



11-03-2019 To 17-03-2019 MARCH Week - 03

# OUR TEAM

### GENERAL STUDIES

















Mr. KOUSHIK

Mr. CHETAN PRAKASH

Mr. RAVI TEJA

Mr. SIVA KUMAR

Mr. PRANAY AGARWAL

Mr. NIKHIL SAREEN

Mr. UDAY SIMHA

Mr. VIJAY

### OPTIONALS



SOCIOLOGY Mr. SAROJ SAMAL







Mr. VINNAKOTA SRIKANTH

MATHEMATICS



Mr. PRIYESH SINGH SENGAR

GEOGRAPHY

### OTHER OPTIONALS

ANTHROPOLOGY

TELUGU LITERATURE

POLITICAL SCIENCE

HISTORY

# Contents

Topic		Page No	
Pol	lity and Governance	1 - 14	
1.	Election Fever Begins		
2.	VVPATs to be used in 2019 Lok Sabha Elections		
3.	Multi-Pronged Approach to Urban Transformation		
4.	Official Secrets Act 1923		
<b>5.</b>	Data Privacy		
6.	Police Reforms		
Int	ernational Relations	15 - 22	
7.	Significance of the Airstrike at Balakot		
8.	India, China Ink First First-Ever Internal Security Cooperation		
	Agreement		
9.	China again blocks India's bid to declare JeM Chief Masood		
	Azhar as global terrorist		
10.	India-West Asia Ties		
11.	India's first TIR shipment through Chabahar Port		
Ec	onomy	23 - 30	
12.	World Gold Council		
13.	Trends of Rural Wages		
14.	India's Oil import dependence		
15.	International IP Index 2019		
Ge	ography and Environment	31 - 35	
16.	Kurichiyana Frog		
17.	Cloud seeding to be back in Karnataka for two monsoons		
18.	Climate Vulnerability Index		
Sci	ence and Technology	36 - 39	
19.	Drone Olympics		

20.	Regulation of Dru	128
<b>4</b> 0.	regulation of Dr	ഷട്ടാ

# 21. India's Nuclear Facilities under IAEA Safeguards

# Miscellaneous 40 - 42

- 22. Gandhian Peace Prize
- 23. New War Memorial
- 24. West Nile Virus
- 25. FINE Initiative
- 26. AFINDEX

# **Polity and Governance**

## 1. Election Fever Begins

### Context:

The Election Commission of India announced Sunday that the country would vote in seven phases from April 11 to May 19 and the results will be announced on May 23. With this, the Model Code of Conduct (MCC) comes into effect.

### What is the Model Code of Conduct?

The Election Commission's Model Code of Conduct is a set of guidelines issued to regulate political parties and candidates prior to elections. The rules range from issues related to speeches, polling day, polling booths, portfolios, content of election manifestos, processions and general conduct, so that free and fair elections are conducted.

- The Model Code of Conduct comes into force immediately on announcement of the election schedule by the commission. The Code remains in force till the end of the electoral process.
- The need for such code is in the interest of free and fair elections. However, the code does not have any specific statutory basis. It has only a persuasive effect. It contains what is known as "rules of electoral morality". But this lack of statutory backing does not prevent the Commission from enforcing it.
- The Commission issued the code for the first time in 1971 (5th Election)
  and revised it from time to time. This set of norms has been evolved
  with the consensus of political parties who have consented to abide
  by the principles embodied in the said code and also binds them to
  respect and observe it in its letter and spirit.

# Restrictions that Model Code of Conduct impose:

- The MCC contains eight provisions dealing with general conduct, meetings, processions, polling day, polling booths, observers, the party in power, and election manifestos.
- As soon as the code kicks in, the party in power whether at the Centre or in the States — should ensure that it does not use its official position for campaigning. Hence, no policy, project or scheme can be announced that can influence the voting behavior. The party must also avoid advertising at the cost of the public exchequer or using official mass media for publicity on achievements to improve chances of victory in the elections.
- The code also states that the ministers must not combine official visits with election work or use official machinery for the same. The ruling party also cannot use government transport or machinery for campaigning.

• It should also ensure that public places such as maidans etc., for holding election meetings, and facilities like the use of helipads are provided to the opposition parties on the same terms and conditions on which they are used by the party in power.

- The issue of advertisement at the cost of public exchequer in the newspapers and other media is also considered an offence. The ruling government cannot make any ad-hoc appointments in Government, Public Undertakings etc. which may influence the voters
- Political parties or candidates can be criticized based only on their work record and no caste and communal sentiments can be used to lure voters. Mosques, Churches, Temples or any other places of worship should not be used for election propaganda.
- Bribing, intimidating or impersonation of voters is also barred. Holding public meetings during the 48-hour period before the hour fixed for the closing of the poll is also prohibited. The 48-hour period is known as "election silence".

The idea is to allow a voter a campaign-free environment to reflect on events before casting her vote.

## Is the Model Code of Conduct legally binding?

The fact is the MCC evolved as part of the ECI's drive to ensure free and fair elections and was the result of a consensus among major political parties. It has no statutory backing. Simply put, this means anybody breaching the MCC can't be proceeded against under any clause of the Code. Everything is voluntary. The EC uses moral sanction or censure for its enforcement.

- The ECI can issue a notice to a politician or a party for alleged breach of the MCC either on its own or on the basis of a complaint by another party or individual.
- Once a notice is issued, the person or party must reply in writing either accepting fault and tendering an unconditional apology or rebutting the allegation.
- In the latter case, if the person or party is found guilty subsequently, he/it can attract a written censure from the ECI something that many see as a mere slap on the wrist.

# cVIGIL app

'cVIGIL' stands for Vigilant Citizen and emphasizes the proactive and responsible role citizens can play in the conduct of free and fair elections.

cVIGIL, a user-friendly and easy to operate the android application, which can be used for reporting violations from the date of notifications for bye-election/ assembly/ parliamentary elections. The uniqueness of the app is that it only allows Live Photo/ video with auto location capture from within the app to ensure digital evidence for flying squads to act upon in a time-bound manner.

## 2. VVPATs to be used in 2019 Lok Sabha Elections

### Context:

The Supreme Court of India directed the EC in 2013 to introduce VVPAT in LokSabha Elections 2014 to improve voter confidence and ensuring transparency of voting.

### **About VVPATs**

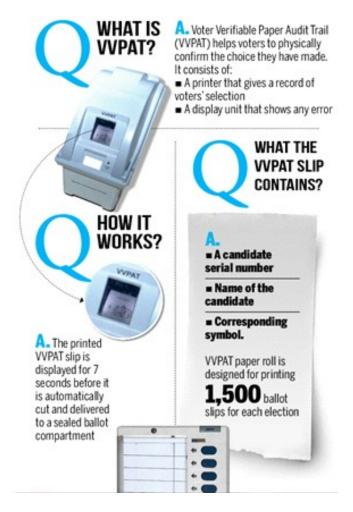
- Voter verifiable paper audit trial (VVPAT) is an independent system attached to an EVM that allows the voters to verify that their votes are cast as intended.
- When a vote is cast, a slip is printed on the VVPAT printer containing the serial number, name and symbol of the candidate voted.
- This remains visible to you through a transparent window for seven seconds.
- Thereafter, this printed slip automatically gets cut and falls into a sealed drop box.

## Significance of VVPAT

- VVPATs add another layer of transparency and reliability to convince voters about the sanctity of EVMs.
- EVMs and VVPATs also quicken the election process as counting votes on EVMs takes much lesser time than counting paper ballots.
- The EVMs and VVPATs are also environment-friendly as they use very little paper compared to paper ballots.

### Use of VVPATs in India

- These were fi rst used in the bye-election for the Noksen Assembly seat in Nagaland in 2013.
- They were deployed in eight Parliamentary constituencies during the 2014 LokSabha elections.



• In the 2019 LokSabha elections, VVPATs will be used in all the constituencies.

# 3. Multi-Pronged Approach to Urban Transformation

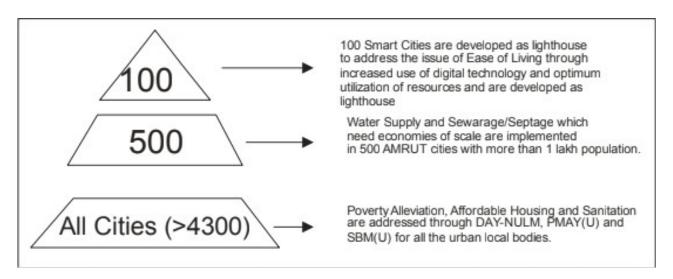
### Context:

• India's urban population was over 31 per cent in 2011 census. This is expected to rise to 40 percent by 2030 and 50 per cent by 2050, i.e., it will cross 800 million.

• As per 2011 census, urban India contributed 63 per cent to the GDP; it is projected to grow over 75 per cent by 2030.

## Challenges to Urban India

- Poverty alleviation, basic infrastructure like water supply and issue of ease of living are the major challenges
- Therefore, a three-level strategy, as highlighted in following diagram has been envisaged:



# What do we mean by Smart Cities?

- Smart Cities Mission was launched on June 25, 2015. Hoever, there is no fixed definition of a smart city. Our Smart Cities are woven around the following principles:
- 1. Citizen at the Core
- 2. More from Less
- 3. Cooperative Competitive Federalism: Cities are selected through competition in to stage challenges at state and central levels.
- 4. Integration, Innovation, Sustainability
- 5. Technology is the Means, and Not the Goal
- 6. Inclusiveness is a Guiding Philosophy:
  - Broadly, Smart Cities address three core issues: Live-ability, Economicability and Sustain-ability. Creating a better investment climate, enabling creation of jobs as per needs of available talent, attracting more investment and talent, breeding innovation, reducing levels of unemployment are some of the important aspirations of smart cities.

## **Smart Cities Mission Strategy**

The Mission tries to meet its major goals through a two-fold strategy:

**1. Area Based Development** - which focuses on development of world class localities within cities to act as replicable models through redevelopment, retrofitting or green development?

**2. Pan City development** – Wherein cities identify few key areas of intervention with use of digital technologies to create impacts on basic infrastructure and services with intent to improve quality of life for their citizens.

## Technology as a Means, and not the End -

- Every Smart City under the Mission will have a Smart City Centre (also referred to as Integrated Command and Control Centre). Few examples in this regard are –
- Rajkot recorded an increases in on-line issuance of birth/death certificates; and through surveillance, crime rate has gone down.
- There is an improvement in traffic challans in Ahmedabad.
- Pune has installed the city which feed data to the Smart city centre thereby enabling timely warning and response mechanism.
- In Vishakhapatnam, CCTV and GPS enabled buses are being tracked online through the Smart City Center.
- Bhopal has seen a rise in its property tax collections and is able to track its transport services online.

# Quality of Life and Economy-

The Mission promotes mixed land-use in area-based developments as proximity and density reduce the per capita costs of providing and maintaining infrastructure and services, while creating knowledge spill-overs and specialization that hugely enhance the urban productivity.

# Innovation as Key Driver –

- Recognising the role of Start-ups, the Smart Cities Mission will work to create an innovation eco-system in Smart Cities through SPIRIT-Smart Cities Promoting Innovation Research and Incubation in Technology.
- It is an initiative in collaboration with Atal Innovation Mission (AIM) and Start-up India program harnessing the strengths of the three initiatives.
- Another important area of transformation is the digital payments space.

# Impact on Sustainability -

• Smart Cities have proposed investments to ensure assured electricity supply with at least 10 percent of the Smart City's energy requirement coming from Solar Energy. Diu has become the first city to completely switch over to solar power during the day-time.

## **Key Enablers**

Smart Governance, improved urban finance, capacity building and technology driven innovation are key enablers in the performance of the smart cities.

### A. Smart Governance -

- Smart Cities Mission aims to address barriers in data driven governance through "Data Smart Cities, an evolving policy framework on data for smart cities, which aims to be a catalyst for the entire eco-system comprising of people, processes and technology.
- Smart Cities Mission intends to unlock civic data for all 100 cities.
- Making ULBs financially self-sufficient is very important for sustainable development. The Ministry started credit rating of cities, which has been completed in 465 cities.
- The Ministry has incentivized ULBs through cash incentive of Rs. 13 crore for every Rs. 100 crore of municipal bonds issued, equivalent to 2 per cent interest subvention.
- Cities are implementing projects in PPP mode for Housing, Waste-to-Energy, Solar Rooftop Public Bike Sharing, Parking Management, Smart Cards and Transport Hubs.

## B. Capacity Building and Knowledge Management -

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

### C. National Urban Innovation Hub

- A new entity titled the "National Urban Innovation Hub (NUIH) is being proposed at the national level to consolidate existing resources and to expand the footprint of innovation development and capacity building for the urban sector.
- NUIH will anchor the National Smart Cities Capacity Building Program to produce empowered functionaries and stronger institutions.
- NUIH will be powered by the National Urban Innovation Stack (NUIS).

• NUIS is a nationally-shared digital infrastructure usable by the Governments, both at Centre and States and across public and private sectors.

## Way Forward:

- At the start of the mission, one of the biggest challenges was to create an institutional framework at city level. It is for the first time that city level SPVs have been created for comprehensive urban development in India. Now, these cities have to build capacity at city level to take up innovative technology solutions.
- A major challenge is to build urban finance capacities in order for cities to be able to leverage grants being provided by the governments.
- Innovative financing models like issuance of municipal bonds, developing PPP projects and formulating land value capture finance (VCF) policies are required.
- The importance of standardization in the context of development of Smart Cities cannot be ignored.
- The Mission is closely working with Bureau of Indian Standards (BIS) in an effort to come up with smart ICT infrastructure standards and they are hopeful that they should be able to release the first version of these standards around mid-2019.

## 4. Official Secrets Act 1923

## Why in news?

- The Official Secrets Act (OSA) has been in the news recently due to the debate over 'stolen documents' in Rafael case. The Attorney-General has suggested "criminal action" against those responsible for making 'stolen documents' public.
- OSA is a colonial-era law that seeks to ensure secrecy and confidentiality in governance especially on national security and espionage issues.
- However, successive governments have faced criticism for misusing the law against journalists and whistleblowers thus violating their right to freedom of speech and expression.

# History

- The Indian Official Secrets Act of 1889 was enacted at a time when a large number of powerful newspapers had emerged in different languages across the country.
- Fearless editors criticized the British Raj's policies on a daily basis, created political consciousness among the people, and faced police crackdowns and prison terms to continue their mission and convictions.
- Thus the main purpose of the Act was to put an end to the voice of nationalist publications.

• A more stringent version of OSA named The Indian Official Secrets Act, 1904 was enacted during the period of Lord Curzon, Viceroy of India from 1899-1905.

• In 1923, the British government had notified a newer in governance in the country.

### Salient Features of OSA:

- The law broadly deals with 2 aspects namely: 1) Section 3 which deals with spying or espionage, and 2) Section 5 which deals with disclosure of other secret information of the government.
- The secret information can be any official code, password, sketch, plan, model, article, note, document or information.
- Under Section 5, both the person who communicates the information and the person who receives the information can be punished by the prosecuting agency.

## Notable convictions under OSA:

- 2002: Iftikhar Gilani, the then Kashmir Journalist was arrested and charged under the OSA for allegedly possessing secret documents with respect to the deployment of troops in the Kashmir valley. The State later withdrew the case.
- 2017: Journalist Poonam Agrawal was charged under OSA for conducting a sting operation on an Army officer who opposed the Sahayak system in the Army
- 2018: the Delhi Court held ex-diplomat Madhuri Gupta, who had served at the Indian High Commission in Islamabad under the OSA and sentenced her to 3 years imprisonment for passing on sensitive information to Pakistan's ISI.

# Laws to supplement OSA:

- Civil Service Conduct Rules, 1964 which prohibits communication of an official document to any person without permission.
- Section 123 of the Indian Evidence Act of 1872 prohibits publishing the evidence from the unpublished official records without the authorization of the Head of the department, who has high discretion in the matter.

# Arguments in favor of OSA:

- **No opposition:** Official Secrets Act has not been opposed by any commission as there are a need and necessity of the laws that can keep the specific documents of the state secret. Only a few unclear provisions of the act require change.
- **National credibility:** There is a requirement of strong laws to deal with the crimes against the state that undermines the credibility of the state.

• **National Security:** There are many documents which need to stay secret like locations of a military installation, which if leaked would go against the security of the nation and benefit the enemy

• Other countries have similar legislation: Many nations including the United Kingdom, Malaysia, Singapore, and New Zealand continue to use the legislation for protecting state secrets. In 2001, Canada replaced its OSA with a Security of Information Act. The Official Secrets comes under the Espionage Act of the United States.

## Arguments against the OSA:

- **Definition:** Lack of a clear definition of "secret" documents or information = government can declare any document as official secrets.
- RTI: It violates the Right to Information (RTI) Act of 2005
- **Archaic law:** OSA was enacted during colonial times where there was mistrust of people and the primacy of public officials in dealing with the citizens. But it doesn't suit to present democratic India.
- **Governance:** OSA promotes the culture of secrecy in the governance and makes disclosure an exception = against the transparency requirement of democratic governance.
- Records which are meant to be confidential are sometimes crucial in bringing illegalities to public attention.
- This was true in the 1980s of irregularities in Bofors defence deal. More recently, in 2016, the Panama papers involved the painstaking unveiling of offshore transactions in tax havens = resulted in government tracing out of hundreds of crore of undeclared assets.
- However, in every other instance, the OSA hampers the process. Freedom of speech & expression: Section 5 of OSA which deals with potential breaches of national security is frequently misinterpreted and misused to frame journalists.
- The Section makes it a punishable offence to share information that may help an enemy state. Thus it comes in handy for the government to book journalists when they publicize information that may embarrass the government or the armed forces.
- However, The Delhi High Court in 2009 has declared that publishing a document merely labelled as "secret" shall not render the journalist liable under the OSA.

# Recent case regarding OSA:

- The recent case is related to the alleged irregularities in the Rafael aircraft deal between India and France which was published in 'The Hindu' Newspaper.
- The Attorney General, however, expressed an objection in court and sought dismissal of the review petitions on the ground that the reports mentioned documents "stolen" from the defence ministry = need to

take "criminal action" against those responsible for making 'stolen documents' public.

• Thus the OSA was utilized by the government as a shield against allegations of wrongdoing in the Rafael deal.

## Supreme Court's observations:

- Corruption complaints should not be protected under the guise of national security. The Act did not provide the liberty to commit corruption.
- The court dismissed the act of targeting the messenger and criminalization of the whistleblowers in the name of national security or stability of government or official secrecy.
- The court called such actions as an attack on the freedom of expression and the people's right to information. The right to freedom of speech & expression and information should be prioritized over the archaic Official Secrets Act.
- The Court expanded the protections to the whistleblowers to make sure that those who expose corruption and wrongdoing should not be made vulnerable to any threats

### **Recommendations:**

- **2**<sup>nd</sup> **Administrative Reforms Commission (ARC)** Report suggested repeal of OSA and replaced with a new chapter in the National Security Act of 1980.
- **The Law Commission** also suggested consolidation of all legislation dealing with national security into a single law and pass the "National Security Bill". Commission also recommended that any person voluntarily receiving any official secret knowing or having reasonable ground to believe, at the time he receives it, that the official secret is communicated in contravention of this Act, shall be guilty of an offence under this section.
- **The Shourie Committee** suggested a comprehensive amendment of Section 5(1) to make the penal provisions of OSA applicable only to violations affecting national security. The Commission is of the view that the disclosure of information has to be the norm and keeping it secret should be an exception.
- The old law/s must be repealed or modified for sending a strong signal about the change and for the sake of effective implementation of the law.

# 5. Data Privacy

### Context:

Ahead of the upcoming polls the Election Commission's has issued a set of guidelines to regulate political parties and candidates prior to elections.

• The commission has also set up media certification and monitoring committees in every district to counter paid news and media-related violations of the model code.

• Facebook, Twitter, Google and YouTube have to ensure that all political ads on their platforms are pre-certified by these committees, each of which will include a social media expert.

## Can sharing be Private?

Facebook has been facing flak for privacy violations. The most notorious of these was the Cambridge Analytica scandal. Under relentless pressure from regulators to tighten its privacy safeguards, Facebook CEO Mark Zuckerberg, in a post last week, has made a 180-degree shift in what Facebook has stood for all along: from sharing and openness, to privacy and encryption.

## **About Cambridge Analytica**

- Cambridge Analytica is a UK-based data analytics firm, whose parent company is Strategic Communication Laboratories. It describes itself as specializing in data, analytics and strategy.
- This data firm is partly owned by the family of Robert Mercer, a billionaire American hedge fund manager and Republican donor
- Cambridge Analytica helps political campaigns reach potential voters online. The firm combines data from multiple sources, including online information and polling, to build "profiles" of voters. The company then uses computer programs to predict voter behavior, which then could be influenced through specialized advertisements aimed at the voters.
- In 2014, Dr Aleksandr Kogan, a psychology professor at Cambridge University, was allegedly paid \$800,000 by CA to develop an application, this is your digitallife, to harvest data of Facebook users.
- Although the app was downloaded by 270,000 people (these people granted permission for data collection), it extracted personal information of each of the users' friends without consent.
- This app offered personality predictions to users while calling itself a research tool for psychologists.
- The app asked users to log in using their Facebook account. As part of the login process, it asked for access to users' Facebook profiles, locations, what they liked on the service, and importantly, their friends' data as well.
- The problem, Facebook says, is that Kogan then sent this user data to Cambridge Analytica without user permission, something that's against the social network's rules.

# How is it related to the upcoming polls?

The Trump campaign hired Cambridge Analytica to run data operations during the 2016 election.CA performed a variety of services including

designing target audiences for digital advertisements and fund-raising appeals, modelling voter turnout, buying \$5 million in television ads and determining where Trump should travel to best drum up support. It also helped with strategic communication, like what to say in speeches. It helped the 'Leave' side in the Brexit referendum. Without strict regulation India can also undergo the similar situations and can go against its motto of Free and Fair elections

And amongst all India doesn't have any Data Protection Bill in use though proposed by Justice B.N. Srikrishna-headed expert panel.

## Key Provisions of the Draft Bill.

- The draft takes into account three aspects in terms of data the citizens, the state and the industry.
- The draft bill notes that "the right to privacy is a fundamental right".
- It thus makes it necessary to protect personal data as an essential facet of informational privacy.

**Data**: Critical personal data of Indian citizens should be processed in centres located within the country.

- Central government will notify categories of personal data that will be considered as critical.
- Other personal data may be transferred outside the territory of India with some conditions.
- However, at least one copy of the data will need to be stored in India.
- For data processors not present in India, the Act will apply to those carrying on business in India.
- It may also include other activities such as profiling which could cause privacy harms to data principals in India.
- 'Data principal' refers to the individual or the person providing their data.

**Violation**: The draft also provides for penalties and compensation for violations of the data protection law.

- The penalty would be Rs.15 crore or 4% of the total worldwide turnover of any data collection/processing entity, for violating provisions.
- Failure to take prompt action on a data security breach can attract up to Rs.5 crore or 2% of turnover as a penalty.

**Consent**: Processing of sensitive personal data should be on the basis of "explicit consent" of the data principal.

- The consent should be given before the commencement of the processing.
- The law will not have retrospective application.

**Anonymization**: It is the irreversible process of transforming personal data to a form in which a data principal cannot be identified.

• Notably, the provisions of the draft shall not apply to processing of anonymized data.

• However, anonymization should meet the standards specified by the Authority.

**Right to be forgotten**: The data principal will have the right to restrict or prevent continuing disclosure of personal data by a data processor.

- But the bill does not allow for a right of total erasure as the European Union does.
- Also, it gives a data processor considerable space in deciding on this 'right to be forgotten.'
- The data holder may charge a reasonable fee to be paid for complying with such requests.

**Implementation**: The law will come into force in a structured and phased manner.

- The draft has recommended setting up a Data Protection Authority to prevent misuse of personal information.
- The draft Bill also provides for setting up an Appellate Tribunal.

## Way Forward:

- Data localization conditions can ensure that user data collected within a country must be kept within it.
- Regulations can also compel businesses to adopt privacy by design principles that foreground user choice and consent.
- There must be clear laws on the ownership of data and what data need to be protected. Personal data cannot be the new oil. Individuals must own it, have a right to know what companies and governments know about them and, in most cases, that is, when there is no legitimate security or public interest reasons, have the right to have their data destroyed or being seen.

### 6. Police Reforms

### Context:

The Supreme Court has clarified its last order on police reforms. This month, the courts and offices having a minimum of 6 months tenure left in service can be considered for the post of Director General of Police (DGP)

### **About:**

The Director General of Police is a three star rank and the highest ranking police officer in States. The DGP is the head of the state police force

# 2006 guidelines:

• When its 2006 judgement in Prakash Singh vs Union of India, the SC laid down guidelines for appointment and removal of the DGP

• **Selection:** DGP of the state shall be selected by the state government from amount is the three senior most officers of the department funded by UPSC

• **Removal:** the DGP can be removed by the state government in consultation with the state security Commission consequent upon any action taken against him under the All India services (Discipline and Appeal) rules or following his conviction in a court of Law in a criminal offence or in case of corruption, or if he is otherwise incapacitated from discharging his duties

## 2018 guidelines:

- In July 2018, the supreme court laid down further guidelines for the appointment of a DGP by the states
- It declared that no state government can appoint their favourite police officer shooting their political choice as the acting GDP.
- The concept of an acting GDP was not considered in the 2006

## Judgement on the police reforms

- To prevent this the court directed all the states to send their proposals to the UPSC at least three months prior to the date of retirement of the DGP
- It also said that an endeavour has to be made to ensure that the person appointed as DGP continues despite his date of superannuation but not beyond a reasonable period

# **Recent Supreme Court verdict:**

- A bench headed by chief justice of India Ranjan Gogoi said the recommendation for post of DGP by the Union Public Service Commission and preparation of the panel should be purely on the basis of merit
- It said that officers having a minimum of 6 months tenure left in service can be considered for the post of DGP
- The apex court passed the verdict on a modification plea filed by farmer Uttar Pradesh DGP Prakash Singh. sing had alleged that the July 3, 2018, directive was being misused by the state governments who are ignoring competent senior officers for appointment as DGPs.

# **International Relations**

# 7. Significance of the Airstrike at Balakot

### Why in news?

- The 2019 Balakot airstrike occurred on 26 February 2019, when 12 Jets of the Indian Air Force crossed the line of control in Kashmir to perform airstrike on what India says was a terrorist training camp inside Pakistan
- The airstrikes were retaliation for an attack on its Paramilitary forces, which took place two weeks prior to the attack
- The Indian government stated that it was a preemptive non-military airstrike based on credible intelligence that another attack on India was planned by JeM
- According to India that jets struck a JeM operated militant camp at Balakot killing a very large number of militants and returned back into Indian airspace unharmed without being engaged by Pakistani aircraft

## Why it is a watershed event in the India-Pakistan Engagement?

Airstrikes by the Indian Air Force establishes a new threshold between the two nuclear neighbors for an Indian response to a terror attack. So far, India has either chosen to

- Put diplomatic pressure on Pakistan (after the 26/11 Mumbai terror attack)
- Mobilize its armed forces (after the 2001 Parliament attack) or
- Conducted limited ground-based operations (after the 2016 Uri attack)

But has never used the Air Force, that too inside Pakistan. The use of airpower has been taboo between the two countries, especially after both became declared nuclear powers in 1998, because of the dangers of escalation.

Restrictions around the use of airpower are best illustrated by the Kargil War, when the Vajpayee government allowed the IAF to be used, but did not allow it to cross the LoC

# Deep Inside Pakistan:

- A more important reason making it a watershed is the extent of incursion.
- Indian operations after the 1971 War have always been limited to the Line of Control and Pakistan-occupied Kashmir, never venturing into mainland Pakistan.
- As India considers PoK to be Indian Territory illegally occupied by Pakistan, and LoC is a militarily active border manned by the two armies, military action there has been considered somewhat acceptable.

#### **Future Scenario:**

• This airstrike also sets a precedent for future action by India: use of airpower in mainland Pakistan against terror camps. If it is Balakot today, it could be Bahawalpur or Muridke tomorrow.

• This new template for Indian response is going to create a public clamour in India after every terror incident to punish Pakistan, another reason that makes it a real watershed in the history of the bilateral relationship.

## **Intelligence-Led Operation:**

- The Foreign Secretary has called it an "intelligence led operation" and a "non-military prremptive action"
- The Foreign Secretary was taking the care of asserting that the targets had been carefully selected, based on hard intelligence inputs about the presence of terrorists in the camp.
- By calling it an intelligence-led operation, the government was trying to send a message to the global audience that the airstrikes were not done at some arbitrarily chosen place but were part of a well-considered action.

The phrasing of "non-military preemptive action" was important for two reasons.

- Given that use of airpower inside Pakistani mainland territory is bound to be considered an act of war, India by calling it non-military wanted to reassure everyone that it is not such an act.
- That India chose not to target the Pakistan military or civilians but a terror camp was an important part of the Indian argument for preventing any escalation by the Pakistani side.

The words "preemptive action" were to suggest that the airstrike was not an act of revenge or retribution but an act of self-defence to prevent a likely terror attack in the future. All these phrases point to an effort to couch the action in terms that have a de-escalatory tone, giving Pakistan the space it may need to de-escalate.

# **Options for Pakistan:**

- Any step that Pakistan takes from here on as an "appropriate reply" would be escalatory in nature, which could beget a further response from India.
- While Pakistan will try and make a diplomatic case against India, it is unlikely to carry any weight because of its track record in dealing with terrorist groups.
- Any military action outside the LoC will be an act of war, and hitting any non-military target is fraught and could make the situation even more difficult for Pakistan.

• Having wrested the initiative, India would have placed its armed forces on the highest alert, which takes away any element of surprise that Pakistan would want in conventional warfare. It may intensify its shelling along the border.

## Key challenges for India:

- The real challenge is of an escalation matrix. Essentially, this means that the Indian armed forces will now have to be prepared for a full-spectrum of conflict.
- Politically, India is heading into elections and the BJP has done well to tone down the rhetoric.
- Diplomatically, it is the challenge of dealing with the US, China and Russia, which are interested in a settlement with Pakistan and would advise both the countries to exercise restraint.
- While that restraint is now being asked of Islamabad, in case of a Pakistani military misadventure against India, that restraint would also be sought of New Delhi.

## Way ahead for India:

- The purpose of a military action after a terror strike is either compellence or deterrence.
- While compellence refers to India's demonstration of military and political will to compel Pakistan to change its ways of patronizing terror, deterrence refers to a fear of punishment to stop Pakistan from supporting another terror attack in India.
- The air strike in Balakot is a strong signal that India can hold the threat of action as a coercive tool and use the diplomatic offensive to demand compliance from Pakistan.

# 8. India, China Ink First First-Ever Internal Security Cooperation Agreement

#### Context:

India and China signed their first ever internal security cooperation agreement marking a new beginning in bilateral relations.

- During the meeting, India has also asked China to support its pending application in the UN to designate Pakistan-based Masood Azhar, leader of the Jaish-e-Mohammed terror group, as a global terrorist.
- In the past, China—a veto-wielding permanent member of the UN Security Council—has opposed India's proposal to list Azhar as a global terrorist and to not give shelter to hardliner ULFA leader Paresh Baruah.
- India's mention of Baruah to China comes in the backdrop of reports stating that United Liberation Front of Assam (ULFA) leader Baruah had been making frequent trips to China. During the seventies, when

insurgency was at its peak in the north-east, the extremist leaders often got training and shelter in China.

• Chinese concerns included insurgency in Xinjiang by Uighur extremists. In the absence of an extradition treaty with China, the two countries have not exchanged each other's sentenced prisoners, but this pact may change that. There are at least 10 Indians in Chinese prisons and an equal number of Chinese citizens in Indian prisons.

## **Uighurs and Separatist Movement:**

The Uyghurs or Uighurs is a Turkic ethnic group who live in East and Central Asia. Uyghurs live primarily in the Xinjiang Uyghur Autonomous Region of the People's Republic of China, where they are one of China's fi fty-fi ve offi cially-recognized ethnic minorities. Uyghurs primarily practice Islam.

- Xinjiang in northwest China has seen sporadic terror attacks since 2009, allegedly plotted by the separatist movement for East Turkestan, whose leaders live outside China. There is little evidence to show that the majority of Xinjiang's residents — Muslim Uighurs support them. But the government has descended heavily on them.
- Human Rights Watch says Uighur people in particular are subject to intense surveillance and are made to give DNA and biometric samples. Those with relatives in 26 "sensitive" countries have reportedly been rounded up, and up to a million detained.

# 9. China again blocks India's bid to declare JeM Chief Masood Azhar as global terrorist

# Why in news?

- Giving setback to India, China for the fourth time blocked a bid in the United Nations Security Council (UNSC) to designate Pakistan's Jaishe-Mohammed's chief Masood Azhar as a "global terrorist".
- India termed the move of China's putting a technical hold on the proposal as "disappointing".

# Fourth Proposal at UNSC:

- The proposal to designate Azhar under the 1267 Al Qaeda Sanctions Committee of the UN Security Council was moved by France, the United Kingdom and the United States on February 27 2019 days after a suicide bomber of the Jaish-e-Mohammed killed 40 Central Reserve Police Force soldiers in Jammu and Kashmir's Pulwama, leading to a flare-up in tensions between India and Pakistan.
- The Al Qaeda Sanctions Committee members had 10 working days to raise any objections to the proposal.
- The no-objection period deadline was scheduled to end at March 14, 2019 (Indian Time). However, just before the deadline, China blocked

the proposal with a 'technical hold' and asked for "more time to examine" the proposal.

• The technical hold is valid for up to six months and it can be extended by three months thereafter.

## China blocking all four proposals:

- The proposal is the fourth such bid at the UN in the last 10 years to list Azhar as a global terrorist.
- In 2009, India moved a proposal by itself to designate Azhar as a global terrorist.
- In 2016 again India moved the proposal with the P3 the United States, the United Kingdom and France in the UN's 1267 Sanctions Committee to ban Azhar, also the mastermind of the attack on the air base in Pathankot in January, 2016.
- In 2017, the P3 nations moved a similar proposal again.

However, on all occasions China, a veto-wielding permanent member of the Security Council, blocked India's proposal from being adopted by the Sanctions Committee.

## **Al-Qaida Sanctions Committee**

- The Al-Qaida Sanctions Committee is one of three UNSC committees dealing with counter-terrorism. The other two are Counter-Terrorism Committee, and the Security Council Committee.
- The 1267 Al-Qaida Sanctions Committee aims to impose strictures against individuals and entities associated with Al-Qaida and the Islamic State.
- The committee makes its decisions by consensus of its members.

# What happens if accepted?

- A UNSC designation will subject Azhar to an assets freeze, travel ban and an arms embargo. An assets freeze under the Sanctions Committee requires that all states freeze without delay the funds and other financial assets or economic resources of designated individuals and entities.
- The travel ban entails preventing the entry into or transit by all states through their territories by designated individuals.
- Under the arms embargo, all states are required to prevent the direct or indirect supply, sale and transfer from their territories or by their nationals outside their territories, or using their flag vessels or aircraft, of arms and related materiel of all types, spare parts, and technical advice, assistance, or training related to military activities, to designated individuals and entities.

## 10. India-West Asia Ties

### Context:

• India is actively engaging with West Asia. The recent invitation as the Guest of Honor at the Organization of Islamic Cooperation meet and In just ten months, PM of India has visited the UAE, Saudi Arabia, Iran and Qatar, and has hosted the Abu Dhabi crown prince in Delhi gives rise to a very promising ties between India and West Asia.

### **Economic Ties**

- These visits attached central importance to boosting energy and economic ties and both sides committed to upgrade the existing buyer-seller relations to long-term partnerships based on investments and joint ventures.
- The two sides also agreed to pursue cooperation in new frontier areas, such as space, telecommunications, renewable energy, food security, sustainable development, desert ecology, and advanced healthcare.

## **Security**

- Every Gulf country expressed anxiety about the threat from terrorism and pledged to work closely with India to combat it. They also said that terrorism cannot be brought down only through strong armed action but also by countering radicalization through promotion of a moderate religious discourse espousing peace, tolerance, and inclusiveness.
- The joint statement with the UAE speaks of "shared threats to peace, stability and security", and agrees to a "shared endeavour" to address these concerns, which is founded on "common ideals and convergent interests".
- The joint statement with Saudi Arabia talks of the two countries' responsibility to promote peace, security and stability in the region. The Iran statement speaks of the strategic importance of regional connectivity linked with the development of Chabahar port.

# Indian role to promote security in the Gulf

- The UAE statement speaks of the need for the two countries to establish a "close strategic partnership" for "these uncertain times", and calls upon them to work together to promote peace, reconciliation, stability in the wider South Asia, Gulf and West Asia region.
- The joint statement with Iran speaks at length about the threat from terrorism for the peace, security, stability and development of the region. It specifically refers to the peace and stability of the region being served by "a strong, united, and prosperous and independent Afghanistan" and their agreement to strengthen trilateral consultations and coordination.
- This is because India and Iran both have shared interest in Afghanistan. Taliban are against Iran because it is a shia Nation where as Taliban follows wahabism which is strictly anti Shia

### **Defence**

• Enhancement of defence ties has been given central importance by all the countries. This includes frequent dialogue between senior officers, training, joint exercises by the three arms of the military of both countries, joint marine operations, and supply and joint development of arms and ammunition.

- Defence cooperation is complemented by the countries agreeing to intelligence sharing, counter-terrorism operations, capacity-building and adoption of best practices and technologies by the security agencies on both sides.
- Cooperation in defence and intelligence affirms that India is seen as a worthy partner in these sensitive areas by countries that face serious domestic and external threats from extremists.
- On the other hand, Pakistan uses Taliban in Kashmir and causes instability. Thus, a strong, united, and prosperous and independent Afghanistan will be beneficial to both.

### **Problems in West Asia**

- There are two wars going on west Asia such as Syria and Yemen. There is the emergence of jihad, represented by the al-Qaeda and the Islamic State.
- The two Islamic giants, Saudi Arabia (Sunni) and Iran (Shia), are locked in a competition in which each country sees the other as threatening its nationhood, regime, political order, and doctrinal standing in Islam.
- Saudi Arabia believes that Iran supports terror, interferes in the domestic politics of the neighbouring Arab states, and is a destabilising force that has regional hegemonic aspirations.
- Iran denies these allegations, arguing that the Saudi monarchy faces serious domestic economic and political challenges and being unable to handle these challenges, Saudi Arabia is trying to divert attention of its people by making false allegation Iran.
- India's energy security and its economic interests are linked with regional security, as is the welfare of its eight million-strong community living in West Asia.

## Way forward

India should contribute actively to regional stability by promoting engagement between Saudi Arabia and Iran, and by working with regional and extra-regional partners with a similar interest in regional security, to structure platforms for dialogue and confidence-building measures. This process could help India both in front of economic stability and in terms of creating regional stability and emerging as a global power.

# 11. India's first TIR shipment through Chabahar Port

### Context:

The first shipment under the United Nations 'Transports Internationaux Routiers' (TIR) convention arrived in India from Afghanistan through Iran's Chabahar Port.

## **About Transports Internationaux Routiers**

- India had joined the TIR Convention (the United Nations Customs Convention on International Transport of Goods under cover of TIR Carnets) on June 15, 2017.
- The convention is adopted under the auspices of the United Nations Economic Commission for Europe (UNECE).
- The convention allows goods to be outlined in a TIR carnet and sealed in load compartments.
- Customs officials verify the carnet and check the seals, with no need for physical checking of the contents, enabling shipments to pass through countries without being opened at borders.
- Reciprocal recognition of customs controls is at the heart of the Convention.
- This enables a facilitative and non-intrusive environment for multimodal transport of goods through several countries.

## **Advantages of TIR**

- The TIR convention will help in fast and easy movement of goods across multiple countries under a common customs document and guarantee.
- It will help boost India's exports and enable greater participation in the global value chains.
- TIR will play a pivotal role in improving ease of doing business and pave the way for smoother and safer transport of goods across international borders.
- It will help boost trade between India, Central Asia, Europe and Russia.

# **Economy**

### 12. World Gold Council

### Context:

According to the latest report by the World Gold Council (WGC), India,

which is the world's largest consumer of gold, has the 11th largest gold reserve, with the current holding pegged at 607 tonnes.

- India's overall position in terms of total gold holding would have been tenth had the list included only countries.
- International Monetary Fund (IMF) is included and is third on the list with total gold reserves of 2,814 tonnes.
- The U.S. tops the list with gold reserves of 8,133.5 tonnes, followed by Germany with 3,369.7 tonnes.
- Among Asian countries, China and Japan have more reserves when compared to India.

U.S. Germany IMF Italy France Russia	8,133.5 3,369.7 2,814.0 2,451.8 2,436.0
IMF Italy France	2,814.0 2,451.8 2,436.0
Italy France	2,451.8 2,436.0
France	2,436.0
Russia	
	2,119.2
Mainland China	1,864.3
Switzerland	1,040.0
Japan	765.2
Netherlands	612.5
India	607.0
ECB	504.8
Taiwan	423.6
Portugal	382.5
Kazakhstan	353.3
֡֡֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜	Switzerland Japan Netherlands India ECB Taiwan Portugal

• The demand for gold was concentrated among emerging market central banks, with diversification the key driver in the face of ongoing geopolitical and economic uncertainty.

### **World Gold Council**

- The World Gold Council (WGC) is a nonprofit association of the world's leading gold producers.
- Headquartered in London, the WGC covers the markets which comprise about three-quarters of the world's annual gold consumption.
- It is a market development organization for the gold industry which includes 25 members and many gold mining companies as well.
- The WGC was established to promote the use of and demand for gold through marketing, research and lobbying.

## Gold & Economy

**As Currency:** Gold was used as the world reserve currency up through most of the 20th century. The United States used the gold standard until 1971.

The paper money had to be backed up by equal amount of gold in their reserves.

Although the gold standard has been discontinued, some economists feel that we should return to it due to the volatility of the U.S. dollar and other currencies.

- **As a hedge against inflation:** The demand for gold increases during inflationary times due to its inherent value and limited supply. As it cannot be diluted, gold is able to retain value much better than other forms of currency.
- **Strength of Currency:** When a country imports more than it exports, the value of its currency will decline. On the other hand, the value of its currency will increase when a country is a net exporter. Thus, a country that exports gold or has access to gold reserves will see an increase in the strength of its currency when gold prices increase, since this increases the value of the country's total exports.

Since, the central banks rely on printing more money to buy gold, they create an excess supply of the currency. This increases the supply and thereby reduces the value of the currency used to purchase it.

# 13. Trends of Rural Wages

### Context:

A study on rural wages over the past 5 years was recently published based on the Labour Bureau data on wages.

# **Highlights**

- Since 2018 the Rural wages have grown 3.8% year-on-year in December, 2018.
- Given the annual rural consumer price index (CPI) inflation of 1.5%, it means wages rose just over 2.3% in "real" terms (wages adjusted for inflation).
- For the Last 5 years the average year-on-year wage growth for December during 2014 to 2018 (NDA government) stands at 4.7% in nominal terms and a mere 0.5% in real terms.
- In comparison, for the same month of the preceding 5 years (2009 to 2013), nominal rural wages grew by an annual average of about 17.8%.
- With average CPI inflation for agricultural workers at 11.1% over the same period, the real growth in wages was still higher at 6.7% a year.

### What is the new trend?

- The lower wage growth in the last 5 years has not been confined to agriculture-related work alone.
- The average growth in December for eight main agricultural occupations was higher (5.14%) than for general wages (4.68%)

	Rural	Agri	Skilled	Rural CPI inflation%
Dec 2018	3.84	4.64	4.06	1.50
Dec 2017	4.21	4.50	3.91	5.27
Dec 2016	6.07	6.77	5.50	3.83
Dec 2015	4.68	4.67	4.38	6.32
Dec 2014	4.58	5.13	6.16	4.16

Note: All figures for male workers. Rural: Simple average for 25 occupations. Agri: Average for ploughing, sowing, harvesting, picking, horticulture, animal husbandry, general farm labour and plant protection. Skilled: Average for carpenter, blacksmith, mason, plumber, electrician and LMV/tractor driver. Source: Labour Bureau and Central Statistics Office.

- On the other hand, the December year-on-year wage growth for skilled workers has lagged behind overall rural wage growth in 3 out of the last 5 years.
- The average growth in wages for construction and general nonagricultural labour has been even lower.
- In other words, the crisis in rural India now is not just about farm incomes, as it is equally 'off-farm' as 'on-farm'.
- Agricultural productivity with favourable rainfall conditions and remunerative farm prices, and non-farm employment at better wages are the main sources of poverty reduction in rural areas.
- But notably, both of these crucial elements for poverty reduction have been absent in the past five years.

## Way Forward:

- The wage trend coincides with increasing divergence in wholesale inflation in food and non-food items in recent times.
- E.g. In December 2018, wholesale inflation for food items was -0.07% but it was 4.45% for non-food items.
- This is a sign that the terms of trade have turned decisively against agriculture.
- The government will thus have to examine how this state of affairs can be remedied.
- Non-farm employment in rural areas clearly needs a boost.
- Historically wages for non-farm employment have been boosted by spending on health and education.

• The focus now needs to be on quality assurance in these sectors, particularly when it comes to publicprovision of these services.

- Besides, the question of agricultural prices and terms of trade also needs to be considered, with a pro-farmer trade policy.
- As, the world price of commodities has a significant impact on terms of trade for Indian farmers.
- Farmers need to be allowed to take full advantage of increases in world prices.
- Properly working commodity markets that are globally integrated and allow for various forms of insurance and safeguards must be a priority.

# 14. India's Oil import dependence

### **Context:**

With India's rising dependence on fuel imports, it has to adopt some strategic measures for it to survive during a crisis and prevent any macro instability.

- India imports over 80% of its crude oil and the largest sources are Iraq, Saudi Arabia and sanctions-hit Iran.
- Overall, India's import dependency in its energy mix has risen sharply from 21% in 2000 to 36% in 2015.
- It could be as much as 50% in 2040 even if energy production domestically grows faster than it has in the past.

# **Current Challenges**

- As India modernizes its economy, it will move away from older, less dense forms of energy such as biomass to more dense ones.
- But India largely lacks proven resources of oil, gas and metallurgical coal on the scale it requires.
- However, the consequence of this continued dependence for the external balance and for overall macro-economic stability is unwelcome.
- E.g. a spike in the price of oil drives up domestic inflation, stresses the fiscal deficit
- It can also drive India close to a crisis in terms of its balance of payments, as it did in 1991 and nearly did in 2013.

### Other sources:

- **Coal** India does have extensive resources of coal, but not all of the proven reserves are of the quality needed.
- In order to ensure that Indian coal burns relatively cleanly, it would have to be processed or washed.
- But this can greatly add to water stress in the area around a coal plant.

• Areas already short of water, such as say Vidarbha in Maharashtra, can hardly afford a cluster of new coal-fired plants.

- Moreover, the effect of coal-fired plants' emissions on greenhouse gas concentrations and the direct health effect on people also need to be taken into account.
- India may well be dependent on coal for many years into the future, but certainly alternatives will have to be found.
- **Renewable energy sources** are a major source of hope, especially as they are currently competitive in terms of variable costs.
- However, solar and wind power are not perfect substitutes for current energy sources, given that they are variable in terms of output.
- Wind farms produce power when the wind is blowing, and solar farms when the sun is shining.

## Way Forward:

- India will have to think strategically about the effect of continuing import dependence.
- In terms of survival during a crisis, India needs to ensure that there are sufficient reserves on its own soil.
- The strategic oil reserves being set up in cooperation with the UAE and Saudi Arabia are a good step in that direction.
- In terms of preventing macro instability, it must be ensured that the balance of trade becomes healthier.
- India needs to ensure that exports grow sustainably for it to stay confident to pay for imported fuel.

### 15. International IP Index 2019

### In News

- The U.S. Chamber of Commerce's Global Innovation Policy Center (GIPC) has released its International IP Index, Inspiring Tomorrow.
- This index assesses the intellectual property (IP) environments of 50 world economies.

### **About The Index**

- The index covers over 90 per cent of global gross domestic product.
- It provides both an IP report card for the world and a blueprint for policymakers in countries like India, that wish to bolster economic growth and jobs, innovation and creativity.
- It is based on 45 indicators that are critical to an innovation-led economy supported by robust patent, trademark, copyright, and trade secrets protection.

## **Key Highlights**

This year, the index included four new indicators on commercialisation of IP assets and market access that shed light on factors that either disrupt or facilitate technology transfer in global markets.

- These are barriers to technology transfer, registration and disclosure requirements of licensing deals, direct government intervention in setting licensing terms and tax incentives for the creation of IP assets.
- US, UK, Sweden, France and Germany remained the top five economies on the intellectual property index in 2019 retaining their spots from the last year.

# **India Specific Observations**

- India has jumped eight places to 36th (from previous 44) position on the index.
- The eight-point jump is the highest increase among 50 nations mapped by the index. For the second year in a row, India's score represents the largest gain of any country measured on the Index.
- India's overall score has also increased substantially from 30.07 per cent (12.03 out of 40) in the previous edition to 36.04 per cent (16.22 out of 45) in the present edition.
- The improvement reflects important reforms implemented by Indian policy-makers towards building and sustaining an innovation ecosystem for domestic entrepreneurs and foreign investors alike and the country's efforts to align and incorporate the IP environment with the international IP environment.
- The increase is a result of specific reforms, including its accession to the WIPO Internet Treaties, the agreement to initiate a Patent Prosecution Highway (PPH) with international offices, a dedicated set of IP incentives for small business and administrative reforms to address the patent backlog.
- Among the weaknesses, the index has cited barriers to licensing and technology transfer, including strict registration norms, limited framework for the protection of biopharmaceutical IP rights, patentability rules outside international standards, lengthy pre-grant opposition proceedings and previously used compulsory licensing for commercial and non-emergency situations as key hurdles.

# **Intellectual Property**

- Intellectual property (IP) refers to creations of the mind, such as inventions; literary and artistic works; designs; and symbols, names and images used in commerce.
- IP is protected in law by, for example, patents, copyright and trademarks, which enable people to earn recognition or financial benefit from what they invent or create.

## National IPR policy 2016:

• The Union Cabinet has approved the National Intellectual Property Rights (IPR) Policy in May 2016 that shall lay the future roadmap for IPRs in India.

• The policy recognises the abundance of creative and innovative energies that flow in India and the need to tap into and channelize these energies towards a better and brighter future for all.

## The policy lays down the following seven objectives:

- **1. IPR Awareness:** Outreach and Promotion- Generation of IPRs: To create public awareness about the economic, social and cultural benefits of IPRs among all sections of society;
- **2. Generation of IPRs** To stimulate the generation of IPRs;
- **3. Legal and Legislative Framework:** To have strong and effective IPR laws, which balance the interests of rights owners with larger public interest;
- **4. Administration and Management:** To modernize and strengthen service-oriented IPR administration;
- **5. Commercialization of IPR:** Get value for IPRs through commercialization;
- **6. Enforcement and Adjudication:** To strengthen the enforcement and adjudicatory mechanisms for combating IPR infringements;
- **7. Human Capital Development:** To strengthen and expand human resources, institutions and capacities for teaching, training, research and skill building in IPRs;
- The department of industrial policy and promotion (DIPP) will be the nodal agency for all IPR issues. Copyrights related issues will also come under DIPP's ambit from that of the Human Resource Development (HRD) Ministry.

# Significance

- Increased awareness
- Perception management through legal, administrative and institutional management.
- It will help in reducing the time taken on clearing the backlog of IPR applications from current 5 to 7 years to 18 months by March 2018 as stated by the goals of the policy.
- Reviewing of provisions in every five year will help the Indian IPR-ecosystem to update and improve them or to remove anomalies and inconsistencies.
- It will promote incorporation of globally best practices and will be helpful in promotion of R&D through tax benefits.

### Criticism

• It is driven by the agenda of IP maximalism where owner's rights will be maximized at the cost of public interest.

- Intellectual Property rights accelerate innovation in certain sectors/ technology but impede innovation in other sectors. This policy fails to take notice of this and hence lacks integrated approach.
- Criminalising what is essentially a civil wrong is too much, not to mention the potential for abuse at the hands of our police.
- Although the policy seeks to promote & develop the IP field to ensure commercialization and expansion but it does not address the specifics.
- It does not address the present condition of patent filing in the country and how do we improve that, while it does mention that most of the patents in the country are filed by foreign companies/investors.

### Conclusion

The policy seems to be a welcoming change but all depends on the way it is enforced. If the all the aspects mentioned in the policy are dealt with in a strict sense, keeping in mind the rights and interests of the indigenous innovators, the policy can change India's stand in the world and foster innovation to a great extent.

# Geography and Environment

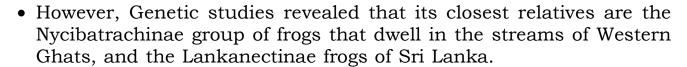
# 16. Kurichiyana Frog

### Context:

Recently a starry dwarf frog, named after constellation-like markings on it and Wayanad's Kurichiya tribe, has been discovered in Wayanad district, Kerala.

### **About**

- It is about 2cm to 3cm long and is the sole member of an ancient lineage, a long branch on the frog tree of life that researchers have classified as a new subfamily, Astrobatrachinae.
- Dark brown with a bright orange underbelly and speckled with pale blue dots, the frog camouflages well in wet leaf litter. It is **Nocturnal**.
- Scans of its skeletons showed it to be completely different from any other similarsized frog seen in Wayanad, some of its physical characteristics (such as its
  - triangular finger- and toe tips) closely resembled frogs in South America and Africa.



• Researchers still do not know its life cycle, the sound of its call or whether the species is threatened or endangered.

# Kurichiya Tribe

- The tribe is also known as Malai Brahmins or Hill Brahmins.
- They are the second largest adivasi community in Wayanad district. They stand at the top of the caste hierarchy among the hill tribes of Wayanad.
- The community was named Kurichiya by the Kottayam Raja for the community's expertise in archery. The name is derived from the phrase 'kuri vechavan', which means 'he who took aim'. It is also said that the name 'Kurichiya' is derived from the kuri or the sandalwood paste that they apply on their foreheads and chests as a custom.
- They are land-owning communities, and follow a matrilineal household system.
- They followed slash and burn (shifting) cultivation known as Punam cultivation.



• Nellukuthu Pattu is their art form.

## Significance

• India, once part of Africa, split from Madagascar about 89 million years ago and drifted northeast. Its long isolation as an island provided fertile ground for the evolution of new life forms and may have sheltered species that disappeared elsewhere.

• Finding ancient lineages like Astrobatrachinae can help fill in in the region's distant biological past and may answer the perennial question that whether peninsular India's frogs are the descendants of African ancestors or they first originated in Asia and then moved south.

## 17. Cloud seeding to be back in Karnataka for two monsoons

## Why in news?

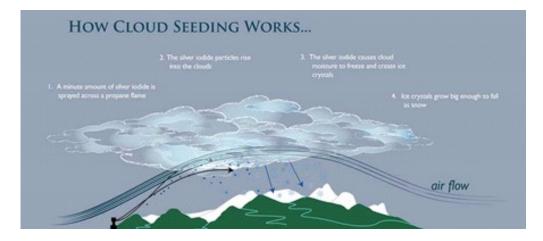
- The Rural Development and Panchayati Raj Department of Karnataka Government pushed a tender for the Cloud Seeding Operation to enhance rainfall during the monsoons of 2019 and 2020.
- The project is expected to cost 50 Crore each year

## Success story of Project Varshadhare:

- In 2017 Karnataka government launched Cloud seeding Project Varshadhre.
- It was called a success by an independent evaluation committee. Its report, submitted to the State government in 2018, estimated that rainfall was enhanced by 27.9% and there was an extra inflow of 2.5 tmcft into Linganamakki reservoir.
- On account of procedural delays and inconsistent monsoon season, the two planes could only fly for 37 days.
- However, experts involved said the outcome addressed the scepticism about the exercise.

# **Cloud Seeding:**

- Cloud Seeding is a process to induce rain in moisture-filled clouds by sprinkling the upper reaches of clouds with chemicals such as common salt or silver iodide, usually with the help of jets fixed to airplanes.
- Usually, rain occurs when moisture content in a cloud becomes too heavy and can no longer be held. Cloud seeding aims to accelerate this process by making more chemical nuclei available to facilitate the process.
- The chemicals induce nucleation the water in the cloud condenses around the newly introduced particles, and then goes to form ice. The much heavier ice particles then melt on their way to the ground.
- For cold clouds, sodium iodide crystals are used and for warm clouds
  such as those in India common salt crystals are used.



• Rain generally follows 30 minutes after the seeding. But the process is only meant to increase the precipitation and rainfall isn't guaranteed.

## Examples of cloud seeding:

- In July 2016, China allocated 199 million yuan (\$29.76 million) to spend on its cloud seeding program to prevent drought.
- During 2008 Beijing Olympics, Chinese organizers fired a barrage of rockets in the air ensuring clear skies for the opening ceremony.
- In 2009, Chinese scientists fired Beijing skies with iodide sticks hoping to end a long spell of drought, the seeding, however, caused an early snowfall which disrupted air and road traffic.
- In the United States, cloud seeding is occasionally used by ski resorts to induce snowfall. Cloud seeding is being used to recharge the ground water in arid UAE.
- Also Malaysia and Indonesia used cloud seeding to stimulate rainfall after toxic smoke gripped the region. Effectiveness of cloud seeding:
- The success of cloud seeding depends on the weather conditions of the area. Some moisture in the atmosphere is needed to cause precipitation.
- Environmentalists have raised concerns regarding secondary air and water pollution as an outcome of chemicals used to cause precipitation.

## Impact on Environment and Health:

- Silver iodide can cause temporary incapacitation or possible residual injury to humans and other mammals with intense or chronic exposure. However, there have been several detailed ecological studies that showed negligible environmental and health impacts
- The toxicity of silver and silver compounds (from silver iodide) was shown to be of low order in some studies.
- These findings likely result from the minute amounts of silver generated by cloud seeding, which are about one percent of industry emissions into the atmosphere in many parts of the world, or individual exposure from tooth fillings.

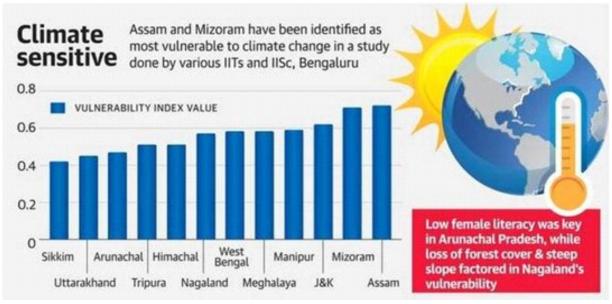
• Accumulations in the soil, vegetation, and surface runoff have not been large enough to measure above natural background.

# 18. Climate Vulnerability Index

#### Context:

Scientists have developed a common framework for assessment of climate change vulnerability in all the states in the Himalayan region.

- They have developed an index based on socio-economic factors, demographic and health status, sensitivity of agricultural production, forest-dependent livelihoods and access to information, services and infrastructure.
- The assessment has been done jointly by experts from Indian Institutes of Technology (IIT) at Guwahati and Mandi, in collaboration with Indian Institute of Science, Bangalore with support from the Department of Science and Technology and the Swiss Development Corporation (SDC) which is implementing the Indian Himalayas Climate Adaptation Program (IHCAP).



# Highlights:

- The assessment shows that the vulnerability index is the highest for Assam (0.72) and Mizoram (0.71).
- Sikkim is the least vulnerable state with the index being 0.42. Districts within a state face different degrees of vulnerability based on difference in geographic, climatic, socio-economic and demographic conditions.
- Assam is highly vulnerable to climate change because of factors like low per capita income, deforestation, large number of marginal farmers, least area under irrigation, lack of alternative sources of income and high rates of poverty.

# Significance

• Receding apple lines, changing cropping patterns, more disasters like landslides and floods, drying springs in hills, spread of vector-borne

diseases etc — are being felt all over the Himalayan region, which is one of the most sensitive climate zones globally.

- However, the vulnerability to climate change varies from state to state and even district to district within a state.
- It also depends on various socio-economic factors.
- Climate adaptation is a collaborative effort between appropriate use of technology, vision that produces policies, change at ground level and engagement of local communities.
- These vulnerability maps will play a crucial role in this effort.
- The vulnerability assessments will be useful for officials, decision makers, funding agencies and experts to have a common understanding on vulnerability and enable them to plan for adaptation.

# Science and Technology

# 19. Drone Olympics

#### In News

- The Drone Olympics was recently held at the 12th edition of Aero India, wherein national and international players demonstrated their potential.
- The Aero India exhibition, with the theme "The Runway to a Billion Opportunities" is designed to bolster business in the international aviation sector and provide a platform to showcase India's aeronautical advancements.
- The Drone Olympics has been organized by Ministry of Defence.
- It aims to encourage the UAV industry to connect with potential buyers and business partners in the country and also provide an opportunity to the Armed Forces to assess the capabilities of UAVs.
- The role of UAVs is ever-increasing in the defence sectors, making them the ideal platform for intelligence, surveillance, reconnaissance, electronic warfare and strike missions.
- The competition was held in three categories: surveillance challenge to determine the surveillance capacities of unmanned aerial vehicles (UAV); supply drop challenge to assess the weight dropping capacity of the UAVs; and the formation flying challenge to demonstrate different shapes with group of UAVs.
- During the award ceremony, Atal Tinkering Lab (ATL) of Atal Innovation Mission (AIM), NITI Aayog launched "ATL Drone Module Get Set Fly!" created in collaboration with the blooming drone industry in India.

The goal of the ATL Drone module is to introduce the young minds of India to the technology and help them to identify and solve community issues using drones as a tool.

# 20. Regulation of Drugs

#### Context:

The National Pharmaceutical Pricing Authority (NPPA), for the first time, capped trade margins on 42 non-scheduled, anti-cancer drugs at 30 per cent.

# **National Pharmaceutical Pricing Authority**

National Pharmaceutical Pricing Authority (NPPA) was constituted through a Government of India Resolution in 1997. It is an attached office of the Department of Pharmaceuticals (DoP), Ministry of Chemicals & Fertilizers. It works as an independent regulator for pricing of drugs and also ensures availability and accessibility of medicines at affordable prices. It

implements and enforces the provisions of the Drugs (Prices Control) Order in accordance with the powers delegated to it

## Scheduled and Non-Scheduled drugs

- "Scheduled drugs" or "Scheduled formulations" are those medicines which are listed out in the Schedule I of Drug Price Control Order (DPCO) and on which price controls are applicable.
- Since 2013, scheduled drugs consist of the "Essential Medicines" declared so by the Government through its National List of Essential Medicines (NLEM).
- Any formulation based on combination of any one of the drugs appearing under NLEM can be subject to price fixation. In other words, NLEM forms the basis of deciding on the "Scheduled drugs".
- On the other hand, non-scheduled formulations are medicines that are not under price control of NPPA.
- In this case, the Drug Prices Control Order, 2013 allows manufacturers to increase the MRP by 10% annually.
- So while essential medicines are subject to absolute price controls in the form of ceiling prices, the non-essential/non-scheduled medicines are subject to a managed price increase.

#### NPPA's Decision

- Currently, 57 anti-cancer drugs are under price control as scheduled formulations.
- Now, 42 non-scheduled anti-cancer medicines have been selected for price regulation, with MRP reduction up to 87%. These would cover more than 70 formulations and around 390 brands.
- Trade margins are capped at 30% of the MRP, or conversely a 43% mark-up on the price to the stockist (price at which manufacturers supply to retailers). The manufacturers of these 42 drugs have been directed not to reduce production volumes of brands under regulation.

# Significance

- Being non-scheduled, these 42 life-saving drugs do not fall under the ambit of price control.
- The NPPA has thus invoked its extraordinary powers in public interest, under Para 19 of the Drugs (Prices Control) Order, 2013, for this move.
- As per this, the Government may fix the ceiling price or retail price of any drug, whether scheduled or non-scheduled or a new drug, for such period as it may deem fit.
- NPPA'S move is thus a new paradigm of regulation by the pharma industry.

The NPPA has invoked extraordinary powers in public interest, under Para 19 of the Drugs (Prices Control) Order, 2013 to bring 42 non-scheduled anti-cancer drugs under price control. Para 19 of DPCO.

 As per Para 19 of the DPCO-2013, the Government may, in case of extraordinary circumstances and in public interest, fix the ceiling price or retail price of any drug, whether scheduled or non-scheduled or a new drug for such period, as it may deem fit.

• It also has powers to revise (either increase or decrease) the ceiling price or retail price of the drug which is already fixed and notified, irrespective of annual wholesale price index for that year.

## Way Forward

- According to the NPPA, the rationalisation of trade margins will lead to an MRP reduction of 50-75% in the case of 124 brands.
- In the case of another 121 brands, the reduction will be 25-50% and up to 87% in some cases.
- The price rationalization move is expected to benefit 22 lakh cancer patients in the country.
- This is likely to result in annual savings of approximately Rs. 800 crores to the consumers.
- Notably, the average out of pocket expenditure for cancer patients is 2.5 times that for other diseases.
- Out of pocket expenses in India account for nearly 70% of total healthcare expenses.
- Significantly, cancer care forces even middle-class households into debt and economic distress.

# 21. India's Nuclear Facilities under IAEA Safeguards

#### Context:

Government of India decided to place four more nuclear reactors under the IAEA safeguards.

# **International Atomic Energy Agency**

- It seeks to promote the peaceful use of nuclear energy, and to inhibit its use for any military purpose, including nuclear weapons.
- It was established as an autonomous organization in 1957 through its own international treaty, the IAEA Statute.
- Its headquarters are in Vienna, Austria. IAEA serves as international nuclear energy watchdog, independent of United Nations but reports to both United Nations General Assembly (UNGA) and Security Council (UNSC).
- The four reactors will include two Russian-designed Pressurised Light Water Reactors and two Pressurised Heavy Reactors built with Indian technology.
- With the addition of four new nuclear reactors, a total of 26 Indian nuclear facilities will be under IAEA, the nuclear energy watchdog.

• These reactors are eligible to import uranium to generate nuclear energy for civilian purposes.

## **Background**

- As India is not a party to Non Proliferation Treaty (NPT), it has classified its nuclear facilities into two types under Separation Plan Unsafeguarded- where domestic uranium can be used anywhere India wants.
- Safeguarded- where imported uranium would be used for civilian nuclear energy.
- Since India's use of domestic uranium could not anyway be restricted, this was seen as a balance between the benefits of nuclear energy in emission reduction and the risks of increasing India's military capability.

## India and IAEA safeguards:

- The IAEA safeguards in the country are implemented in accordance with the agreement entered between Government of India and the IAEA.
- In 2014, India ratifi ed the additional protocol, a commitment given under the Indo-US civil nuclear deal by the government to grant greater access to the IAEA to monitor country's civilian atomic programme.
- A special set of India-specifi c safeguards, negotiated with the International Atomic Energy Agency
- (IAEA) ensures that imported uranium was not diverted for military use.
- New reactor plants established with foreign collaboration are automatically placed under the IAEA safeguards.

# **Miscellaneous**

## 22. Gandhian Peace Prize

## Why in news?

The President of India, Shri Ram Nath Kovind presented the prestigious Gandhi Peace Prize for the years 2015, 2016, 2017 and 2018 at a function in Rashtrapati Bhawan.

#### **About**

- International Gandhi Peace Prize was constituted by the government of India in 1995. It is created as a tribute to the ideals of Mahatma Gandhiji, father of the Nation.
- The winners are selected by a panel headed by Prime Minister, the Leader of the Opposition in the Lok Sabha, the Chief Justice of India and two other eminent persons.
- The winners would receive a cash prize of Rs 1 crore, a citation in a scroll, a plaque and a traditional handicraft/handloom item.

## **Winners**

The government has announced the names of Vivekananda Kendra in Kanyakumari (2015), Akshaya Patra Foundation and Sulabh International (2016), Ekal Abhiyan Trust (2017) and Yohei Sasakawa (2018) for the International Gandhi Peace Prize.

#### 23. New War Memorial

## Why in news?

PM Modi opens the War memorial in Delhi to commemorate the soldiers.

#### **About**

- The National War Memorial, near India Gate in New Delhi, is a fitting tribute to our soldiers who laid down their lives defending the nation, post-independence. The National War Memorial also commemorates the soldiers who participated and made the supreme sacrifice in Peace Keeping Missions, and Counter Insurgency Operations.
- The National War Memorial will not replace the Amar Jawan Jyoti which was built in 1972 underneath the India Gate arch to commemorate soldiers killed in the Indo-Pak War of 1971.

#### 24. West Nile Virus

#### In news:

A 7 year old boy from Malappuram district of Kerala, found to be infected by the West Nile virus.

#### **About WNV:**

• The West Nile Virus (WNV) is a viral infection which is typically spread by mosquitoes and can cause neurological disease as well as death in people.

- First detected in a woman in West Nile district of Uganda in 1937, the virus was later identified in birds (crows and columbiformes) in Nile delta region in 1953.
- According to the World Health Organization (WHO), the virus is a member of the flavivirus genus and belongs to the Japanese encephalitis antigenic complex of the family Flaviviridae.
- Humans, horses and other mammals can be infected. Vaccines are available for horses but not yet for humans
- Approximately 80% of infected people will not show any symptoms and about 20% infected humans will develop WNV fever
- The largest outbreaks of the virus were recorded in Greece, Israel, Romania, Russia and USA.

## 25. FINE Initiative:

#### In news:

- President Ram Nath Kovind inaugurated the Festival of Innovation and Entrepreneurship in Gandhinagar, Gujarat.
- President will also confer the 10th National Grassroots Innovation Awards to encourage the village and grass root innovators.

### **About FINE:**

- The Festival of Innovation & Entrepreneurship (FINE) {previously known as Festival of Innovation FOIN)} is a unique initiative of the Office of the President of India to recognize, respect and reward grassroots innovations and foster a supportive ecosystem for innovators.
- This festival is being organised by National Innovation Foundation in association with the department of science and technology Government of India
- FINE is a celebration of country's Innovation potential, particularly those ideas which stem from grassroots level including the citizen at the last mile and also a reflection of power of children's creativity.
- FINE would provide platform to the innovators for building the linkages with potential stakeholders whose support can improve their prospects in coming years for the larger social good.
- It will also help in promoting lateral learning and linkages among the innovators to enrich the ecosystem for new India. It would also be a great opportunity to create awareness about the importance of various

Ministries of Government of India attaches to their effort and participation in the FINE.

- It is imperative that India becomes a growth engine for the world and provides a new model of inclusive development by providing a large number of open technological and other solutions for the developing and developed world.
- In sync with the policies of the government of India, FINE will provide a window to the creative and innovative solutions for social development through grassroots innovations, student ideas and other technologies for agriculture, rural development, sanitation, health, women and child development, biotechnology and medical innovation for grassroots.

## 26. AFINDEX

### In news:

It is a Joint Field Training Exercise between the Indian Army and 16 African nations. The 2019 edition will be conducted in Pune from March 18 to 27.

- AFINDEX-19 aims to train the participating contingents in Humanitarian Mine Assistance (HMA) and Peace Keeping Operations (PKO) under the United Nations Charter through practical and comprehensive discussions and tactical exercises.
- Contingents from Egypt, Ghana, Nigeria, Senegal, Sudan, South Africa, Tanzania, Namibia, Mozambique, Uganda, Niger & Zambia are part of the joint exercise together with officers from Rwanda, Democratic Republic of Congo and Madagascar as Observers.
- The joint exercise will also focus on achieving interoperability, learning each other's methodologies and tactics through synchronized operational level planning and tactical level training.



# Abhyasa Program Structure

	Multiple Choice Questions (PRELIMS)	Descriptive Questions (MAINS)	Total Marks
Daily Test	10 (10*1 = 10 marks)	1 (1*10= 10 Marks)	20
Weekly Test	<b>20</b> (20*1 = 20 marks)	2 (2*10= 20 Marks)	40
Fortnightly Test	<b>30</b> (30*1 = 30 marks)	3 (3*10= 30 Marks)	60
Monthly Test	<b>50</b> (50*1 = 50 marks)	<b>5</b> (5*10= 50 Marks)	100
3 Months Test	100 (100*1 = 100 marks)	10 (10*10= 100 Marks)	200
Total Questions	4250+	500+	



To know more, scan this QR Code and watch video.



Subscribe to our youtube channel www.youtube.com/analogiasacademy

# OUR BRANCHES

# Hyderabad : Indira Park

Domalguda

Ph: 040-27620440, +91 991 244 1137

Email: ias.analog@gmail.com

## Hyderabad : Madhapur

100 Ft Road, Ayyappa Society,

Ph: 040-48522831, +91 990 856 4438

Email: ias.analog@gmail.com

## Vizag: Dwaraka Nagar

Office-3, 3rd Floor, GK Towers,

Ph: 0891-2546686, +91 998 513 6789

Email: ias.analogvizag@gmail.com

# Hyderabad : Ashok Nagar

Above OBC Bank

Ph: 8121046686, +91 991 244 1138

Email: ias.analog@gmail.com

# New Delhi: Old Rajinder Nagar

57/12, Third Floor,

Ph: 011-49785868, +91 880 028 3132 Email: ias.analog.delhi@gmail.com

## Guntur: Arundalpet

2nd Floor, Eluri Mansion 2/1,

Ph: +91 996 335 6789

Email: ias.analog.guntur@gmail.com

# **OUR RESULTS - 2017**

