population.
- Drivers are held responsible for 78% of accidents; 3% accidents are caused by neglect of civic bodies.
- 67% road accidents take place between 9AM and 9PM; 18-34 year olds most affected.
- With unlimited liability, premium for third party insurance has been increasing rapidly.
- Incurred claims ratio for motor insurance is high; claims ratio for private companies has been increasing.

An increase in the number of vehicles on roads, along with the absence of a coordinated policy to control the problem has been attributed to an increase in the number of road accidents. With the number of road accidents increasing, the Ministry of Road Transport and Highways appointed the Committee on Road Safety in 2007 (Chair: Mr. S. Sundar) to examine the magnitude of road traffic injuries and fatalities. The Committee recommended setting up road safety authorities (at both national and state In April 2016, the central levels). government constituted a group of state transport ministers (Chair: Mr. Yunus Khan, Minister for Transport, Rajasthan) to recommend reforms for

the road transport sector. The group recommended that the Motor Vehicles Act, 1988 be amended to address urgent issues related to road safety.

In the year that the Motor Vehicles (Amendment) Bill was first introduced, India saw 1.5 lakh deaths from road accidents, according to the 'Road Accidents in India, 2016' report by the Ministry of Road Transport and Highways. In 2017, when it was reintroduced, there had been a marginal decline in that number, but the loss of lives from road accidents remains high in the country. India, as a signatory to the Brasilia declaration,

Brasilia Declaration on Road Safety

Only seven per cent of the world's population is protected by appropriate traffic laws. On 18th-19th November 2015 in Brasilia it was co-sponsored by WHO, the 2nd Global High-Level Conference on Road Safety represented a historic opportunity to chart progress at the mid-point of the Decade of Action for Road Safety 2011-2020.

At the close of the Conference, the 2200 delegates adopted the "Brasilia Declaration on Road Safety" through which they agreed ways to halve road traffic deaths by the end of this decade – a key milestone within the new Sustainable Development Goal (SDG) target 3.6. The Brasilia Declaration encourages WHO and partners to facilitate the development of targets to reduce road traffic crashes and fatalities and support the definition and use of indicators linked to the SDG targets related to road safety.

Citing its importance for traffic safety, the declaration promotes sustainable commuting prioritises ways and pedestrians, cyclists and motorists. It recommends "implementation enforcement of policies and measures to protect and promote, in an active way, pedestrian safety and cyclists' mobility, such as sidewalks, bike paths and bike lanes, proper lighting, radars with cameras, signalling and road marking". The declaration further urges states to adapt road safety policies for the benefit of the vulnerable road users, children, vouth, older persons and persons with disabilities.



intends to reduce road accidents and traffic fatalities by 50% by 2022. To make roads safer, the Centre in consultation with state transport ministers came up with this Bill to amend the Motor Vehicles Act, 1988. The new Bill takes into account taxi aggregators, third party insurance, computerisation of licensing authorities and so on. It also provides for a National Road Safety Board.

Key Highlights

National Transportation Policy

The Bill requires the Central government to develop a National Transportation policy, in consultation with the states. The Policy will: (i) establish a planning framework for road transport, (ii) develop a framework for grant of permits and schemes and (iii) identify and specify priorities for the road transport system.

Driving Licenses

Under the 1988 Act, a driving license is valid for a period of 20 years, or till the person attains the age of 50 years, whichever is earlier. After the age of 50, the license is valid for a period of five years. The Bill amends this to create several categories for the validity of licenses. If the person applying for the license is: (i) below 30 years, his license will be valid till he turns 40 years; (ii) between 30 and 50 years, his license will be valid for a period of 10 years; (iii) between 50 and 55 years, his license will be valid till he turns 60 years; (iv) above the age of 55 years, his license will be valid for a period of five years.

Aggregator Licenses

The Bill defines an aggregator as a digital intermediary or market place. The aggregator's services may be used by a passenger to connect with a driver for transportation purposes. State

governments will grant licenses to the aggregators based on the guidelines framed by the Central government. The aggregators will also be required to comply with the Information Technology Act, 2000.

Recall of Vehicles

The Bill allows the Central government to order for the recall of motor vehicles if a defect in the vehicle (i) may cause damage to the environment, or (ii) may cause damage to the driver, or (iii) may cause damage to other road users, or (iv) is reported to the Central government. The manufacturer will have to (i) reimburse the buyers for the full cost of the vehicle, or (ii) replace the defective vehicle with another vehicle with similar or better specifications.

Protection of Good Samaritans

The Bill defines a good samaritan as a person who renders emergency medical or non-medical assistance to a victim at the scene of an accident. The assistance must have been (i) in good faith, (ii) voluntary and (iii) without the expectation of any reward. Such a person will not be liable for any civil or criminal action for any injury to or death of an accident victim.

Electronic Services

Bill provides for the computerization of certain services. These include: (i) issue or grant of licenses or permits, (ii) filing of forms or applications (such as for licenses and registration), (iii) receipt of money (such as fines) and (iv) change of address. The Bill mandates state governments to ensure the electronic monitoring and enforcement of road safety on national highways, state highways and urban roads. The Central government will make rules for such monitoring.

Penalties

The Bill increases penalties for several offences under the Act. For example, the maximum penalty for driving under the influence of alcohol or drugs has been increased from Rs 2,000 to Rs 10,000. If a motor vehicle manufacturer fails to comply with manufacturing or maintenance standards of motor vehicles, the penalty may be a fine of up to Rs 100 crore, or imprisonment of up to one year, or both.

Compensation and Insurance

The Bill also modifies the compensation and insurance provisions in case of motor vehicle accidents.

Solatium Fund

The 1988 Act already has a Solatium Fund for victims of hit-and-run accidents, but the new Bill has also provided for another Fund. Earlier, the Bill said that the Fund would be credited with a cess or a tax, but that provision has now been removed, and instead the money will come either from the government, or from a grant or loan.

Lacunae to Fill

- Lack of clarity with regard to limited liability for third party insurance: The Bill caps the maximum liability for third party insurance, but does not cap the compensation amount that courts can award. In cases where courts award compensation higher than the maximum liability amount, it is unclear who will pay the remaining amount.
- With a fund existing for hit and run cases, need for a new fund is unclear: Under the Act, compensation for hit and run victims comes from a Solatium Fund. The Bill creates a new Motor

Current Affairs: Perfect 7



Vehicle Accident Fund in addition. With a Fund already existing to provide compensation for hit and run accidents, the purpose of the new Accident Fund is unclear.

- Lack of clarity on central guidelines for aggregator companies: State governments will issue licenses to taxi aggregators as per Central government guidelines. Currently, state governments determine guidelines for plying of taxis. There could be cases where state taxi guidelines are at variance with the central guidelines on aggregators.
- Penalties have been prescribed, without specifying the offences:
 While the penalties for contravening provisions of the proposed scheme on interim relief to accident victims are specified in the Bill, the offences that would warrant such penalties have not been specified. It may be argued that imposing penalties without knowing the nature of the offences is unreasonable.
- States must provide for electronic monitoring of road safety: The Bill does not address several issues

- around road safety that have been highlighted by other committees such as: (i) creating road safety agencies and (ii) improving road design and engineering.
- No agency responsible for road safety: In India, the National Road Safety Council, headed by the Minister of Road Transport and Highways, is the apex advisory body on road safety. The Transport Division within the Ministry looks at the safe movement of vehicles on roads and safety awareness. The Sundar Committee had recommended setting up Road Safety and Traffic Management Boards at the national and state levels.
- be erroneous: The Ministry of Road Transport and Highways adopted a standardised accident recording form in February 2017. The form will capture information such as: (i) accident identification / location, (ii) road conditions such as gradient, potholes, (iii) details of the vehicles involved, (iv) victim details and (v) traffic violations.

Poor road design and engineering: National Transportation Development Policy Committee had noted that badly designed roads should be held responsible for road accidents instead of bad drivers. It had recommended that road design should be such that it corrects driver behaviour towards safer alternatives. Other countries, such as Sweden and Australia, recognize that humans will make errors and therefore focus on designing road transport systems which minimise the opportunity for human error.

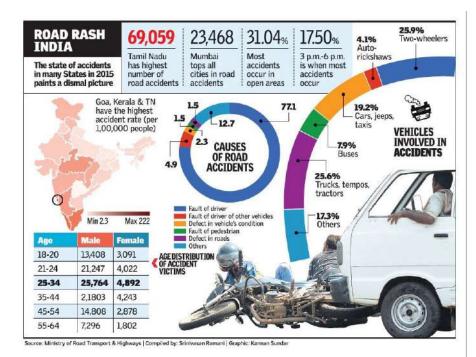
Way Forward

At least 400 deaths are reported on Indian roads daily and nearly five lakh accidents a year, in which 1.5 lakh people die and three lakh get crippled. Road safety is a multisectoral issue. At a policy level, the first step is to create an enabling framework that weaves in different progressive aspects across stakeholder sectors under one legislation. The Motor Vehicles (Amendment) Bill, 2017 aims to rectify several systemic issues by providing a uniform driver licensing system, protecting children and vulnerable road users, rationalising penalties and creating a system of accountability in the construction of roads. The Bill was sent to the Rajya Sabha last Monsoon Session; a year later, it still awaits passage. The Bill is not a panacea for all problems, but it is the first step towards ensuring that no deaths are caused by road crashes.

General Studies Paper-III

Topic: Infrastructure: Energy, Ports, Roads, Airports, Railways etc.

CCC





3. INDIA'S QUEST FOR BALLISTIC MISSILE DEFENCE SHIELD

Why in News?

India is planning to procure an advanced air defence system to defend the National Capital Region (NCR) from aerial attacks. The process for procuring the National Advanced Surface - to - Air Missile System-II (NASAMS-II), estimated at \$1 billion, has been initiated. This system will help in preventing 9/11-type attacks on Delhi. It is in the Acceptance of Necessity (AoN) stage now.

Introduction

Today, the anti-ballistic missile defence is a major shield system available to nations worldwide to guard them against any nuclear weapon attack. India has been exploring various missile defence options and it has achieved excellent progress in its own indigenous missile defence shield. The Indian missile defence programme is the result of indigenous scientific research and consistent endeavour and resolve in the field of ballistic missile defence. In its quest for acquiring the Missile Defense System (MDS), India has developed Ballistic Missile Defence (BMD) System that could intercept missiles in not only endo-atmosphere i.e. within earth's atmosphere, but can also intercept in the exo-atmosphere. However this advancement of Indian BMD and Air Defence System (ADS) is not merely the fruits of Indian efforts. Countries like Russia, Israel and the US helped India while providing it with an access to sophisticated technology in order to advance its MDS. Recently India is planning to buy 131 surfaceto-air missiles from Israel at the cost of US\$70 million (S\$93 million). The BARAK missiles made by Israel's Rafael Advanced Defence Systems are to be used aboard India's first locally built aircraft carrier, the INS Vikrant, which

is under construction. Previously in April 2017 India and Israel signed a deal worth around US\$2 billion which includes medium-range surface-to-air missiles. Israel has become a major defence supplier to India, selling an average of US\$1 billion worth of military equipment each year.

Moreover not only relying on Israeli missiles, India signed an governmental agreement with Russia for the purchase of the S-400s in October 2016. The S-400 is technologically one of the most advanced missile air defence system in the world. The S-400 system is armed with the capacity which enables it to engage with the stand-off jammer and Airborne Warning and Control System (AWACS) aircraft including both ballistic and cruise missiles. The Russian interception technology is fully advanced and equipped with both endo and exo-atmospheric interception capabilities. The strength of the Russian missile defence system is its theatre defence and augmented air defence platforms. The Russian theatre defence venture mainly consists of the S-300, the S-400, and the S-500 programmes.

What is a Ballistic Missile Defence (BMD) System?

A Ballistic Missile Defense (BMD) system is a system that defends any country against possible incoming missile threat. It intercepts targets and destroys enemy missile en-route. Theoretically, a hostile missile can be intercepted at the launch point, mid-course (flight through space), or terminal phase (during atmospheric descent). Usually the radar of the BMD missile intercepts the missile from the opponent's side, then tracks the target through command and control system

and finally fires the interceptor missile from the launcher truck. The countries that have advanced missile system include the US, Russia, Israel and China. The leading BMD systems in the world are Patriot Advanced Capability-3, THAAD, S-400 Triumph and S-500.

Indian BMD Programme

India with its aspirations for regional dominance has been trying to develop an indigenous (BMD) system since the late 90s with the start of Integrated Guided Missile Development Program (IGMDP).

Bit by bit, India is working towards making its national Capital more impregnable against military or 9/11-like terror attacks from aircraft, missiles and drones. The measures underway include getting a new missile shield to replace older air defence systems, re-configuring the VIP no-fly zone and refining the protocol to shoot down rogue planes.

The DRDO has two phases of the BMD systems. While the phase-I interceptors are now ready for deployment, the phase-II missiles are expected to be ready in next couple of years. Meanwhile, the DRDO is developing a laser-based BMD system. The new interceptor can travel at the speed of sound and kill incoming missiles in less than one minute. It will have the flexibility to be fired from both airborne and seaborne platforms. The two-tiered BMD System consists of the Prithvi Air Defence (PAD), which will intercept missiles at exoatmospheric altitudes of 50-80 km (31-50 mi) and the Advanced Air Defence (AAD) missile for interception at endo-atmospheric altitudes of up to 30 km (19 mi). The deployed system would consist of many launch vehicles, radars, Launch Control Centres (LCC)



Mission Control Centre and the (MCC). All these are geographically distributed and connected by a secure communication network. After the interceptor is launched, it is provided target information from the radar through a datalink. When the interceptors close onto the target missile, it activates the radar seeker to search for the target missile and guides itself to intercept the target. Multiple PAD and AAD interceptors can be launched against a target for high kill probability.

Prithvi Air Defence (PAD)

The Prithvi Air Defence (PAD) is an anti-ballistic missile developed to intercept incoming ballistic missiles outside the atmosphere (exoatmospheric). Based on the Prithvi missile, PAD is a two-stage missile with a maximum interception altitude of 80 km. PAD has capability to engage the 300 to 2,000 km class of ballistic missiles at a speed of Mach 5. PAD is fast enough to hit medium-range ballistic missiles, but would struggles against intermediate-range ballistic missile types. Long Range Tracking Radar (LRTR) is the target acquisition and fire control radar for the PAD missile. It is an active phased array radar having capability to track 200 targets at a range of 600 km. The PAD missile has also been called Pradyumna. Further development led to the improvement of the interception range from 50 to 80 km. The improved missile will utilise a gimbaled directional warhead, a technology also used by Israel, the US and Russia. This technology allows for a smaller warhead to destroy the target missile.

Advanced Air Defence (AAD)

Advanced Air Defence (AAD) is an anti-ballistic missile designed to intercept incoming ballistic missiles in the endo-atmosphere at an altitude of 30 km. AAD is a single-stage, solidfuelled missile. Its guidance is similar to that of PAD. It has an inertial navigation system, midcourse updates from ground-based radar and active radar homing in the terminal phase. It is 7.5 m (25 ft) tall, weighs around 1.2 t (1.2 long tons; 1.3 short tons) and a diameter of less than 0.5 m (1 ft 8 in). On 6 December 2007, AAD successfully intercepted a modified Prithvi-II missile acting as an incoming ballistic missile enemy target. The endo-atmospheric interception was carried out at an altitude of 15 km. The interceptor and all the elements performed in a copy book fashion validating the endo-atmospheric layer of the defence system. Due to two successful interceptor missile tests carried out by India, the scientists have said that the

AAD missile could be modified into a new extended range (up to 150 km) surface-to-air missile that could be possibly named as 'Ashwin'.

Swordfish Radar

Swordfish is a long-range tracking radar developed for the BMD system. It was derived from the Israeli Green Pine long range radar. A test conducted in March 2009 validated the long-range capabilities of the radar. Swordfish guides the exo-atmospheric interceptor missile PAD to engage aerial targets at altitudes over 80km. The radar can detect very small targets within the range of 600km-800km. DRDO is planning to upgrade the range of Swordfish radar.

US-National Advance Surface to Air Missile System-II

The NASAMS, armed with the three-dimensional Sentinel radars, short and medium-range missiles, launchers, fire-distribution centres and command-and-control units to quickly detect, track and shoot down multiple airborne threats, is part of the air defence network guarding Washington. It is also deployed in several NATO countries. Besides the US national capital region, Israeli cities and Moscow also have their own missile defence systems.

NATIONAL ADVANCED SURFACE-TO-AIR MISSILE SYSTEM-II

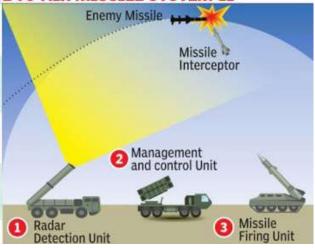
Armed with 3-D Sentinel radar, shortand medium-range missiles, launchers, fire-distribution centres & C&C units

Quickly detects, tracks & shoots down multiple airborne threats such as cruise missiles, aircraft and drones

Deployed to guard US and several Nato countries. Israel, Russia and European militaries also deploy them

India's own shield is in final stages of development by DRDO. Will be deployed to protect cities like Delhi and Mumbai

Diagram based on Israel's Iron Dome defence

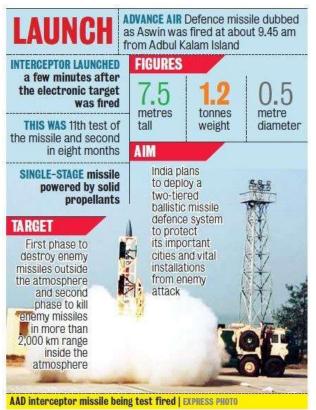


Challenges

Compared to the offensive technology of ballistic missiles, these defense systems are immature. making them less effective and cost efficient. However, though India will continue to face a threat from airattacks, the principal menace comes from short, medium and intermediate ballistic missiles range

Current Affairs: Perfect 7





launched by Pakistan and China. In time, these will be augmented by stealth cruise missiles and represent a clear and present danger to the entire landmass of India - no target, no matter how far from the borders is immune from attack. The limitations on accuracy of missile defence systems remain an important issue of concern in the BMD system. In fact, there is global susceptibility as far as accuracy and foolproof protection is concerned. A BMD system can be overwhelmed by a flurry of ballistic missiles. A nuclear attack also could be launched by using deep penetration strike aircrafts and BMD technology offers no resistance to it.

Moreover, it's quite vulnerable to cruise missiles since they evade enemy radars by flying at low altitudes, virtually hugging the terrain. India's endo-atmospheric system may be able to tackle the cruise missile travelling at lower altitudes to a certain extent. Destroying a nuclear missile just 10- 15 km above ground may only lessen the level of damage but would

foolproof not warranty protection. The limitation for India has not been the lack of a desire to field the systems, but the technical limitation that they are not ready. Even with Akash, it is not at all clear that the missile has meaningful operational capability against Pakistani missiles and cruise missiles which present a very different targeting challenge.

India wants to
"assess the US response"
on different issues,
including its punitive
sanctions regime under
the Countering America's
Adversaries Through
Sanctions Act (CAATSA)

that seeks to deter countries from buying Russian weapons or Iranian oil, before granting acceptance of necessity (AoN) to the helicopter project as well. "The AoN for the helicopters, which are used to detect, track and hunt enemy submarines, has been deferred till September. The US is moving towards granting waiver to India from CAATSA but it's not yet cast in stone. India wants to ink the Rs 39,000 crore deal for five top-tier S-400 Triumf air defence missile systems from Russia later this year without the threat of financial sanctions from US. India has earmarked proposed procurement projects, the NASAMS as well as the naval helicopters, for government-togovernment contracts through the US foreign military sales (FMS) program.

Conclusion

India's rapidly growing economy, which has the potential to compete with China. The concurrent growth of India's military capability that could contribute to the strategic stability

in the Asian region and the growing threat of Islamic terrorism, has resulted in new convergences in geo-political and geo-economic interests between the US and India. This strategic convergence could be seen in many aspects of a bilateral relationship, be it in economic, political, nuclear energy or defence sectors. But the growing threat of weapons of mass destruction (WMD) and threat from nuclear weapons going into the hands of rouge states and states with poor nuclear non-proliferation records has been guiding Indo-US courtship in the missile defence arena. In the coming years, missile defence will emerge as one of the more important components of the Indo-US bilateral relationship.

India's move to acquire NASAMS comes even as DRDO is in the final stages of developing its two-tier ballistic missile defence (BMD) shield, which is designed to track and destroy nuclear missiles both inside (Endo) and outside (Exo) the earth's atmosphere. As a final point, India must identify its envisaged threats, evaluate its own technological constraints to face them, and collaborate with international players like US, Israel, Russia, etc. to build a missile defence architecture to enhance its air defence and nuclear deterrence capability and ensure nuclear stability in the subcontinent.

General Studies Paper- III

Topic: Achievements of Indians in Science & Technology; indigenization of technology and developing new technology.

Topic: Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology and issues relating to intellectual property rights.

CCC



4. GANGA RIVER CLEANING PROJECTS: JOURNEY SO FAR

Why in News?

The National Green Tribunal has expressed its anguish over condition of the Ganga. The water from the river between Haridwar in Uttarakhand and Unnao in Uttar Pradesh was unfit for drinking and bathing. The tribunal then directed the National Mission for Clean Ganga to install display boards at a gap of 100 km indicating whether the water was fit for bathing or drinking. It also asked the National Mission for Clean Ganga and the Central Pollution Control Board to upload a map on their websites, that indicates locations where the water was fit for consumption and bathing. The authorities have two weeks to complete the task.

Background

Saying that much of India's lifeline depends on the Ganga is no exaggeration. 2,525 kilometers in length and passing through 5 major states, the Ganga provides water to 40 per cent of India's population and is one of the country's most used and abused rivers. Rampant pollution and indiscriminate dumping of industrial and other waste for years has resulted in the Ganga becoming one of world's most polluted rivers and unfit for usage in many parts of India.

The National Mission for Clean Ganga (NMCG) was set up in 2011 to implement programs and objectives for a clean and pollution free Ganga. In July 2014, the 'Namami Gange' program was announced under the National Mission for Clean Ganga initiative with an allocated budget of Rs 20,000 crores for 5 years. The objective of the Namami Gange program was to ensure sewage management, industrial discharge management and the beautification of several ghats along the Ganga.

In the past, thousands of crores have been spent on Ganga rejuvenation projects but successive governments have not been able to contain the increasing pollution levels in the river. Proper utilisation of funds remains an issue because of bureaucratic hurdles and red-tape. In 2016-17, the NMCG was able to use only Rs 734.70 crores of Rs 1,675 crores released by the government. Overall, the NMCG has been able to utilise only Rs 1,963.18 crores of Rs 4,321.05 crores since 2011-12, displaying a huge deficit between amounts allocated and utilised. One of the biggest reasons seems to be the lack of will. For 11 years, from 2003 to 2014, the National River Conservation Authority (NRCA) did not hold a single meeting. The NRCA's steering committee, which involves 5 member states and is supposed to hold a meeting every 3 months, had not met since 2007.

Where do We Stand Today?

A total of 187 projects have been sanctioned under the Namami Gange programme for infrastructure development, river surface cleaning. rural sanitation and other interventions at a cost of Rs 16,713 crore. 47 projects have been completed and remaining projects are at various stages of execution. However, recent data from the National Mission for Clean Ganga suggests otherwise. Only 18 projects have been completed out of 95 sanctioned. Moreover, not a single project has been completed in Bihar, Jharkhand, Haryana and Delhi.

The target was to process around 2769.38 million litre waste per day. However, only 299.13 million litres waste has been processed per day. Bihar, Jharkhand and Delhi score a nil on this front. Of the 4,762 km of

sewer network targetted, not even half has been achieved so far. In Uttar Pradesh, not a single project launched after 2014 is near completion, as per report on National Mission for Clean Ganga portal. 28 projects have been sanctioned in UP.

State	Projects Sanctioned	Projects completed
Uttarakhand	30	13
Uttar Pradesh	28	4
Bihar	20	Nil
Jharkhand	2	Nil
West Bengal	11	1
Haryana	2	Nil
Delhi	2	Nil
Total	95	18

Even the Comptroller and Auditor General (CAG) recently came down heavily on the Centre. According to a new report from the CAG, the new push to clean the Ganga is not delivering results. The audit team sampled 87 projects (73 ongoing, 13 completed, and one abandoned). These projects included the 11 institutional, 5 afforestation and 1 biodiversity. A corpus of Rs 198.14 crore (as of 31 March 2017) was available in the Clean Ganga Fund. However, National Mission for Clean Ganga could not utilise any amount out of the Clean Ganga Fund and the entire amount was lying in banks due to non-finalization of action plan.

Another major thrust area of the Namami Gange mission was to make villages on the banks of Ganga Open Defecation Free (ODF). Although government said that all 4,465 villages have been declared ODF, neither the Swachh Bharat Mission portal of the government nor the budget documents of the government clarify whether the mandatory verification of the declared villages has been done.



Challenges

Policy Wrongs

In India's electoral democracy, there is little space for environmental policy. Pollution has rarely been an electoral issue. Employment, economic growth and poverty alleviation are more urgent. Elected leaders have few incentives to take on either the big polluters (which include the government's own companies and power stations) or the small-scale firms in industrial clusters that serve as vote-banks.

Not having an action plan also led to non-utilisation of any amount from the corpus of fund available in the Clean Ganga Fund. It also pulled up the mission for not finalising a long-term action plans even after more than six-and-a-half years of signing with the consortium of Indian Institute of Technology. It was also surprised to see that it could not formulate a river basin management plan even though the National Ganga River Basin Authority notification was issued more than eight years ago.

Absent water

Another major issue is the diminished flow of water in India's rivers. Along the Ganga, for example, so much water is diverted for irrigation and hydro-power that the flow of the river is reduced to a trickle, particularly in the hot summer months. The water isn't always put to good use either; India's irrigation is quite inefficient compared to the world average. According to one estimate, 75 per cent of India's water for irrigation may be wasted. This is compounded by distortions in the electricity markets farmers receiving free electricity have almost no incentive to conserve water. It makes little sense to talk about cleaning a river that has almost all its water removed and sewage thrown back in.

Problems at the Official Level

The government of India has set up a number of bodies for executing the project. However, the way they have gone about in approaching the project has left a lot to be desired. For example, the National Mission on Clean Ganga or NMCG, which is supposed to be the primary body responsible for executing the project, is supposed to have several permanent officers for executing the project but till date it has had only few on its rolls, which is a matter of great concern. What has compounded the misery is that these officers are also playing important roles in other departments of the government, which means that they are unable to devote their fullest time to the more important project.

Slow Implementation

The slow implementation of project is attributed to delay in tendering, retendering, non- availability of land, legal issues, natural calamities, delay in permission for road cutting, crossing, local festivals, higher fund requirement and pending approvals of state Cabinet etc.

Causes of Ganga Pollution

Treating Urban and Rural Sewage

Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal together generate over 7,300 million litres of sewage per day that flows directly or indirectly into the river. About half of this comes from Tier I and Tier II towns like Kanpur, Allahabad and Varanasi. The five states together have the capacity to treat only about 3,300 million litres of sewage — or about 45 per cent of the total. The rest flows into the river untreated. This colossal volume might actually be even greater, because large parts of major urban centres like Kanpur and Varanasi are not even connected to the sewage network and their waste remains unaccounted for. About 1,650 gram panchayats lie directly on the banks of the Ganga. The sewage they generate is almost entirely untreated. About half of the population in these villages defecates in the open.

Industrial Effluents

There are 764 grossly polluting industries on the banks of the Ganga, mostly in Uttar Pradesh. These include tanneries, paper and pulp industries, sugar mills, dyeing factories, distilleries and cement plants. Effluents from all these flow untreated into the river. Tanneries near Kanpur alone generate about 25 million litres of effluents daily.

Surface Cleaning

Solid waste, clothes, polythene and all kinds of religious offerings are dumped into the river and float on its surface. It is the easiest to clean them — and can result in a quick visual makeover for the river.

Burning the Dead

Cremation along rivers and immersion of remains is a unique reason for pollution in Indian rivers and especially the Ganga. The burning of wood leads to air pollution as well. One of the efforts in the Ganga Action Plan of 1985 was to build gas or electric crematoriums, especially in religious centres like Varanasi and Allahabad. Not much was achieved, however.

About Namami Gange

'Namami Gange Programme', is an integrated conservation mission, approved as 'flagship programme' by the government in June 2014 with budget outlay of Rs.20,000 Crore to accomplish the twin objectives of effective abatement of pollution, conservation and rejuvenation National River Ganga. implementation has been divided into 'entry-level activities (for immediate visible impact)', 'medium-term activities (to be implemented within 5 years of time frame)' and 'long-term activities (to be implemented within 10 years)'.





Namami Gange The Mission involved undertaking a slew of activities such as creating sewerage treatment infrastructure, river surface afforestation, effluent monitoring, making villages on the banks of Ganga (Ganga gram villages) open defecation free and riverfront development, interception, diversion and treatment of wastewater flowing through the open drains through bio-remediation / appropriate in-situ treatment / use of innovative technologies / sewage treatment plants (STPs) / effluent treatment plant (ETPs); rehabilitation augmentation of existing STPs and immediate short term measures for arresting pollution at exit points on river front to prevent inflow of sewage etc. However, the bulk of projects sanctioned are sewerage treatment plants.

Drawing from the lesson learned from the previous implementation, the program also focuses on involving the states and grassroots levels institutions such as urban local bodies (ULBs) and panchayati raj institutions (PRIs) in implementation. The program would be implemented by the National Mission for Clean Ganga (NMCG) and its state counterpart organizations i.e., State Program Management Groups (SPMGs). NMCG will also establish field offices wherever necessary.

The Five Tier Structure

- 1. National Ganga Council under chairmanship of Prime Minister of
- 2. Empowered Task Force (ETF) on river Ganga under the chairmanship of Union Minister of Water Resources, River Development and Ganga Rejuvenation.
- 3. National Mission for Clean Ganga (NMCG).
- 4. State Ganga Committees.
- 5. District Ganga Committees in every specified district.

GANGA CLEANING DEADLINE: 2018-19

Tasks to be completed by then

- Sewage Infrastructure: Setting up Sewage Treatment Plants (STPs) in all 118 towns
- Projects are ongoing in 50 towns
- Projects will be allotted in remaining 68 towns by June 2016
- Tapping (disallowing) untreated water from flowing into river) all 144 drains; 65 have already been tapped
- Setting up Central Effluent Treatment Plants (CETPs) at main industrial clusters and make it sustainable
- Provision of public amenities at Char Dham Yatra and Ganga Sagar
- River front management at 7 identified locations including Kedarnath, Hardwar,
 - ➤ 100% sanitation coverage for 1.657 Gram Panchavats

Allahabad, Varanasi, Kanpur

and Patna

> Raising 4 battalions (4,000 personnel) of Ganga Task Force

Plantation of medicinal plants along 2,525 km long Ganga - involving

ex-servicemen along Ghats

- Setting up a workforce of trash collectors by involving urban local bodies (ULBs)
- Conservation of aquatic life special attention to dolphin. turtles and ghariyals

Ganga Gram

Ministry of Drinking Water and Sanitation (MoDWS) launched the 'Ganga Gram' project as part of the Namami Gange programme, holistic sanitation development in 4,470 villages on the banks of the river. The project identified 1674 Gram Panchayats situated on the bank of river Ganga in 5 State (Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal). UNDP has been engaged as the executing agency for rural sanitation programme and to develop Jharkhand as a model state at an estimated cost of Rs. 127 Crore.

Way Forward

The Ganga's vast coverage across multiple states and level of usage indeed makes it difficult to clean it up within a short time period. A comprehensive plan is required to ensure that the funds which are being allocated are put to use. The government should regularly followup with the respective departments and monitors the situation. Along with allocation of funds, there should be a proper planning and monitoring body which can assess the Ganga situation regularly so that actual work gets done.

Real solutions require shared responsibility between the state and the people. It is time to prioritise citizen engagement. To encourage that, India needs more publicly available data and more local analysis of this data. There is also a need for more education and awareness on the health effects of pollution, as well as the causes of pollution.

The current push for sanitation will definitely help, but so will other efforts that catch agricultural and industrial waste before they run into the river. It is definitely time to take a comprehensive look at the interconnection between policies such as subsidies, electricity consumption, use patterns, industrial development and urbanisation plans. All of this takes creativity, innovation, discipline, transparency and strong leadership. The cleanup of the Thames in London and the Rhine flowing through Europe suggest this is possible. The Ganga's waters will ultimately depend on the actions of millions of Indians who depend on it for nutrition, electricity, and spiritual fulfillment.

General Studies Paper- III

Topic: Conservation, environmental pollution and degradation, environmental impact assessment.

COC



5. 100TH BIRTH ANNIVERSARY OF NELSON MANDELA

Why in News?

On South African icon Nelson Mandela's 100th birth anniversary, leaders from all over the world has paid their tributes to the man who fiercely opposed apartheid in his country. He died in 2013 at the age of 95 and was seen as a symbol of peace.

On Mandela's 100th birth anniversary, the South African Reserve Bank has introduced limited edition currency notes and gold coins. The notes show Mandela's life right from his birth in 1918 to his death in 2013. The 1-ounce coin has the face of middle-aged Mandela, with a smile on his face.

Background

Born on July 18, 1918, Mandela was named Rohlihlahla, or 'troublemaker,' by his father, a chief of the Thembu people of the Xhosa nation. On his first day of school the teacher gave each child an English name and the troublemaker was disguised as 'Nelson'. Mandela left his village Qunu at the age of nine after his father died and studied at Clarkebury Boarding Institute, the Wesleyan College at Fort Beaufort and the University College of Fort Hare. Then he ran away to Johannesburg in 1941 to escape the prospect of a forced marriage. A few years after his arrival in Johannesburg, the far-right Afrikaner nationalist party won the 1948 election, in which only whites were allowed to vote, on the platform of implementing a racial segregation policy called apartheid, or 'apartness.'

His life, more than any other, has come to symbolise the struggle for racial equality and self-determination of the diverse peoples of South Africa and the African continent: beginning with his early childhood in the remote

region of the Transkie, his gradual entry into politics as a young lawyer, the 27 years of imprisonment at the hands of white supremacists and his triumphant return to freedom as a man who, in his own words, sought the middle ground between 'white fears and black hopes' in one of the most segregated modern societies in the world.

He joined the African National Congress (ANC), a venerable organisation that was established in 1912 and had since lost its way and in 1944 helped found the ANC's more militant Youth League. He initially opposed alliances with other groups like the Indians and white communists, fearing that they would hijack the ANC, but gradually evolved a broadbased politics that embraced all those opposed to apartheid. In 1961, Mandela was tasked with setting up UmkhontoweSizwe, or Spear of the Nation, a guerilla organisation that would serve as the ANC's armed wing. In August 1962 he was caught as he made his way back into South Africa and sentenced to life imprisonment along with Walter Sisulu. Govan Mbeki, Denis Goldberg, Kathrada, Raymond Mahlaba and Elias Motsoaledi. His incarceration, most of it on Robben Island, would last 27 years and he finally walked free in February 1990.

His Thoughts

Africa's last great statesman, Mandela presided over a largely peaceful political transition and stepped aside after only one term in power. He was the first black President of South Africa and under his aegis, the country dismantled the institutional legacy of apartheid and racism. He remained the country's moral compass in the silence of his twilight in much the same way he served as the liberation

movement's rallying cry through 27 years of incarceration.

Mandela had viewed the whole system of apartheid as an exhibition of imperialism, hence his fight was not only against racial discrimination but it was against the whole system of imperialism which was full of "intrigue The deception". Gandhian methods, involving civil disobedience, strikes, protest marches, boycotts and demonstrations of all kinds and stressed the importance of discipline, peaceful and non-violent struggle, were answers to it. While he was influenced by Mohandas Gandhi's satyagraha movement, he saw nonviolence as a tactical decision rather than as the moral choice described by Gandhi.

He accepted that the problem was not whether to fight, but was how to continue the fight. He carried on incessant struggle for the people as their liberty was paramount to him. He knew that its attainment must be the ultimate goal of his political life. He defined the real basis of the state power and emphasised that the will of the people is the basis of the authority of government, is a principle universally acknowledged as sacred throughout the civilised world and constitutes the basic foundations of freedom and justice. He was convinced that people's power is the ultimate basis on which any political structure can be established. He took lessons from history and contrasted the democratic and authoritarian way of political life. His vision was clear as he knew that no power on earth can stop an oppressed people determined to win their freedom. History punishes those who resort to force and fraud to suppress the claims and legitimate aspirations of the majority of the country's citizens.

Current Affairs: Perfect 7



Mandela recognised the role of other organisations in achieving the great aims. He assigned an important role to the Communists. He had deduced that Communists were their partners in the struggle against apartheid as they had always opposed the imperialist powers. His understanding of the communist movement was quite comprehensive.

His love for the democratic system was comprehensive in the sense that he attempted to make it inclusive as much it could be possible. After long years, when he was out of the prison,

he echoed the same sentiments for which he had stood for his whole life. He was therefore a leader from whom how to attain, establish and continue the democratic fabric in the social system can be learnt as he elaborates the concept of democracy with its basis in the cohesiveness of the people. Once he said cannot accept an undemocratic constitution in order to address the fears of a minority party about its own future at the cost of democracy itself (and that) all South Africans, black and white together, need to join hands for democracy, peace and justice."

Mandela and the Mahatma

Mohandas Karamchand Gandhi spent his years in prison in line with the Biblical verse, "Rejoice in hope, be patient in tribulation, be constant in prayer." Nelson Mandela was shut off from his countrymen for 27 years, imprisoned, until his release on February 11, 1990. Both walked that long road to freedom. Their unwavering commitment to nationalism was not only rooted in freedom; it also aspired towards freedom. Both discovered that after climbing a great hill, one only finds many more to climb. They

MANDELA -- THE SYMBOL OF FREEDOM

Mandela was born in the Mvezo village of East Cape province in South Africa on **July 18, 1918**

Mandela was named as Rolihlahla Dalibhunga when he was born but his teacher gave him the name Nelson on the first day of his school

Standing out against racial discrimination in the later stages of his education and boycotting the student representative council's position on students' demand made him expelled from school.

The young Mandela graduated from law school and opened a law firm with Oliver Tambo as the first black lawyer in the country.

The legendary leader joined the African National Congress (ANC) for the first time at the age of 25

1960

Police killed 69 demonstrators in a rally organized by ANC after it was declared illegal by the apartheid regime in 1960.

After the killing, which is referred as "Sharpeville massacre" in history, the government continued to suppress the resistance movement and arrested thousands of people.

• 1964

Mandela was charged with attempting to overthrow the government, and was eventually sentenced to life imprisonment.



NELSON MANDELA

Embracing forgiveness and love in the country instead of hatred against the apartheid regime is the very reason he is admired throughout the world.

Various events and symposiums will be held all over the world to commemorate the 100th birthday of Mandela

1990

Mandela was freed on Feb. 11, 1990birakildi

1994

Mandela participated in the country's first democratic election to become South Africa's first black president,

1999

When his five-year term expired and he handed over the power in 1999 to his companion Thabo Mbeki, who won the election.

2013

Mandela's health deteriorated in 2011 and died on December 5

Ülkesine barış ve esitliğin gelmesi için verdiği mücadeleden dolayı Nobel Barış Ödülü'ne layık görülen Mandela hayatı boyunca 250'den fazla ödül alan lider olarak tarihe geçti



had little time to rest and look back on the distance they had travelled. Both Mandela and the Mahatma believed freedom was not pushed from behind by a blind force but that it was actively drawn by a vision. In this respect, as in many other ways, the convergence of the Indian and South African freedom struggles is real and striking.

Both Gandhi and Nelson Mandela are entitled to our affection and respect for more than one reason. They eschewed violence against the person and did not allow social antagonisms to get out of hand. They felt the world was sick unto death of blood-spilling, but that it was, after all, seeing a way out. At the same time, they were not pacifists in the true sense of the word. They maintained the evils of capitulation outweighed the evils of war. Needless to say, their ideals are relevant in this day and age, when the advantages of non-violent means over the use of force are manifest.

Gandhi and Mandela also demonstrated to the world they could help build inclusive societies, in which all Indians and South Africans would have a stake and whose strength, they argued, was a guarantee against disunity, backwardness and the exploitation of the poor by the elites. This idea is adequately reflected in the make-up of the "Indian" as well as the "South African" — the notion of an allembracing citizenship combined with the conception of the public good.



Nelson Mandela's Relevance

Martin Luther King Jr. once said, "If a man hasn't discovered something he will die for, he isn't fit to live." Nelson Mandela was a man who cherished the ideal of a free society all his life; an ideal that as he proclaimed at his trial in Pretoria, in April 1964, he hoped to live for, but if need be, die for. During his lifetime, Mandela dedicated himself to the freedom struggle of the African people and in doing so, fought against white and black domination in South Africa. But more than anything else, he fought for democracy as a plural society in which all races, languages and opinions could live together in harmony and with equal opportunity. However, what Nelson Mandela, as a political and moral leader, made possible for humanity was to extend and expand our capacity to rethink politics in terms of an ethics of empathy, a politics of forgiveness and a revolution of values.

Mandela emphasized the central importance of core principles and values. One could then work out appropriate tactics and strategy. Although Mandela should be seen as a freedom fighter in the tradition of Mahatma Gandhi, who spent 21 years in South Africa and Martin Luther King, Jr., he did not fully endorse their views of nonviolence. For Mandela, nonviolence is not an absolute principle, philosophy, or way of life. In different contexts, where nonviolence is not possible or effective, the use of violence may be justified.

Mandela leaves us with a legacy of hope; that even in the darkest of times, we can live meaningful value-based lives of integrity and bring about dramatic, qualitative changes in the unjust status quo. Mandela shows us that we can live lives of admirable courage, even when we have deep fears and insecurities, as he often had. In an age when we are

socialized to desire instant rewards and gratifications, Mandela teaches us the necessary value of disciplined will power and perseverance. Mandela shows us the core importance of having worthy principles and values, of clarifying what we really believe and then, as he quoted Gandhi, "Be the change you seek."

Mandela's legacy and meaning for us today, teaches us that while dedicating our lives to struggles for justice based on living lives of integrity with worthy values and ideals, we can also reach out to others with a spirit of forgiveness, truth and reconciliation.

Way Forward

'Madiba', as Mandela was known by his clan name, accomplished his heroic status by meeting the challenges of his life and those of his time. As an activist, as a prisoner or as a leader in government, he remained intensely conscious of his moral and political responsibilities as a man in search for excellence. Even after his death, he has remained a global figure with a legacy — of a politics of excellence.

So what is Nelson Mandela's legacy for us today? There is so much more to the real Mandela, as a truly incredible, his remarkable achievements and his hopeful, significant and relevant message today. It is now up to us to understand, appreciate and selectively appropriate what is of lasting value in Mandela's vision, values and ideals and to contextualize his legacy in ways that inspire us, give us hope and inform our lives as integral to an action-oriented interconnected movement working for a much better world.

General Studies Paper- IV

Topic: Contributions of moral thinkers and philosophers from India and world.

OOO



6. NEED FOR EVALUATION OF AGRICULTURE POLICY IN INDIA: OECD REPORT

Why in News?

India's agro-food sector is at a critical juncture, facing multiple challenges multiple opportunities. new Organisation for Economic Cooperation and Development - Indian Council for Research on International Economic Relations (OECD-ICRIER) report suggests a series of reforms which, if implemented, would help India improve food security for its vast population, advance the quality of life of its millions of smallholders, overcome severe resource and climate pressures, while generating sustainable productivity growth and creating a modern, efficient and resilient agrofood system that can contribute to inclusive growth and jobs throughout the economy.

Introduction

The Indian economy, including its agricultural sector, has undergone significant transformations and realised a number of notable achievements over the last decades. The green revolution (in cereal production, late 1960s-early 1980s) was succeeded by the white revolution (in milk production, starting in the 1970s), the gene revolution (in cotton production, early 2000s) and the more recent diversification of production towards pulses, fruit and vegetables, as well as meat and meat products, largely in response to evolving demand patterns driven by rising incomes and urbanisation. Since the early 1990s, India's agricultural exports have also steadily grown and diversified. India emerged as a major exporter of agriculture and allied products such as rice, meat and meat products, cotton, oilcakes, vegetable extracts, fish and fish products and several others (including wheat in some years).

The diversity of natural regions and climatic conditions in India allow

for the cultivation of a wide range of crops and undergoing various livestock activities. However, at just 0.15 ha per capita, agricultural land is very scarce. Moreover, land degradation is increasingly prevalent throughout the country: 37% of the total land area (about 120.4 million ha) appears to be affected by various types of degradation. India also faces a severe water crisis due to a widening gap between water supply and demand, as well as poor water resources management and changing precipitation patterns induced by climate change. Total water demand is expected to increase by 32% by 2050 driven by population growth, urbanisation and further industrialisation. Environmental pressures are rapidly intensifying: by midcentury, the impact of climate change would be felt as an increase in the average surface temperature, changes in rainfall during both monsoon and non-monsoon months, as well as an increase in the frequency and intensity of both droughts and floods. Agriculture accounts for as much as 17% of GDP and 47% of the total national labour force.

Agricultural Policy Trends and Evaluation

Although India's Constitution specifies that only the individual states have legislative power in agriculture, the Union retains residual powers. The government of India provides most of the government expenditure on agricultural and food policy and has scope for much regulatory intervention in the sector. The actions of the central government therefore dominate the picture of agricultural and food policy in India, but the role of state governments is crucial.

Agricultural Policy objectives and Basic Stages of Agricultural Policy

Reform: From India's early years, seeking to achieve food security has been an important part of the objectives of both its agricultural and trade policy. The phrase food security has been given different conceptual and practical interpretations over time, whether emphasizing national self-sufficiency in food production, economic access to food for certain groups, or other dimensions. The consequent policy approaches have therefore also evolved over time.

Framework for Policy Implementation

The Ministry of Agriculture, which in 2015 became the Ministry of Agriculture and Farmers' Welfare (MAFW), provides broad guidelines for agricultural policies. Many state governments have ministries or departments of agriculture, animal husbandry, irrigation or the like. While they implement central and centrally sponsored schemes in co-operation with, central government.

Major Components of Agriculture and Food Policy in India

The set of policies directly relating to agriculture and food in India has for a long time consisted of five major categories. They include managing the prices and marketing channels for many farm products, making variable farm inputs available government-subsidised prices, providing general services for the agriculture sector as a whole (such as research and extension), regulating border transactions through trade policy and making certain food staples available to selected groups of the population at government-subsidised prices. More recently, environmental measures concerning agriculture have gained prominence.



Marketing Policies

Commodities Act: Essential An early amendment to India's Constitution gave the Central government a statutory provision for regulating the production, prices and distribution of so-called essential commodities with the objective of improving the efficiency of markets and ensuring remunerative prices for producers and affordable prices for consumers. The most fundamental policy instrument is the Essential Commodities Act, 1955 (ECA), which originally applied to foodstuffs, certain cotton yarn, raw jute and jute textiles, many kinds of seeds, fertiliser, petroleum and drugs. The ECA provides for the control of

Agricultural Produce Market (APMC) Committee Act: Many states had their own regulations for agricultural marketing since before India's independence and marketing remains under the administration of the states. While the ECA regulates transactions in the whole value chain from producer to consumer, the Agricultural Produce Marketing (Regulation) Acts (APMR Act) in many individual states regulate only the point of first sale from the producer. The acts are often called APMC Acts since they regulate agricultural markets through Agricultural Produce Market Committees (APMCs). A state's APMC Act empowers the state to establish regulated wholesale markets

production, supply, distribution and for agricultural produce, known as pricing of essential commodities. mandis or "APMC" markets.			
Approximate Years	Key Sector Features	Major Policy Initiatives	
1950-65	Expansion of area main source of growth	 Agrarian reforms (abolition of intermediary landlordship, imposition of land ceiling acts) Strengthening of co-operative credit institutions 	
1965-80 Increase in productivity main source of growth	 Develop pathways for the adoption of technological breakthroughs in rice and wheat production 		
	 Policy support for marketing, research and credit; introduction and formalisation of lending to priority sectors, including agriculture 		
	 New institutions, e.g. State Agricultural Universities, Food Corporation of India, Agricultural Prices Commission 		
1980s	Widespread use of technology in major crop areas	 Some delicensing and deregulation Increase in subsidies and support to agriculture 	
1990s Economic liberalisation in agriculture lags behind general economic reforms	 Cautious relaxation of trade protection in some products, e.g. sugar, cotton, edible oils, wheat, rice Increases in input subsidies 		
	> Targeting of beneficiaries of public distribution system of food grains		
2000s Demand-driven shift towards producing fruit, vegetables and livestock	Alternate tightening and loosening of market and trade regulations		
	Large increases in input subsidies, including credit		
	> Gene revolution in seeds, including cotton		
2010s	Major participant in world markets	More structured interaction between central and state level authorities	
for some commodities		Expansion of food subsidies	

Minimum Support Prices: Within the marketing structure defined by the ECA and the APMC Acts, the Central government's price policy for major agricultural crop commodities seeks to ensure remunerative prices to producers with a view to encouraging higher investment and production and to safeguard the interest of consumers by making available supplies at reasonable prices. The government organises purchase operations through public and co-operative agencies, which intervene in the market through procurement operations with the objective that market prices do not fall below the Minimum Support Prices (MSPs) fixed by the government.

Reduction of Input Costs

- Fertilisers: Fertiliser is an essential commodity under the ECA and a fertiliser control order applies. The central government controls the prices at which some fertilisers are sold to farmers.
- Electricity: Over the last 25 years, reforms in electricity governance, such as the Electricity Act, 2003, have resulted in some unbundling of these functions into separate entities for generation, transmission and distribution.
- Water: Surface water for irrigation is supplied to agricultural producers in India at prices lower than the costs incurred by the government agencies at central and state level that manage the supply.
- Seeds, machinery and other inputs: Seed policies concern such issues as balancing the incentives for plant breeding between the private and public sectors and encouraging farmers to use certified seeds and replace seed more often so as to increase yields.
- Credit: About 64% of agricultural credit outstanding is held by institutional sources, almost all of it by commercial banks, co-operative



societies and banks and regional rural banks.

Fasal Bima Yojana is being implemented in association with the state governments. In contrast to other insurance schemes there is no limit on the government's premium subsidy. Producers pay a premium of 2% and 1.5% of the "sum insured" of the kharif and rabi crops, respectively and 5% for annual commercial and horticultural crops.

National Food Security Mission

The National Food Security Mission (NFSM) was launched in 2007-08 to increase the production of wheat, rice and pulses as well as the promotion of commercial crops like cotton, jute and sugarcane. The strategy is to provide financial assistance promote and extend improved technologies regarding, e.g. seed, micronutrients, soil improvement, pest management, machinery and irrigation, as well farmer capacity building. From 2016-17 several new such initiatives were undertaken to increase the production of pulses.

India Food Security While Ensuring Farmer Income Security

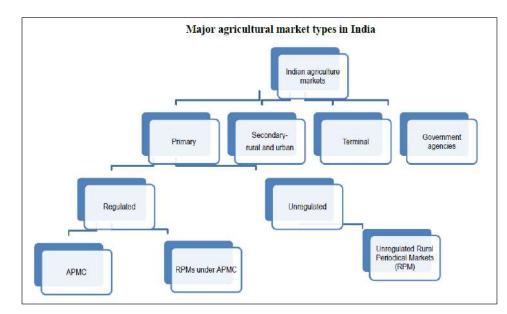
India's share of the world's undernourished population exceeds its share of the world's population indicating that it houses a

disproportionate number of the world's poor. Since the early 1990s, the number of undernourished people in India has remained relatively stable - with only a reduction of 15 million in the number of undernourished between 1990-92 and 2014-16. India's policies to increase food security emphasise the availability and access dimensions of food security. For availability, policies seek to guarantee adequate supply by incentivising production using multiple types of producer support. Access to food is mostly addressed by offering food grains at affordable prices to the population.

India's Targeted Public Distribution System (TPDS) is indicative of its approach to food policy. The TPDS both targets food insecure consumers and attempts to help provide stable and secure incomes for India's producers. Given this, reforms to one aspect of the scheme - more effective and efficient outcomes for poor consumers - will mean that there are flow on impacts on producers. The focus of the policy reforms that could improve the efficiency and effectiveness of government interventions aimed at improving food security, focusing on individuals as consumers. This has to be possible through the implementation of a system of Direct Benefit Transfer (DBT). In moving towards a more

efficient and effective system with the use of DBT, however, the need for significant government purchases of wheat and rice under a system of MSPs would be drastically reduced. But for producers, lower government purchases at a MSP would have an impact. This shows the direct impact that MSPs have on producers and indicates that specific policy responses directed towards them will be required under a system of DBT.

The negative price gap between the domestic and international markets for both products have arisen from a number of sources, but in sum, are due to the interaction of the various policy measures that are depressing producer prices. Such policies, even under MSP, have had a negative impact on producers. With a significantly scaled back procurement system, these effects will continue and likely have a greater impact on producers. As an exporter, such a situation is untenable as India cannot make use of export subsidies to dispose of excess stocks created by the higher prices - policies which all WTO members agreed to eliminate at the 10th Ministerial Conference in Nairobi in 2016. In this sense, pursing further reform is both necessary to avoid farm gate price falls that may result from a scaled back government procurement system under a DBT scheme, and to avoid complications over dealing with excess production. Such reforms will help place India's agricultural producers on a stronger footing and promote income growth due to better participation in both domestic and international markets - the latter a significant buyer of rice produced by Indian farmers.



Key Policy Recommendations

(1) Rebalance the policy package to foster sustainable productivity growth

Strengthen the regulatory environment governing land issues.



- Reform market regulations and strengthen market functioning across states.
- Build on and reinforce initiatives already underway (E-NAM, Model Acts).
- Support farmers to integrate in competitive markets and allow the private sector to play a greater role.
- Encourage efficient and sustainable use of variable inputs such as fertilisers.
- Enlist all concerned actors in developing collective - action groundwater and watershed management schemes and correcting perverse incentives to overuse of scarce water.
- Strengthen the overall access to credit and particularly encourage long-term loans.
- Re-focus investments on fostering the agriculture enabling environment, such as infrastructure and education in rural areas.
- Harness innovation for sustainable productivity growth and climate change adaptation and mitigation.
 - Increase research intensity and strengthen priority setting processes.
 - Reform and refocus the extension system on today's challenges.
 - Invest in digital connectivity in rural areas.

(2) Strengthen the role of agriculture in enhancing food and nutrition security

- Scale back the public distribution system as incomes and the share of the middle class in the population rises.
- Move gradually to targeted lump sum transfers (Direct Benefit Transfers) or food stamp type mechanisms.
- Allow the private sector to play a role in managing remaining stocking operations.

(3) Improve agricultural institutions and governance systems

- Clarify roles and responsibilities at central level by bringing key policy areas under a single umbrella.
- Strengthen co-ordination among central ministries and agencies and between the centre and the states.
- Prioritise institutional reforms to allow development of a single market for agricultural products.

(4) Make trade work for Indian agriculture

- Streamline and clarify trade policy roles and responsibilities across the different ministries and agencies to iron out inconsistencies and simplify procedures.
- Move away from the use of export restrictions in order to create a stable and predictable market environment.
- Reduce tariffs and relax the other restrictions on imports which are applied from time to time with a view to creating a more open and predictable import regime.
- Address a range of supply-side constraints in the application of sanitary and phytosanitary measures.

Way Forward

Gaps in physical infrastructure and logistics disrupt agro-food supply chains and drive up transaction costs, particularly for small and marginal farmers. Limited connectivity and storage infrastructure increase postharvest losses and impacts farmers' incomes as well as their incentives to produce. This remains a key challenge to address in order to link farmers to markets, encourage private sector participation in the supply chains and tap the potential for the production and export of fruit and vegetables, as well as meat and meat products. Alternative marketing channels are nevertheless emerging (such as contract farming in poultry), in addition to an evolving food processing industry and an improved business environment for the retail sector. The food processing industry has nonetheless a dualistic structure, with a relatively small (in number of units) but capital intensive organised segment coexisting with a pervasive, mostly rural and more labour-intensive unorganised segment.

A country's enabling environment is defined as the multifaceted settings within which the agricultural sector and economy more broadly operates, comprising non-distorting and stable policies, adequate provision of public goods, good governance through laws and regulations that are conducive to private-sector economic activity while addressing market failures and strong and effective institutions through which government measures and actions are operationalised. Collectively, these factors play an important role in ensuring a favourable environment for innovation at the farm level and by other businesses in agricultural value chains, by shaping incentives for investment and sustainable use of natural resources and by building economic capacities.

General Studies Paper- III

Topic: Major crops - cropping patterns in various parts of the country, different types of irrigation and irrigation systems - storage, transport and marketing of agricultural produce and issues and related constraints; e-technology in the aid of farmers.

Topic: Issues related to direct and indirect farm subsidies and minimum support prices; Public Distribution System-objectives, functioning, limitations, revamping; issues of buffer stocks and food security; Technology missions; economics of animal-rearing.

OOO



7. NATIONAL DIGITAL POLICY-2018: IMPROVING DIGITAL COMMUNICATIONS

Why in News?

The government has recently come up with the national policy for telecom sector which aims to provide access to every household with download speed of 50Mbps in addition to facilitate futuristic technologies such as Artificial Intelligence (AI) and robotics.

There could have been no better time than this for a new telecom policy. As we usher in a new, digitally-led India, telecom has a vital role to play. The national telecom policy, rechristened as the National Digital Communications Policy (NDCP-2018), aims to attract \$100 billion or about Rs. 6.5 crore investments in the digital communication sector by 2022 with the help of reforms.

Introduction

This new digital policy seeks to regulate not only the telecom sector but also devise new ways of improving digital communication across the country. The policy aims at creating and sustaining a sound digital infrastructure in the country. Such digital infrastructure is expected to propel economic growth and enable India to transition to a digitally empowered economy and society. The policy mainly talks about three key missions or pillars which would help buttress India's digital infrastructure. These are: Connect India, Propel India and Secure India. Connect India is based on the objective of introducing broadband services for all, propel India seeks to utilize the emerging technologies such as artificial intelligence and internet of things to create future-ready products and secure India aims to achieve digital sovereignty in the country by focussing on issues such as data privacy.

Digital infrastructure and services are increasingly emerging as the key enablers and critical determinants of a country's growth and well-being. With significantly advanced capabilities

in both telecommunications and software, India, more than most countries, stands poised to benefit from harnessing the new digital technologies and platforms; as a means to unlock productivity, as well as to reach unserved and underserved markets; thus catalysing economic growth and development, generating new- age jobs and livelihoods and ensuring access to next generation services for its citizens.

Background: National Telecom Policies

The successive national telecompolicies have laid down the government's high-level vision on liberalisation, competition and growth in this sector. Prior to the opening up of the sector, government was performing multiple roles of being the sole telecom operator, licensor and policy maker in this field. This was changed by the National Telecom Policy (NTP), 1994 which called for bringing in private investment into the telecom sector and bridging the resource gap with the goal of making telecommunication services accessible to all. In line with these goals, the government began issuing licenses to private operators for providing basic telecom services. This was in addition to the opening up of Value Added Service (VAS) like radio paging and cellular mobile services, which had already been announced in 1992. The pace of privatisation and its outcomes in the initial years, however, did not fully meet the expectations of the NTP, 1994. This led to a review by the government of its policy priorities and targets through the NTP, 1999. Often pegged as a seminal moment in the Indian telecom history, the NTP, 1999 proposed several tangible targets towards securing affordable access for all citizens. It highlighted the need for striking a healthy balance between

the provision of universal service to all uncovered areas and the availability of high-level services to meet the needs of a growing economy. In addition, the policy document also acknowledged the increasing convergence of the telecommunication, information technology and broadcasting sectors and the need for the policy framework to keep pace with these developments.

Thirteen years later, government once again reviewed its policies and goals for the telecom sector through the NTP, 2012. This policy document contained the idea of one nation - one license, relecting the move towards a unified licence regime to exploit the attendant beneits of convergence, spectrum liberalisation and to facilitate delinking of the licensing of networks from the delivery of services. Another key feature of the NTP, 2012 was to increase the availability of adequate spectrum and ensure its allocation in a transparent manner through market-related processes. The policy also spoke about provisioning on-demand broadband services; developing an ecosystem for design, research and development of telecom equipment; using renewable sources of energy for powering telecom networks; and strengthening the framework for protection of consumer interests. Each of these policies has served as the backbone for a series of government and regulatory initiatives.

The National Digital Communications Policy, 2018

The National Digital Communications Policy, 2018 seeks to unlock the transformative power of digital communications networks - to achieve the goal of digital empowerment and well being of the people of India; and towards this end, attempts to outline



- a set of goals, initiatives, strategies and intended policy outcomes. The National Communications Policy aims to accomplish the following strategic objectives by 2022:
- 1. Provisioning of 'Broadband for All'.
- Creating 4 Million additional jobs in the digital communications sector.
- Enhancing the contribution of the digital communications sector to 8% of India's GDP from ~ 6% in 2017.
- 4. Propelling India to the top 50 nations in the ICT development Index of ITU from 134 in 2017.
- 5. Enhancing India's contribution to global value chains.
- 6. Ensuring digital sovereignty.

Three strategies

- 1. Connect India: The aim of the connect India strategy is to create a robust digital communication infrastructure for the country where the entire country can be connected. This will be achieved by using 'Broadband for All' as a tool, means, availability of high speed broadband connectivity for each and every citizen of the country. This strategy aims to:
- Provide universal broadband coverage at 50 Mbps to every citizen.
- Provide 1 Gbps connectivity to all Gram Panchayats of India by 2020 and 10 Gbps by 2022.
- Enable 100 Mbps broadband on demand to all key development institutions; including all educational institutions.
- Enable fixed line broadband access to 50% of households.
- Achieve 'unique mobile subscriber density' of 55 by 2020 and 65 by 2022.
- Enable deployment of public Wi-Fi Hotspots; to reach 5 million by 2020 and 10 million by 2022.
- Ensure connectivity to all uncovered areas.

- 2. Propel India: The government believes it will not be enough if just a robust communications network is provided. The country should make bigger strides towards the newer technologies including 5G, Internet of Things (IoT), Artificial Intellegence (AI), Cloud and other next generation technologies. And to achieve that the country needs more investment in those areas and intellectual property rights (IPRs) should obtained in every aspect of the these technologies and solutions. The strategy aims to:
- Attract investments of USD 100 Billion in the digital communications sector.
- Increase India's contribution to global value chains.
- Creation of innovation led Start-ups in digital communications sector.
- Creation of globally recognized IPRs in India.
- Development of Standard Essential Patents (SEPs) in the field of digital communication technologies.
- Train/re-skill 1 Million manpower for building new age skills.
- Expand IoT ecosystem to 5 Billion connected devices.
- Accelerate transition to Industry 4.0.
- **3. Secure India:** The third aspect of the policy is securing the nation from a digital and cyber network point of view. It is often said the next war would not fought on land, water or air but on a virtual space and securing a country's digital infrastructure, will be paramount. This aspect of the policy aims to:
- Establish a comprehensive data protection regime for digital communications that safeguards the privacy, autonomy and choice of individuals and facilitates India's effective participation in the global digital economy.
- Ensure that net neutrality principles are upheld and aligned with service requirements, bandwidth availability and network

- capabilities including next generation access technologies.
- Develop and deploy robust digital communication network security frameworks Build capacity for security testing and establish appropriate security standards.
- Address security issues relating to encryption and security clearances.
- Enforce accountability through appropriate institutional mechanisms to assure citizens of safe and secure digital communications infrastructure and services.

Key Changes Proposed by the Digital Policy

- a) Amending the Telegraph Act, 1885: As an initiative under the connect India mission, the government has proposed the creation of a national broadband mission for universal provision of broadband services. Among other things, this mission proposes that there should be a convergence of telecom, IT and broadcasting sectors. In order to make this convergence legally possible, the policy proposed that provisions of the Telegraph Act, 1885 may need to be amended.
- b) Simplification and uniformity in regulatory framework: Under its propel mission, the digital policy also recommends that a uniform framework for technologies such as the Over the Top (OTT) and cloud computing should be set up. It has been proposed that a unified policy and spectrum management regime should be set up in this regard.
- c) Simplifying compliance obligations:

 The Digital Policy seeks to simplify the onerous compliance obligations. It proposed to reduce the licensing and regulatory obligations, revamp the merger and acquisition regulations for obtaining fast-track approvals, fixing penalties to maintain proportionality etc.



- d) The digital policy suggests the setting up of international cable landing stations which would lead to a reduction in bandwidth costs.
- e) Suggestions with regard to fixed number portability have been made which would lead to full number portability.
- f) The digital policy also proposes the setting up of policies pertaining to data encryption and retention.

Challenges

The growth of the telecom sector in the last twenty years has brought with it a tremendous increase in the welfare of telecom users as well as efficiency and innovation in many other allied sectors of the economy. While technology is dynamic and changing constantly, regulation is often slower to develop and implement. This contrast makes the task of policy making in the communications sphere a delicate one.

The digital policy through its clearly structured missions, objectives and strategies appear to be a committed and long-term policy which would fast-track India on the path of legal development. However, there may be few irritants which can prevent the policy from achieving its objective.

Firstly, the convergence of the IT, telecom and broadcasting sectors may not be as easy as it sounds. A plethora of legislation would have to be amended. Not only the legal and regulatory regime but a revamp of the administrative structure of these sectors would also be required to be carried out.

Moreover, there may be certain areas which are isolated to one sector only and it would be difficult to fit them in a unified regime. The proposal to amend the merger and acquisition regulations and to reduce licensing and regulatory obligations may not always serve the purpose of simplification. The rationale behind having strict compliances in place is to ensure a

fair play. A lenient regime may lead to other concerns. Having said that, the changes suggested and the frameworks proposed are indeed laudable and if implemented efficiently would enhance India's digital capability.

Dynamic approaches to regulation thus need to be considered. There is a risk that excessive regulatory intervention, or in some cases, non-intervention, could result in stiling innovation or distorting market decisions. Awareness of some of the main challenges faced by the sector and regulatory framework of today, ranging from convergence to the persisting issue of the digital divide, is therefore necessary to be better equipped to handle these challenges in future.

Conclusion

The objective of a national policy on digital communications is to prepare the country and its citizens for the future. Achieving these goals would require that the key stakeholders namely the Centre, the States, local governments and agencies, Telecom Service Providers, Internet Service Providers, handset and equipment academic manufacturers, the community, the innovators and startups come together to forge a coalition to deliver this national policy and its missions.

The proposed Digital Policy is a brilliant initiative on the part of the government to formally focus on not only the telecom sector but also include digitization of the country within its ambit. The three-pronged missions of ensuring broadband connectivity, utilizing the future technologies and focussing on data sovereignty show that the government has thought through and intensively planned to make India digitally strong. However, what remains to be seen is that practical viability of this policy and the extent to which it is actually implemented.

Way Forward

Digital India is already unfolding. India's digital profile and footprint is one of the fastest growing in the world. With over a billion mobile phones and digital identities and half a billion internet users, India's mobile data consumption is already the highest in the world. The and unprecedented rapid proliferation of the mobile phone, the internet, social media platforms, digital payments, data consumption and generation across India indicate that the data economy and digital technologies and services are no longer the prerogative of the privileged few; but that they have indeed evolved into widespread instruments of access and empowerment for more than a billion Indians.

Improvement in regulation and ongoing structural reforms are the pillars of a sound policy initiative. Regulatory reform is not a one-off effort, but a dynamic, long-term and multi- disciplinary process. To serve this objective, the policy further aims to pursue regulatory reforms to ensure that the regulatory structures processes remain relevant, transparent, accountable and forwardlooking. Additionally, the policy aims to remove regulatory barriers and reduce the regulatory burden that hampers investments, innovation and consumer interest. The policy also identifies steps to strengthen the sector's institutional mechanism and legislative framework, to ensure that India's economy and citizens can derive the full potential of its digital communications sector.

General Studies Paper-III

Topic: Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology and issues relating to intellectual property rights.

OOO

SEVEN SUBJECTIVE QUESTIONS WITH MODEL ANSWERS

India's Green Watchdog and its Effectiveness

Q1. Discuss the role and objectives of National Green Tribunal (NGT). Do you think its institutional integrity and autonomy is being compromised? Critically examine.

Hints:

- The National Green Tribunal (NGT) has been established under the NGT Act, 2010 on 18th October, 2010.
- There are 3 major objectives of the NGT:
 - The effective and speedy disposal of the cases relating to environment protection and conservation of forests and other natural resources.
 All the previous pending cases will also be heard by the tribunal.
 - It aims at enforcing all the legal rights relating to the environment.
 - It also accounts for providing compensation and relief to effected people for damage of property.
- The NGT has the power to hear all civil cases relating to environmental issues. It has the power to regulate its own procedure and is not bound by the Indian Evidence Act, 1872. NGT can exercise powers of a Civil Court. It can summon people, enforce attendance and examine on oath. It can also receive evidence on affidavits and decide matters ex-parte. It also has the power to grant interim orders, injunctions or stay.
- Since its formation, the NGT has emerged as an independent voice when it came to protect the environment. It has pulled up the Centre for fast-tracking approvals and corporate groups for violating green approval conditions. But several NGT orders and the multiple pending decisions have faced ire from different fronts, which have attempted to dilute or nullify the effects of the judgments. In a report it was said that till January 2015, the total number of cases before the NGT and its zonal benches located in Kolkata, Chennai, Pune and Bhopal, was 7,768. Of these, 5,167 cases were resolved and 2,601 were pending. Almost 67 per cent of cases have been disposed off within nine months from its establishment.

- While the NGT has acted as an "effective deterrent" to violations of environmental norms, recent challenges to its decisions in several High Courts is a growing concern. The NGT recently came under criticism for its handling of Sri Sri Ravi Shankar's World Culture Festival on the floodplains of Yamuna. According to the NGT Act, its decision can be challenged before the Supreme Court, as the NGT has been given enormous powers. But petitioners have been invoking Article 226 (power of High Courts to issue certain writs) to challenge decisions before the High Courts. No doubt, this provision is there, but this is one of the weaknesses of the Act.
- There is a real danger of the NGT becoming an ineffective institution. This may happen due to weaknesses in NGT's own internal procedures as well as due to non-cooperation from the government, especially the Union Ministry of Environment, Forest & Climate Change (MOEF&CC).
- India at present faces a huge challenge accounting for the millions that are affected each year by national development projects. In addition to this, industries are a burgeoning factor in the Indian economic scene so one cannot sensibly ask for capping such endeavours as they are spearheading the economic development of this still developing nation. Also the largest industries have the best lawyers in their pockets and the others are unaccounted for. Therefore the only way to ensure the success of the NGT is a well-defined and at this stage draconian means of judgment.

The Motor Vehicles (Amendment) Bill, 2017: An Overview

Q2. Road accidents in India take more lives than natural disasters and diseases do and these figures are on the rise. With the aim of addressing this problem, the pending Motor Vehicles (Amendment) Bill, 2017 is an attempt to create an exhaustive and comprehensive legislative framework for road safety in India. Critically analyze.

Current Affairs : Perfect 7



Hints:

- It is a matter of some pride that India boasts of the world's second-largest road network and the densest amongst countries of similar size. Over the years, both accessibility and mobility have improved through construction of new roads and development of existing roads.
- In the last few years, with growing urbanisation and rising incomes, the number of motor vehicles in India has been increasing steadily. The number of registered motor vehicles in India grew by 123% between 2005 and 2013. Between 2005 and 2015, the number of road accidents increased by 14% and road accident fatalities increased by 54%. During the same period, the road network grew by 44%.
- An increase in the number of vehicles on roads, along with the absence of a coordinated policy to control the problem has been attributed to an increase in the number of road accidents. A vital Bill stuck in Parliament can have revolutionary impact on your life on the road. The bill is seeking 68 amendments and insertion of 28 new sections in the Motor Vehicles Act, 1988.
- The Bill requires the Central government to develop a National Transportation Policy, in consultation with the states. The policy will: (i) establish a planning frame work for road transport, (ii) develop a frame work for grant of permits and schemes and (iii) identify and specify priorities for the road transport system.
- Once the Motor Vehicles Act is amended, violations can face penalties running up to Rs 100 crore. There is also a provision of imprisonment for one year. The automobile manufacturer can escape paying the fine by initiating a recall on its own after informing the Central government of the defect.
- The Bill has provision for protection of 'Good Samaritans'. Those who come forward to help accident victims will be protected from civil or criminal liability. It will be optional for them to disclose their identity to the police or medical personnel.
- For deaths in hit-and-run cases, the government will provide a compensation of Rs 2 lakh or more to the victim's family. Currently, the amount is just Rs 25,000.
- A 'Motor Vehicle Accident Fund' will provide compulsory insurance cover to all road users in India for certain types of accidents.
- Road safety is a multisectoral issue. At a policy level, the first step is to create an enabling framework that weaves in different progressive aspects across stakeholder sectors under legislation. It aims to rectify

several systemic issues by providing a uniform driver licensing system, protecting children and vulnerable road users, rationalising penalties and creating a system of accountability in the construction of roads. The Bill is not a panacea for all problems, but it is the first step towards ensuring that no deaths are caused by road crashes.

India's Quest for Ballistic Missile Defence Shield

Q3. What do you understand by Ballistic Missile Defence (BMD) system? Discuss the India's significant efforts in the development of full-fledged multi-layer BMD system.

Hints:

- India is planning to procure an advanced air defence system to defend the national capital region (NCR) from aerial attacks. The process for procuring the National Advanced Surface-to-Air Missile System-II (NASAMS-II), estimated at \$1 billion, has been initiated. This system will help in preventing 9/11-type attacks on Delhi. It is in the 'Acceptance of Necessity' (AoN) stage now.
- A Ballistic Missile Defense (BMD) system is a system that defends any country against possible incoming missile threat. It intercepts targets and destroys enemy missile en-route. Theoretically, a hostile missile can be intercepted at the launch point, mid-course (flight through space), or terminal phase (during atmospheric descent). Usually the radar of the BMD missile intercepts the missile from the opponent's side, then tracks the target through command and control system and finally fires the interceptor missile from the launcher truck. Other countries that have advanced missile system include the US, Russia, Israel and China. The leading BMD systems in the world are Patriot Advanced Capability-3, THAAD, S-400 Triumph and S-500.
- India with its aspirations for regional dominance has been trying to develop an indigenous (BMD) system since the late 90s with the start of Integrated Guided Missile Development Program (IGMDP). The DRDO has two phases of the BMD systems. The two-tiered BMD System consists of the PAD, which will intercept missiles at exo-atmospheric altitudes of 50–80 km and the AAD missile for interception at endo-atmospheric altitudes of up to 30 km. The deployed system would consist of many launch vehicles, radars, launch control centres (LCC) and the mission control centre (MCC). All these are geographically distributed and connected by



a secure communication network. After the interceptor is launched, it is provided target information from the radar through a datalink. When the interceptors close onto the target missile, it activates the radar seeker to search for the target missile and guides itself to intercept the target. Multiple PAD and AAD interceptors can be launched against a target for high kill probability.

- Indiais rapidly growing economy, which has the potential to compete with China, the concurrent growth of India's military capability that could contribute to the strategic stability in the Asian region and the growing threat of Islamic terrorism, has resulted in new convergences in geo-political and geo-economic interests between the US and India. This strategic convergence could be seen in many aspects of a bilateral relationship, be it in economic, political, nuclear energy or defence sectors. But the growing threat of weapons of mass destruction (WMD) and threat from nuclear weapons going into the hands of rouge states and states with poor nuclear non-proliferation records has been guiding Indo-US courtship in the missile defence arena.
- India's move to acquire NASAMS comes even as DRDO is in the final stages of developing its two-tier ballistic missile defence (BMD) shield, which is designed to track and destroy nuclear missiles both inside (Endo) and outside (Exo) the earth's atmosphere. As a final point, India must identify its envisaged threats, evaluate its own technological constraints to face them and collaborate with international players like US, Israel, Russia, etc. to build a missile defence architecture to enhance its air defence and nuclear deterrence capability and ensure nuclear stability in the subcontinent.

Ganga River Cleaning Projects: Journey So Far

Q4. In the past, thousands of crores have been spent on Ganga rejuvenation projects but successive governments have not been able to contain the increasing pollution levels in the river. Critically examine why?

Hints:

 Rampant pollution and indiscriminate dumping of industrial and other waste for years has resulted in the Ganga becoming one of world's most polluted rivers and unfit for usage in many parts of India. Recently, National Green Tribunal has expressed its anguish over the condition of the Ganga. The water from the river between Haridwar in Uttarakhand and Unnao in Uttar Pradesh was unfit for drinking and bathing. The tribunal then directed the National Mission for Clean Ganga to install display boards at a gap of 100 km indicating whether the water was fit for bathing or drinking.

- The NMCG was set up in 2011 to implement programs and objectives for a clean and pollution free Ganga. In July 2014, the 'Namami Gange' program was announced under the NMCG initiative with an allocated budget of Rs 20,000 crores for 5 years.
- In the past, thousands of crores have been spent on Ganga rejuvenation projects but successive governments have not been able to contain the increasing pollution levels in the river. Proper utilisation of funds remains an issue because of bureaucratic hurdles and red-tape.
- In India's electoral democracy, there is little space for environmental policy. Pollution has rarely been an electoral issue. Employment, economic growth and poverty alleviation are more urgent. Elected leaders have few incentives to take on either the big polluters (which include the government's own companies and power stations) or the small-scale firms in industrial clusters that serve as vote-banks. Not having an action plan also led to non-utilisation of any amount from the corpus of fund available in the Clean Ganga Fund.
- The government of India has set up a number of bodies for executing the project. However, the way they have gone about in approaching the project has left a lot to be desired. For example, NMCG, which is supposed to be the primary body responsible for executing the project, is supposed to have several permanent officers for executing the project but till date it has had only few on its rolls, which is a matter of great concern. What has compounded the misery is that these officers are also playing important roles in other departments of the government, which means that they are unable to devote their fullest time to the more important projects.
- The slow implementation of project is attributed to delay in tendering, retendering, non- availability of land, legal issues, natural calamities, delay in permission for road cutting, crossing, local festivals, higher fund requirement and pending approvals of state Cabinet etc.
- There are 764 grossly polluting industries on the banks of the Ganga, mostly in Uttar Pradesh. These include tanneries, paper and pulp industries, sugar mills, dyeing factories, distilleries and cement plants. Effluents from all these flow untreated into the river.



- Tanneries near Kanpur alone generate about 25 million litres of effluents daily.
- The current push for sanitation will definitely help, but so will other efforts that catch agricultural and industrial waste before they run into the river. It is definitely time to take a comprehensive look at the interconnection between policies such as subsidies, electricity consumption, power use patterns, industrial development and urbanisation plans. All of this takes creativity, innovation, discipline, transparency and strong leadership. The cleanup of the Thames in London and the Rhine flowing through Europe suggest this is possible. The Ganga's waters will ultimately depend on the actions of millions of Indians who depend on it for nutrition, electricity and spiritual fulfillment.

100th Birth Anniversary of Nelson Mandela

Q5. In an age when we are socialized to desire instant rewards and gratifications, Mandela teaches us the necessary value of disciplined will power and perseverance. Discuss how his life offers many lessons which are of relevance to us.

Hints:

- On South African icon Nelson Mandela's 100th birth anniversary, leaders from all over the world has paid their tributes to the man who fiercely opposed apartheid in his country. He died in 2013 at the age of 95 and was seen as a symbol of peace.
- His life, more than any other, has come to symbolise the struggle for racial equality and self-determination of the diverse peoples of South Africa and the African continent: beginning with his early childhood in the remote region of the Transkie, his gradual entry into politics as a young lawyer, the 27 years of imprisonment at the hands of white supremacists and his triumphant return to freedom as a man who, in his own words, sought the middle ground between white fears and black hopes in one of the most segregated modern societies in the world.
- Africa's last great statesman, Mandela presided over a largely peaceful political transition and stepped aside after only one term in power. He was the first black President of South Africa and under his aegis, the country dismantled the institutional legacy of apartheid and racism. He remained the country's moral compass in the silence of his twilight in much the same way he served as the liberation movement's rallying cry through 27 years of incarceration.

- Mandela emphasized the central importance of core principles and values. One could then work out appropriate tactics and strategy. Although Mandela should be seen as a freedom fighter in the tradition of Mahatma Gandhi, who spent 21 years in South Africa and Martin Luther King, Jr., he did not fully endorse their views of nonviolence. For Mandela, nonviolence is not an absolute principle, philosophy, or way of life. In different contexts, where nonviolence is not possible or effective, the use of violence may be justified.
- Mandela shows us that we can live lives of admirable courage, even when we have deep fears and insecurities, as he often had. In an age when we are socialized to desire instant rewards and gratifications, Mandela teaches us the necessary value of disciplined will power and perseverance. Mandela shows us the core importance of having worthy principles and values, of clarifying what we really believe and then, as he quoted Gandhi, "Be the change you seek."
- So what is Nelson Mandela's legacy for us today? There is so much more to the real Mandela, as a truly incredible, his remarkable achievements and his hopeful, significant and relevant message today. It is now up to us to understand, appreciate and selectively appropriate what is of lasting value in Mandela's vision, values and ideals and to contextualize his legacy in ways that inspire us, give us hope and inform our lives as integral to an action-oriented interconnected movement working for a much better world.

Need for Evaluation of Agriculture Policy in India: OECD Report

Q6. The National Agricultural Policy (NAP) was formulated with the aim of sustainable development in agriculture sector. Critically examine the policy and provides suggestions as to how NAP could be made effective if time bound action plan is taken into consideration, including the active participation of various stakeholders.

Hints:

Agriculture is generally described as the backbone of Indian economy and is at the core of socio economic development of the country. Since the mid-1990s, India has raised GDP per capita by more than 5% per year, cut the incidence of poverty in half, significantly decreased undernourishment and transformed the country into a major agriculture exporter. India's agriculture production has been increasing on average at about 3.6% annually since 2011, sustained by



- improved access to inputs such as fertilisers and seeds, as well as better irrigation and credit coverage.
- Agricultural policies in India are designed and implemented by a complex system of institutions. States have constitutional responsibility for many aspects of agriculture, but the Central government plays an important role by developing national approaches to policy and providing the necessary funds for implementation at the state level. Nevertheless, no sufficiently strong mechanism exists to bring state and central level policy makers together to discuss problems, design solutions and monitor performance. Over the past several decades, agricultural policies have sought to achieve food security, often interpreted in India as self-sufficiency: seeking to ensure that farmers receive remunerative prices, while at the same time safeguarding the interest of consumers by making food available at affordable prices.
- Policy-induced inefficiencies are due to minimum support prices being set below international prices for several commodities at different periods between 2000 and 2016, to domestic regulations and to trade policy measures. Policies that govern the marketing of agricultural commodities in India include the Essential Commodities Act (ECA) and the Agricultural Produce Market Committee Acts (APMCs). On the other hand, public expenditures financing general services to the sector have declined over the last decades. Most of this expenditure is in development and maintenance of infrastructure (particularly hydrological infrastructure), followed by the cost of public stockholding and expenditure on the agricultural knowledge and innovation system.
- To rebalance the policy package to foster sustainable productivity growth required strengthen the regulatory environment governing land issues, support farmers to integrate in competitive markets and allow the private sector to play a greater role, encourage efficient and sustainable use of variable inputs such as fertilisers, enlist all concerned actors in developing collectiveaction groundwater and watershed management schemes and correcting perverse incentives to overuse of scarce water, Strengthen the overall access to credit and particularly encourage long-term loans and re-focus investments on fostering the agriculture enabling environment, such as infrastructure and education in rural areas.
- To strengthening the role of agriculture in enhancing food and nutrition security by scale back the public distribution system as incomes and the share of the middle class in the population rises. Moving gradually

- to targeted lump sum transfers (Direct Benefit Transfers) or food stamp type mechanisms and need to allow the private sector to play a role in managing remaining stocking operations
- To improve agricultural institutions and governance systems by clarify roles and responsibilities at central level by bringing key policy areas under a single umbrella. Strengthen co-ordination among central ministries and agencies and between the centre and the states and prioritise institutional reforms to allow development of a single market for agricultural products. Streamline and clarify trade policy roles and responsibilities across the different ministries and agencies to iron out inconsistencies and simplify procedures.
 - India's agro-food sector is at a critical juncture, facing multiple challenges and multiple opportunities. The new Organisation for Economic Co-operation and Development Indian Council for Research on International Economic Relations (OECD-ICRIER) report suggests a series of reforms which, if implemented, would help India improve food security for its vast population, advance the quality of life of its millions of smallholders, overcome severe resource and climate pressures, while generating sustainable productivity growth and creating a modern, efficient and resilient agro-food system that can contribute to inclusive growth and jobs throughout the economy.

National Digital Policy-2018: Improving Digital Communications

Q7. Although the 'Digital India' initiatives are focused on reducing the digital divide, a multi-pronged strategy is required for India to emerge as a leading digital economy. Critically examine.

Hints:

The national telecom policy, rechristened as the National Digital Communications Policy (NDCP-2018), is expected to be announced shortly after Cabinet approval. There could have been no better time than this for a new telecom policy. As we usher in a new, digitally-led India, telecom has a vital role to play. Hence the policy merits an overhaul not only in content and scope, but also in outlook. Telecom is no longer a vertical or a sector or a segment. It has, within a matter of three to five years, lost its tall, vertical structure to achieve a leaner, horizontal orientation. It is now present in every industry and sector.



- The superlative internet speeds are still a distant dream, the government, regulator TRAI and telecom firms have failed miserably in providing basic mobile call quality. The call drop menace continues, with no accountability whatsoever, letting down subscribers. The telecom sector has been in financial turmoil with debts rising, thanks to mindless spectrum auctions pushing the telcos into bankruptcy. State-owned firms Bharat Sanchar Nigam (BSNL) and MTNL are making losses for several years with no sign of revival. Successive governments have provided free/discounted spectrum to the PSUs with the hope of revival. Despite the preferential treatment, the PSUs have struggled to stay relevant even in rural India, where private players are dominant. Spectrum being a scarce resource, the government should look at improving efficiency in the spectrum held by BSNL/MTNL by allowing private players with the right checks and balances.
- Bharat Net, a special purpose vehicle envisaged in 2011, was an ambitious plan to connect all the 2,50,000 gram panchayats through a high-speed optical network. Incessant delays meant only 25-30 per cent completion against the target. The telecom commission has drawn up revised plans to complete this by March 2019.
- Most of the e-governance websites and apps are not intuitive and even e-literate citizens would find it challenging to navigate them. Internet users are exposed to world-class apps and websites and expect a similar experience on government websites. The National Knowledge Network (NKN), a government initiative, can play a key role in bringing students, researchers, academics and the government on a common platform for improving the quality of experience. The government would do well to encourage the NKN to pursue cognitive science programmes that would look at easy ways to communicate and represent information through artificial intelligence and human-

- computer interaction. Such an initiative will immensely help the semi-literate/illiterate population.
- Citizens across the country today understand how a digital world can reshape their lives. There is also an understanding of how digital can be integrated with traditional economic activities, resulting in higher earnings and improved standards of living. Similarly, citizens are aware of the social engineering that can be designed over digital platforms, by providing access to healthcare and education.
- NTP 2018 should set the cornerstone for a "Telecom-Plus" era. With smart living, industrial 4.0, digital economy, connected world, e-Businesses, e-Governance and several such technology led concepts poised to result in paradigm shifts in strategy, implementation, execution and measurement, telecom is not only going to be pivotal but also a focal point of the digital ecosystem.
- The success and efficacy of all such concepts will only be determined by how strongly telecom is integrated with every other sector and segment. For instance, digital healthcare will only achieve the desired goals if telecom is deeply integrated into healthcare. Similarly, transport, governance, education, commerce, finance, agriculture and every such industry and sector has to have very deep integration with telecom. This is what erases the boundaries of telecom and spreads its impact and influence in every other sector.
- The NTP-2018 has to position itself as the umbrella vision document that sets the stage for India to enter into a digital world. This won't happen if the policy only addresses telecom, which is a given thing. The success of the policy would rather be determined by how effectively telecom is horizontalised so that each sector embraces its power in its core, creating a lot many use cases for industry and benefits for the citizens as well as the government.

OOO

SEVEN IMPORTANT NATIONAL & INTERNATIONAL NIEWS

NATIONAL

1. Resolution to Rename West Bengal

The West Bengal Assembly has passed a resolution to change the name of the state as 'Bangla' in three languages — Bengali, English and Hindi. The proposal has been pending since August 2016, when the Assembly passed a resolution to change the name to 'Bengal' in English, 'Bangla' in Bengali and 'Bangal' in Hindi. The Centre, however, turned it down in 2017, objecting to having three names in three languages. West Bengal parliamentary affairs minister Partha Chatterjee had then argued

for the change saying bureaucrats and politicians from the state often complain that they are asked to speak at the end of every national-level meeting in Delhi.

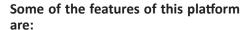
The name change will only become official when resolution gets approval from Union Home Ministry and Parliament passes Bill. The renaming will help the state appear at the fourth spot after Arunachal Pradesh, Andhra Pradesh and Assam in the alphabetic order of the states.

If any fresh proposal comes from states to the Home Ministry, it will prepare a note for the Union Cabinet for an amendment to the Schedule 1 of the Constitution. Thereafter, a Constitution Amendment Bill will be introduced in Parliament, which has to approve it with a simple majority, before the President gives his assent to it.

2. Innovative India Platform

Atal Innovation Mission (AIM), NITI Aayog and citizen engagement platform MyGov have launched online portal 'Innovate India Platform'. The users can view the leaderboard which is calculated based on the votes on each innovation. It aims to serve as the common point for all the innovation

happening across the nation. It creates the much-needed innovations platform for registering both grassroots and deep-tech innovators at a national level. Those searching for a critical innovation can leverage the portal advantageously for the benefit of the economy as well as national social needs.



- The platform is open to all Indian citizens.
- The users can view, comment, share and rate the innovations crowdsourced on the InnovateIndia platform.
- View the leaderboard which is calculated based on the votes on each innovation.

- Citizens can share their/ organizations / someone else's innovation on the platform by login to the MyGov website.
- These innovations can also be shared on various social media platforms such as WhatsApp, Facebook and Twitter.

India has been a very innovationoriented society, but our challenge has been a structured approach to innovation, capturing them and building an ecosystem to take them global. The current government initiative to capture and support innovation from ground up is aimed at creating a structured ecosystem to encourage, enhance and develop India's innovative character.







3. New Definition of Hydrocarbon

The government has amended the Petroleum and Natural Gas Rules, 1959 to include shale in the definition of petroleum, a change that would allow private companies to explore and produce the resource in the blocks they already operate. Now 'petroleum means naturally occurring hydrocarbons, whether in the form of natural gas or in a liquid, viscous or solid form, or a mixture thereof, but does not include coal, lignite and

helium occurring in association with petroleum or coal or shale.

- Prior to this, the definition excluded shale and therefore barred companies from exploiting
 it from fields that are producing conventional oil and gas or coalbed methane.
- The amendment of the definition of petroleum is a welcome move as it would open up exploration

of all hydrocarbons in existing fields which is line with the new Hydrocarbon Exploration Licensing Policy(HELP).

 It would help in enhancing domestic exploration and production of hydrocarbons and increasing India's energy security and reducing dependency on imports.

4. Anti-Trafficking Bill, 2018

The Lok Sabha has passed the Trafficking of Persons (Prevention, Protection and Rehabilitation) Bill, 2018. The Bill laid down a stringent punishment of 10 years to life imprisonment for aggravated forms of trafficking, which include buying or selling of persons for the purpose of bonded labour, bearing a child, as well as those where chemical substances or hormones are administered and a survivor acquires life-threatening illnesses such as AIDS.

The Bill proposes establishing a National Anti-Trafficking Bureau (NATB) for coordinating, monitoring and surveillance of trafficking cases. It also provides for a Relief and Rehabilitation Committee and Rehabilitation Fund with an initial allocation of Rs. 10 crore. It prescribes forfeiture of property used or likely to be used for the commission of an offence.

As per government data more than 300,000 children went missing in

the country between 2012 and 2017. Many of these children are victims of modern slavery — forced into prostitution, labour or domestic work. They are also used as drug mules and even given up for adoption illegally. Poverty and lack of opportunity also pushes a lot of young women, especially from the interior parts of West Bengal, Odisha, Bihar and Jharkhand, into prostitution.

5. Urja Ganga Gas Pipeline Project

Five central oil companies - IOCL, ONGC, GAIL, OIL and NRL has signed a joint venture agreement for executing the North-East natural gas pipeline grid as a step towards the 'Urja Ganga' gas pipeline project. The joint venture company will develop, build, operate and maintain the natural gas pipeline grid connecting Guwahati to the other major North-Eastern (NE) cities and major load centres such as Numaligarh refinery and integrating it with gas producing fields, wherever feasible, in the region.

 The project will connect the state capitals of all the eight North Eastern states - Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura.

- The gas grid project will connect all NE States to the National Gas Grid through Barauni-Guwahati Gas Pipeline being laid by GAIL.
- From Guwahati, the pipeline will extend to Numaligarh, Dimapur, Kohima and Imphal in one direction; Shillong, Silchar, Aizawl and Agartala in the second direction and to Itanagar in the third direction.
- Gangtok will be connected from Siliguri from the gas pipeline of

GAIL coming from Barauni to Guwahati.

About Project

- Under the project 20 lakh households will get PNG connections.
- The project is said to be a major step towards collective growth and development of the Eastern region of India.
- GAIL has built a network of trunk pipelines covering the length of around 11,000 km. With Urja Ganga project, this number will further increase by 2540 km.



6. Green Mahanadi Mission

Odisha Chief Minister Naveen Patnaik has launched the 'Green Mahanadi Mission', a plantation drive under which 2 crore saplings will be planted along the Mahanadi river and its tributaries. A massive plantation drive will be undertaken along the Mahanadi, Ib and Tel rivers. Two crore trees will be planted along the rivers in the state.

Under the mission, a green belt with width of 1 km will be created on both sides of the river beginning from the place, where the river enters Odisha to Paradip, where it merges with the Bay of Bengal. The plantation will be undertaken over 75,760 hectares government land besides 47,470 hectares private land.



The plantation drive will be carried out in as many as 1,303 villages spread

over 15 districts situated on both sides of the Mahanadi.

7. Public Affairs Index- 2018

Public Affairs Index (PAI) 2018 has been released by the think tank Public Affairs Centre (PAC).

Key Highlights

- Kerala has topped the Public Affairs Index (PAI) for 2018 as the best-governed state for the third consecutive year since 2016 among large states.
- Tamil Nadu, Telangana, Karnataka and Gujarat are ranked second,

third, fourth and fifth among the top five states delivering good governance.

- Madhya Pradesh, Jharkhand and Bihar ranked the lowest on the PAI, indicating higher social and economic inequalities in the states.
- Among smaller states (with population less than two crore), Himachal Pradesh topped the list, followed by Goa, Mizoram, Sikkim and Tripura which figured among

the top five states with good governance. Nagaland, Manipur and Meghalaya were ranked at the bottom of the index among small states.

• This year's PAI also included a separate index on the children of India,

- giving a measure of how childfriendly each of the states are.
- Kerala, Himachal Pradesh and Mizoram topped the index on being the states to provide better living conditions for all children.

About Index

The index is released since in 2016 by Bengaluru base Public Affairs Centre (PAC), a not for profit think tank which aims to improve governance in India.

It is a data driven platform to rank the 29 states of India from the lens of governance. It covers wide range of themes such as support to human development, social protection, essential infrastructure, women and children, crime, law and order, delivery of justice, transparency and accountability, environment, fiscal management and economic freedom.

WINNER FOR 3RD CONSECUTIVE YEAR

The Public Affairs Index 2018 released by the thinktank Public Affairs Centre examines governance performance in the states through a data-based framework, ranking them on social and economic development

The thinktank



has undertaken the study across all acro the Indian states suc

considering them across 10 themes such as essential ➤ Tamil Nadu, Telangana, Karnataka and Gujarat followed Kerala among the top five states delivering good governance

infrastructure.

development,

support to human

social protection,

women and children as well as

Current Affairs: Perfect 7



INTERNATIONAL

1. BRICS Summit-2018

The BRICS summit-2018, the tenth such annual summit was held in South Africa. The theme for the summit was "BRICS in Africa: Collaboration for Inclusive Growth and Shared Prosperity in the 4th Industrial Revolution". The theme is intended to align and ensure strategic continuity with the approved themes for South Africa's chairship of both the South African Development Community (SADC) and the Indian Ocean Rim Association (IORA).

The new areas of BRICS cooperation are as follows:

- Establishment of a working group on peacekeeping.
- Establishment of a vaccine research centre for collaboration with BRICS vaccine innovation and development partners – this is intended to be a physical research centre focused on research and development and vaccine innovation.

- Establishment of a BRICS Gender and Women's Forum - intended dedicated а track for gender women's and issues, given the economic benefit to be derived sociofrom the
 - economic empowerment of women, particularly in developing countries.
- economic partnership towards the pursuit of inclusive growth and advancing the 4th industrial revolution this is intended to foster discussions to addresses opportunities provided by the 4th industrial revolution, as a means of leapfrogging development stages and bridging the digital divide.



 Establishment of a BRICS tourism track of cooperation.

The BRICS nations have resolved to strengthen their multilateral trading system and called upon member countries of the World Trade Organisation (WTO) to abide by rules, amid ongoing trade disputes between major economies. India, China, Brazil, Russia and South Africa also re-affirmed the centrality of the rules-based, transparent, non-discriminatory, open and inclusive multilateral trading system.

2. FDI Confidence Index-2018

FDI Confidence Index- 2018 was recently released by global consultancy firm A T Kearney.

Key Highlights

- The United States (US) topped the index, followed by Canada at 2nd and Germany at the 3rd place.
- China falls three spots to 5th place this year.
- Switzerland and Italy entered the top 10 for the first time in more than a decade, pushing out India

- and Singapore to 11th and 12th spots, respectively.
- Only four emerging markets appear among the top 25 countries for FDI intentions- China, India, Mexico and Brazil.

India's Performance

- India has slipped by three spots and now occupies the 11th spot in the list.
- Some policies, however, may have deterred investors at least
- in the short term. The goods and services tax, for example, has faced implementation challenges and in 2016 demonetisation initiative disrupted business activity and weighed on economic growth.
- The report also highlighted several of the reforms such as removing the Foreign Investment Promotion Board and liberalising FDI limits in key sectors that have maintained India's high rankings in terms of FDI attractiveness.

Current Affairs : Perfect 7



3. Invest India and Business France

Invest India and Business France have signed an MoU to promote investment facilitation and cooperation between startups of India and France. The goal will be to facilitate direct foreign investment by providing practical investment information to enterprises and support the companies pursuing those opportunities which contribute positively to economic growth of the two countries. The partnership will strengthen the existing business relations between India and France and provide a seamless facilitation channel for new businesses and innovations from India and France to grow in the French and Indian markets.

About Invest India

Invest India is the official investment promotion and facilitation agency of the government of India, mandated to facilitate investments in the country. It is the first stop for potential global investors in the country.

About Business France

Business France is an executive

agency of the French government under the supervision of the Minister for Economic Affairs and Finance and the Minister of Foreign Affairs and International Development. It international business promotes development for French companies and professionals through a worldwide network of 80 trade commissions. Business France mobilizes the expertise of 1,400 persons in France and in 70 other countries.

4. India and Rwanda

India and Rwanda reviewed their entire gamut of bilateral ties and signed eight agreements across different sectors during the course of Prime Minister Narendra Modi's two-day visit to the East African nation. The two countries have signed agreements on cooperation in the field of defence, trade, agriculture and animal resources. They also agreed to cooperate in defence capacity building, industry and science and technology.

India has extended two lines of

credit - one of \$100 million for development of industrial parks and Kigali special economic zone (SEZ) in Rwanda and another one for \$100 million for agriculture.

- Prime Minister Narendra Modi gifted 200 cows to villagers from Rweru villages as part of Rwandan government's 'Girinka Programme'.
- India will soon open a High Commission in the East African nation on Rwanda.

About Girinka Programme

The programme was initiated by President Paul Kagame in response to alarmingly high rate of childhood malnutrition and as way to accelerate poverty reduction and integrate livestock and crop farming. Under this programme, poorest residing in region gets cows from government and gift first female calf to neighbour to promote brotherhood.

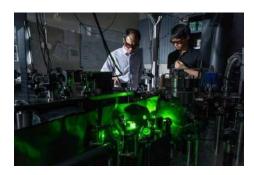
5. Fastest Man-made Spinning Object

Scientists have developed the fastest man-made rotor in the world, which they believe will help them study quantum mechanics. At more than 60 billion revolutions per minute, this machine is more than 100,000 times faster than a high-speed dental drill.

The team synthesised a tiny dumbbell from silica and levitated it in high vacuum using a laser. The laser can work in a straight line or in a circle - when it is linear, the dumbbell vibrates and when it is circular, the dumbbell spins. A spinning dumbbell functions as a rotor and a vibrating dumbbell functions like an instrument for measuring tiny forces and torques, known as a torsion balance.

By observing this tiny dumbbell spin faster than anything before it, scientists may also be able to learn things about vacuum friction and gravity. Understanding these mechanisms is an essential goal for the modern generation of physics.

Quantum mechanics fundamental theory in physics which



describes nature at the smallest scales of energy levels of atoms and subatomic particles.

Current Affairs : Perfect 7



6. Underground Lake Detected on Mars

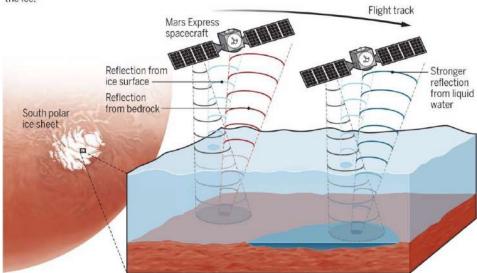
Using a radar instrument on an orbiting spacecraft, scientists have spotted a sizeable salt-laden lake under ice on the Southern Polar plain of Mars, a body of water they called a possible habitat for microbial life.

The reservoir they detected — roughly 20 km in diameter, shaped like a rounded triangle and located about 1.5 km beneath the ice surface — represents the first stable body of liquid water ever found on Mars.

Water is considered a fundamental ingredient for life. Mars long ago was warmer and wetter, possessing significant bodies of water, as evidenced by dry lake beds and river valleys on its surface. There had been some signs of liquid water currently on Mars, including disputed evidence of water activity on Martian slopes, but not stable bodies of water. It may be some time before scientists

Using radar waves to detect water on Mars

As the Mars Express spacecraft travels over the SPLD, it emits radar waves that travel from the satellite to the ice surface, where they are reflected. Part of the wave travels through the ice and is reflected at the bed below the ice. The reflections from water are stronger than from bedrock, providing evidence for a water body below the ice.



can investigate the water under the Martian South Pole to see if any life lurks there. For now, the researchers will search other sites on Mars for

can investigate the water under the signs of more subterranean lakes or Martian South Pole to see if any life aquifers.

7. Operation Pitch Black

The Royal Australian Air Force (RAAF) has commenced this year's exercise 'Pitch Black' in the Northern territory of the country. Exercise 'Pitch Black'-18 involves the participation of more than 4,000 personnel and 140 military aircraft from different countries across the globe. The participating nations include Canada, France, Germany, India, Japan, Republic of Korea, New Zealand, Philippines and the US amongst others.

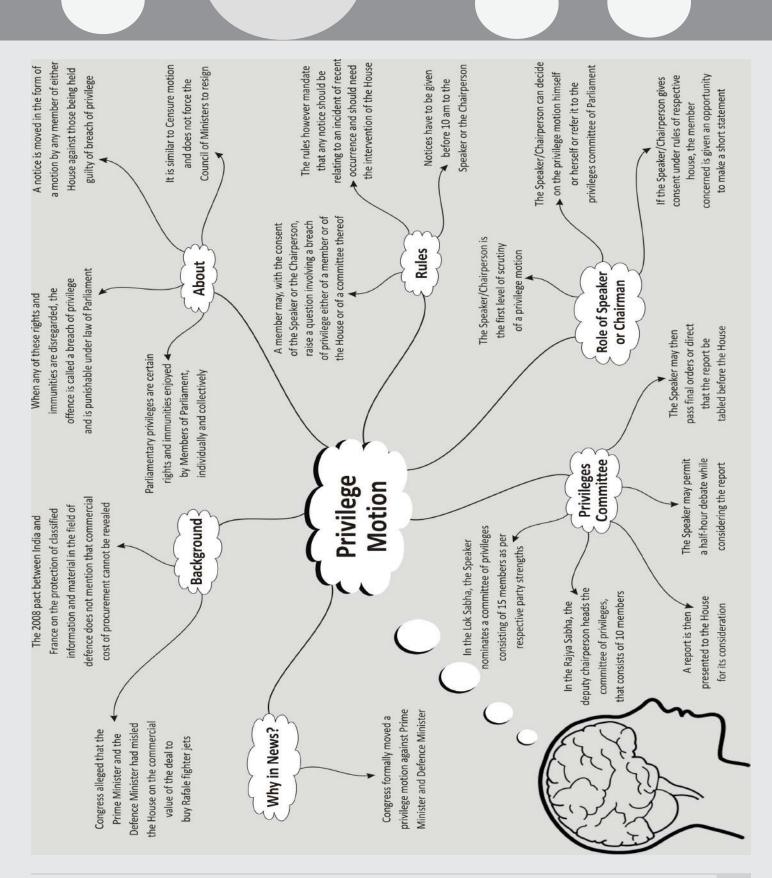
Exercise 'Pitch Black' is a largescale operational collective training activity that includes both day and night flights using fast jets, transport and other aircraft in a multi-national coalition environment.

This is the first time that an Indian Air Force (IAF) contingent is participating in a multinational air exercise in Australia. This exercise involves over 100 aircraft from around the globe and will provide a unique opportunity to the air-warriors to operate in a dynamic warlike environment. The IAF contingent consists of 145 air-warriors

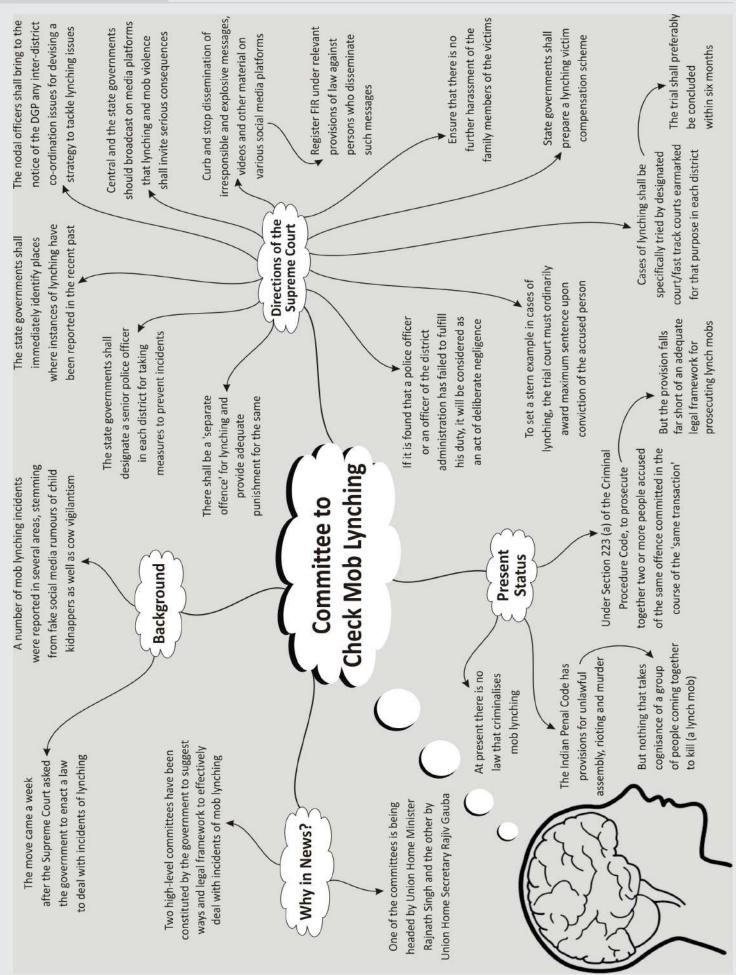
including the Garud team along with its four frontline Su-30 MKI fighters, One C-130 and one heavy lift C-17 aircraft.

Over the last decade, IAF has been actively participating in operational exercises hosted by various countries, where in collaborative engagements undertaken with the best air forces in the world. During the transit to Australia, IAF contingent will also have constructive engagement with Indonesian and Malaysian Air Forces.

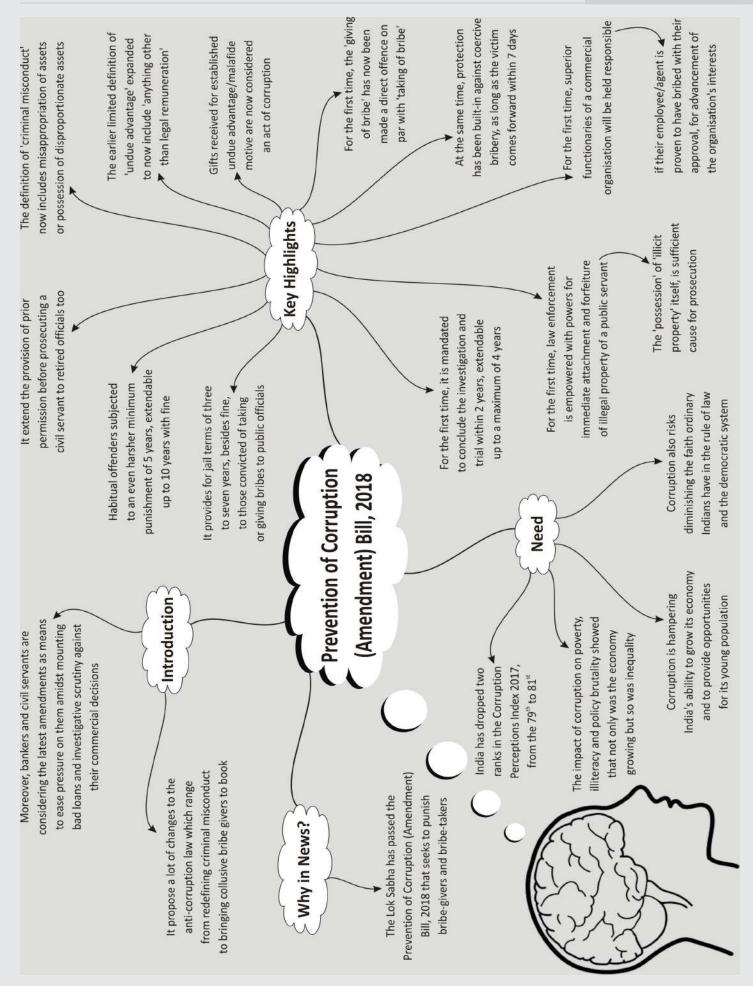
SEVEN BRAIN BOOSTERS



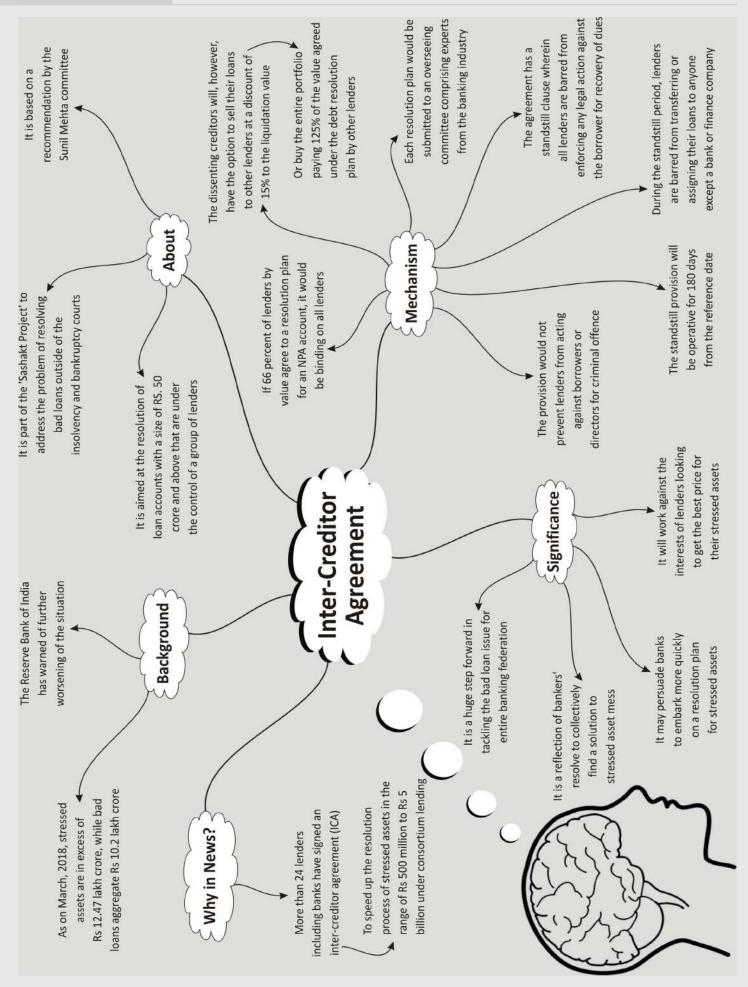




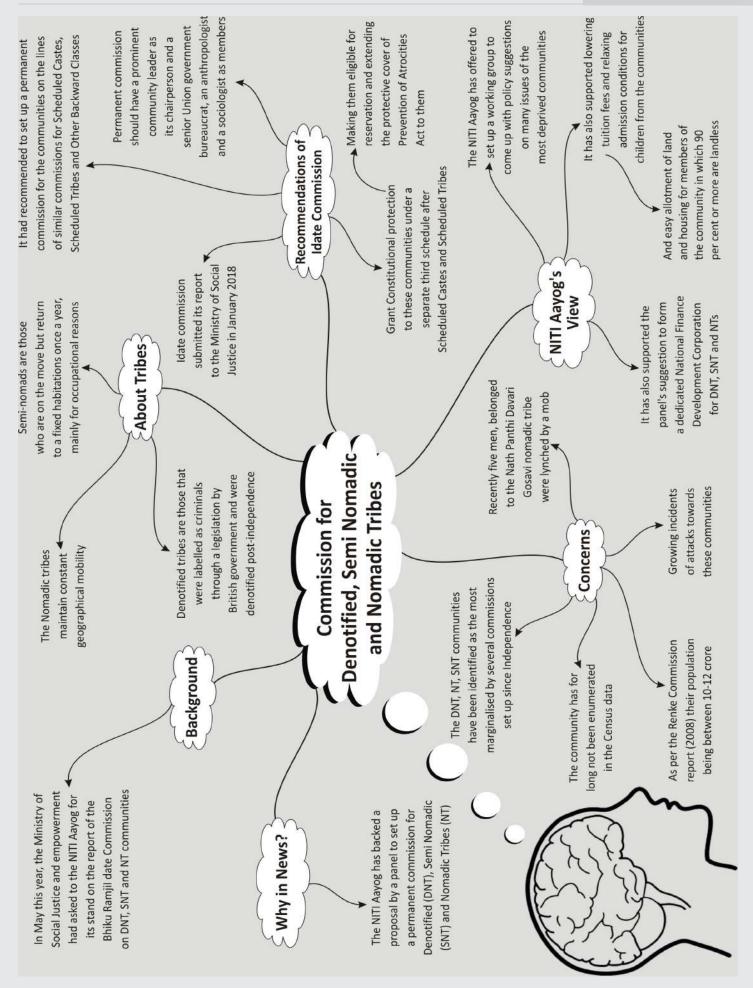




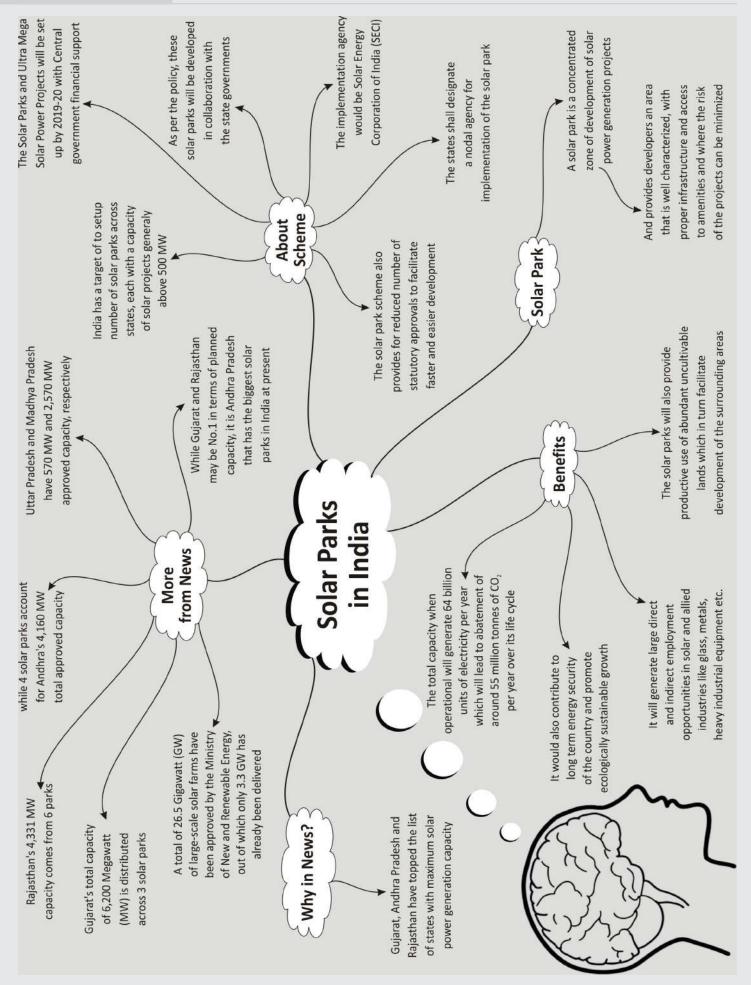




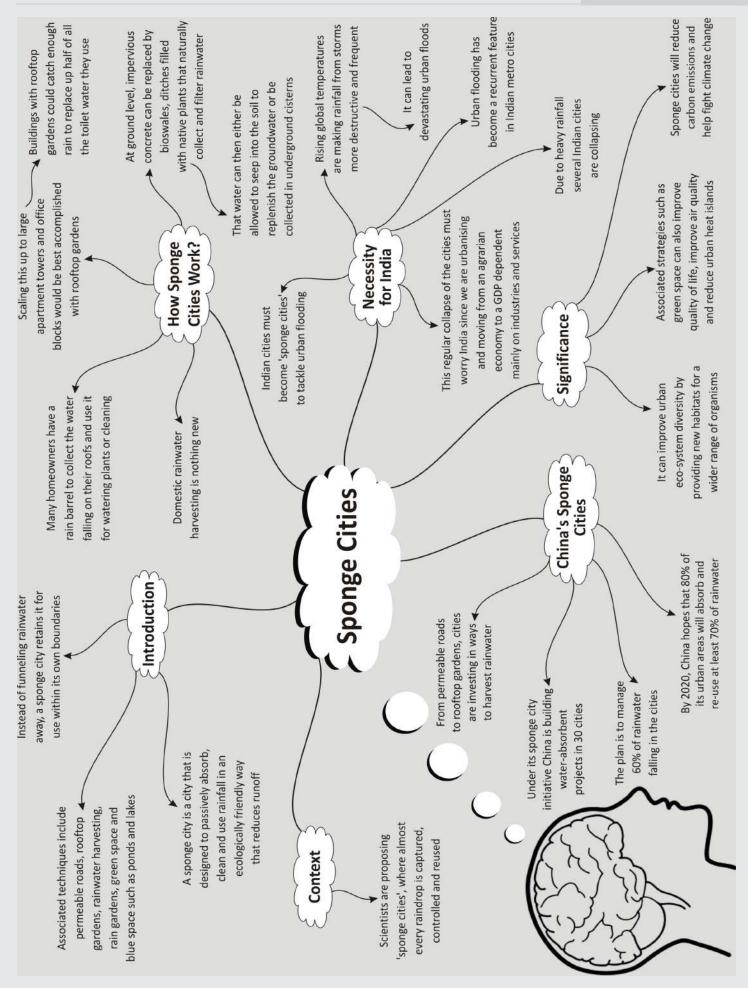












SEVEN MCO'S WITH EXPLANATORY ANSWERS (Based on Brain Boosters)

Privilege Motion

Q1. Consider the following statements in respect of 'Privilege Motion':

- A privilege motion is a notice by any member of either House of a state legislature or Parliament, against anyone who is accused of breach of privilege.
- 2. It is similar to Censure motion and does not force the Council of Ministers to resign.

Which of the statements given above is/are correct?

a) 1 only

b) 2 only

c) Both 1 and 2

d) Neither 1 nor 2

Answer: (c)

Explanation: Both statements are correct. It is concerned with the breach of parliamentary privileges by a minister. It is moved by a member when he feels that a minister has committed a breach of privilege of the House or one or more of its members by withholding facts of a case or by giving wrong or distorted facts. Its purpose is to censure the concerned minister. If it is passed in the Lok Sabha, the council of ministers need not resign from the office.

Committee to Check Mob Lynching

Q2. Consider the following statements:

- The government of India has constituted two high-level committees to suggest legal framework to effectively deal with incidents of mob lynching under the chairmanship of Union Home Minister.
- 2. The Supreme Court has recommended creating a separate offence for lynching and providing adequate punishment for the same.

Which of the statements given above is/are correct?

a) 1 only

b) 2 only

c) Both 1 and 2

d) Neither 1 nor 2

Answer: (b)

Explanation: Statement 1 is not correct. Two high-level committees have been constituted by the Central

government to suggest ways and legal framework to effectively deal with incidents of mob violence and lynching. One of the committees is being headed by Union Home Minister Rajnath Singh and the other by Union Home Secretary Rajiv Gauba.

Statement 2 is correct. The Supreme Court condemned mob lynching incidents across the country and urged Parliament to enact a law to deal with the crime that threatens rule of law and the country's social fabric. It gave slew of directions, including creation of a special law against lynching and provide adequate punishment for the same.

Prevention of Corruption (Amendment) Bill, 2018

Q3. With reference to the 'Prevention of Corruption Act (Amendment) Bill, 2018', consider the following statements:

- For the first time, the 'giving of bribe' has now been made a direct offence on par with 'taking of bribe'.
- 2. The earlier limited definition of 'undue advantage' expanded to now include 'anything other than legal remuneration'.

Which of the statements given above is/are correct?

a) 1 only

b) 2 only

c) Both 1 and 2

d) Neither 1 nor 2

Answer: (c)

Explanation: Both statements are correct. The Lok Sabha has passed the Prevention of Corruption (Amendment) Bill, 2018 that seeks to punish bribe-givers and bribe-takers. The existing law penalises only public officials who take a bribe. Under new Bill, people who are compelled to pay bribe will have the option of reporting the incident to the law enforcement authorities within seven days to avoid being punished.

The previously limited definition of 'undue advantage' expanded to now include 'anything other than legal remuneration', thereby fundamentally widening the scope and ambit of the offence of corruption.



Inter-Creditor Agreement

Q4. Consider the following statements in respect of 'inter-creditor agreement':

- 1. It is a framework under which consortium of lenders would take up Non Performing Assets (NPA) cases.
- 2. It is not a legal document and cannnot be enforceable in any court of law.

Which of the statements given above is/are correct?

a) 1 only

b) 2 only

c) Both 1 and 2

d) Neither 1 nor 2

Answer: (a)

Explanation: Statement 1 is correct. Inter-creditor agreement is a framework under which consortium of lenders would take up NPA cases. With a view to fast track NPA resolution, more than two dozen lenders have signed an inter-creditor agreement (ICA) framework. It is aimed at the resolution of loan accounts with a size of RS. 50 crore and above, that are under the control of a group of lenders.

Statement 2 is not correct. The inter-creditor agreement will a legal document and enforceable in any court of law.

Commission for Denotified, Semi Nomadic and Nomadic Tribes

Q5. Consider the following statements:

- 1. The Ministry of Social justice and Empowerment has given a consitutional status to the commission for Denotified (DNT), Semi Nomadic (SNT) and Nomadic Tribes (NT).
- The NITI Aayog will establish a dedicated National Finance Development Corporation for DNT, SNT and NTs.

Which of the statements given above is/are correct?

a) 1 only

b) 2 only

c) Both 1 and 2

d) Neither 1 nor 2

Answer: (d)

Explanation: Both statements are incorrect. The NITI Aayog has backed a proposal by a panel constituted by the Ministry of Social justice and Empowerment to set up a permanent commission for Denotified (DNT), Semi Nomadic (SNT) and Nomadic Tribes (NT) on the lines of similar commissions for Scheduled Castes, Scheduled Tribes and Other Backward Classes. The NITIs Aayog has also supported the panel's suggestion to form a dedicated National Finance Development Corporation for DNT, SNT and NTs.

Solar Parks in India

Q6. With reference to the solar parks in India, consider the following statements:

- 1. The government has set a target of 175,000 MW of total renewable power generation capacity by 2022, including 150,000 MW from solar projects.
- 2. Gujarat, Rajasthan and Andhra Pradesh are emerging as the top destinations for large, utility scale solar projects in India.

Which of the statements given above is/are correct?

a) 1 only

b) 2 only

c) Both 1 and 2

d) Neither 1 nor 2

Answer: (b)

Explanation: Statement 1 is not correct. The government has set an ambitious target of 175,000 MW of total renewable power generation capacity by 2022, including 100,000 MW from solar projects.

Statement 2 is correct. Gujarat, Andhra Pradesh and Rajasthan have topped the list of states with maximum solar power generation capacity approved under solar parks in India, according to the Ministry of New and Renewable Energy. Andhra Pradesh has the biggest solar parks in India at present.

Sponge Cities

Q7. The term 'spong city' is sometimes seen in the news. Consider the following statements in this regard:

- 1. A sponge city is a city that is designed to passively absorb, clean and use rainfall in an ecologically friendly way.
- 2. Its associated techniques include permeable roads, rooftop gardens, rainwater harvesting, rain gardens, green space and blue space such as ponds and lakes.

Which of the statements given above is/are correct?

a) 1 only

b) 2 only

c) Both 1 and 2

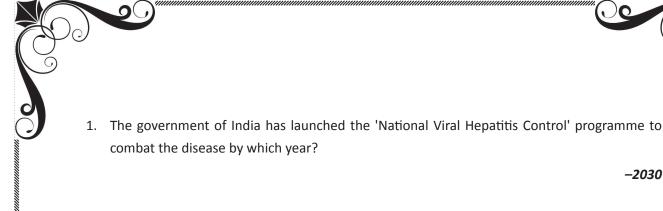
d) Neither 1 nor 2

Answer: (c)

Explanation: Both statements are correct. A sponge city is a city that is designed to passively absorb, clean and use rainfall in an ecologically friendly way that reduces dangerous and polluted runoff. Associated techniques include permeable roads, rooftop gardens, rainwater harvesting, rain gardens, green space and blue space such as ponds and lakes. Properly implemented a sponge city can reduce the frequency and severity of floods, improve water quality and allow cities to use less water per person.

CCC

SEVEN IMPORTANT FACTS FOR PRELIMS



2. Which state government has decided to take up census for backward classes?

-Telangana

-2030

3. Which government organisation has launched 'Mission Satyanishtha'?

-Indian Railways

4. When the Kargil Vijay Diwas is celebrated every year in India?

-July 26

5. Which state has become the first one to implement the national policy on biofuels?

-Rajasthan

6. Name the Indians who won the 2018 Ramon Magsaysay Award?

-Bharat Vatwani and Sonam Wangchuk

7. Which country has decided to remove five zeroes from ailing currency?

-Venezuela







SEVIEN IMPORTANT INDEX



 \mathbf{CCC}

Norway

African

Republic

Development Programme

(UNDP)

7.

Development

Index- 2018

130th

131st

SEVEN PRACTICE QUESTIONS FOR MAIN EXAM



- Q1. Resolving the issue of illegal immigration is essential for peace and prosperity in the state.

 Discuss why unresolved questions on identity threaten Assam's economic transformation.
- Q2. The B.N. Srikrishna committee's draft data protection bill gets some things right but fails to impose credible checks and balances on the state. Critically analyse.
- Q3. What do you understand by CRISPER-Cas9 technology? There is growing fear that the promising gene-editing system (CRISPR-Cas9) is being prematurely rushed for clinical use. Is CRISPR-Cas9 safe for clinical use? Critically discuss.
- Q4. India has brought down HIV incidences, but it must do more in removing social stigma attached with it. Discuss.
- Q5. What do you understand by 'stigmatized capitalism'? Capital is extremely mobile in today's interconnected world and tends to avoid economies where it is not treated well. India needs to build trust in the private sector. Discuss.
- Q6. GST rate rationalizations over a period of time have tried to bring down the rates in sectors to boost economic activity. GST tax structure should move towards lower rate brackets. Analyse.
- Q7. Though a collective responsibility of the state and society, tiger is a sovereign issue and an ecological necessity for the sustainability of our environment. In this context, examine the steps taken by India to conserve tigers.



OOO





FACE-TO-FACE CENTRES

MUKHERJEE NAGAR

635, Ground Floor, Main Road Dr. Mukherjee Nagar, Delhi 110009, Ph: 011-47354625/26, +91 9205274741 / 42

RAJENDRA NAGAR

25B, 2nd Floor, Pusa Road, Old Rajendra Nagar, Metro Pillar Number 117, Ph: +91 9205274745 / 43

LAXMI NAGAR

1/53, 2nd Floor, Lalita Park, Laxmi Nagar, Delhi 110092, Ph: 011 43012556, +91 9311969232

ALLAHABAD

2nd & 3rd Floor, Shri Ram Tower, 17C, Sardar Patel Marg, Civil Lines, Allahabad-211001, Ph: 0532 2260189, +91 8853467068

LUCKNOW

A-12, Sector-J, Aliganj Lucknow, U.P., Ph: 0522 4025825, +91 9506256789

GREATER NOIDA

Plot No. 28/1A Knowledge Park III, Greater Noida, U.P. 201306, Ph: +91 9205336037, 38

LIVE STREAMING CENTRES

BIHAR - PATNA 9334100961, CHANDIGARH -8146199399 **DELHI & NCR**- FARIDABAD 9711394350, 01294054621, HARYANA-KURUKSHETRA 8950728524, 8607221300, YAMUNANAGAR 9050888338, MADHYA PRADESH - GWALIOR 9098219190, JABALPUR 8982082023, 8982082030, REWA 9926207755, 7662408099 PUNJAB- PATIALA 9041030070, RAJASTHAN- JODHPUR 9928965998, UTRAKHAND- HALDWANI 7060172525 UTTAR PRADESH- BAHRAICH 7275758422, BAREILLY 9917500098, GORAKHPUR 7080847474, 7704884118, KANPUR 7275613962, LUCKNOW (ALAMBAGH) 7570009004, 7570009006, LUCKNOW (GOMTI NAGAR) 7570009003, 7570009005, MORADABAD 9927622221, VARANASI 7408098888

FOR DETAILS, VISIT US ON DHYEYAIAS.COM

011-49274400



AN INTRODUCTION

Dhyeya IAS, a decade old institution, was founded by Mr. Vinay Singh and Mr. Q. H. Khan. Ever since its emergence it has unparallel track record of success. Today, it stands tall among the reputed institutes providing coaching for Civil Services Examination (CSE). The institute has been very successful in making potential aspirants realize their dreams which is evident from the success stories of the previous years.

Quite a large number of students desirous of building a career for themselves are absolutely less equipped for the fairly tough competitive tests they have to appear in. Several others, who have a brilliant academic career, do not know that competitive exams are vastly different from academic examination and call for a systematic and scientifically planned guidance by a team of experts. Here one single move may invariably put one ahead of many others who lag behind. Dhyeya IAS is manned with qualified & experienced faculties besides especially designed study material that helps the students in achieving the desired goal.

Civil Services Exam requires knowledge base of specified subjects. These subjects though taught in schools and colleges are not necessarily oriented towards the exam approach. Coaching classes at Dhyeya IAS are different from classes conducted in schools and colleges with respect to their orientation. Classes are targeted towards the particular exam. Classroom guidance at Dhyeya IAS is about improving the individuals capacity to focus, learn and innovate as we are comfortably aware of the fact that you can't teach a person anything, you can only help him find it within himself.

DSDL Prepare yourself from distance

Distance Learning Programme, DSDL, primarily caters the need of those who are unable to come to metros for economic or family reason but have ardent desire to become a civil servant. Simultaneously, it also suits to the need of working professionals, who are unable to join regular classes due to increase in work load or places of their posting. The principal characteristic of our distance learning is that the student does not need to be present in a classroom in order to participate in the instruction. It aims to create and provide access to learning when the source of information and the learners are separated by time and distance. Realizing the difficulties faced by aspirants of distant areas, especially working candidates, in making use of the Institute's classroom guidance programme, distance learning system is being provided in General Studies. The distance learning material is comprehensive, concise and examoriented in nature. Its aim is to make available almost all the relevant material on a subject at one place. Materials on all topics of General Studies have been prepared in such a way that, not even a single point will be missing. In other words, you will get all points, which are otherwise to be taken from 6-10 books available in the market/library. That means, DSDL study material is undoubtedly the most comprehensive and that will definitely give you added advantage in your Preliminary as well as Main Examination. These materials are not available in any book store or library. These materials have been prepared exclusively for the use of our students. We believe in our quality and commitment towards making these notes indispensable for any student preparing for Civil Services Examination. We adhere all pillars of Distance education.