



# IAS PARLIAMENT

*Information is a Blessing*

A Shankar IAS Academy Initiative

## CURRENT AFFAIRS MAGAZINE

JANUARY 2019

**Shankar IAS Academy™**

Door No 18, New Plot No 259 /109,  
AL Block, 4th Avenue, Shanthi Colony,  
Annanagar, Chennai - 600040.

[www.shankariasacademy.com](http://www.shankariasacademy.com) | [www.iasparliament.com](http://www.iasparliament.com)



## INDEX

<b>G.S PAPER II .....5</b>	7.1 Deeping Indo-Japan Ties ..... 32
<b>1. POLITY.....5</b>	<b>8. INETRATIONAL ISSUES..... 33</b>
1.1 Reservation for the 'Poor Forward' .....5	8.1 Greece-Macedonia Dispute ..... 33
1.2 Concerns with Collegium system ..... 6	8.2 New Brexit Challenge ..... 34
1.3 Reinstating CBI Director .....8	8.3 US – Mexico border wall issue..... 35
1.4 Clause 6 of the Assam Accord .....9	<b>G.S PAPER III..... 37</b>
1.5 Protest in Mizoram - Citizenship (Amendment) Bill and the Chakmas ..... 10	<b>9. ECONOMY ..... 37</b>
1.6 Report on Death Penalty in India .....11	9.1 Significance of Accounting Year ..... 37
1.7 Scrapping Educational Qualification ..... 12	9.2 CSO Advance Estimates..... 37
1.8 Issues with Teachers' quota in Universities..... 13	9.3 CAG report on government spending ..... 38
<b>2. GOVERNMENT ACTS, AND POLICIES AND INTERVENTIONS ..... 15</b>	9.4 RBI notification on MSME loans ..... 40
2.1 Muslim Women Bill, 2018 ..... 15	9.5 Financial Stability Report – RBI .....41
2.2 Amendments to POCSO Act ..... 16	9.6 NSEL Scam ..... 43
2.3 Aadhaar Amendment Bill .....17	9.7 Significance of a Competitive Exchange Rate... 44
2.4 Drug Price Control - NITI Aayog ..... 19	9.8 Crisil report on GSDP growth ..... 46
<b>3. SOCIAL ISSUES .....20</b>	9.9 Upholding validity of IBC..... 47
3.1 Annual Status of Education Report 2018 .....20	9.10 Global Worries on VUCA Factors ..... 49
3.2 Increasing Youth Suicides in India ..... 21	9.11 Rising Fiscal Deficit - Causes ..... 50
<b>4. GOVERNANCE..... 23</b>	9.12 Fed Rate Hike - Rationale .....51
4.1 Concerns with Electronic Voting Machines .....23	9.13 32 <sup>nd</sup> GST Council Meet Highlights ..... 53
<b>5. HEALTH ..... 24</b>	9.14 NITI Aayog on Labour reforms ..... 54
5.1 Drugs Amendment Order, 2019 .....24	<b>10. INFRASTRUCTURE ..... 55</b>
5.2 Report on Child Care Institutions .....25	10.1 Concerns with Jaitapur Nuclear Power Plant.. 55
5.3 Parental Consent for Vaccination - Delhi High Court Order .....26	10.2 New Water Extraction Guidelines .....57
5.4 Ten Threats to Global Health in 2019 - WHO ...27	<b>11. AGRICULTURE ..... 58</b>
<b>6. INDIA AND ITS NEIGHBOURHOOD ..... 29</b>	11.1 MSP for Minor Forest Produce ..... 58
6.1 India's role in Afghanistan .....29	11.2 UP's New Levy for Cow Protection ..... 59
6.2 India – Bangladesh relations .....29	11.3 Sugarcane Farmers' Protest in Maharashtra... 60
6.3 New Electricity Guidelines for South Asia ..... 31	11.4 Addressing Tenant Farming ..... 62
<b>7. BILATERAL RELATIONS ..... 32</b>	11.5 Restoring patent rights - Bt Cotton ..... 63
	<b>12. SCIENCE &amp; TECHNOLOGY ..... 65</b>
	12.1 Chang'e-4 Spacecraft ..... 65
	12.2 Discovery of Fast Radio Burst ..... 65

**13. ENVIRONMENT ..... 66**

- 13.1 Rulebook at Katowice - Concerns for Developing Countries ..... 66
- 13.2 IMD Statement on Climate of India in 2018.....68
- 13.3 National Clean Air Programme ..... 69
- 13.4 New Coastal Regulation Zone Notification ..... 70

**14. INTERNAL SECURITY ..... 72**

- 14.1 Reforming Defence Acquisition in India ..... 72
- 14.2 Shortfalls in Fighter Jets - IAF ..... 73
- 14.3 Indigenous Defence Production - Tejas Case..... 74

**PRELIM BITS ..... 75****History and Art & Culture..... 75**

- Monuments of National Importance ..... 75
- Sanjhi - Mujh Mein Kalakar ..... 76
- Sangeet Natak Academi ..... 76
- Mudiyettu ..... 77
- Folk Arts ..... 77
- Kurumba Painting ..... 77
- Pithora Paintings ..... 78
- Elephanta Caves ..... 78
- Etikoppaka Bommalu ..... 78
- Budithi Brass Craft ..... 78
- Kumbh Mela ..... 78
- Maagh Bihu ..... 79
- Losar Festival..... 79
- Guru Gobind Singh ..... 79
- First Swadesh Darshan project in Meghalaya ..... 80
- Gandhi Circuit..... 80
- Champaran Satyagraha ..... 80
- Pravasi Bharatiya Divas ..... 81
- World Capital of Architecture ..... 81

**Geography ..... 81**

- Vaduvoor Bird Sanctuary ..... 81
- Chadar Trek ..... 82

**Polity ..... 82**

- Nagaland under AFPSA ..... 82
- Renaming of Allahabad ..... 82
- Vote on Account (VoA) ..... 82
- Poll Symbols..... 83
- Law Ministry on Judges' Retirement Age ..... 83
- Consultative Committee ..... 83

**Government Initiatives ..... 84**

- Department for Promotion of Industry and Internal Trade ..... 84
- Unispace Nano-satellite Assembly & Training Program ..... 84
- Small Farmers' Agri-Business Consortium ..... 84
- Technical Textile ..... 84
- Vande Bharat Express..... 85
- Chin refugees ..... 85
- ELISA Kits ..... 85
- Tamil Nadu Defense Industrial Corridor ..... 85
- Deen Dayal Hastkala Sankul..... 86

**Government Schemes ..... 86**

- Development of Particularly Vulnerable Tribal Groups (PVTG)..... 86
- Deendayal Disabled Rehabilitation Scheme..... 86
- National Agricultural Higher Education Project (NAHEP) ..... 86
- Indian Post Payment Bank (IPPB)..... 86
- Menstrual Hygiene for Adolescent Girls Scheme ..... 87
- Cyber Crime prevention against Women and Children Scheme..... 87
- Central Information Commission ..... 87

**Bilateral Issues..... 88**

- India-Myanmar-Thailand Trilateral Highway ..... 88

**International organisations ..... 88**

- US & Israel Quits UNESCO ..... 88
- UNESCO ..... 88
- World Economic forum (WEF)..... 89

**Economy ..... 89**



Swap ratio .....	89	Yutu 2 .....	97
U K Sinha Committee.....	89	Sub-glacial Antarctic Lakes Scientific Access.....	97
Currency Swap Arrangement.....	89	Kyasanur Forest Disease .....	97
Bilateral Swap Arrangement.....	90	Congenital Central Hypoventilation Syndrome.....	97
Status paper on Government Debt .....	90	Global Syndemic.....	97
e-Nam Inter State Trade .....	90	New Delhi metallo-beta-lactamase-1.....	98
Diffo Bridge.....	90	<b>Defence .....</b>	<b>98</b>
Renukaji Multipurpose Dam Project .....	91	INS Kohassa.....	98
<b>Environment .....</b>	<b>91</b>	Biojet fuel for Aircraft .....	98
Lake Urima .....	91	IAFTX 2019 .....	98
Invasion of Shola Grasslands .....	91	Sea Vigil 2019 .....	99
Firecracker ban on Galapagos Islands .....	91	Global Talent Competitiveness Index.....	99
Thawing of Permafrost .....	92	Climate Change Performance Index .....	99
Vulture and Raptor Survey .....	92	Total Fertility Rate.....	99
Satkosia Tiger Reserve .....	93	The Future of Rail report .....	99
Pong Dam Wetlands .....	93	Oxfam Report 2019 .....	100
ZSI Amphibian List .....	93		
Cinereous Vulture .....	93		
Mugger Crocodile .....	93		
Sarus Crane.....	94		
Golden Langur .....	94		
Living Fossils.....	94		
<b>Science and Technology.....</b>	<b>95</b>		
Ultima Thule.....	95		
Juno and Jupiter Volcanic Plumes .....	95		
Super Blood Wolf Moon.....	95		
X-Calibur Telescope.....	96		
MICROSAT-R and KALAMSAT .....	96		



**JANUARY 2019**

**G.S PAPER II**

## **1. POLITY**

### **1.1 Reservation for the 'Poor Forward'**

#### **Why in news?**

The Union Cabinet has cleared a Bill seeking to provide 10% reservation to the economically backward among the 'general category'.

#### **What does the Bill propose?**

- It seeks to provide 10% reservation in government higher education institutions and government jobs to the **economically weaker sections among the upper castes**.
- This refers to non-Dalits, non-Other Backward Classes (OBCs) and non-tribals - essentially, the upper castes or so-called 'forwards'.
- It will apply for general category individuals -
  1. whose family together earn less than Rs.8 lakh per annum
  2. who have less than 5 acres of agricultural land
- It also excludes those individuals whose families own or possess -
  1. a residential flat of area 1,000 sq ft or larger
  2. a residential plot of area 100 yards or more in notified municipalities
  3. a residential plot of area 200 yards or more in areas other than notified municipalities.
- The proposals in the Bill, to become a reality, will need an amendment of -
  1. Articles 15 (prohibition of discrimination on grounds of religion, race, caste, sex or place of birth) of the Constitution
  2. Article 16 (equality of opportunity in matters of public employment) of the Constitution
- The amendment will have to be ratified in both Lok Sabha and Rajya Sabha, by at least two thirds of members present and voting.
- It also has to be passed by the legislatures of not less than half the states.

#### **What are the contentions with the present Bill?**

- Violation of Constitution - Articles 330-342 under Part 16 of the Constitution outline special provisions for certain classes.
- The Constitution identifies only four such classes - SCs, STs, Backward Classes and Anglo Indians.
- The Constitutional promise is explicitly for social exclusion and discrimination.
- Notably, the "socially and educationally backward classes" was the target group in quotas for OBCs.
- So the quota for the poor among the upper castes has been seen essentially as a poverty alleviation move dressed up as reservation.
- Ambiguity - There have been disagreements as to the proportion of population living in poverty in the country.
- The Arjun Sengupta Committee (April 2009) estimated that 77% of India's population were surviving on less than Rs 20 per day.
- In November 2009, Suresh Tendulkar Committee estimated India's combined rural-urban poverty headcount ratio in 2004-05 at 37.2%
- Given this, the Rs 8 lakh per annum limit in the Bill clashes with the poverty line concepts and seems arbitrarily set up to cover a wider proportion.

#### **How does it violate the Constitution?**



- Definition of backward class - A nine-judge Constitution Bench of the Supreme Court reiterated this view point in the Indira Sawhney case of 1992.
- It categorically held that “a backward class cannot be determined only and exclusively with reference to economic criterion.”
- “It may be a consideration or basis along with, and in addition to, social backwardness, but it can never be the sole criterion”.
- Sacrifice of Merit - A total 59% (49%+10%) quota would leave other candidates with just 41% government jobs or seats. This may amount to “sacrifice of merit” and violate Article 14.
- Basic Structure - If the government proposes to bring a constitutional amendment to include the 10% quota KesavanandaBharati judgment may stand in the way, as it violates Article 14.
- The judgment held that constitutional amendments which offended the basic structure of the Constitution would be ultra vires.
- This proposed Bill finds an echo in an ordinance promulgated in Gujarat in 2016, which provided 10% quota to upper castes there.
- But the Gujarat High Court in the DayaramKhemkaranVerma Vs State of Gujarat quashed the ordinance in August 2016.

### What were the earlier committee recommendations?

- The first Backward Classes Commission was appointed under Article 340(1) in 1953 under the Chairmanship of Kaka SahebKalelkar.
- It was to determine the criteria to identify people as socially and educationally Backward Classes.
- It was also tasked to recommend steps to ameliorate their condition.
- The Commission interpreted 'socially and educationally backward classes' as relating primarily to social hierarchy based on caste.
- The second Backward Classes Commission was appointed in 1978 under B P Mandal to review the state of the Backward Classes.
- It submitted its report in 1980, but no measure was taken on it until the V P Singh government in 1990.
- It recommended 27.5% reservations in government jobs for OBCs.

### What are the other state proposals?

- In 2008, Kerala decided to make reservations for economically backward among the forwards.
- It proposed to reserve 10% seats in graduation and PG courses in government colleges and 7.5% seats in universities.
- An appeal is pending in the Supreme Court in this regard.
- In 2011, UP CM wrote to the central government asking for reservation for upper-caste poor.
- In 2008 and 2015, the Rajasthan Assembly passed Bills to provide a 14% quota to the economically backward classes (EBCs) among the forward castes.

## 1.2 Concerns with Collegium system

### Why in news?

SC collegium scrapped its own decision it took previously to appoint two judges and has made fresh appointments.

### What is the background?

- The apex court is presently functioning with 26 judges as against the sanctioned strength of 31, leaving five clear vacancies.
- Last month, the Supreme Court had recommended the elevation of Justice Pradeep Nandrajog, the Chief Justice of Rajasthan High Court and Justice Rajendra Menon, the Chief Justice of Delhi High Court.



- However, a new collegium on January 10, which was formed after Justice Madan Lokur retired, decided to elevate Justice Maheshwari and Justice Khanna as SC judges.
- Thus, the collegium revisited its decision made at an earlier meeting.
- The elevation was made questionable, since it was criticised that the elevation has been done ignoring 32 more senior judges.
- The allegation is not merely one concerning the seniority of the two appointees.
- Rather, it is the much graver charge of arbitrarily revoking a decision that was made last month.

#### What are the reasons?

- The official reasons are in the public domain in the form of a resolution.
- It claims that even though some decisions were made last month, the required consultations could not be undertaken and completed in view of the winter vacation.
- When the collegium met again this month, its composition had changed following the retirement of Justice Madan B. Lokur.
- Hence, it was decided that it would be appropriate to have a fresh look at the matter, as well as the additional material.
- Also, the collegium made a claim that new material had surfaced on the process which has made the names of the two persons to be left out from the current list.
- However, it is not clear what the material is and how it affected their suitability.
- This lack of clarity shines a spotlight on the opaque collegium system of appointments in the higher judiciary.

#### What are the concerns?

- It is not clear whether the retirement of one judge shall be a ground to withdraw a considered decision, even if some consultations were incomplete.
- It is now widely accepted that seniority cannot be the sole criterion for elevation to the Supreme Court.
- However, the fact that there are three other judges senior to Justice Khanna in the Delhi High Court itself, two of them serving elsewhere as chief justices, is bound to cause some misgivings.
- Hence, the credibility of the collegium system has once again been called into question.
- Also, the Collegium system is still not accountable to any other authority.

#### What should be done?

- The process for the appointment of judges lies at the heart of an independent judiciary.
- The Second Judges' case of 1993 led to the formation of a collegium of high-ranking judges which has since then identifying persons for appointment to the SC and high courts.
- While the collegium began with a desire for judicial independence, the recent collegium appointments show that it is not transparent.
- The lack of a written manual for functioning, the absence of selection criteria, the arbitrary reversal of decisions already taken and the selective publication of records of meetings shows that the Collegium is getting opaque.
- Also, the higher judiciary has exempted itself from the Right to Information Act.
- Thus, India needs to restore the credibility of the higher judiciary by making the process of the appointing judges transparent and the collegium must also open its proceedings to the public.



### 1.3 Reinstating CBI Director

Click [here](#) to know more on the issue

#### Why in news?

SC recently reinstated senior IPS officer Alok Verma as CBI Director.

#### What are the court's directions?

- The Central Vigilance Commission (CVC) and the Department of Personnel & Training divested the powers, functions, duties, supervisory role, etc. of Verma as CBI Director through an order passed in October 2018.
- Accordingly, it has recommended the government to remove Mr. Verma on allegations of bribery and undue interference in corruption cases.
- The court recently set aside the order and directed that the matter will now be examined by the Committee under Section 4A (1) of the Delhi Special Police Establishment (DSPE) Act, 1946.
- The committee comprises the Prime Minister, the Leader of Opposition and the Chief Justice of India.
- It also directed that the issue of divestment of power and authority of the CBI Director is still open for consideration by the Committee.
- Hence, the selection committee should meet within a week and consider Mr. Verma's powers and authority.
- Until then, he has been restrained from making any policy decisions and his role will be confined only to the exercise of the ongoing routine functions.

#### What does the judgement reveal?

- The judgment reveals that neither the CVC nor the DoPT is competent to order Mr Verma's transfer under the terms of the CVC Act and the Delhi Special Police Establishment Act.
- The government contented that stripping the CBI Director of his duties did not amount to a transfer, but only a measure to deal with an extraordinary situation.
- However, the court has rejected the government's decision and has strengthened the principle that the head of the agency should be insulated against any form of interference.
- The court upheld the decision in the **Vineet Narain case** which has ruled that the removal of CBI Director, including sending him on leave, can only be done by the high powered Committee that selects the Director.
- Thus, the judgment makes it clear that Verma will have the power to exercise routine functions.
- This would mean that he can take decisions regarding the important investigations being undertaken by the CBI.
- Also, though the government has accused the court of judicial overreach into its domain, the SC has underlined the Union government's failure to observe institutional propriety in this case.

#### What are the concerns with the judgement?

- **Judicial Evasion** - The court avoids deciding a thorny and time-sensitive question, but its very refusal to decide is, effectively, a decision in favor of the government, because it is the government that benefits from the status quo being maintained.
- As a matter of law SC's decision was strange, Mr. Verma's challenge, to recall, was that his divestment was procedurally flawed.
- The Supreme Court's limited remit was to decide that question, It was not for the court to then direct the committee to consider the case against Mr. Verma.
- Still less was it for the court, after holding that Mr. Verma's divestment was invalid in law, to place fetters on his powers as the Director, thus presumptively placing him under a cloud of suspicion.
- It is not appropriate, however, for a Constitutional Court that is tasked with providing clear answers to the legal questions before it.





- Supreme Court's Aadhaar judgment, although private parties were banned from accessing the Aadhaar database, the ambiguity in the court's holding meant that different parties interpreted the judgment differently, lead to an amendment to the Aadhaar Act that attempts to circumvent the judgment by letting in private parties through the backdoor.
- This is once again, a reminder that much like judicial evasion ambiguity is not neutral, it primarily benefits the party that has the power to exploit it, and that party is invariably the government.

#### 1.4 Clause 6 of the Assam Accord

##### What is the issue?

- Union Cabinet has cleared a proposal to set up a high-level committee to look into the implementation of Clause 6 of the Assam Accord of 1985.
- It is imperative to understand the significance of Clause 6, especially in the context of the National Register of Citizens (NRC) for Assam and the Citizenship (Amendment) Bill, 2016.

##### What is Clause 6 of the Assam Accord?

- **Purpose** - Assam Accord came at the culmination of a movement against immigration from Bangladesh.
- For recognition as citizens, the Accord sets March 24, 1971 as the cutoff date.
- It was proposed that the immigrants up to the cutoff date would get all rights as Indian citizens.
- So, Clause 6 was inserted to protect, preserve and promote the cultural, social, linguistic identity and heritage of the "Assamese people".
- It seeks to offer constitutional, legislative and administrative safeguards to the Assamese people.
- "**Assamese people**" - As agreed by most stakeholders, the NRC of 1951 was the basis for defining "Assamese people".
- The current NRC update is based on March 24, 1971, which defines citizenship.
- On the other hand, Clause 6 relates to "Assamese people".
- If 1951 is accepted as the cutoff, it would imply that those who migrated between 1951 and 1971 would be Indian citizens.
- However, they would not be eligible for safeguards meant for "Assamese people".

##### How has the implementation been?

- AASU (All Assam Students Union) and the Assam government had submitted a number of proposals in furtherance of Clause 6.
- Although some steps have been taken in this regard, the clause remains to be implemented fully.
- The Assam government website, however, describes a number of steps as part of the implementation of Clause 6.
- These include cultural centres and film studios, and financial assistance to historical monuments and xatras (Vaishnavite monasteries).
- In 1998, the Home Ministry set up the sub-committee under G K Pillai.
- In 2006, the state government set up a committee to help define "Assamese".
- In 2011, it constituted a Cabinet sub-committee to deal with Clause 6.

##### What are the demands?

- Former CM Prafulla Mahanta was one of the signatories to the 1985 Accord as the then AASU President.
- Mahanta views "safeguards" as reservation of electoral seats, and land and political rights.
- There are also demands that it should include rights over natural resources and protection of culture of the indigenous people.

- It is also demanded that one needed to be a citizen in or prior to 1951 to purchase land, and similar laws for jobs too are called for.
- E.g. Arunachal Pradesh entrusts rights over natural resources on the basis of ethnic community
- Likewise, Manipur passed a Bill, last year, to define “Manipuri people” with 1951 as cutoff.

### What will the proposed committee do?

- The committee would examine the effectiveness of actions since 1985 to implement Clause 6.
- It would hold discussions and assess the quantum of reservation of seats in the Assembly and local bodies for Assamese people.
- It will also assess the steps required to protect Assamese and other indigenous languages of Assam.
- Besides, the committee will also look into the issue of reservation in state government jobs and other measures.

### What are the challenges?

- The AASU has described it as an effort to mislead people before pushing the Citizenship (Amendment) Bill, 2016.
- The Bill proposes to grant citizenship to non-Muslim immigrants from 3 countries including Bangladesh.
- This has divided residents of Brahmaputra Valley (mostly anti-Bill) and Barak Valley (pro-Bill).
- The government and the committee should thus take into account these concerns too while deciding on the safeguards.

## 1.5 Protest in Mizoram - Citizenship (Amendment) Bill and the Chakmas

### What is the issue?

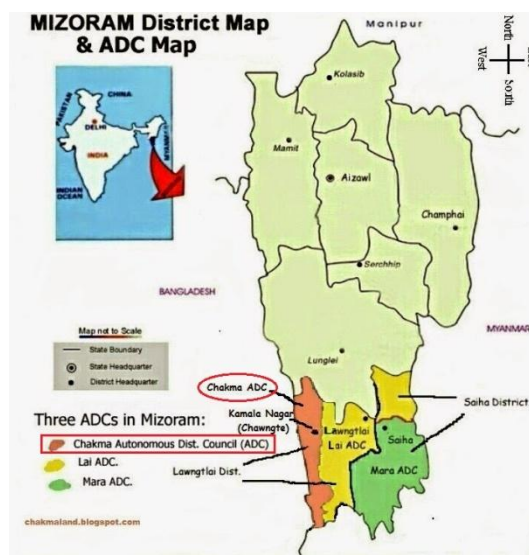
- Among various Northeastern states protesting against the Citizenship (Amendment) Bill, Mizoram witnessed massive demonstrations. Click [here](#) to know more on the Bill.

### Why is the protest?

- The Citizenship (Amendment) Bill amends the Citizenship Act, 1955.
- It relaxes the citizenship eligibility rules for immigrants belonging to six minority (non-Muslim) religions from Afghanistan, Bangladesh or Pakistan.
- Political parties and non-political groups in the Northeast (NE) have protested due to the potential impact on the region's demography.
- The Bill is also questioned for its constitutionality as it grants citizenship on the basis of religion.

### Why is Mizoram's case different in this regard?

- For protesters in Assam, Meghalaya and Tripura, the concern is about Hindu immigrants from Bangladesh.
- The Assam Accord lays down 1971 as the cutoff for acceptance as citizens.
- The National Register of Citizens is being updated based on this cutoff, which does not differentiate on the basis of religion.
- But in Mizoram, the concern is not about Hindu immigrants from Bangladesh but about Chakmas, a tribal and largely Buddhist group.
- The Chakmas are present in parts of the Northeast, and the Chittagong Hill Tracts of Bangladesh with which Mizoram shares an international border.





- While Christians form 87% of Mizoram's 11 lakh population (2011), Chakmas number about 1 lakh.

### **What is the concern with the Chakmas?**

- Chakmas are clearly identified as 'non-Mizo' by the Mizos, and there is no attempt at incorporating them as Mizo.
- Notably, the Chakmas do not want to identify themselves as Mizo.
- Certain sections in Mizoram blame Chakmas for illegal migration from Bangladesh, which the community denies.
- Large-scale migrations are said to have taken place in 1964.
- This was caused by inundation of their land due to the damming of the Karnaphuliriver for a hydro-electric project in Bangladesh.
- 1980-4 migrations were caused by insurgency in the Chittagong Hill Tracts led by the Hills Peoples' Movement of Bangladesh.
- In 1901, there were only 198 Chakmas in Mizoram and by 1991 it was over 80,000, as per census data.
- The growth rate is far more than normally possible, proving that there has been influx from Bangladesh.
- The state has seen ethnic violence, names of Chakmas being struck off voters' lists, and denial of admission to Chakma students in college.
- There are even calls to expel them from Mizoram.
- Given these, if the Bill is passed, Chakmas who have illegally migrated from Bangladesh will become legal Indian citizens.
- Also, in some time, possibly Mizos could become a minority in their own land.
- The protests are serious because protesters, notably, displayed posters that proclaimed "Hello China, bye bye India".

### **What is the Chakmas' stance?**

- The reliability of the Census figures between 1901 and 1941 cannot be ascertained as they are not available with the Census Directorate, Mizoram.
- Chakma activists cite a 2015 report submitted by the government of Mizoram to the NHRC (National Human Rights Commission).
- The report cites Census data that puts the Chakma population at around 15,000 in 1951 and 97,000 in 2011.
- Reportedly, in the 1960s, Chakmas had migrated from the Chittagong Hill Tracts, but all of those people were settled in Arunachal Pradesh.
- Chakmas deny any migrations into Mizoram citing the structural discrimination against them in Mizoram.

## **1.6 Report on Death Penalty in India**

### **Why in news?**

No of death sentences awarded by trial courts saw a sharp rise in 2018, as per a report on death penalty in India.

### **What are the highlights of the report?**

- The report was prepared by the National Law University, Delhi.
- The 162 death sentences by trial courts in 2018 are the highest in a calendar year since 2000.
- In 2017, capital punishment was accorded to 108 persons.
- No death sentences were pronounced in 8 states - Arunachal Pradesh, Goa, J&K, Meghalaya, Mizoram, Nagaland, Sikkim, and Tripura.
- SC commuted death sentences to life imprisonment in 11 of the 12 cases it heard.
- It upheld the sentence for 3 persons convicted in the December 16 Delhi gangrape case.

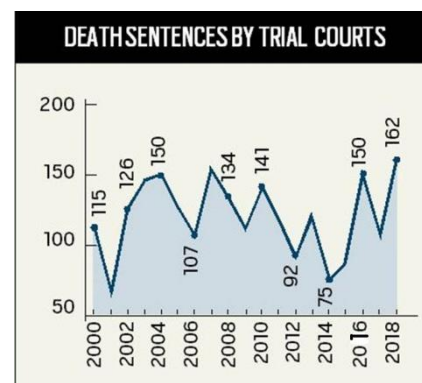
- The number of people on death row in India as of December 2018 stands at 426.

### What is the possible reason for the rise?

- The increase in the number of death sentences could be the result of the recent legislative intervention.
- It extended capital punishment to non-homicide crimes (homicide - murder).
- The Parliament amended IPC to provide for death as a possible punishment in cases of rape and gangrape of girls below the age of 12.

### What is the case with Madhya Pradesh?

- Among states that invoked the IPC amendment, Madhya Pradesh did so in the highest number of cases involving child sexual assault.
- This resulted in death sentences to 22 people in 2018, of whom 7 were sentenced in cases concerning sexual assault of girls below 12 years not involving murder.
- In contrast, only 6 had been accorded the death penalty by sessions courts in MP in 2017.
- The MP government has also introduced a rewards scheme for public prosecutors who seek the death penalty.



### How has judiciary approached death penalty?

- SC upheld the constitutionality of capital punishment in Bachan Singh case (1980).
- But since then, there have been demands for re-examining the need.
- The Court could previously dismiss the Special Leave Petitions (SLPs) without giving any reasons ('in limine' dismissals) and not admitting them to be heard as appeals.
- In Babasaheb Kamble v State of Maharashtra 2018, SC finally did away with 'in limine' dismissals of SLPs in death penalty cases.
- The Court held that review petitions in death sentence cases will mandatorily be heard in open court.
- The SC also recognised the right of death row prisoners for meeting mental health professionals.

### What is the government's stance?

- There is an enthusiasm in the government for legislative expansion of capital punishment.
- Besides legislating for death in child sex assault cases, the POCSO Act was also amended.
- It introduced death penalty for penetrative aggravated sexual assault on children below the age of 18.
- Also, in August 2018, a Bill was introduced, providing for the death penalty or life imprisonment for crimes involving piracy at sea.
- India also voted against the UN General Assembly's draft resolution proposing a ban on the death penalty.

## 1.7 Scrapping Educational Qualification

### Why in news?

Rajasthan recently abolished the condition of a minimum educational qualification to contest local body elections.

### What does the 2015 act say?

- The Rajasthan Panchayati Raj (amendment) Bill, 2015, made Class X mandatory for contesting municipal elections and for contesting zila parishad or panchayat samiti elections.
- To contest the sarpanch elections, an aspirant from the general category must have passed Class VIII and a SC/ST aspirant must have passed Class V.
- It has also made a functional toilet mandatory in the house of a contestant.
- By this, Rajasthan became the first State in the country to fix a minimum educational qualification for contesting elections to the Panchayati Raj Institutions.

### What were the concerns?

- According to the 2011 Census, the literacy rate was 52% for women and 79% for men in the state of Rajasthan.
- Hence, the move was ill-considered from the very beginning.
- The amendment was made based on the assumption that its voters tended to be younger.
- It, however, penalised the people for failure to meet certain social indicators, when it is the state's responsibility to provide the infrastructure and incentives for school and adult education.
- It has defeated the very purpose of the panchayati raj institutions, to include citizens in multi-tier local governance from all sections of society.
- Also, there was no justification for insisting on educational qualification at the grassroots level when there was no such condition for elections to State Assemblies and Parliament.
- Though making toilets mandatory had given a push to the cleanliness drive, many homes didn't have a functional toilets or were built only at the time of passage of the bill.
- Hence, the Rajasthan government recently abolished the provisions on educational qualifications, since laws should not become hurdles for the masses to exercise their rights.

### What will be the impact?

- This is a progressive move and will restore the right to contest to a large section of the population in the State.
- The state of Haryana also made the minimum education qualification, following Rajasthan, to contest Panchayat poll as Class X for general candidates, Class VIII pass for women and Dalits, Class V for Dalit women.
- The Act was also upheld that year by the Supreme Court in Rajbala v. State of Haryana case in 2015.
- This shows that the temptation to expand educational eligibility requirements remains across the country.
- Hence, the recent decision of the Rajasthan government recast the debate on finding ways and means by which elected bodies are made more representative.

## 1.8 Issues with Teachers' quota in Universities

### Why in news?

SC recently dismissed a Special Leave Petition filed by the HRD against a 2017 order of Allahabad High Court.

### What did the Allahabad High Court rule?

- The matter of Vivekanand Tiwari & Anr v Union of India and Ors dealt with the recruitment of teachers in Banaras Hindu University (BHU), a central educational institution.
- The petitioners sought cancellation of the then recruitment drive in the University.
- They demanded a fresh beginning, treating each department as a unit for calculating the number of faculty posts reserved for SCs, STs and OBCs.
- At that time, as mandated by the University Grants Commission (UGC), the number of SC, ST, and OBC faculty positions were calculated by treating the university as a "unit".
- All posts of the same grade across departments in a university were grouped together to calculate the quota.
- The High court upheld the plea and criticised the UGC for applying reservation in teaching jobs in a "blanket manner".
- It clarified that if the University is taken as a 'Unit', it could result in some departments/subjects having all reserved candidates and some having only unreserved candidates which would be discriminatory and unreasonable and is violative of Article 14 & 16.

### What was the basis of this judgement?

- The posts of Assistant Professor, Reader, Associate Professor and Professor of each subject or the department are placed in the same pay-scale.



- But their services are neither transferable nor they are in competition with each other.
- It is for this reason that clubbing of the posts for the same level treating the University as a 'Unit' would be completely unworkable and impractical.
- Thus, the HC quashed Clauses 6(c) and 8(a)(v) of the guidelines framed by the UGC in 2006, and the letter of the UGC dated February 19, 2008, which forbade the practice of creating department-wise cadres.
- While in the case of Clause 8(a)(v), the HC cited the interpretation of the Supreme court for implementation of the roster system in R K Sabharwal and Ors vs State of Punjab and Ors case.
- The SC had then ruled that reservation rosters in government services should be with reference to posts, and not vacancies.
- Also, the roster would be implemented in the form of a running account from year to year.

### How did UGC change its formula?

- The Allahabad HC decision was upheld by the Supreme Court in June 2017.
- Subsequently, the UGC recommended to the HRD Ministry that the High Court's verdict should be applied to all universities.
- The amended Section 6(c) now says that in case of reservation for SC/ST, all the Universities shall prepare the roster system keeping the department/subject as a unit for all levels of teachers as applicable.
- The amended Section 8(a)(v) says that the roster shall be applied to the total number of posts in each of the categories [e.g., Professor, Associate Professor, Assistant Professor] within the department/subject.
- However, there was widespread controversy following the order of the UGC.
- Hence, the HRD Ministry moved a Special Leave Petition before the Supreme Court last year, challenging the Allahabad HC order.

#### OLD FORMULA VS NEW

Number of reserved posts, if BHU takes university as a unit (OLD)

Name of posts (cadre)	General	SC	ST	OBC	Total
Professor	197	38	18	00	253
Associate Professor	410	79	39	00	528
Assistant Professor	581	172	86	310	1,149
Total	1,188	289	143	310	1,930

Number of reserved posts, if BHU takes department as a unit (NEW)

Name of posts (cadre)	General	SC	ST	OBC	Total
Professor	250	03	00	00	253
Associate Professor	500	25	03	00	528
Assistant Professor	812	91	26	220	1,149
Total	1,562	119	29	220	1,930

\*\*\*Data shared in govt SLP filed in SC this month

### Why did government appealed against?

- Since the UGC order of March 2018, of the 706 vacancies advertised by 11 central universities, only 2.5% posts were for SCs, and none for STs.
- A projection was presented by Banaras Hindu University to the HRD Ministry to show how the new formula would have impacted.
- It showed that the posts reserved for SCs would be reduced by half, those for STs by almost 80%, and those for OBC teachers by 30%.

### What are the other shortcomings?

- Reservation based on department as 'unit' means the number of reserved posts will be determined separately for each department.
- A department with only one professor cannot have reserved posts.
- This will drastically reduce the number of SC, ST, and OBC teachers in higher education.
- Under the old formula, posts of professors across different departments were clubbed together, and there was a better chance of positions being set aside for SCs, STs, and OBCs.
- Since reservation will only be implemented by rotation, it could take years to ensure proportional representation among teachers in higher education.



## 2. GOVERNMENT ACTS, AND POLICIES AND INTERVENTIONS

### 2.1 Muslim Women Bill, 2018

#### Why in news?

The triple talaq bill was recently passed in the Lok Sabha and is to be passed by the Rajya Sabha.

#### What is the Bill on?

- The Muslim Women (Protection of Rights on Marriage) Bill, 2017 was introduced and passed in Lok Sabha.
- But the 2017 Bill was listed for withdrawal, due to lack of consensus in the Rajya Sabha.
- So an Ordinance was passed in September, 2018 for the interim period.
- The Muslim Women (Protection of Rights on Marriage) Bill, 2018 now replaces the ordinance.
- The government rejected the Opposition's demand in the Rajya Sabha to send the Bill to a joint select committee for further scrutiny.
- So there is again a standoff in the Rajya Sabha.

#### What are the key changes in 2018 Bill?

- The Bill makes all declaration of talaq, including in written or electronic form, to be void (i.e. not enforceable in law) and illegal.
- Definition of talaq includes talaq-e-biddat or any other similar form of talaq pronounced by a Muslim man resulting in instant and irrevocable divorce.
- **Offence and penalty** - The Bill makes declaration of talaq a cognizable offence.
- It could attract up to 3 years imprisonment with a fine.
- [A cognizable offence is one for which a police officer may arrest an accused person without warrant.]
- The offence will be cognizable only if information relating to the offence is given by -
  1. the married woman (against whom talaq has been declared), or
  2. any person related to her by blood or marriage
- **Bail** - The Bill provides that the Magistrate may grant bail to the accused.
- The bail may be granted only after hearing the woman.
- The Magistrate has to be satisfied that there are reasonable grounds for granting bail.
- **Compounding** - The offence may be compounded by the Magistrate upon the request of the woman.
- Compounding refers to the procedure where the two sides agree to stop legal proceedings, and settle the dispute.
- The terms and conditions of the compounding of the offence will be determined by the Magistrate.
- **Allowance** - The woman is entitled to seek subsistence allowance from her husband for herself and for her dependent children.
- The amount of the allowance will be determined by the Magistrate.
- **Custody** - The woman is entitled to seek custody of her minor children.

#### What are the concerns?

- Contrary to the intent of the legislation, it would weaken the position of Muslim women.
- The question over the need for a law when the five-judge Supreme Court Bench had outlawed the practice remains unanswered.
- The Bill stipulates a three-year prison sentence and a fine. It is unclear why a civil contract should carry a criminal penalty.

- The original Bill stated that the offence would be non-bailable, which has been reduced to a bailable offence in the latest version.
- The woman is entitled to receive from her husband a subsistence allowance for her and her dependent children.
- Expecting a man, who is incarcerated for 3 years and with less chance to earn a livelihood, to pay allowance is illogical.

## 2.2 Amendments to POCSO Act

### Why in news?

Cabinet has recently approved amendments to the Protection of Children from Sexual Offences (POCSO) Act, 2012.

### What are the amendments proposed?

- The act will be amended to introduce the death penalty as a punishment for offences of penetrative sexual assault and aggravated penetrative sexual assault.
- The following cases will be treated as “aggravated offence”.
  1. Cases of sexual assault by police officers,
  2. by members of the armed forces,
  3. by public servants,
  4. by relatives,
  5. gang-penetrative sexual assault,
  6. where the survivor is less than 12 years old and
  7. attempt to inject hormones in children to attain early sexual maturity for the purpose of penetrative sexual assault.
- A hefty fine would be imposed for not deleting, not destroying child pornographic material or not reporting child pornography.

### What are the concerns?

- **Burden of proof** - Usually, in criminal cases, the burden of proof lies on the prosecution, and the guilt must be proved beyond reasonable doubt.
- Under POCSO, however, there is a presumption that a person who is prosecuted for an offence has actually committed the offence, unless the contrary is proved (Section 29).
- Instead of “innocent until proven guilty”, the court assumes that the accused is guilty once the prosecution lays the foundation of the case.
- The Act also presumes that the accused person had a sexual intent when touching the child (Section 30).
- The amendment does not address this existing issue with the bill.
- Under Article 21 of the Constitution, a person can only be deprived of their life or liberty in accordance with the procedure established by law, which should be just, fair and reasonable.
- Thus, by additionally imposing the death penalty for offences that already carry such stringent presumptions violates the right to life guaranteed under the Constitution.
- **Evidence** - To overturn the presumptions, the accused needs to bring witnesses and documents in their defence or conduct a stellar cross-examination, which require high quality lawyering.
- However, if the accused is in jail, their family will have to collect evidence and find witnesses.
- For migrant workers, it is even more difficult since their neighbours or employers may not readily give evidence.





- **Legal procedure** -The 262nd Law Commission Report has recommended universal abolition of the death penalty, except in terror cases.
- This has not been given due credence.
- **Premise** - Further, the reason given for introducing the death penalty is that it will deter child sexual abuse.
- However, the government does not cite any evidence to prove that the death penalty can achieve this goal, in the absence of better policing and shorter trials.

#### **What are the other issues with death penalty report?**

- Death row prisoners are typically overwhelmingly poor, lower caste, or religious minorities with 76% of death row prisoners were from backward classes and religious minorities.
- Economic vulnerability had also impacted the experience of the prisoner during investigation and trial.
- Prisoners suffer from lack of access to lawyers during interrogation and many of them had experience of custodial violence.
- At the national level, 24.5% of those on death row were from Scheduled Castes and Scheduled Tribes with Maharashtra, Karnataka, Madhya Pradesh, Bihar, Jharkhand and Delhi being above the national average.
- Also, as cases travelled up the court hierarchy, the proportion of general category prisoners fell, and the proportion of SC and ST prisoners increased.
- Thus, introducing the death penalty in POCSO is likely to send more poor, lower caste and religious minority accused to death row.

### **2.3 Aadhaar Amendment Bill**

#### **Why in news?**

Lok Sabha recently passed The Aadhaar and Other Laws (Amendment) Bill, 2018.

#### **What is the need?**

- **Verdict** - The changes follow the recent Supreme Court's verdict in regards with Aadhaar.
- It upheld Aadhaar but limited its use for only certain subsidies and schemes funded by the Consolidated Fund of India.
- The court disallowed private companies from asking for Aadhaar for authentication.
- The amendments now seek to work on some of the restrictions imposed by the court.
- **Regulation** - Over 122 crore Aadhaar numbers were issued over the period.
- So, given the widespread use of Aadhaar, it is essential to have a regulatory framework for its operation.
- Also, UIDAI needed to be empowered to take enforcement actions against errant entities.

#### **What is the objective?**

- The objective is to amend the laws relating to the use of Aadhaar and the powers of the Unique Identification Authority of India.
- The Bill seeks to amend at least 27 sections of three existing laws. These are:
  1. The Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act, 2016
  2. The Indian Telegraph Act, 1885
  3. The Prevention of Money Laundering Act, 2002

#### **What are the major provisions?**

- **Aadhaar for authentication** - The Aadhaar Act allowed for the state and any body corporate, Aadhaar-based authentications.



- But the SC had said that Aadhaar can only be sought for welfare schemes and subsidies mentioned in Section 7 of the Aadhaar Act.
- The amendments now say the central government can allow Aadhaar-based authentications, in consultation with the UIDAI.
- But this is only -
  1. if the entity is compliant with certain standards of privacy and security specified by the UIDAI
  2. if it is permitted by law
  3. for any purpose that the central government feels is in the interest of the state
- The changes to The Indian Telegraph Act and The Prevention of Money Laundering Act allow banks and telecom companies to use Aadhaar.
- But this is only in case if it is offered voluntarily by a person as a Know Your Customer (KYC) document or the only KYC document.
- But neither of the entities can make it mandatory.
- A person will have the choice to use any other valid document for KYC.
- The central government can, through a notification, allow a non-banking company too, if necessary, to perform such authentications.
- **Aadhaar for children** - The amendments say that at the time of enrolment the parents or guardians of the children would have to provide consent.
- They also allow for the children to apply for cancellation of their Aadhaar number within 6 months of achieving adulthood (18 years).
- **Complaints and penalties** - The original Act permitted only the UIDAI or officers authorised by it to make complaints in case of violations.
- With the amendments, individuals will be able to register complaints in certain cases.
- This can include impersonation, or if their Aadhaar information is disclosed without their consent.
- The amendments also give UIDAI the power to issue directions to entities in the Aadhaar ecosystem.
- The penalties to be decided by an adjudicating officer appointed by UIDAI for violations have been increased to a maximum of Rs 1 crore in certain cases.
- In case of a continuing failure, additional penalty may extend to ten lakh rupees for every day.
- The Telecom Disputes Settlement and Appellate Tribunal has been made the Appellate Tribunal for such cases.
- **Offline verification, voluntary use** - The Aadhaar Act only allowed Aadhaar to be used “subject to authentication”.
- It works when a person’s biometric information results in a positive match with the Central Identities Data Recovery information.
- This has now been changed to use it by authentication or even offline verification.
- The verification can be done “offline”, using a digitally signed copy of the Aadhaar card.
- This contains the person’s photograph, selected information and a QR code, but not the biometric information, and need not include the Aadhaar number.
- Also, people can use Aadhaar as an ID proof voluntarily, without having to authenticate.
- **UIDAI Fund** - Currently, the UIDAI deposits whatever revenue it collects in the Consolidated Fund of India.
- The amendments create a UIDAI Fund, which will now receive its revenues from fees, grants and charges.
- The revenue will be used for UIDAI’s expenses.
- **Other amendments** - In compliance with the SC's order, only High Courts (not district courts) can ask for disclosure of Aadhaar-related information.

- Only an officer of the rank of Secretary (not Joint Secretary, as earlier provisioned) can issue directions for such information in the “interest of national security”.
- The changes have made provisions for the use of virtual IDs to conceal the actual Aadhaar number of an individual.
- Section 57 of the Aadhaar Act relating to use of Aadhaar by private entities has been omitted, as it was struck down by the SC.

## 2.4 Drug Price Control - NITI Aayog

### Why in news?

The government has recently authorised NITI Aayog to recommend drugs that could be put under price control.

### What is the existing mechanism?

- The National Pharmaceutical Pricing Authority (NPPA) enforce prices and availability of the medicines in the country, under the National List of Essential Medicines (NLEM).
- **Essential Drugs** - The health ministry prepares the list of drugs eligible for price regulation.
- The department of pharmaceuticals (DoP) then incorporates NLEM into Schedule 1 of the Drugs (Prices Control) Order (DPCO).
- Following this, NPPA fixes the prices of drugs in this schedule.
- Drugs which are declared essential by NPPA would automatically come under price control.
- NPPA regularly publishes this list and their maximum ceiling prices.
- **Para 19 powers** - NPPA also exercises Para 19 powers in public interest.
- In 2013, the government had delegated these powers to NPPA, which it can exercise for setting the price cap of scheduled and non-scheduled drugs.
- These are the same powers NPPA used in 2017 to cap prices of cardiac drugs, stents and knee implants.
- NPPA also regulates prices of other health products such as stents.
- Those on the non-scheduled list are allowed a maximum annual price hike of 10%.
- More than 750 formulations are currently on India’s list of essential medicines.

**MINT GRAPHITI**

**WATCHDOG ON A LEASH**

■ Current ■ Change

Essential medicines automatically fall under price control  
**Essential medicines delinked from price control**

Health ministry prepares the list of essential medicines, DoP incorporates it into Schedule 1, NPPA fixes the prices  
**NITI Aayog panel to be recommending body to NPPA on pricing**

NPPA fixes prices for medicines on the non-scheduled list  
**The new panel to be recommending body on pricing**

NPPA exercises Para 19 powers in public interest  
**The new committee may encompass Para 19 powers**

### What are the changes made?

- **Recommending body** - From now, Standing Committee on Affordable Medicines and Health Products (SCAMHP) housed in the NITI Aayog will decide which drugs should be under price control.
- SCAMHP has been constituted to act like a recommending body to NPPA regarding prices of drugs and health products.
- In the new order, the SCAMHP will be a recommending body to NPPA regarding prices of drugs and health products.
- Also, the committee may take a matter related to pricing for examination, suo motu or on the recommendations of DoP, NPPA and the department of health and family welfare.
- The power to set price caps on other drugs has also been taken away from the NPPA and given to the committee under the NITI Aayog.
- **Para 19 powers** - Under the new order, the committee may also encompass the powers under Para 19 of DPCO.

### What are the concerns?

- The change in regulation gives arbitrary power to the committee to determine which medicine is sold at which price.
- Such mechanisms always breed lobbying, even if that is not the immediate intention.
- By making a standing committee of NITI Aayog to scrutinise NLEM, the government has diluted the mandate of affordability.
- Hence, all drugs will now undergo the scrutiny of the committee housed in NITI Aayog, of which NPPA is not a member.
- Also, the changes will weaken the functions of NPPA as an enforcement body.
- NPPA was taking strict action against those companies found to be overcharging by sending demand notices.
- With this, the ability to enforce and recovery of overcharging will be curtailed.

## 3. SOCIAL ISSUES

### 3.1 Annual Status of Education Report 2018

#### Why in news?

Annual Status of Education Report (ASER) 2018, released recently, finds some improvements in primary education.

#### What is the background?

- ASER is being released by a non-governmental organisation Pratham since 2005.
- Each year's report has been presenting a dismal picture of primary education in India.
- The reports focus on children aged between 6 years and 14 years in rural India.
- It maps the schooling status of and the impact of primary education on a child's ability to complete basic reading and arithmetic tasks.
- Despite enacting Right to Education in 2010, which has mandated free and compulsory education for each child between the age of 6 and 14 years, learning outcomes remained poor.

#### The ABCs of the report

- ▶ Only **50.3%** of all Class V students can read texts meant for Class II
- ▶ Reading ability among such students has **jumped 10 percentage points** in Kerala, 8 percentage points in Himachal Pradesh and 7 percentage points in Chhattisgarh and Odisha since 2016
- ▶ The learning deficit is prevalent across **government and private schools**
- ▶ The percentage of private school enrolment in 6-14 age group has been around **30%** in the last five years
- ▶ The dependence on private schools is much higher than the national average in states such as **Manipur** (70.4%) and **Haryana** (55.3%)
- ▶ Over 180 million students are in elementary schools; adding secondary levels, the figure is **240 million**



#### What does the latest report reveal?

- For the first time since India adopted RTE, reading abilities of Class V students in government schools have improved and their basic mathematical abilities have started growing faster.
- For instance, the proportion of government school students in Class V, who can read a Class II-level text has risen from 41.7% in 2016 to 44.2% this year.
- This ratio had been declining from 53.1% in 2008.
- Similarly, 27.3% of students in Class III can now read a Class II text, up from 21.6% in 2013.
- India has also moved further ahead on gender parity, wherein the proportion of girls in the age group of 11-14 years who stayed out of school declining from 6% in 2010 to 4.1% in 2018.
- Moreover, it is the first time that the proportion of children not enrolled in schools has fallen below 3%.
- Also, among states, the reading ability among Class V students in Kerala jumped 10 percentage points in 2018 from that in 2016.
- In Himachal Pradesh, the growth is nearly 8 percentage points and in Chhattisgarh and Odisha it is around 7 percentage points between 2016 and 2018.
- Still, data from states such as Jharkhand, West Bengal, Gujarat, Rajasthan and Tamil Nadu shows a marginal dip in the same criterion for the same cohort.

### What are the concerns?

- Despite these developments, the broader trend is still worrying.
- The basic reading and mathematics abilities of children in Class VIII continue to slowly decline.
- For instance, among Class VIII students attending government schools, the proportion that can read a Class II text has continued to decline from 83.6% a decade ago to 69% in 2018.
- The proportion is similar when it comes to mathematical abilities.
- The picture is slightly more encouraging at the Class III level, where there has been gradual improvement since 2014.
- However, even in 2018, less than 30% of students in Class III are actually at their grade level, that is, able to read a Class II text and do double-digit subtraction.
- The performance in private schools is better than government schools.
- In fact, in private schools, reading and mathematical abilities for students in both Class V and Class VIII have shown improvement.
- However, the performance difference is not great as learning deficit is present across both government and private schools.
- Traditionally, students in private schools have fared better than their government school counterparts, but that's a relative situation.
- For example, while 40% of Class VIII students in government schools can do simple division, the figure is only 54.2% in private schools.
- Private school students are believed to have better family background, both in economic and education front, which serves as a key differentiator.
- This means the improvements in educational achievements are not broad-based.
- In particular, higher primary (class VI to Class VIII) have not shown enough improvements.
- Thus, the report shows the prevalence of learning deficit and the poverty of basic reading and arithmetic skills among students in Indian schools.

### Why is learning level in schools important?

- The quality of the learning level bears directly on India's future workforce, its competitiveness and the economy.
- India's demographic dividend depends on the learning level of students.
- Since children at the higher primary level is closest to joining the labour market or the next level of education, they need adequate foundational skills such as literacy and numeracy.
- Thus, it can be revealed from the latest report that India continues to stare at a crisis and hence need concerted efforts to be taken at the earliest.

### 3.2 Increasing Youth Suicides in India

#### What is the issue?

In India youth suicides are ubiquitous, and the educational ecosystem must take the blame for this.

#### What are the incidences of suicides in India?

- In India there have been frequent news reports of suicides taking place in coaching centers that train students for medical and engineering entrance examinations.
- According to the National Crime Records Bureau, between 2014 and 2016, 26,476 students committed suicide in India. Of them, 7,462 committed suicide due to failure in various examinations.
- The deaths of 49 students in Navodaya Vidyalaya schools in the last five years, and of three students preparing for the IIT entrance examinations in Kota in a span of four days, brings the issue of youth suicides to the fore again.



- More youths are taking their lives due to the fear of failing in examinations, constant flak from teachers, bullying from peers, family pressure and a loss of a sense of a decent future.

### **How education eco system affects students?**

- The rising number of student suicides provokes a serious discussion on the way in which outcomes of education are perceived in India.
- The instrumental value of education in India is its potential in generating socio-economic and cultural capital through a promise of decent job opportunities in the future.
- But the education system has not been successful in generating enough job options.
- For instance, the International Labor Organization's World Employment and Social Outlook Trends Report of 2018 says that in 2019, the job status of nearly 77% of Indian workers would be vulnerable and that 18.9 million people would be unemployed.
- With their job future being so bleak, students are put under constant pressure to perform.
- They have failed to learn to enjoy the process of education, Instead, the constant pressure and stress has generated social antipathy and detachment among them.
- With a loss of community and other social bonds, students in schools, colleges and coaching centers end up taking their lives.

### **What are the issues in measures taken by government?**

- Following the reports of suicides the National Human Rights Commission sought information from the Ministry of Human Resource Development on whether trained counsellors were present on campus.
- HRD Ministry is also setting up an expert committee to look deep into the matter.
- According to NavodayaVidyalayaSamitis, merely one or two training sessions are included to sensitize the teachers and principals regarding safety and security of the children and to prevent suicidal tendencies.
- The framework for implementation of the RashtriyaMadhyamikShikshaAbhiyan (RMSA) recognizes the role of guidance and counselling services to students.
- In 2018, the government approved an integrated school education scheme subsuming the SarvaShikshaAbhiyan, the RMSA, and Teacher Education from April 1, 2018 to March 31, 2020.
- However, without any significant rise in budgetary allocations for education, it is likely that there would be cuts in "non-productive" areas of education such as guidance and counselling.
- Thus stop-gap solutions to setting up expert committees and counsellors in schools have not been able to solve the problem, thus deep-rooted causes must be addressed.

### **What holistic measures needs to be taken?**

- The government must undertake a comprehensive study on the reasons behind these suicides.
- Academic curriculum should be designed in ways that stress the importance of mental exercises and meditation.
- The Delhi government's initiative on the 'Happiness Curriculum' may be a step in the right direction.
- Union government must consider to setup Equal Opportunity Cells with an anti-discrimination officer functional in universities and colleges.
- Apart from this it is need of the hour to reinvent our educational ecosystem in ways that impregnate new meanings, new ideas of living, and renewed possibilities that could transform a life of precocity into a life worth living.

## 4. GOVERNANCE

### 4.1 Concerns with Electronic Voting Machines

#### What is the issue?

Malfunctions in Electronic Voting Machine (EVM) affects the free and fair nature of conducting elections in India.

#### What is necessary to ensure a free and fair election?

- A democratic nation gives moral legitimacy to the government.
- This legitimacy is ensured through the people's will and this in turn is expressed through the vote.
- Not only must this vote be recorded correctly and counted correctly, it must also be seen to be recorded correctly and counted correctly.
- The recording and counting process must be accessible to, and verifiable by, the public.
- So transparency, verifiability, and secrecy are the three pillars of a free and fair election.
- Paper ballots ensure these, since the voter can visually confirm that her selection has been registered, the voting happens in secret, and the counting happens in front of her representative's eyes.
- But in the case of EVMs, there were many reports of misbehaving EVMs in recent assembly elections, which serves as a cause of concern.

#### What are the concerns?

- **On transparency** - EVMs are neither transparent nor verifiable.
- Neither can the voter see her vote being recorded, nor can it be verified later whether the vote was recorded correctly.
- What is verifiable is the total number of votes cast and not the choice expressed in each vote.
- **On verifiability** - An electronic display of the voter's selection may not be the same as the vote stored electronically in the machine's memory.
- To rectify this, the Voter Verifiable Paper Audit Trail (VVPAT) was introduced.
- VVPAT is a method of providing feedback to voters using a ballot less voting system.
- A VVPAT is intended as an independent verification system for voting machines designed to allow voters to verify that their vote was cast correctly.
- It contains the name of the candidate (for whom vote has been cast) and symbol of the party/individual candidate.
- But VVPATs solve only the problems at the voting part and the counting part still remains an opaque operation.
- Also, at present, the EC's VVPAT auditing is restricted to one randomly chosen polling booth per constituency.
- However, this sample size will fail to detect faulty EVMs 98-99% of the time.
- VVPATs can be an effective deterrent to fraud only, when the detection of even one faulty EVM in a constituency is followed by the VVPAT auditing of all the EVMs (at all booths) in that constituency.
- This poses a serious logistical challenge and hence VVPATs are not the answer to counting level failures.
- **On secrecy** - With the paper ballot, the EC could mix ballot papers from different booths before counting, so that voting preferences could not be connected to a given locality.
- However, the votes cast via EVMs are counted on individual booth basis, which allows one to discern voting patterns and renders marginalised communities vulnerable to pressure.
- A totaliser machine was proposed as a remedy to this alternative.

- Totaliser machine allows votes from 14 booths to be counted together so that voters are saved from pre-poll intimidation and post-poll harassment.
- But the EC has shown no intent yet to adopt them at the national level.
- So, on all three counts such as transparency, verifiability and secrecy – EVMs are flawed.
- Also, the recent track record of EVMs indicates that the number of malfunctions in a national election will be high.

#### **What should be done?**

- EVMs fail on all three pillars, as established by a definitive judgment of the German constitutional court in 2009.
- The court's ruling forced the country to scrap EVMs and return to paper ballot.
- Other technologically advanced nations such as the Netherlands and Ireland have also abandoned EVMs.
- But in India, EVMs continue to enjoy the confidence of the EC, which insists that Indian EVMs are tamper-proof.
- This confidence is based on a matter of trust.
- But the precondition of this trust is the verifiability of election events, whereas in the case of EVMs, the calculation of the election result cannot be examined from outside.
- Another argument made in favour of the EVM is that it eliminates malpractices such as booth-capturing and ballot-box stuffing.
- In contrast, tampering with EVM could accomplish rigging on a scale unimaginable for booth-capturers.
- Thus, the EC is obliged to provide the people of India a polling process capable of refuting unjustified suspicion, as this is a basic requirement for democratic legitimacy.

## **5. HEALTH**

### **5.1 Drugs (Prices Control) Amendment Order, 2019**

#### **Why in news?**

The Ministry of Chemicals and Fertilizers has recently released the Drugs (Prices Control) Amendment Order, 2019.

#### **What is it for?**

- Drug price control is all about striking the right balance between consumer and producer interests.
- The DPCO fixes the prices of scheduled drug formulations.
- It also monitors maximum retail prices of all drugs, including the non-scheduled formulations.

#### **What are the key provisions in the recent order?**

- A drugmaker who has brought in an innovative patented drug will be exempt from the price control regulations for 5 years from the date of marketing.
- Drugs for treating rare or “orphan” diseases too will be exempt from price control, with a view to encouraging their production.
- Under the amended DPCO, the Centre will continue fixing prices in line with market-based data available on drugs.
- The source of market-based data shall be the data available with the pharmaceutical market data specialising company as decided by the government.
- If the government deems it necessary, it may validate such data by appropriate survey or evaluation.
- [Alternatively, cost-based pricing model takes into account the actual money that went into developing the drug, sourcing the raw material and so on].



### What are the concerns?

- The changes are aimed at lifting foreign investor sentiment, particularly of US companies.
- But not bringing orphan drugs into price control will significantly impact patients.
- Only MNCs are manufacturing orphan drugs at the moment; so lack of price control will have a detrimental effect on affordability.
- Also, cancer drugs are increasingly patented with no generic competition, putting them out of the reach of poor patients.

### What should be done?

- Medicines account for over half the costs of inpatient care and 80% in the case of out-patient care.
- So, there must be a way of ensuring that their prices remain accessible without producers feeling disincentivised in the process.
- The Competition Commission of India's recent report identifies retailers' margins as a major cause of high prices.
- This can best be addressed by investing in wholesale public procurement, as Tamil Nadu and Rajasthan have shown.
- A combination of State-led insurance, such as Arogyashree in Andhra Pradesh, and public procurement can help keep health costs down.
- All these essentially require increasing the budget allocation for the health sector.

## 5.2 Report on Child Care Institutions

### Why in news?

Ministry of Women and Child Development recently released a report titled 'Mapping and Review Exercise of Child Care Institutions'.

### What is the report on?

- The drawbacks in the management of child care institutions have been analysed by a Central government committee.
- The committee studied nearly 9,600 Child Care Institutions and Homes.
- These are mostly run by NGOs, and come under the Juvenile Justice (Care and Protection of Children) Act (JJ Act).
- Most of the inmates are orphaned, abandoned, sexually abused, trafficked, victims of disasters and conflict, children in conflict with the law and in need of care and protection.

### What are the key findings?

- Only 32% of Child Care Institutions or Homes were registered under the JJ Act as of 2016.
- An equal number were unregistered, and the rest were either empanelled under other schemes or awaiting registration.
- Only around 46% of the total homes had adequate number of caregivers per child.
- Also, only around 28% centres were able to tend to inmates showing signs of hunger or illness.
- 65.9% of homes were able to actively supervise children under trauma.
- Child care standards were poor in many institutions, lacking proper bedding, food, and nutrition and sanitation.
- Children often have to live in facilities without proper toilets, and secure compounds.



- More worse, they do not have the opportunity to vent their grievances as provided for under law.
- Some States have too few homes, giving authorities little incentive to take up cases of children in distress.
- A few States do not have even one home of every category, such as child care, observation and adoption.
- Tamil Nadu, Maharashtra and Kerala together account for 43.5% of all shelters.
- The study highlights the disconnect between civil society and the welfare system for children, and the poor engagement of elected representatives.

#### **What should be done?**

- Emergency measures to address the serious lacunae in these institutions are crucial.
- Systematic scrutiny by State governments is essential to bring reforms to the childcare system.
- It must be ensured through special inspection officers that all institutions -
  - i. register under the JJ Act
  - ii. account for funds received
  - iii. enforce mandatory child protection policies during adoption
- The priority should be to bring about uniformity of standards and procedures.
- Common norms for infrastructure, human resources, financial practices and external audits should be in place.
- The findings of the Ministry's committee should now be turned into a blueprint for action.
- Credentialed NGOs should take a greater interest in this effort.

### **5.3 Parental Consent for Vaccination - Delhi High Court Order**

#### **What is the issue?**

- Delhi High Court recently put on hold the Delhi government's plan for a measles rubella (MR) vaccination campaign in schools.
- The court said the decision did not have the consent of parents, introducing the question of consent in vaccination.

#### **What is the MR vaccine?**

- Recently, the measles rubella (MR) vaccine was introduced in the universal immunisation programme.
- It has to be administered to all children between ages 9 months and 15 years.
- But those who did not get it earlier are also vaccinated and before they reach the reproductive age group.
- The vaccine being given in the MR campaign is produced in India and is WHO prequalified.
- MR vaccine is safe and effective, and in use for over 40 years across 150 countries.
- It is being given in the routine immunisation programme of India and in neighbouring countries like Bangladesh, Sri Lanka, Nepal and Myanmar.
- Private practitioners in India have been giving measles-rubella (MR) or measles-mumps-rubella (MMR) vaccine to children for many years.

#### **Why is it crucial?**

- India had around 56,000 confirmed measles cases and 1,066 confirmed rubella cases in 2018.
- Measles is a serious and highly contagious disease that can cause debilitating or fatal complications.
- These include encephalitis, severe diarrhoea and dehydration, pneumonia, ear infections and permanent vision loss.
- The disease is preventable through two doses of vaccine.
- Congenital Rubella Syndrome (CRS) is an important cause of severe birth defects.



- A woman infected with the rubella virus early in pregnancy has a 90% chance of passing the virus to her foetus.
- This can cause the death of the foetus or CRS.

#### **Why is the court's order a welcome move?**

- Obtaining parental consent prior to vaccination is the standard practice around the world.
- The World Health Organization (WHO) recognises oral, written, and implied consent for vaccination.
- A WHO survey in 2012 in 34 countries on consent procedures for vaccination in 6-17-year-olds found approximately half the countries using written consent.
- WHO insists that countries are encouraged to adopt procedures that ensure that parents have been informed and agreed to the vaccination.
- Vaccination is always a voluntary process, and there is never compulsion involved.
- Vaccines should be administered after people are sensitised about the disease and vaccine.

#### **What is the contention here?**

- Schools were consciously chosen rather than health centres or hospitals as nowhere else can such large numbers of children in the relevant age group be targeted.
- In most US states, it is compulsory to provide vaccination records before seeking admission into school, so that the child is not a danger to others.
- Also, the consent of parents is not sought during routine immunisation programmes as it is implied, where the parents or members of the family bring the child.
- For such a public good and for a vaccine that is tried and tested, there is ample evidence on safety and efficacy.
- Also, for something which is already a part of the universal immunisation programme, written consent should not be essential.

#### **5.4 Ten Threats to Global Health in 2019 - WHO**

##### **Why in news?**

The World Health Organisation (WHO) has recently released a list of “Ten threats to global health in 2019”.

##### **What are the highlights and where does India stand?**

- **Air pollution, climate change** - This is the gravest risk, with 9 out of 10 people breathing polluted air across the world.
- With 18% of the world's population, India sees a disproportionately high 26% of the global premature deaths and disease burden due to air pollution.
- Over half the 12.4 lakh deaths in India attributable to air pollution in 2017 were of individuals of age under 70, as per the India State-Level Disease Burden Initiative report.
- The average life expectancy in India would have been 1.7 years higher if air pollution levels were lower than the minimum level causing health loss.
- **Noncommunicable diseases** -Noncommunicable diseases (NCD) such as diabetes, cancer, and heart disease kill 41 million every year.
- This is over 70% of deaths worldwide, including 15 million premature deaths of people in 30-69 age group.
- India, notably, remains the “diabetes capital of the world”.
- India's current estimated cancer burden - over 1.5 million new cases - is predicted to nearly double in 20 years.
- **Global influenza pandemic** -WHO has warned of another influenza pandemic in the world.
- But global defences are only as effective as the weakest link in any country's health emergency preparedness and response system.
- **Fragile, vulnerable settings** - More than 22% of the global population live in places where prolonged crises and weak health services leave them without access to basic care.



- [The crisis situation includes a combination of challenges such as drought, famine, conflict, and population displacement.]
- In India, the massive distress in farm sector has engendered waves of internal migration for work.
- This migrant population often live in unhygienic conditions with very little access to basic care.
- The Rohingya migration crisis unfolding in Bangladesh could send ripples into India.
- Moreover, natural calamities routinely bring health crises in their wake. E.g. the recent Kerala floods were followed by a leptospirosis outbreak
- **Antimicrobial resistance** - Antimicrobial resistance (AMR) is what a pathogen develops upon non-lethal exposure to a drug.
- It usually happens when patients do not complete the full dosage prescribed.
- It is also a result of rampant over-the-counter sale of medications without the prescription of a registered medical practitioner.
- This threatens to send the world back to a time when treating infections such as pneumonia, tuberculosis, gonorrhoea, and salmonellosis were impossible.
- India, China, and the Russian Federation accounted for 47% of the global incidence of MDR (Multi-drug-resistant)/RR (rifampicin resistant) TB in 2016.
- India now has an AMR policy but implementation is poor.
- **Primary healthcare** - WHO has highlighted that many countries did not have adequate primary healthcare facilities.
- In India, only about 5,000-odd centres are estimated to be functioning currently, and there is high vacancy of doctors too.
- The primary care arm of Ayushman Bharat, with a proposed 1,53,000 health and wellness centres, has received less attention.
- **Vaccine hesitancy** - The reluctance to vaccinate despite the availability of vaccines threatens to reverse the progress made in tackling vaccine-preventable diseases.
- Vaccination currently prevents 2-3 million deaths a year, and a further 1.5 million could be avoided if global coverage of vaccinations improved.
- The Delhi High Court's recent ruling on parental consent in vaccination has the threat of adversely impacting vaccination drives.
- **Dengue** - Dengue is endemic to India, and its season in countries like Bangladesh and India is lengthening significantly.
- In 2018, Bangladesh saw the highest number of deaths in almost two decades.
- The disease is spreading to less tropical and more temperate countries such as Nepal.
- WHO estimates 40% of the world is at risk of dengue, with around 390 million infections annually.
- **HIV** - The epidemic continues to rage, with nearly a million people every year dying of HIV/AIDS.
- India has now launched a test and treat policy, and made HIV treatment the right of every individual who needs it.
- The HIV/AIDS Act, 2018 makes access to anti-retroviral therapy (ART) an actionable legal right for Indians living with HIV/AIDS (about 21 lakh).
- Also, India is a stakeholder in the WHO's 90-90-90 target for HIV elimination.
- [By 2020, diagnose 90% of all HIV-positive persons, provide ART for 90% of those diagnosed, and achieve viral suppression for 90% of those treated]
- **Ebola, other pathogens** - Several Indian states battled Zika in 2018, and at least 17 people died of Nipah infection in parts of Kerala.
- While India has been spared Ebola so far, the WHO prioritises research & development for several haemorrhagic fevers, Zika, Nipah, and SARS.



## 6. INDIA AND ITS NEIGHBOURHOOD

### 6.1 India's role in Afghanistan

#### What is the issue?

India must be prepared for the potential consequences of withdrawal of American troops from Afghanistan.

#### What is the shift in U.S. policy?

- The U.S. had announced South Asia Strategy for Afghanistan in 2017.
- According to it, U.S. troops would remain involved in the country until conditions mandated the return of the troops.
- Also, U.S. would put Pakistan on notice for its support to the Taliban and a political settlement with the Taliban would only follow after an effective military effort.
- Finally, the strategy would focus on further developing the strategic partnership with India.
- Despite the strategy, casualties of Afghan National and Defence Security Forces (ANDSF) in May-September 2018 were higher compared to corresponding periods since 2001.
- The United Nations Assistance Mission in Afghanistan also documented more civilian deaths in the first nine months of 2018 than during the same period in 2014.
- US has also appointed a special envoy to have direct talks with the Taliban.
- This show that it has reversed its earlier position of not engaging the Taliban, until Taliban engages the Afghan government.
- However, the efforts of the special envoy too fail to deliver much on the peace process.
- Hence, the US seem to pull-out its troops and reduce its presence in Afghanistan.
- As a result, the U.S. war in Afghanistan evolved into a mission for ensuring democracy and prosperity in Afghanistan.
- Accordingly, the U.S president has suggested that regional players like Russia, India and Pakistan should be more involved in stabilising the situation.

#### What should be the role of India?

- The U.S. administration has welcomed Indian investment in Afghanistan, which is shown by its temporary waiver on Chabahar port development in Iran.
- The port development could pave the way for an alternate passage of facilitating easy movement of goods into the country through Iran.
- However, India cannot replace Pakistan's position geographically.
- The decision to abandon the SAARC in favour of groupings like BIMSTEC, BBIN and IORA may have provided some short-term returns for India in isolating Pakistan.
- However, it has had the effect of cutting Afghanistan loose from Indian leadership of South Asia as well.
- Thus, India's best course with Afghanistan remains its own regional strategy, not becoming a part of any other country's strategy.
- As the U.S.'s eventual pullout as Afghanistan's peacekeeper is inevitable, close bilateral consultations should be made to help Afghanistan according to its own needs.

### 6.2 India – Bangladesh relations

#### What is the issue?

- During the last decade of Ms. Hasina's tenure as PM, Bangladesh-India engagement has intensified.
- With her recent electoral victory, India and Bangladesh must seize the opportunity to further enhance connectivity and trade ties.



### What are the present areas of co-operation?

- **Connectivity** - India's 'neighbourhood policy' has focussed on Bangladesh, which has emerged as a key interlocutor in India's 'Act East Policy' and sub-regional groupings like BIMSTEC and the BBIN Initiative.
- The Padma multipurpose bridge and the Akhaura-Agartala rail link will dramatically change connectivity within Bangladesh and with India.
- Waterways are also being revived to reduce the cost of trade.
- **Cyberspace** - Bangladesh has provided cyber connectivity between the international gateway at Cox's Bazar to Agartala for faster Internet connectivity in India's northeastern States.
- **Energy** - India has also become a partner in Bangladesh's nuclear power programme, with the beginning of construction at the Rooppur nuclear power plant.
- India is poised to export around 1100 MW of power to meet the energy deficit in Bangladesh.
- Power projects totalling more than 3600 MW are under implementation by Indian companies.
- **Trade** - Bangladesh is India's largest trading partner in South Asia with an annual turnover of around \$9 billion plus an estimated informal trade of around \$8-9 billion.
- To enable more Bangladeshi exports to flow into India, duty free entry was granted in 2011 under the South Asian Free Trade Area (SAFTA).
- Also, a Special economic zone (SEZ) in Bangladesh for Indian manufacturing companies has been mooted and notified recently.
- **Credit** - Indian investment in Bangladesh has reached \$3 billion.
- To offset the economic asymmetry, India has granted Bangladesh generous lines of credit (LOCs) and grants, with commitments reaching \$8 billion.
- While LOCs flow into infrastructure and connectivity projects, grants flow into social sector development.
- Capacity building under the Indian Technical and Economic Cooperation programme was also extended.
- **Tourism** - Over a million visas are issued to Bangladeshi citizens by India annually.
- Both countries have signed Revised Travel Arrangement 2018 (RTA 2018) for further liberalizing the visa regime, including enhanced duration for employment and student visas.
- **Terrorism** - Bangladesh has denied support to Indian insurgent groups, with insurgent leaders handed over to India.
- This has progressively built trust and confidence between the two countries.

### Where should the future focus lie?

- The Rohingya issue has imposed a huge economic and security burden on Bangladesh.
- India, on its part, published the draft National Register of Citizens in Assam to account genuine Indian citizens residing in Assam and to curb the flow of illegal migrants in the future.
- Thus the illegal migrant's issue, along with sharing of river waters, will require deft handling of bilateral ties between the two countries.
- Also, China's security and economic footprint has grown in South Asia and managing this will remain a challenge for both countries.
- While Bangladesh is overwhelmingly dependent on military hardware from China, India has provided a \$500 million LOC for procurement of defence-related goods from India.
- However, this momentum must be maintained and intensified.

### 6.3 New Electricity Guidelines for South Asia

#### What is the issue?

- The Union Ministry of Power issued a memo that set the rules for the flow of electricity across South Asian borders.
- The new electricity guidelines are seen as a first step towards creating a true regional market.

#### How has energy cooperation been?

- In the early 2000s, India tried with the SAARC countries for cross-border energy flows.
- It began to gain steam with substantial power trade agreements between India and Bhutan (2006) and Bangladesh (2010).
- These were driven by India's need for affordable power to fuel quickened growth in a recently liberalised economy.

#### What happened thereafter?

- The SAARC Framework Agreement for Energy Cooperation and the India-Nepal Power Trade Agreement were signed in 2014.
- These agreements imposed only few restrictions on trade.
- But it formulated an institutional structure to allow private sector participation and to facilitate market rationality in electricity commerce.
- The new government aimed for a seamless SAARC power grid, for power transmission within SAARC countries.
- E.g. offshore wind projects set up in Sri Lanka's coastal borders to power Pakistan or Nepal
- But later, in 2016, the Union Ministry of Power released certain guidelines.
- It imposed a slew of major restrictions on who could engage in cross-border electricity trade.
- They seemed to be a reaction to perceptions of increased Chinese investment and influence in the energy sectors of South Asian neighbours.

#### What were the concerns in 2016 guidelines?

- The guidelines prevented anyone other than Indian generators in the neighbouring country from selling power to India.
- So, many privately held companies, particularly in Nepal, that had hoped to trade with India were excluded.
- In restricting access to the vast Indian market, the economic rationale for Nepali hydropower built for export was lost.
- The requirement that the exporting generation companies to be majority owned by an Indian entity worried Bhutan.
- This created friction in joint ventures between India and Bhutan.
- Bhutan was also concerned about the limited access to India's main electricity spot markets.
- Here, Bhutan could have been well placed to profit from evening peaks in demand.
- Bangladesh sensed an opportunity to partially address its power crisis with imports from Bhutan and Nepal routed through Indian territory.
- But the guidelines complicated this by giving India disproportionate control over such trade.

#### How are the new guidelines?

- **Liberal** - A liberal trading regime is in India's national interest.
- So the new guidelines resolve the above issues and make the governance of electricity trade less restrictive.

- The concern that India was enabling the incursion of foreign influence into neighbouring power sectors was addressed.
- India now recognises that economic interdependency created by such arrangements have the political benefit of positioning India as a stable development partner.
- **Greener grid** - As India transitions to a power grid dominated by renewables, regional trade could prove useful in maintaining grid stability.
- A wider pool of generation sources, particularly hydropower from the Himalayas, is instrumental for a greener grid.
- Nepal and Bhutan have also, for long, recognised the potential of sustainable use of vast hydropower reserves for their prosperity.

### What is the significance?

- The new guidelines could create a true regional market and lead South Asian electricity trade in progressive directions.
- Generators across the subcontinent could now compete to deliver low-cost, green energy to consumers.
- The new guidelines also, for the first time, allow tripartite trading arrangements.
- Power generated in a country is routed over the territory of a neighbour to be consumed in a third.
- Since this would soften the hard borders of South Asia, it is essentially a political vision too.
- This is a crucial move towards the evolution of complex, multi-country market arrangements.
- Such markets require the construction of regional institutions that absorb the politics and manage the technicalities of electricity trade.
- Going ahead, South Asian nations might have to build joint, independent regional institutions that offer clear and stable rules.
- In an atmosphere of regional mistrust, the new rules are a rare and recent example of political pragmatism.

## 7. BILATERAL RELATIONS

### 7.1 Deeping Indo-Japan Ties

#### What is the issue?

- In recent times there are evidences of improving Sino-Japanese Ties.
- Amidst such scenario India must recalibrate its strategic partnership with Japan.

#### What are the existing bilateral ties between India and Japan?

- **Infrastructure** - Between 2000 and 2017, Japan invested \$25.6 billion in domains including infrastructure, retail, textiles, and consumer durables.
- Japan is involved in big-ticket projects like the Delhi-Mumbai Industrial Corridor (DMIC), the Mumbai-Ahmedabad bullet train, and setting up around 12 industrial parks across different States.
- India signed a joint high speed rail project with Japan, for which the first instalment of Rs. 5,500 crore was released by Japanese Industrial Cooperation Agency (JICA).
- **Defense co-operation** - India and Japan had hosted various bilateral exercises, recently naval cooperation between the Indian Navy and the Japan Maritime Self-Defense Force (JMSDF) has held in the Indo-Pacific region.
- **Developmental Projects** - Together, both nations have constituted the Japan-India Act East Forum with an objective of spearheading development cooperation in north-eastern States bordering China, Bangladesh, and Myanmar.
- JICA has signed a \$610-million pact with the Centre for phase I of the North-East connectivity projects.



### What is the significance of Indo-Japan ties?

- Both India and Japan are confronting challenges with volatile global order in the Indo-Pacific region.
- Therefore, cooperation between them, and that too on multiple fronts, is both obvious and desirable.
- Their collective interest in forging better and stronger ties has been demonstrated by both the quantity and quality of the reciprocal state visits witnessed in the recent years.
- Besides, it is said that the nations' personal rapport and the fact that both of the premiers exhibit similar right-wing nationalist sentiments seem to have brought them on the same page.

### What is the status of Sino-Japan ties?

- The Sino-Japan bilateral trade equals \$300 billion in 2017, a 15 per cent increase from the previous year.
- Japanese Logistics Corporation has partnered with its Chinese to open up a trial logistics route from the eastern coast of China to Western Europe and Central Asia.
- The Japan-China rapprochement is governed by multiple factors. Japan needs access to China's market.
- While for China, whose ambitious BRI project is facing hurdles and opposition over the issues of transparency and is constantly being reviewed by successive governments, partnering with Japan will be a much-needed boost to its image.
- China's economy and currency are facing tough times owing to trade sparring with the US, and is willing to partner with other regional powers.

### What are opportunities before India?

- The Japan-America-India (JAI) trilateral summit on the sidelines of G-20, reiterating a free and open Indo-Pacific, hints that the Sino-Japan rapprochement could be "tactical" at best.
- However, these recent developments negate the typical "cold war" dynamics between China and the so-called democratic "Quad" that is increasingly being used to analyze the international politics in Asia.
- Major Asian powers are engaging with each other guided by economic rationale.
- Therefore, Asia is witnessing a strategic flux where power is diffused and demarcation of geopolitical interests are blurred.
- Given the scenario, it is pertinent for New Delhi to not adopt a zero-sum game approach and objectively contextualize the Indo-Japan strategic partnership amidst interchangeable variables of the emerging strategic equation.

## 8. INTERNATIONAL ISSUES

### 8.1 Greece-Macedonia Dispute

#### Why in news?

The Republic of Macedonia recently voted to change their country's name to the "Republic of North Macedonia".

#### What is the source of the dispute?

- Macedonia broke away from the former Yugoslavia in 1991 and declared independence.
- The country measures a little over 25,000 sq km, and has a population just over 2 million.
- A region of Greece bordering the Macedonian republic is also called Macedonia.
- Hence, Greece, being the neighbouring country, has objected to the adoption of this name and insisted that the name apply only to the Greek region.



- Greece also raised concerns that the adoption of this name implies the Macedonian republic's territorial aspirations over the northern region of Greece.
- Consequently, the Greeks have been blocking the Macedonian republic's entry to NATO and EU membership.
- Greece's objections also forced the United Nations to refer to Macedonia as the former Yugoslav Republic of Macedonia.
- Since 1991, many suggestions have been proposed and then rejected.
- But a change of government in Macedonia in 2017 finally led to the deal reached last year.
- Under the proposed agreement, the country's language will be called Macedonian and its people known as Macedonians (citizens of the Republic of North Macedonia).
- Also, under the deal, Greece said it would drop its objection to the neighbouring country's entry into the EU and NATO if the changes are formally adopted.
- The new name will be used both internationally and bilaterally, so that even the 140 or more countries that recognise the name Macedonia will also have to adopt North Macedonia.

#### What is the consequence?

- Though Macedonia voted in favour of the name change, the Greek Parliament still needs to vote.
- However, this will likely prove no easy task given how deeply divisive the issue remains in Greece.
- However, NATO and European leaders have welcomed the move.
- NATO strongly supports the full implementation of the agreement, which is an important contribution to a stable and prosperous region.
- Thus, Political leaders and citizens alike have shown their determination to seize this unique and historic opportunity in solving one of the oldest disputes in the region.

## 8.2 New Brexit Challenge - May's Brexit Plan Defeat

### Why in news?

British Parliament voted against Prime Minister Theresa May's Brexit deal (plan for Britain's exit from the European Union).

### What is the present scenario?

- Ms. May is expected to face the motion of no-confidence against her government.
- But it is unlikely the motion, tabled by Opposition leader Jeremy Corbyn of the Labour Party, would be passed.
- Consequently, the onus of taking the country out of the EU will remain with Ms. May.
- Ms. May argues that there is no better deal than the one she has negotiated with the other 27 members of the EU.
- Yet, the difficult task of persuading MPs on the merits of the agreement exists.
- Ms. May will hope to win the Commons' approval for a Plan B for Brexit.
- At the minimum, it must do better on the contentious Irish backstop.

### What is the Irish backstop issue?

- "Republic of Ireland" is an independent country that is an EU member, while "Northern Ireland" is an autonomous territory within the UK.
- The UK and Ireland are currently part of the EU single market and customs union.



- So products do not need to be inspected for customs and standards.
- But after Brexit, the two parts of Ireland could be in different customs and regulatory regimes, which could mean products being checked at the border.
- The UK government does not want this to happen and the EU also does not want any hardening of the border.
- However, the current Brexit provisions, which include leaving the customs union and the single market, make this very difficult.
- In this backdrop, the backstop is an arrangement to maintain an open border on the island of Ireland.
- The arrangement allows the flow of goods between Northern Ireland and the Republic of Ireland.
- This is only in the event that the UK leaves the EU without securing an all-encompassing deal.

### What are the challenges ahead?

- The EU is less likely to ensure that the backstop will not indefinitely lock Britain into a customs union with the EU.
- But that would necessarily limit London's freedom to make trade deals with third states.
- Logically, Brexit supporters oppose this, whose prime motive is to regain sovereignty.
- Besides, deep differences persist within the Conservative and Labour parties on the terms of exit they must obtain from Brussels.
- There is also increasing clamour for a second referendum from remainers in the two parties.
- These groups view the uncertainty as symptomatic of a flawed Brexit project.
- They say the citizens should be enabled to make a more informed decision, given the mounting evidence on the economic impact of Brexit.
- But this view had, nevertheless, to be balanced with the consideration that the majority of MPs have resolved to respect the June 2016 referendum.
- In any case, a reversal of the 2016 Brexit result is not a guaranteed outcome.
- Given all these, an extension of the exit date seems the least controversial among many other alternatives for Ms. May for now.

### 8.3 US – Mexico border wall issue

#### Why in news?

The U.S. federal government partially shut down recently on the backdrop of the issue constructing a border wall between U.S. and Mexico.

#### What is a shutdown in U.S.?

- The U.S. government shuts down if the Congress does not pass –
  1. Appropriation bills (appropriating federal funds to government departments, agencies, programmes)
  2. Continuing resolutions (appropriations legislation allowing funding on a formula based on the previous year's funding)
- It also happens when the President fails to sign such bills or resolutions into law.
- The consequence is that certain parts of the government shut down and the staff that are deemed “non-essential” are sent on temporary unpaid leave.
- Only “essential” staff, such as those who deal with national security or public safety, continue to work.
- Unpaid workers receive pay retroactively after the shutdown ends.



- Shutdowns occur the most frequently when Congress and the President take stands that are mutually hostile.

#### **What is the recent case?**

- The continental border between the U.S. and Mexico stretches for nearly 2,000 miles.
- The land border reaches across four states - Arizona, California, New Mexico and Texas.
- The entire border between U.S. and Mexico extends from the Gulf of Mexico to the Pacific Ocean.
- A Department of Homeland Security report estimated that 170,000 people successfully entered the U.S. illegally from the southern border in 2015.
- There were approximately 5.6 million "unauthorized immigrants" from Mexico by 2016, according to data from the Pew Research Center.
- The U.S. President Trump first proposed a wall along the U.S.-Mexico border when he announced his presidential candidacy in June 2015.
- Recently, Trump wants Congress to approve \$5 billion for the project, but Democrats are offering only \$1.3 for border security.
- Hence, a shutdown was triggered after the U.S. President was refused funding for his border wall by the Congress.
- He also threatened to call a national emergency and urged to build the wall very quickly, even though the legality of such a step is uncertain.
- Thus, the federal government partially shut down on December 22 and if it were to last beyond January 12, it would be the longest shutdown in United States history.

#### **What is the consequence?**

- There are no official figures on how many workers have been furloughed or on a temporary leave.
- There are estimates that around 800,000 workers have been furloughed in the shutdown happened previously in U.S. (2013)
- A recent report on the current shutdown reveals that less than half [of the 800,000 impacted in 2013] are on unpaid leave, while more than half are working without pay.
- Also, the report said that, those who work can expect compensation after the funding is restored, but furloughed workers have no such guarantee.
- As of now, only essential work like mail delivery and law enforcement was being performed.
- Operations in nine federal government departments, including Homeland Security, Justice, State, and Treasury had been hit and agencies such as the Environmental Protection Agency and NASA had been impacted.

#### **What is the economic impact?**

- In the period of the shutdown, there was a mixed reaction from the markets.
- While the US Dollar Index fell by 0.5%, the S&P 500 improved by 11% after a stock market crash in December, 2018.
- The 10-year bond yields softened only marginally in the same period to 2.7%.
- Financial markets seem to have so far ignored the shutdown event risk.
- They have been focusing on hopes of a positive outcome from US-China trade negotiations and favourable policies of Federal Reserve.
- This risk may, however, come to the fore in case the issue remains unresolved.



## **G.S PAPER III**

### **9. ECONOMY**

#### **9.1 Significance of Accounting Year**

##### **What is the issue?**

For government, many businesses, investors and taxpayers in India, the year beginning from April 1 is significant.

##### **What is the brief history Accounting year in India?**

- The 12-month period from April 1 to March 31 is widely accepted as the accounting/fiscal/financial year in India.
- This was adopted by the British government in 1867 to align India's financial year with that of the British Empire.
- Most companies and businesses in India follow the April to March accounting cycle that syncs with the fiscal year of the government. But some companies follow a different cycle.
- For instance, Nestle India follows a January to December accounting year while Gillette India's financial year ends on June 30.
- Many corporate realigned to April-March recently after new Companies Act called for a uniform financial year.
- The RBI too follows its own accounting year, as it likes to present an aggregate picture after all banks come out with their numbers, its accounting year begins with a three-month lag and follows a July-June cycle.
- Considering that taxation is one of the major sources of revenue for the government, the tax year too runs from April to March.

##### **Why is the significance of accounting year?**

- The income earned in one accounting year (called the previous year) is subject to tax in the following accounting year (called assessment year).
- The accounting year is the time period for which governments draw up the estimate of income and expenditure for the country/state.
- It is the period for which the government sets out its financial and economic goals and lays down the means to raise funds for the same.
- The action plan (Budget) for the upcoming fiscal year beginning April is usually presented by the government towards the end of the previous fiscal.
- Most companies and other business entities too fall in line with the fiscal year of the government and tax department, as it ensures uniformity and aids easy comparison of data.

##### **How Accounting year impacts personal spending?**

- If one make new financial resolutions on January 1 and start investing right away, but the taxation on your investments will follow the April-March cycle.
- Tax returns are filed for every financial year from April to March. The deadline for making tax saving investments under Section 80C, such as PPF, ELSS, etc., falls on March 31.
- All tax-related changes announced in the Budget of any year are applicable for income earned from April 1 of the following year.
- But when it comes to Leave Travel Allowances (LTA), the cycle shifts to the calendar year, leave entitlements at work also predominantly follow a January-December calendar.

#### **9.2 CSO Advance Estimates**

##### **Why in news?**

The Central Statistics Office (CSO) recently released the first advance estimates of economic growth.



### How is the growth scenario?

- The CSO expects gross domestic product to grow at 7.2% for 2018-19, an improvement over the 6.7% growth in the previous year.
- The most significant aspect of the latest estimates is the clear deceleration in the growth momentum.
- The first half of the fiscal witnessed a respectable growth rate of 7.6%.
- However, GDP growth rate dipped sharply from 8.2% in the first quarter to just 7.1% in the second quarter.
- A full year growth of 7.2% implies that the CSO expects economic growth to drop to just 6.8% in the second half of the year.
- This clear dip in growth rate is seen in most sectoral estimates as well.
- E.g. manufacturing is expected to grow at 8.3% in FY19, sharply higher than the 5.7% in FY18.
- But it is expected to slow down sharply from 10.3% in the first half of the year to just 6.4% in the second half.
- Likewise, on the expenditure side of the national income accounts, both private and government consumption is expected to moderate.

### How is the investment prospect?

- The gross fixed capital formation (or investments) is projected to rise sharply in the second half of the year.
- A rise in the rate of investments from 7.6% a year ago to 12.2% in 2018-19 is welcome.
- But it is uncertain if the increase in investments will necessarily sustain as new projects tend to be held up before a general election.
- It is also possible that even these estimates have an element of overestimation.
- Evidently, the data compiled by the Centre for Monitoring Indian Economy showed a fall in investment projects being completed.
- It also highlighted a 30% drop in new investment projects taken up between December 2016 and 2018.

### What is the dispute?

- The estimate has come as a disappointment because it is below the expectation of most institutions mapping the Indian economy.
- E.g. both the RBI and the International Monetary Fund expected the economy to grow by 7.4% this year.
- Even the Union finance ministry expected a growth rate of 7.5% for the current fiscal.

### How does the future look?

- Overall, there is indeed some merit in the government's optimism as India remains the fastest-growing major economy in the world.
- But there are some factors that could possibly drag down growth in the second half.
- Government's ability to come up with economic boosters is uncertain as fiscal deficit in the first 8 months of the year has crossed 112% of the full-year target.
- In this context, the CSO estimates are significant as they will provide the foundation for the preparation of the interim Budget.

## 9.3 CAG report on government spending

### Why in news?

CAG on Tuesday recently tabled its report on spending in Parliament.

### What does the report say?

- It said that **off-budget financing** was being used by the government (in the fiscal 2016-17) to defer fertiliser arrears, food subsidy bills and outstanding dues of Food Corporation of India (FCI).

- Off-budget financing includes mechanisms like market borrowing and ways and means advances, which are outside the purview of parliamentary oversight.
- e.g Special banking arrangements were used to conceal the deferment of fertiliser subsidies.
- Spending on irrigation was masked by borrowing by the National Bank for Agriculture and Rural Development (NABARD).
- Railway expenditure was covered by borrowing by the Indian Railway Finance Corporation, and spending on power projects by the Power Finance Corporation.
- Though these provides flexibility in meeting requirement of capital intensive projects, it would pose fiscal risk in the long term in cases the entity that raises the funds fails to meet debt servicing.
- Despite this, the government resorts to off-budget methods of financing to meet its revenue and capital requirements.
- The quantum of such borrowings is huge and current policy framework lacks transparent disclosures and management strategy for comprehensively managing such borrowings.
- Thus, any framework created by the government should specify the rationale and objective of off-budget financing, quantum of off-budget financing and sources of fund, among others.
- The government should also consider disclosing the details of off- budget borrowings through disclosure statements in Budget as well as in accounts.

#### **What is the case with Food Corporation of India?**

- To illustrate off-budget financing, the CAG report gave the example of Food Corporation of India (FCI).
- The difference between the cost of procurement of foodgrains and cost of providing them to fair price shops is what FCI demands from the government as subsidy.
- When the budget allocation of a financial year is not sufficient to clear all the dues of food subsidies bill raised by FCI, the dues of such subsidies are carried over to next financial year.
- It is evident that there was increase of about 350% in carried over subsidy arrears in the five years preceding 2016-17.
- But the government has passed on its own food subsidy burden on to the FCI, rather than servicing it from the budget.
- This require financing from a number of methods including very high interest cash credit facility which increases actual cost of this subsidy substantially.
- The FCI has borrowed to pay for that burden and has also borrowed from NSSF to the tune of tens of thousands of crores to service that debt.
- In 2017-18, the FCI took loans of Rs 65,000 crore from the NSSF, partly for fresh expenditure and also to repay some of the principal of an earlier loan.
- However, all this money should have been part of official government expenditure in the Budget.

#### **What should be done?**

- The objective of the FRBM Act, 2003 was to provide for the responsibility of the Central Government to ensure inter-generational equity in fiscal management and long-term macro-economic stability.
- However, successive governments have resorted to methods like –
  1. Rolling over additional subsidy burden
  2. Taking back unspent amounts from ministries
  3. Converting certain expenditure entries to ways and means advances
  4. Running down the cash reserves

- In 2018-19 as well, such steps are expected as the centre looks to meet an increasingly difficult fiscal deficit target of 3.3% of GDP.
- The CAG is thus right to question the credibility of government fiscal statistics.
- The forthcoming Union Budget should thus give the true picture of central finances.
- Investors require a fiscal deficit number that is credible and that reflects the true level of government borrowing and spending.
- The more transparent it is, the better the market works and the more money can be raised going forward.
- Thus, the government should not sacrifice the effectiveness of the bond markets to its short-term desire to raise more finance while appearing fiscally conservative.
- Also, investing the small savings fund (NSSF) into the troubled and loss-making public sector units like state-owned airline Air India should be avoided.

#### 9.4 RBI notification on MSME loans

##### Why in news?

RBI has recently issued norms on restructuring loans of MSMEs.

##### What is the recent notification on MSME lending?

- RBI has recently decided to permit one-time restructuring of existing loans to MSME enterprises that are in default but 'standard' as on January 1, 2019, without an asset classification downgrade.
- To be eligible for the restructuring, the aggregate exposure to a GST-registered MSME borrower should not exceed ₹25 crores as on January 1, 2019.
- Only a provision of 5% of the total outstanding loan, in addition to the money already set aside to cover potential losses, will have to be made for such borrowers by the lenders.
- Under-provisioning, banks have to set aside funds to a prescribed percentage of their bad assets.
- The banks have to make a larger provision if the asset quality of MSME borrowers gets deteriorated.
- Thus, restructuring without an asset classification downgrade will save the lenders from higher provisioning burden.
- This will encourage banks and non-banking finance companies (NBFCs) to take up restructuring in the case of MSMEs.
- Accordingly, each bank/NBFC should formulate a policy for this scheme with the board approval.
- The plan should include the framework for viability assessment of the stressed accounts and regular monitoring of the restructured accounts.
- This restructuring process has to be implemented by March 31, 2020.

##### What is the need?

- Majority of MSMEs are owner-funded with promoters' fortunes closely intertwined with the business.
- However, despite contributing to 30% of India's GDP, MSMEs get only 14% of bank credit.
- MSMEs are mostly victims of usurious interest rates and inordinate payment delays by clients rather than wilful funds diversion.
- Also, banks have sharply reduced the share of MSME loans, two years prior to demonetisation.
- Though banks increased lending in late 2017, MSMEs were faced with the twin shocks of demonetisation and GST implementation.
- Hence, multiple events beyond the control of MSME have affected MSME finances warranting restructuring of existing loans.



## What are the concerns?

- MSMEs form an important component of the Indian economy and contribute significantly to the country's GDP, exports, industrial output, and employment generation, among others.
- However, permitting restructuring without any asset quality downgrade is in danger of undoing some of the good work done by the RBI with regard to big borrowers.
- Loans to MSME segments are getting more stressed with the NPA ratio for public sector bank lending to MSMEs going above 15%.
- Thus this move could undermine India's credit culture, already weakened by corporate loan write-offs and farm loan waivers.

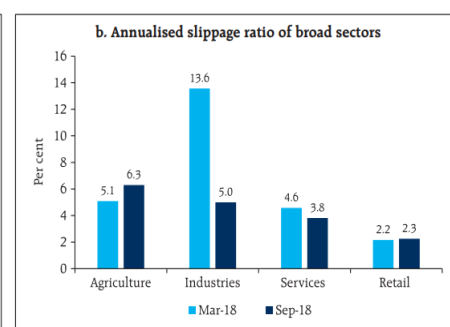
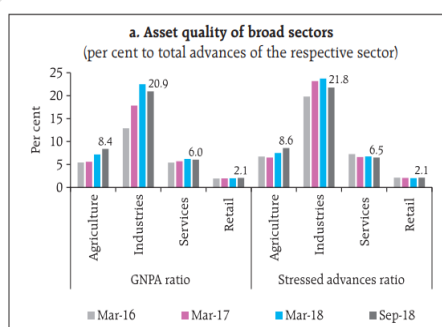
## 9.5 Financial Stability Report – RBI

### Why in news?

The Reserve Bank of India (RBI) has recently released the Financial Stability Report.

### What does the report reveal?

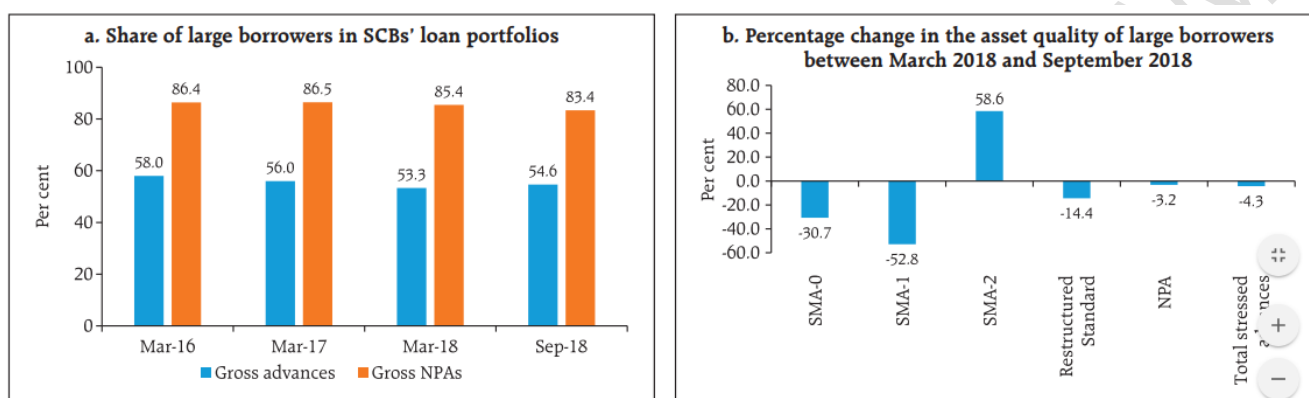
- The quality of banks showed an improvement with **the gross non-performing assets (GNPA) ratio** of Scheduled commercial banks declining from 11.5% in March 2018 to 10.8% in September 2018.
- The GNPA ratio of both public and private sector banks showed a half-yearly decline, for the first time since March 2015.
- GNPA of state-run lenders falling to 14.8% in September 2018 from 15.2% in March 2018.
- GNPA of Private sector banks falling to 3.8% in September 2018 from 4% in March 2018.
- The ratio of restructured standard advances (RSAs) steadily declined to 0.5% in September 2018 following the withdrawal of various restructuring schemes in February 2018.
- This suggested increasing shift of the restructured advances back to NPA category.
- As of September 2018, provision coverage ratio (PCR) of all banks was higher as compared to March 2018, with improvements noticed for both state-run banks and private sector banks.
- Under provisioning, banks have to set aside funds to a prescribed percentage of their bad assets.
- The provisioning coverage ratio is the percentage of bad assets that the bank has to provide for (keep money) from their own funds (profit).
- A rise in PCR reveals that banks has increased its cushion to absorb losses and has also made adequate provisions for NPAs.
- Also, the capital to risk-weighted assets ratio (CRAR) of banks declined marginally from 13.8% in March 2018 to 13.7% in September 2018.
- The CRAR is the capital needed for a bank measured in terms of the riskiness of the assets (mostly loans) disbursed by the banks.
- Higher the assets, higher should be the capital of the bank.



### What are the sector-wise analysis of the report?

- The banks were finally witnessing reverse trend in stressed asset exposures in sectors like industry and services.
- The gross NPA ratio of banks in industry sector has come down to 20.9% in September 2018 quarter.
- Also the annualised slippage ratio decelerated massively to 5% as against 13.6% in March 2018.

- **Slippage ratio** is defined as the ratio of increase in NPAs during the year with respect to standard advances at the beginning of the year.
- The declining trend was also witnessed in service sector, where gross NPA ratio came down to 2.1% along with stressed asset ratio at 6.5% in September 2018.
- On the other hand, this was not the case for agriculture and retail sector.
- Among the sub-sectors within industry, stressed advances ratios of ‘mining’, ‘food processing’ and ‘construction’ sectors have increased in September 2018 as compared to March 2018.
- Also, share of large borrowers in SCBs’ total loan portfolios and their share in GNPA was at 54.6% and 83.4% respectively at the end of September 2018.
- Top 100 large borrowers accounted for 16.0% of gross advances and 21.2% of GNPA of SCBs.



- However, in terms of percentage change in the asset quality of large borrowers, proportion of stressed amount has come down from 30.4% in March 2018 to 25.4% in September 2018.

### What are the concerns?

- The RBI’s Prompt Corrective Action (PCA) framework has significantly helped in lowering risk to the banking system.
- However, State-owned banks continue to have higher levels of bad loans than their private sector peers.
- One reason is that PSBs have a disproportionately higher share of bad loans from among large borrowers.
- Data on banking frauds are also a cause for concern.
- Close to 95% of the frauds reported in the six months ended September were credit-related, with PSBs again bearing the brunt of mala fide intent on the part of borrowers.
- The RBI’s report has also urged to tighten the oversight framework for financial conglomerates in the wake of the IL&FS meltdown.
- Thus, despite the decline in banks’ gross NPA ratio, regulatory vigil should be increased further and should not ease at any cost.

### Quick fact

#### Stressed Assets

- A loan whose interest and/or installment of principal have remained ‘overdue’ (not paid) for a period of 90 days is considered as NPA.
- Restructured asset or loan are that assets which got an extended repayment period, reduced interest rate, converting a part of the loan into equity, providing additional financing, or some combination of these measures.
- Hence, under restructuring, a bad loan is modified as a new loan.
- A restructured loan also indicates bad asset quality of banks.

- This is because a restructured loan was a past NPA or it has been modified into a new loan.
- Written off assets are those amount when the bank or lender doesn't count the money borrower owes to it.
- Thus, Stressed assets = NPAs + Restructured loans + Written off assets.

## 9.6 NSEL Scam

### What is the issue?

The regulator should act against offending brokers in the NSEL scam and should avoid such malpractices in the future.

### What is the NSEL scam?

- NSEL stands for National Spot Exchange Limited and is owned by Financial Technologies which also owns the MCX.
- NSEL was operating unregulated as it didn't come under the scrutiny of the Forwards Market Commission (FMC) because of it being a Spot market.
- The whole fiasco was on the trading of Agri-Commodity products on NSEL.
- T+2 means that the settlement between the buyer and the seller will happen after 2 days of the trade.
- Contracts of T+2, T+3 and up to T+35 were launched by NSEL when as per laws a spot exchange cannot launch contracts having settlement greater than T+11.
- A particular agricultural commodity has many contracts running on it and price difference between the trades is due to factors like time value of money, seasonal cycles, etc.
- A long-term contract is usually higher priced than a short term contract, i.e., T+2 is priced greater than T+35.
- The difference between the prices of buying a short-term contract (T+2) and selling the long term contract (T+35) provides annualised return to the NSEL warehouse, which runs the business.
- Meanwhile, the brokers of the NSEL started selling this product to investor's by assuring them of returns through this, as more than that of what the banks could offer.
- Once the investors realised the potential of these trades, they undertook bigger contracts and on a regular basis.
- In this case, the brokers and NSEL generated high revenues due to these trades for 2 years.
- The profits of NSEL shot up from Rs. 30 Crores per year to Rs. 120 crores per year.
- The price gap between the contracts continued and thus commodity prices also started moving up.
- The Department of Consumer Affairs noticed this and sent a notice to the NSEL saying that the contracts will fall under the radar of the then Forwards Markets Commission.
- So, the NSEL closed down all contracts greater than T+10 in period, as per the law.
- As a result, the arbitrage opportunities closed down.
- Subsequently, there was no stock in the godowns of NSEL and the buyers were being given fake ware house certificates of the commodities which they were buying by the brokers.
- Even when no one takes delivery of goods and was just pure speculation, the issue went totally unnoticed.
- NSEL had not anticipated this and later, when the investors are demanding back their money, the NSEL is unable to repay.
- This is because NSEL don't have stock which they can sell and settle the investor's demands.

### What are the concerns?

- Despite the case running in the court against five brokers, the stakeholders involved continue to trade charges and point fingers at each other.



- For instance, it is widely believed that 13,000 investors trading on NSEL lost a total of around ₹5,600 crores.
- But a committee appointed by the Bombay High Court headed by Justice VC Daga to investigate the NSEL scam found claims worth only ₹650 crores from 4,697 entities.
- It also appears that not all the investors who are purported to have lost money really exist.
- Many fictitious accounts were created by brokers, by enrolling low income people as clients only for trading on NSEL.
- Thus, there is no doubt that lapses have occurred at multiple levels.
- The then regulator, the Forward Market Commission, delayed taking action against NSEL stating that spot exchanges were outside its purview.
- The exchange was guilty of facilitating trading in forwards when it was allowed to trade spot transactions only.
- The investors are also guilty of not doing due diligence and investing in a suspect fixed-return commodity-based instrument.
- Above all, brokers had a large role in bringing investors to trade on the NSEL platform, which is the root cause of this scam.
- These same set of brokers now facilitate trades in stocks, currencies and fixed income instruments as well.
- If they are found to resort to illegal practices in any one segment, investors in other segment are also at risk.
- SEBI needs to impose penal actions at the earliest and should heighten the scrutiny on intermediaries to protect investors in the future.

### 9.7 Significance of a Competitive Exchange Rate

#### What is the issue?

Major economies like China are using the instrument of competitive exchange rates for a stabilized economy, which India can also follow.

#### What is Rupee appreciation?

- Exchange rate is the price of foreign currency (USD, Yen, Euro, Pound etc) in terms of domestic currency (rupee) i.e. amount of domestic currency needed to buy one unit of foreign currency.
- Exchange rate tells us the value of domestic currency in relation to one unit of foreign currency.
- Rupee prices keep fluctuating all the time. Sometimes we need more rupees to buy one unit of foreign currency and sometimes we need fewer rupees to buy one unit of foreign currency.
- This change in rupee price is known as rupee appreciation or depreciation.
- Rupee appreciation is when value of rupee increases (becomes expensive) and fewer, when Rupees can buy one unit of foreign currency.
- This is also known as strengthening of rupee as now INR is worth more than foreign currency.

#### What are economic concerns before India?

- India's demographic dividend is on the verge of becoming a curse as it is unable to create new jobs fast enough for its growing young population.
- In the discussion on improving the business case for value addition and job creation in India, the critical importance of the exchange rate hardly gets any attention.
- India is not yet able to take advantage of its low wages and the inherent talent of its young people to get enough investment, both domestic and foreign, into job creation and value addition.
- India has been for years the largest recipient of capital inflows from its expatriate community who send remittances.
- In addition its stock market has been attractive enough for FIIs (Foreign Institutional Investors).



- Such inflows when not matched by higher rates of investment in the economy usually lead to asset price bubbles in the stock and real estate markets, in addition to an appreciation of the exchange rate and decline in competitiveness.
- In India the perception among political and civil society elites has been that a strong currency is a sign of economic strength and depreciation is a sign of economic weakness.

#### **How rupee appreciation will be beneficial for Indian economy?**

- The movement of the real exchange rate, the nominal rate adjusted for the differential in inflation rates with major trading partners, has a similar effect as changes in tariff rates.
- A 10 per cent real exchange rate appreciation is equivalent to a 10 per cent lowering of tariffs across the board and a 10 per cent depreciation is equivalent to a 10 per cent increase in tariffs.
- The greater the depreciation the higher is the impact on the business case for domestic value addition.
- This impact is experienced not only by exporters but also by those who serve the domestic market as imports become cheaper with appreciation and more expensive with depreciation.
- India's trade deficit with China is over \$60 billion, all that is being imported from China can be made in India.
- Appreciation is beneficial to FIIs as the gains from the increase in the prices of their stocks in India can be taken out fully.
- Similarly, large corporates who have foreign currency debt gain as the real debt repayment burden declines with appreciation.
- The wealthy Indian has to pay less for his holidays, child's education overseas and consumption of imported chocolates and cheeses.

#### **What measures needs to be taken?**

- Investments, which need a competitive exchange rate, could be seriously considered only if there is the expectation that henceforth the real exchange rate would not be allowed to appreciate.
- For this, a consensus on the imperative need for maintaining a competitive exchange rate as a necessary precondition for increasing value addition and job creation in the country would be needed.
- This should then become a clearly enunciated policy objective of the RBI with explicit backing of the government.
- The policy instruments that could be used could include building up of reserves, and reviewing the liberal tax regime for FIIs as well as the encouragement of foreign currency borrowings by large corporates.
- This is a necessary condition for improving the business case for value addition and job creation.

#### **Quick Fact**

##### **Nominal Exchange Rate**

- Nominal exchange rate means a rate by which you can exchange your domestic currency with the foreign currency at any financial institutions like banks, NBFCs etc.
- It is the value of money which is received in an exchange with another currency.
- So in short, the nominal exchange rate is the rate which is presented by the financial institutions.
- If the Nominal exchange rate is high it will benefit an economy a lot in the trading activities.
- If it is high, the goods and services get more foreign units
- If there is a change in the Exchange rate, Nominal Exchange rate is less affected as compared to the Real exchange rate.

##### **Real Exchange Rate**

- The real exchange rate is a rate which measures how many times an item of goods purchased locally can be purchased abroad.



- So, it indicates the ratio of items purchased in the domestic market to the items purchased in the foreign market.
- Real exchange rate actually determines the ratio of price in the local market to the price in the foreign market.
- So, it indicates the goods and services consumed as compared to another country.
- It is complex and also a difficult method to calculate the real exchange rate, thus it measures the purchasing power of domestic currency to the foreign currency at a prevailing time.
- Real exchange rate is highly affected by the change in the exchange rate in the global market.

## 9.8 Crisil report on GSDP growth

### Why in news?

Crisil recently released a report, comparing economic growth of the states in India.

### What does the report reveal?

- Bihar has been ranked the top state among the 17 non-special category States in terms of GSDP (Gross State Domestic Product) growth in financial year 2017-18.
- The state has topped the list by clocking 11.3% GSDP growth in fiscal 2018, which was followed by Andhra Pradesh and Gujarat.
- States like Jharkhand, Kerala and Punjab were at the bottom in terms of GSDP growth.
- It further highlighted that 12 out of 17 states saw faster growth in fiscal 2018 compared with the previous 5 years.
- However, the growth did not translate into job creation, as GSDP expansion has come in from sectors which are less job-intensive.
- It noted that growth was not equitable, as the per capital income between low-income states and high income states widened over the last five years.
- Since there is pressure on fiscal deficit for the Centre, the states have become the engines of government spending, accounting for a bulk 65% of the total money spent.
- However, most states were found to have breached their targets under the fiscal responsibility and budget management act.

### What is the status of inter-state disparities as revealed by the report?

- The inter-State disparities have widened in recent years even as the larger economy grows in size and influence on the global stage.
- Many low-income States have experienced isolated years of strong economic growth above the national average.
- But economic convergence within the country remains a distant dream as poorer States continue to lag behind the richer ones in economic growth.
- Though Bihar was the fastest-growing State this year, they have still failed to bridge their widening gap with the richer States.
- This is because they have simply not been able to maintain a healthy growth rate over a sustained period of time.
- Richer States like Gujarat, for instance, have been able to achieve sustained economic growth and increase their gap over other States.
- The report found that there was a slight convergence in the per capita income levels of the poorer and richer States between fiscal years 2008 and 2013.
- But the trend was reversed in the subsequent years.

- Between fiscal years 2013 and 2018, there has been a significant divergence rather than convergence in the economic fortunes of the poorer and richer States.
- This was the result of richer States continuing to show strong growth while the poorer States fell behind.
- In fact, only two of the eight low-income States in 2013 had growth rates above the national average over the next five years.
- On the other hand, six out of the nine high-income States recorded rates higher than the national average during 2013-18.

#### **What explains the divergence in the economic fortunes of States?**

- The report suggests that government spending boosted GSDP growth in the top-performing States, particularly in Bihar and Andhra Pradesh.
- But their double-digit growth rates have come along with a burgeoning fiscal deficit.
- The impact of greater spending was that 10 of the 17 States breached the 3% fiscal deficit limit set by the Fiscal Responsibility and Budget Management Act.
- Many other big-spending States, however, have not managed to achieve growth above the national average.
- Punjab and Kerala, which are at the bottom of the growth table, are ranked as profligates by the report.
- This suggests that the size of public spending is probably not what differentiates the richer States from the poorer ones.
- Thus, apart from public spending, states should strengthen their state-level institutions in terms of –
  1. Their ability to uphold the rule of law
  2. Creating a free, competitive marketplace for businesses to thrive
  3. The quality of public spending
- These factors could be crucial determinants of the long-run growth prospects of States.

#### **9.9 Upholding validity of IBC**

##### **Why in news?**

The Supreme Court recently upheld the constitutional validity of the Insolvency and Bankruptcy Code 2016 (IBC).

##### **What is the significance of IBC?**

- Insolvency and bankruptcy code 2016, was introduced to resolve the bankruptcy crisis in corporate sector.
- Under IBC, either the creditor (banks) or the loaner (defaulter) can initiate insolvency proceedings.
- It is done by submitting a plea to the adjudicating authority, the National Companies Law Tribunal (NCLT).
- The Insolvency and Bankruptcy Code stipulates cases should be heard within 14 days.
- According to IBC, a financial creditor (generally banks) holds an important role in the corporate insolvency process.
- The Committee of Creditors (CoC) includes all financial creditors of a corporate debtor.
- The CoC will appoint and supervise the Insolvency Professional, and has the power to either approve or reject the resolution plan to revive the debtor, or can proceed to liquidate the debtor.
- The entire process is time-bound and must be completed within a period of 180 days (a one-time extension of 90 days is possible after the completion of 180 days).
- However, several provisions of the IBC were challenged as arbitrary and discriminatory in the Supreme court.



### What does the court say?

- The Supreme Court upheld the IBC saying that the insolvency law was working, while it termed the recovery of bad debt marking as the end of defaulters' paradise.
- In the working of the code, the flow of resources to the commercial sector in India has increased exponentially as a result of financial debts being repaid.
- **On Promoters** - The SC verdict upheld **Section 29A** of the IBC.
- The section bars promoters of bankrupt companies as well as people related to them from bidding to regain control of their assets at a discount.
- Specifically, the section dictates that promoters of companies, which have been classified as NPA's for over a year can't participate in the resolution process of any company unless the dues are repaid.
- However, a mere relationship with an ineligible person/promoter cannot disqualify someone from becoming a bidder for a troubled asset.
- It has to be proved that such a person is "connected" with the business activity of the promoter.
- **On Operational creditors** – Operational creditors are the suppliers of products and services to bankrupt companies and contractors.
- Under Section 53 of the IBC, in the event of liquidation of the company or its sale to another entity, the dues of operational creditors rank below those of financial creditors, workmen and employees.
- This was challenged by the operational creditors, who wanted equal treatment with financial creditors in this regard.
- Currently, the Committee of Creditors (CoC) constituted for bankrupt firms only comprise all financial creditors, like banks.
- And since operational creditors don't have a place in the CoC, they have no voting rights when the committee decides on what to do with an asset.
- Thus, several operational creditors had moved the court arguing that the bankruptcy code violates Article 14.
- But the Court justified the existing differentiation by making a salient distinction between financial debts, which are secured, and operational debts, which are unsecured.
- Also, the original IBC contains no provision for the operational creditors to attend the Committee of Creditors of the lender banks.
- The court noted further that there can be cases where the goods and services that are supplied by operational creditor may be substandard or they may not have been supplied at all.
- Thus, the court rejected the plea by operational creditors' seeking parity with secured financial creditors at the time of inviting bids for the corporate resolution plan under the IBC.
- **On Infrastructure** - The court directed the setting up of the circuit branches of the National Company Law Appellate Tribunal within a period of six months.
- This is to ensure that people from other metropolis need not travel to Delhi for the adjudication of issues by the NCLAT.
- **On case resolution** - Approximately 3,300 cases have been disposed of in out-of-court settlements with claims amounting to over Rs 1.20 trillion.
- Also, the amount realised from the resolution process under the IBC was around Rs 60,000 crore, roughly 200% of the liquidation value.
- The Court has thus provided an emphatic nod in favour of the IBC resolution process.

### What are the challenges?

- Of about 1,500 cases admitted until December 2018, only 79 ended in an approval of the resolution plans and liquidation in a little over 300 cases.





- This shows that only fewer cases of corporate debtors are getting resolved.
- Also, many cases fail to stick to the prescribed timeline of 180 to 270 days to firm up a resolution plan with elaborate hearings at NCLT benches.
- Such delay goes against the basic premise of the law which is to ensure a swift resolution or closure.
- However, over time, the NCLT may be better tuned to these kind of summary proceedings with capacity building and training of professionals.
- But the challenge still lies in how quickly some of the large accounts referred to the insolvency court by the RBI, featuring huge outstanding claims, are resolved.

#### **What are the implications?**

- The ruling has far-reaching implications for the promoters of big defaulting companies such as Essar Steel and Bhushan Power & Steel.
- In the case of Essar Steel, the firm's promoters, the Ruias, offered to repay around Rs 54,389 crore or 100% of the debt it owes to all the lenders and exit the insolvency process.
- This is despite the Committee of Creditors had already voted for ArcelorMittal's Rs 42,000-crore bid for the company post its default.
- The Ruias are depending on Section 12A of the IBC to bail them out, and so could other promoters.
- This section allows for a withdrawal of an insolvency application before the bidding process starts if 90% of the CoC by voting share approves it.
- Since invoking Section 12A is going to give a higher recovery for lenders in this case than the bidding amount by ArcelorMittal, the CoC could consider the offer of the firm's promoters.
- But the legality of this move is yet to be decided by the NCLT, and the Supreme Court's recent ruling on the promoters could have a bearing on its judgement.

#### **9.10 Global Worries on VUCA Factors**

##### **What is the issue?**

Many government and business organizations across the globe are seriously de-stabilized due to VUCA factors.

##### **What is VUCA?**

- VUCA is an acronym used to describe the state of business, political, societal and ecological world.
- VUCA stands for Volatility, Uncertainty, Complexity and Ambiguity.

##### **What are the instances of VUCA across the globe?**

- **Volatility** - Brexit is a good example of the VUCA world, Britain's exit from the European Union took the world by surprise.
- A consequence of this political factor has affected economics, commerce, regulatory system and emotional perception of the people at large.
- Syria's war shows no sign of stopping, Syria can be described as several interconnected wars, and it's not government-versus-rebels narrative it started out as part of Arab spring in 2011.
- The US pressure on Turkey to deal with the ISIS will actually make Turkey more vulnerable to attacks from terrorist groups.
- Brazil is unable to address its growing fiscal deficit.
- The war between North Korea and South Korea, and the political instability in many parts of world has increased volatility.
- **Uncertainty** - In present world, Mergers, acquisitions and takeovers have reached a peak globally because firms are seeking to position and reposition themselves.

- Making systematically-sound strategic decisions under uncertainty requires mature strategies in a framework for determining the level of uncertainty surrounding strategic decisions and for tailoring strategy to that uncertainty.
- Management techniques were always based on assumptions about the future, and the use of planning is a major tool of management control.
- **Complexities** - Globalization has pushed the boundaries of doing business, which has only created a wide gap between developed and underdeveloped markets, increasing the competition from new entrants.
- The biggest fact today is that the start-ups are giving competition to established businesses in many sectors; bigger and established players are dumbfounded due to creativity and innovation from smaller firms.
- Organizations today need 24×7 innovative pool of employees, those who can just keep innovation pumping at all levels of business.
- **Ambiguity** - Too much of information keeps pouring in from everywhere, creating more and more ambiguity.
- Customers have a lot of information and they are confused about what to buy, how to buy, from where to buy, at what price to buy.
- Globalization has paved way for a growing number of multichannel at all levels, from governments to citizens, and each is stumbling with their own set of priorities and responsibilities.

### 9.11 Rising Fiscal Deficit - Causes

#### What is the issue?

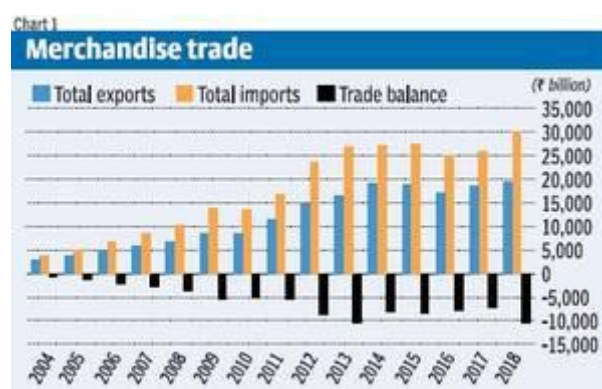
- The government's fiscal deficit touched 114.8% of the full-year estimates at the end of November. Click [here](#) to know more.
- It is essential that the government wake up to other causes beyond the oil import impact.

#### What is the current trade scenario?

- India's external account has once again emerged as a source of concern.
- Notably, the current account deficit has widened to reach 2.4% of GDP over April-June 2018.
- This increase was driven entirely by the trade deficit, which grew rapidly in 2017-18.
- **Exports** - Since 2014, exports have been mostly stagnant (after a period of healthy increases before then).
- But, total imports came down and then increased sharply in 2017-18.
- This was reflected in the total merchandise trade deficit.
- Trade deficit declined for several years from the large deficit observed in 2013-14, and only rose sharply once again in 2017-18.
- Over the period April-November 2018, the trade deficit is once again said to have widened.

#### How was the oil price impact?

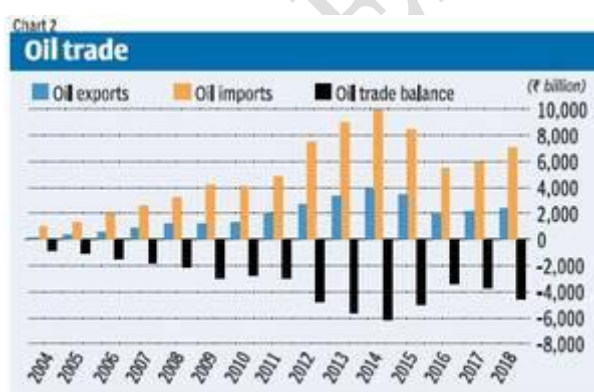
- It is true that India benefited hugely from the global decline in oil prices in the first 4 years of current government's tenure.
- Evidently, the overall oil price scenario -
  - reduced the pressure on the balance of trade
  - contributed to lower rates of domestic inflation
  - provided windfall gains to the public coffers
- Notably, the government did not pass on most of the oil price decline to consumers but instead raised tax rates.



- However, with India being net importer of oil, global oil prices have been suggested as the significant driver of the total trade deficit.
- Periods of rising global oil prices have therefore been associated with higher total imports and vice versa.
- So naturally, the external deficit is assumed to be driven by factors outside domestic policy control.

### Is oil price the only factor for trade deficit?

- India is both an exporter and an importer of petroleum products.
- Also, there is growing involvement of domestic oil refinery and distribution corporations (particularly the private ones).
- Quite often, increased oil exports reflect the choices domestic oil companies make - to produce for the domestic market or to export.
- These, in turn, are related to the local prices and duties, therefore driven by domestic policy.
- The oil trade balance thus indicates that the oil deficit can increase even in periods of relatively low global oil prices (as in 2016-17).
- This is because of the choices made by Indian oil corporations, especially the private players like Reliance.
- So the impact of oil prices on balance of trade is not quite simple and is not driven only by external factors as it is believed to be.



### What are the other factors?

- Non-oil imports have typically been high and rising rapidly.
- Even in the mid-2000s, non-oil trade was largely in balance and then began to show only relatively small deficits from 2006 onwards.
- After 2008, such deficits grew rapidly, as imports kept growing much faster than exports.
- Resultantly, the non-oil merchandise trade deficit peaked in 2012-13, ironically a time when global oil prices were also not that low.
- They came down the following year, but then rose once more, as non-oil imports kept expanding rapidly.
- It is to be noted that this increase was driven by increasing import volumes, as the prices for many of India's imports also remained low.
- Low prices indicate that the potential of imports to displace domestic production has been much greater.
- Increased imports of various final goods have added to the woes of many small-scale producers in agriculture and industry.
- In all, even in the period of rise in oil prices in 2017-18, the non-oil trade deficit was even larger than the oil trade deficit.

### What does it imply?

- High global oil prices are only one of the many reasons why India should be concerned about the rising external trade deficit.
- The more significant causes lie elsewhere, and some are domestic.
- The government should take note of this, and address the developments in non-oil imports too.

## 9.12 Fed Rate Hike - Rationale

### Why in news?

The Federal Open Market Committee (FOMC) of the U.S. recently voted unanimously to increase the short-term interest rate.



### What is the recent decision?

- The Federal Open Market Committee (FOMC) is the monetary policymaking body of the Federal Reserve System in the U.S.
- It voted unanimously to increase the short-term interest rate by a quarter of a percentage point, taking it from 2.25% to 2.5%.
- This was the fourth increase in 12 months, a sequence that had been projected a year ago.
- The FOMC members also indicated that there would be two more quarter-point increases in 2019.
- The announcement soon met with widespread disapproval.

### What is the concern?

- The FOMC statement gave no explicit reason for the interest-rate hike.
- Economic growth in the U.S. has slowed in the current quarter.
- The Fed's preferred measure of inflation (the rate of increase of the price of consumer expenditures) had fallen below the official 2% target.
- The Fed has long said that its interest-rate policy is "data dependent".
- Given this, it is not clear why it went ahead with its previously announced plan to continue tightening monetary conditions.

### What could the possible reasons be?

- **Inflation** - The current level of the real (inflation-adjusted) interest rate is remarkably low.
- The real interest rate was slightly negative before the recent increase and approximately zero even after it.
- A zero real rate might be appropriate in a very depressed economy.
- But it is not so in an economy in which real GDP was growing this year at more than 3% and unemployment rate was exceptionally low.
- Given this condition, an extremely low real interest rate can cause a variety of serious problems -
  - i. businesses respond to the low cost of capital by taking on excessive debt
  - ii. banks and other lenders reach for yield by lending to low-quality borrowers and imposing fewer conditions on loans
  - iii. portfolio investors can drive up the price of equities to unsustainable levels
  - iv. governments are induced to run large deficits because the interest cost of servicing the resulting debt is relatively low
- **Future** - FOMC needs a higher interest rate level now, for it to reduce interest rates later, during the next economic downturn.
- The current expansion, one of the longest since World War II, has now lasted 114 months since the upturn began in June 2009.
- There are enough warning signs to indicate that the next recession could begin during the next two years. These include -
  - i. falling equity prices
  - ii. weakness in the housing sector
  - iii. downturns in major European countries
  - iv. the uncertain level of US exports
- **Neutral level** - The FOMC might have wanted to return the real rate to the "neutral" level.
- Neutral rate is the level that neither increases nor depresses overall demand, often referred to as  $r^*$ .
- This  $r^*$  has declined substantially in recent years which reflects the declining interest rate set by the Fed and other central banks.



- In the past, it was generally assumed that the real value of the neutral rate was equal to about 2%.
- As the current real rate is close to zero, substantial increases are needed to get back to the traditional neutral level.
- These three reasons, and perhaps others, justify the FOMC view that the current interest rate is too low and needs to be raised.

### 9.13 32<sup>nd</sup> GST Council Meet Highlights

#### What is the issue?

- The 32<sup>nd</sup> Goods and Services Tax Council meeting announced a series of sops for taxpayers in its recent meet.
- The prime beneficiaries are the micro, small and medium enterprises (MSMEs), with recent changes.

#### What are the key changes?

- **Exemption threshold** - The council approved doubling of the exemption threshold under GST regime to Rs 40 lakh.
- States, however, will have the option to choose between the two exemption thresholds of Rs 20 lakh and Rs 40 lakh.
- For the North-eastern and hilly states, the exemption limit has been increased from Rs 10 lakh to Rs 20 lakh.
- **Composition scheme** - The annual turnover limit under composition scheme will be increased to Rs. 1.5 crores from current Rs 1 crore.
- The special category states comprising of north-eastern states, J&K, HP and Uttarakhand are given one week time to decide upon the composition limit in their respective states.
- The Council has also introduced a composition scheme for the services sector as well.
- [Of the nearly 1.17 crore businesses registered under the GST, over 18 lakh have opted for composition scheme.
- Under this, traders and manufacturers can pay taxes at a concessional rate of 1%, while restaurants pay 5%.
- While a regular taxpayer has to pay taxes on a monthly basis, a composition supplier is required to pay taxes on a quarterly basis.
- They are also not required to keep detailed records compared with a normal taxpayer under GST.]
- **Software** - Free of cost accounting and billing software shall be made available to small taxpayers by GST Network (GSTN).
- **Real Estate** - A seven-member group of ministers will be constituted in this regard.
- It will examine the proposal of giving a composition scheme to boost the residential segment of the real estate sector.
- **Revenue mobilisation for natural calamities** - The Council allowed Kerala to levy a 1% disaster cess on intra-state sale of goods and services. (Click [here](#) to know more)
- This will be for a period of up to 2 years to mobilise revenues to meet the cost of rehabilitation after the recent floods.
- **Lotteries** - A group of ministers shall be constituted to examine the GST rate structure on lotteries.

#### What is the significance?

- The change on exemption threshold will benefit the MSMEs sector which is suffering from the twin effects of demonetisation and GST.
- The GST Council seems to have finely balanced the need for providing relief and the concern about slipping revenue collections.
- It has clarified that most of these exemptions will come into effect on April 1, the next financial year.
- So the impact on revenue collections for this fiscal year has been rightfully avoided.

- Significantly, the GST Council also did not make any changes to the tax rates of items and allowed things to settle down.

#### What lies ahead?

- Repeated interventions in the form of exemptions and other reliefs can create confusion.
- There are also concerns with the rising level of frauds (especially on claiming input tax credit) and tax evasions in the GST.
- A better idea will be to go in for real reforms by bringing petroleum, the electricity duty and real estate under the GST.
- This will cut out the cascade of taxes, raise transparency and widen the tax base.
- The GST Council should now focus more on these issues so that the process works smoothly, leading to greater revenue mobilisation.

#### 9.14 NITI Aayog on Labour reforms

##### Why in news?

NITI Aayog pitches for labour reforms in its 'Strategy for New India @75' document.

##### What does it recommend?

- **Codifying labour laws** - In 2016, there were 44 labour laws under the statute of the Central government.
- More than 100 laws fall under the jurisdiction of state governments.
- Thus, the government should quickly finish codifying India's labour laws, while simplifying or modifying those that apply to the formal sector.
- The National Policy for Domestic Workers should also be brought in at the earliest.
- **Keeping women in the workforce** - The government should ensure that employers adhere to the Maternity Benefit (Amendment) Act, 2017, and the Sexual Harassment of Women at Work Place (Prevention, Prohibition and Redressal) Act.
- It is also important to implement these legislations in the informal sector, and make sure that skills training programmes and apprenticeships include women.
- **Employment data** - Data collection for the Periodic Labour Force Survey (PFLS) of households must be completed on schedule and data is disseminated by 2019.
- The government should conduct an annual enterprise survey using the GST Network (GSTN) as the sample frame for this.
- Along with it, administrative data from EPFO, ESIC and the NPS could be used, to track regularly the state of employment while adjusting for the formalisation of the workforce.
- **Workers' welfare** - The government must mandatorily comply with the national floor-level minimum wage.
- Also, the Minimum Wages Act, 1948 should be expanded to cover all jobs, besides enforcing the payment of wages through cheque or Aadhaar-enabled payments for all.
- **Social security and working conditions** – There must be a compulsory registration of all establishments to ensure better monitoring of occupational safety.
- A comprehensive occupational health and safety legislation based on risk assessment and employer-worker cooperation should be enacted.
- Labour inspection system should be made transparent by allowing online complaints and putting in place a standardised mechanism.
- Also, labour dispute resolution system should be overhauled, by strengthening labour courts or tribunals to help resolve disputes quickly and fairly.
- **Skills and apprenticeships** - According to the India Skill Report 2018, only 47% of those coming out of higher educational institutions are employable.
- Thus, forming the Labour Market Information System (LMIS) is important for identifying skill shortages, training needs and new employment opportunities.



- Through LMIS, the government should ensure the wider use of apprenticeship programmes by all enterprises, which may require enhancing the government stipend.

### What are the concerns?

- NITI Aayog is stuck on a misguided notion that labour flexibility will boost investment, thereby ignoring skilling and other factors.
- The mere amendments in labour laws have neither succeeded in attracting big investments, boost to industrialisation or to job creation.
- According to the Ease of Doing Business Index (2014), only a little over one-tenth of the respondent firms in India perceived labour regulations as a major constraint.
- Hence, rapid industrialisation, growth in investments and job creation would ultimately depend on –
  1. Development of infrastructure
  2. Stable law and order
  3. Availability of skilled manpower
  4. Boost in skill upgradation
- Also, extension of maternity benefit to 26 weeks under the amended Maternity Benefit Act has adversely affected employment prospects.
- This is because the employers hesitate to hire female workforce, especially in the case of start-ups.
- To overcome this, the government has recently proposed to subsidise wages of female workers earning less than Rs. 15,000.
- However, it has little to say on the gender composition of committees and institutions created under the labour laws to enforce the measure.
- Also, trade union recognition law is still absent in most States and at the national level.
- Thus, the NITI Aayog needs to really retool itself to be able to come up with a balanced and conceptually consistent labour market and industrial relations strategy, to deliver quality jobs and inclusive growth.

## 10. INFRASTRUCTURE

### 10.1 Concerns with Jaitapur Nuclear Power Plant

#### What is the issue?

Indian government has to be transparent on the project details of the Jaitapur nuclear power plant.

#### What is the project about?

- The EPR (European Pressurised Reactors) is a third generation pressurised water reactor, capable of achieving around 1,650 MW of power output with a higher yield than previous models.
- It can supply electricity to up to 1.5 million people, yet requires 17% less fuel and produces less long-term radioactive waste.
- India has initiated the idea of importing 6 nuclear EPRs more than a decade ago, but made little progress due to economics and safety concerns.
- In March 2018, the French company Électricité de France (EDF) and the Nuclear Power Corporation of India (NPCIL) signed an “industrial way forward” agreement.
- Recently, EDF submitted a proposal to the Indian government for the Jaitapur nuclear power project in Maharashtra using EPR design, along with a proposal to start the project ASAP.
- It will become the largest nuclear power plant in the world on completion.

#### What are the risks associated with the project?

- **Cost** - Electricity from the Jaitapur project will be more expensive than many other sources of electricity, including solar and wind power.



- It was estimated in 2013 that first year tariffs from the Jaitapur project would be around Rs. 15 per kilowatt-hour.
- This figure must be revised upwards to account for the construction experience with EPRs over the past five years.
- While nuclear costs have been rising, other low-carbon sources of electricity, especially solar energy, have become cheaper.
- In recent auctions for solar PV projects under the National Solar Mission, winning tariff bids in the range of Rs. 2 to Rs. 2.50 per unit have become routine.
- **Delay** - Across the world, EPRs have experienced delays and cost increases and has also locked consumers into a risky and expensive project with uncertain strategic and economic benefits.
- **Debt** - Power-generating capacity in India has grown faster than demand causing projects to run into financial difficulties.
- The parliamentary standing committee on energy listed 34 “stressed” projects, including NPAs and “those which have the potential to become NPAs”, with a cumulative outstanding debt of Rs. 1.74 lakh crore. (2018)
- Since the NPCIL’s debts would ultimately be underwritten by the Indian government, if the project encounters financial difficulties, the costs would fall on Indian taxpayers.

#### **What are the concerns on safety measures?**

- In addition to the high costs, safety problems with the reactor design and construction have emerged in several EPRs.
- The most serious of these pertained to the pressure vessel, which is the key barrier that prevents the spread of radioactive materials from the reactor.
- There are cases of substandard welding in the reactor’s pipes or high carbon in the reactors’ steel in EPR design as reported the French nuclear safety regulator.
- These safety concerns are further exacerbated by India’s flawed nuclear liability law.
- In the event of an accident, the nuclear liability law would require the public sector NPCIL to compensate victims and pay for clean-up, while largely absolving EDF of responsibility.
- However, under the law, NPCIL can obtain compensation from EDF for the supply of equipment with defects or for sub-standard services.
- But the joint statement issued by the two countries might limit the operator’s (NPCIL) right to obtain compensation.
- This is because, the statement promises that the “enforcement of India’s rules” would be in accordance with the International Convention on Supplementary Compensation for nuclear damage.
- This might prevent the NPCIL from exercising its right to claim compensation from EDF as allowed by Indian law.
- If that is the case, then EDF can escape with limited or no consequences even after a severe accident.
- Thus, without any responsibility, EDF will look more towards lowering operational costs for the plant than maintaining the highest safety standards for it.

#### **What should be done?**

- Jaitapur
- Both the countries emphasized the need for the project to generate cost-effective electricity.
- To ensure that, the government should clarify on –
  1. The entire project cost
  2. Accountability for cost increases and delays





### 3. Agreement on sharing liability

- Unless it is transparent about these details, the implementation of the nuclear power plant will become difficult to materialise.

## 10.2 New Water Extraction Guidelines

### Why in news?

The Central Ground Water Authority (CGWA) has notified the new water-extraction guidelines recently.

### What does the revised guidelines reveal?

- It has introduced the concept of Water Conservation Fee (WCF).
- The WCF payable varies with the category of the area, type of industry and the quantum of ground water extraction.
- It is designed to progressively increase from safe to over-exploited areas and from low to high water consuming industries as well as with increasing quantum of ground water extraction.
- Through this design, the high rates of WCF are expected to discourage setting up of new industries in over-exploited and critical areas.
- It also acts as a deterrent to large scale ground water extraction by industries, especially in over-exploited and critical areas.
- The WCF would also compel industries to adopt measures relating to water use efficiency and discourage the growth of packaged drinking water units, particularly in over-exploited and critical areas.
- It encourages use of recycled and treated sewage water by industries and a provision of action against polluting industries.
- It mandates requirement of digital flow meters, piezometers and digital water level recorders, detailing the quantum of extraction.
- Also, water audits should be conducted by industries abstracting ground water of 500 m<sup>3</sup>/day or more in safe and semi-critical and 200 m<sup>3</sup>/day or more in critical and over-exploited assessment units.
- Industries should undertake roof top rain water harvesting and measures should be adopted to ensure prevention of ground water contamination in premises of polluting industries/ projects.
- There is also an exemption from requirement of No Objection Certificate for –
  1. Agricultural users
  2. Users employing non-energised means to extract water
  3. Individual households (using less than 1-inch diameter delivery pipe)
- Other exemptions have been granted to strategic and operational infrastructure projects for Armed Forces, Defence and Paramilitary Forces Establishments and Government water supply agencies.

### What are the concerns?

- **Regulation** - The guidelines do not make any effort to ensure efficient and need-based utilisation of water for irrigation, which uses nearly 90% of the extracted groundwater.
- The domestic sector has also been exempted from any restrictions.
- Only 5% groundwater that is accessed by the industrial sector is proposed to be regulated for careful use.
- **Approval** - Some of the well-advised norms that are already in place have been relaxed for no good reason.
- Many commercial ventures, including beverages and drinking water bottlers, do not only consume water in bulk but also waste it in substantial measure.
- The power of issuing no objection certificates (NOC) for many kinds of industrial units has now been vested with district magistrates instead of the CGWA.



- Since the civic authorities lack wider perspective on this matter, they can be expected to be quite lenient in letting the commercial ventures tap it unchecked.
- **Norm relaxation** - The existing provision for mandatory recharging of groundwater by bulk consumers has also been diluted.
- They are now bound only to undertake rooftop water harvesting and not large-scale field projects for rainwater harvesting.
- **Fund utilisation** - The new guidelines propose water conservation fees (WCF) on groundwater use to generate resources for the state governments' water harvesting schemes.
- However, there is no guarantee that these funds will actually be used for this purpose.
- **Usage cap** - Though water charges have been levied, there is no cap on water withdrawals.
- Thus, this step will not suffice to discourage wasteful use by cash-rich consumers.
- **Re-use** - The new rules have virtually done away with the obligation to reuse the extracted water.
- This will result in the rampant overexploitation of this resource, causing a sharp dip in water table in many areas.

## 11. AGRICULTURE

### 11.1 MSP for Minor Forest Produce

#### Why in news?

Union Cabinet recently approved a centrally sponsored scheme for providing Minimum Support Price (MSP) to forest dwellers for minor forest produce (MFP).

#### What is the decision?

- The Centre has notified a varied hike in MSP ranging from 200% to 5.6% for 19 MFPs.
- The government has also added 17 more items (exiting 23) to the forest produce covered under the market support scheme.
- [These include mahua flowers, dried tejpatta, jamun dried seeds, dried amla pulp (deseeded), soap nut (dried), Arjuna bark and Giloe among others.]
- A total of 52 items is proposed to be brought under the MFP for MSP umbrella.
- The notification puts out prices for 40 items for now.
- The Central government plans to spend around Rs. 960 crore while states would contribute about Rs. 250 crore.
- The ministry of tribal affairs (MoTA) issued the notification and it is now for the states to implement this.
- Tribal Cooperative Market Development Federation of India Ltd. (TRIFED) has also been given directions.
- They are to develop market linkage between state agencies (through State Nodal Department), and bulk users and buyers to enable implementation.

#### What is the objective?

- The scheme for providing MSP for minor forest produce comes on the lines of support price for agricultural products.
- The decision is being taken in view of the general cost escalation on all fronts.
- The objective is to ensure fair and remunerative price to MFP gatherers.
- According to the ministry, nearly 5 crore tribals are expected to directly benefit from this revamped scheme.

#### What are the concerns?

- **Funds** - MSP system for minor forest produce had been introduced by the previous government as well.



- The centre has earmarked nearly Rs 1,100 crore for this programme in the past 5 years.
- But hardly 25% of this has been released to the states.
- The bulk of even the disbursed funds has remained unutilised.
- Moreover, none of the major forested states has submitted the audited report on funds utilisation.
- **Remuneration** - The minor forest resources have been made freely accessible to forest-dwellers under the Forest Rights Act.
- These include mahua, tejpatta, wild honey and similar others that have several industrial, therapeutic and cosmetic uses.
- However, the tribals, who gather them from the woods, do not get the fair remuneration for these articles.
- It's because they normally have to sell them at meagre rates at local haats dominated by cartelised traders and contractors.
- **Middlemen** - Some state governments have acquired monopolistic marketing rights on the much sought-after forest products.
- E.g. tendu leaves, bamboo, tamarind
- But, the state agencies nominated to lend price support often prefer to buy the stuff from middlemen.
- They fail to create the infrastructure for procuring it directly from individual collectors.
- Thus, for all practical purposes, the collectors of the minor forest produce are at the mercy of middlemen.
- **MSP** - States also do not pay the MSPs even though the Centre is supposed to bear 75% of the losses incurred on such operations.
- Odisha is one of the few states which have opted to implement the MSP scheme for selected forest products.
- But it is reported to be considering to discontinue the scheme because of the heavy financial burden.

#### What is required?

- The government has largely failed to realise the futility of raising the MSPs of crops without their effective enforcement.
- The need, therefore, is for well-advised marketing reforms in this sector.
- This should be aimed specifically at ending the middlemen's role over the minor forest produce trade.
- Equally important is to encourage direct linkages between forest produce gatherers and end-users of these products.
- E.g. the pharmaceutical, cosmetic and food-processing industries
- These are essential to meaningfully complement the move to fix MSPs for the minor forest produce.

#### 11.2 UP's New Levy for Cow Protection

##### What is the issue?

The Uttar Pradesh government has decided to impose a 2% gauraksha (cow welfare) cess on excise items.

##### What are the recent decisions?

- Apart from the cow cess, the government will also levy a 0.5% cess on state-operated tolls.
- It has also increased the levy on the tax revenue of the UP Agricultural Marketing Board, or MandiParishad, from 1% to 2%.
- The money will be used to set up and run "gauvanshashrayasthals" (cattle shelters).
- These shelters are to be made functional in all villages, panchayats, municipalities and municipal corporations.
- These will be run by urban and rural civic bodies and are aimed at tackling the growing menace of stray cattle in the state.



- Additionally, money from the Mahatma Gandhi National Rural Employment Guarantee Scheme will be used to fund these cowsheds.
- Also, 8 profit-making public sector undertakings have to contribute 0.5% of their corporate social responsibility (CSR) kitty towards the cow shelter scheme.
- The aim is to put in place a cowshed with a capacity of accommodating a minimum 1,000 animals in every district.

#### **What is the cattle trade scenario in UP?**

- With new government in UP in 2017, one of the first decisions was to shut down all illegal slaughterhouses.
- The government adopted a zero-tolerance approach to cow smuggling.
- Certainly, illegal slaughterhouses should not be allowed to carry on.
- But the state government did nothing to find any alternative means of livelihood for these small and marginal businessmen and their employees.
- The decision completely upset the dynamics of the meat trade in the state with adverse backward linkages.
- Along with small traders associated with the meat industry, farmers also suffered.
- Cattle owners, who in the past used to sell unproductive animals to slaughterhouses, now simply abandoned them.
- Reportedly, desperate farmers locked up abandoned cattle in schools and government buildings for fear of crop damage.
- The plight of the cattle is even worse, many of which are dying of starvation or asphyxiation.
- Making matters worse, there was rise of violence unleashed by the "gaurakshaks" (cow-protectors), who often penalised even those who traded in buffaloes.

#### **Why is it not a healthy move?**

- UP is not the first state in the country to impose such a cess.
- Punjab levied a similar cess and Rajasthan imposed a cow surcharge, without any real benefits to show for it.
- Passing the burden on people for cow protection, a policy responsibility of the government, seems unfair.
- A cultural affection for cows has happily coexisted with trade in cattle for ages.
- So restrictions on the cattle trade do not make any commercial sense.
- Thus, instead of imposing a cess, the government should reconsider its trade policy.

### **11.3 Sugarcane Farmers' Protest in Maharashtra**

#### **Why in news?**

Sugarcane farmers in western Maharashtra called off their violent four-day-old agitation, reaching an agreement with sugar mill owners and the government.

#### **What was happening?**

- Farmers were protesting against the decision of partial payment of fair and remunerative price (FRP) by mills.
- [FRP is the existing arrangement for the price to be paid to sugarcane farmers by the Sugar Mills and is announced each year by the Centre.]
- Protesters led by the SwabhimaniShetkariSanghtana had paralysed harvesting and transportation of sugarcane in the region.
- Offices of both cooperative and private sugar mills had been attacked and shut down by farmers.
- Sugarcane trucks on the Pune-Bengaluru highway were stopped.

### What is the tussle?

- The SwabhimaniShetkariSanghtana has consistently opposed the decision of sugar mills to pay the FRP in instalments.
- Sugar farmers had been demanding payment in one go, as the partial payment was unprofitable for them.
- On the other hand, the mills cite financial difficulties, for being unable to make full payment of FRP.
- Maharashtra government's Commissionerate of Sugar show that until December 31, 2018 mills owed farmers a cumulative of nearly Rs 4,500 crore.
- As many as 74 factories, mostly in the districts of Kolhapur, Sangli and Satara, have still not made any payments to farmers.
- [This region accounts for 60% of Maharashtra's, and 30% of India's, sugar production.]
- Taken together, cane dues in the states of Maharashtra and UP have already crossed Rs 11,000 crore, and the arrears are set to peak around April, 2019.
- [These two states, notably, account for almost 75% of the crop grown in the country.]



### What ails the sugar mills?

- With assured irrigation and conducive climate, sugar mills in the protest region are able to realise higher amounts of sugar per tonne of cane crushed.
- Notably, the fair and remunerative price (FRP) of cane is linked to its sugar recovery.
- So the average rate payable to farmers here is around Rs 2,850 per tonne net harvesting and transportation charges.
- This is huge compared to Pune or Ahmednagar where farmers get an average net FRP of around Rs 2,200-2,300 per tonne.
- For mills across Maharashtra, the present sugar realisation of Rs 2,900 per quintal would not be enough to meet the production cost of Rs 3,400 per quintal.
- Banks have valued sugar at Rs 3,000 per quintal, and 85% of this would be made available to them as working capital.
- 15% of this amount would go towards meeting expenses like gunny bags, salaries etc.
- This would leave just enough to pay farmers at the rate of Rs 2,300 per tonne of cane.

### What is the agreement made now?

- It was agreed that farmers would be given full payment according to the FRP and not partial payment as the mills had been doing.
- Calling off their agitation, farmers in western Maharashtra have given sugar millers and the government two weeks' time.
- This is to arrange funds for making full payment of dues to sugarcane growers in the area.
- Mills have sought from the central and state governments, a bailout package in order to be able to pay farmers.
- Mills ask for the government to provide Rs 500 per tonne as bridge payment to the farmers, while the remaining would be paid by the mills.
- Mills have also asked for the minimum selling price of sugar to be raised to Rs 3,400 from the present Rs 2,900 per quintal.



## 11.4 Addressing Tenant Farming

### What is the issue?

It is vital to cover the vulnerable section of tenant farmers with credit and insurance, alongside other farming issues, for an inclusive policy outlook.

### How prevalent is tenant farming?

- Tenant farmers are those who undertake farming on rented land.
- Tenant farming was 20.6% of the operating area according to 8th round of NSSO Report in 1953-54.
- In 2002-03, it fell sharply to just 6.6% of the operating area.
- Policymakers focused on abolition of feudal/semi-feudal agrarian structure, with tenancy reforms aimed at conferring ownership right to tenants.
- But post liberalisation, during 2003-13, tenancy increased to 10.4%.
- Andhra Pradesh (35.7%), Bihar (22.7%), Haryana (14.8%), Odisha (16.9 %), TN (13.5%) and WB (14.7%) lead the tenancy league, far above the all-India average of 10.4%.

### What are the policy shortfalls?

- Tenant farmers account for 80% of farmers' suicides in the country.
- Tenant farmers rarely get bank credit and they do not get any subsidies.
- Even with Kisan Credit Cards (KCC) and JLGs (Joint liability groups-'BhoomiHeenKisan') in place, tenant farmers receive barely 3% of total farm credit.
- Loan waivers have not helped tenant farmers as a significant number of crop loans are availed by the land owners even when they are not the actual cultivators.
- Tenant farmers with no documentary evidence become ineligible for crop insurance under PM FasalBimaYojana.
- State level panel data of NABARD indicates that a 10% increase in agricultural growth leads to a 2.1% rise in GDP.
- But uneconomic holdings, lack of adequate credit flow and poor insurance cover to the tenant farmers prevent such growth.

### What are the notable state models in lending?

- **Kerala** is the only State that enacted the Money Lending Act, protecting borrowers from high rates of interest and tenants from excesses in private debt.
- The **AP** government has adopted and refined the implementation process under the AP Licensed Cultivators' Act 2011.
- It undertook digitisation of land records and created a webland portal.
- Loan Eligibility Cards (LEC) or a Certification of Cultivation (CoC) is issued by the designated authority of revenue or agriculture department.
- A standard operating procedure has been put in place for the banks to record the crop loans issued to all farmers including tenants, on the webland portal.
- **Telangana** did not annul the AP law, but took up a massive drive for digitisation.
- It revised the land records under the Dharani project (Telangana Land Records Management System).
- This is being implemented for direct transfer of Rs. 4,000 per owner-farmer per acre per crop season to meet the input needs.
- Besides, farmers are entitled to Rs. 5 lakh insurance with the LIC, with the State paying the same.
- Tenant farmers are, however, not eligible.



### How does the future look?

- As the Indian economy becomes mature and inclusive, tenancy is likely to increase further.
- Urbanisation has made inroads into the rural landscape, and with land being scarce there is severe demand for it.
- Tenancy and sharecropping have become livelihood options in agriculture, to supplement incomes arising out of lesser availability of land.

### What could be done?

- An inclusive growth agenda requires that tenant farmers' issues of both debt and insurance be tackled.
- Agricultural insurance needs to be decoupled from crop loans.
- Farmers' assets (crop husbandry, animal husbandry, poultry, horticulture and family assets) need to be insured irrespective of owned or leased-in.
- Other relevant measures for tenant farming may include -
  - i. creating a legal framework for the States
  - ii. issuance of loan eligibility cards
  - iii. ensuring that banks lend to cultivators and not owners
  - iv. creation of web-based land portals after digitising land records
  - v. setting targets for short-term production credit for tenant farmers
  - vi. formation of JLGs
- Direct cash transfer to tenant farmers following an affidavit of self-declared tenancy conditions and crop(s) grown can help significantly.
- NABARD can set up a Tenant Farmers Development Fund to refinance short-term credit.
- It can also assist JLGs, SHGs, FPOs (Farmer Producer Organizations), and pay crop insurance premium for crop loans less than Rs. 1 lakh, besides providing skilling and calamity relief.

### 11.5 Restoring patent rights - Bt Cotton

#### Why in news?

SC recently restored Monsanto Co.'s patent claim on genetically modified (GM) Bt cotton.

#### How does the case evolve?

- Mahyco Monsanto Biotech (India) (MMB) is a joint venture between Monsanto and India's Maharashtra Hybrid Seeds Co (Mahyco).
- It has sub-licensed Bt cotton technology to various domestic seed companies since 2002.
- It also sells GM cotton seeds under license to more than 40 Indian seed companies, which in turn sell product to retailers.
- India has approved Monsanto's GM cotton seed trait in 2003.
- This has helped in transforming the country into the world's top producer and second-largest exporter of the fibre.
- Monsanto's GM cotton seed technology dominates 90% of India's cotton acreage.
- The problem started when MMB terminated its contract with Nuziveedu Seeds Ltd (NSL) in 2015 after a royalty payment dispute.
- A case filed in 2015 by MMB against NSL and its subsidiaries for selling Bt cotton seeds using its patented technology, despite termination of a licence agreement in November 2015.
- The Delhi High Court on May 2018 held that plant varieties and seeds cannot be patented under Indian law by companies such as Monsanto.



- Also, royalties on GM technology would be decided by a specialized agency of the agriculture ministry.
- This has made Monsanto unable to claim patents on GM cotton seeds.
- The Supreme Court recently overturned this judgement saying that Monsanto can claim patents on its genetically modified (GM) cotton seeds.

#### What will be the consequence?

- Bollgard technology is about a genetic sequence from a microorganism called Bacillus thuringiensis (Bt).
- This sequence, when modified and inserted into plant cell, produces a toxin that repels pests like bollworm.
- Any attack on the ability of Monsanto to earn royalty from its IP would have resulted in Monsanto not introducing newer technologies in India.
- This is critical as bollworms would, over time, become resistant to the current strain of the pest-repellent toxin, and would require further innovation.
- With the ruling, the patent held by Monsanto over its Bollgard-II Bt cotton seed technology will be enforceable in India for now.
- The outcome is positive for foreign agricultural companies which have been concerned that they could lose patents on GM crops in India.
- Also, most international companies which have stopped releasing new technology in the Indian market due to the uncertainty over patent rule would re-think their strategies.
- Access to advanced technology in cotton production was important to help Indian farmers to compete with rivals overseas.
- Thus, the verdict validates that patents are integral to innovation.
- However, SC has left the validity of Monsanto to claim royalty on Bt cotton to be finally decided by the Delhi high court.

#### What is the other related case?

- In **Divya Pharmacy vs Union of India** and Ors, the High Court of Uttarakhand passed an order against Divya Pharmacy that makes ayurvedic medicines and nutraceutical products.
- Various companies manufacturing ayurveda-based cosmetics have been operating unregulated.
- In that case, the High Court gave a purposive interpretation to the provisions of the Biological Diversity Act, 2002.
- It adjudicated that an Indian entity also has to comply with the demand raised by a state biodiversity board towards fair and equitable benefit sharing (FEBS).
- The High Court observed that indigenous and local communities, who either grow “biological resources” or have traditional knowledge of these resources, are the beneficiaries under the Biological Diversity Act.
- Thus, in return for their parting with this traditional knowledge, they are liable to receive certain benefits as FEBS.
- Hence, the above judgement has given impetus to the efforts of the National Biodiversity Authority as well as state biodiversity boards in a particular direction, which were struggling to implement provisions of the Act.

#### What are the takeaways?

- In one scenario, the Supreme Court has upheld the intellectual property rights of an MNC in the Monsanto case.
- On the other case, the High Court of Uttarakhand upheld the liability of another MNC, Divya Pharmacy, to share the benefits it was deriving from exploitation of local biological resources.
- Thus, it is critical to adopt a balanced approach, when there emerges a question of rights of corporations versus the rights of the populace.





## 12. SCIENCE & TECHNOLOGY

### 12.1 Chang'e-4 Spacecraft

#### Why in news?

China recently launched Chang'e-4 spacecraft, which has landed on the dark side of the moon.

#### What is the mission all about?

- The moon, though has two sides, is tidally locked with Earth.
- It rotates exactly once every time it circles our planet, thus keeping the same hemisphere pointing toward Earth at all times.
- Astronomers refer to the side we always see from Earth as the “near side” and the side we can never see as the “far side (dark side).”
- A Chinese lunar probe named Chang'e-4 made the first-ever landing on the far side of the moon.
- It carries a rover, which carries out low-frequency radio astronomical observations and probing of structure and mineral composition of the terrain.
- The instruments include cameras, low-frequency radio spectrum analyser, lunar neutron and radiation dose detectors.
- With its Chang'e 4 mission, China has possibly become the first country to make a soft landing, which is a landing of a spacecraft during which no serious damage is incurred.
- Thus, the pioneering landing demonstrates China's growing ambitions as a space power.

#### What is the importance of the launch?

- **Exploration of moon** - The mission could answer fundamental questions about Earth's only natural satellite, the moon.
- It could reveal formation and early evolution of moon, which could guide astronomers in planetary studies and help in understanding exoplanets.
- **Radio Astronomy** - Communication devices and satellites have made it too noisy for radio astronomers to easily and accurately interpret signals.
- The near side of the moon also suffers from this problem of noise.
- However, the moon's far side is shielded from all the radio waves emanating from earth.
- Hence, it is an ideal place to set up a radio telescope that could reveal astronomical mysteries, such as the structure of the universe shortly after the Big Bang.
- Also, the difference in the thickness of the crust between the near side and the far side would be studied.
- **Human spaceflights** - The probe is the first mini-greenhouse to land on another world in the solar system.
- The investigations will reveal whether plants can grow on the moon, which is a crucial step toward long-term human missions beyond Earth.
- Thus, the mission is a step forward in preparing people to return to the moon for longer than a brief visit.

### 12.2 Discovery of Fast Radio Burst

#### Why in news?

Canadian Hydrogen Intensity Mapping Experiment (CHIME) has reported the sighting of a repeating fast radio burst from a distant galaxy.

#### What are Fast Radio Bursts?

- Fast Radio Bursts are brief (few millisecond) bursts of radio waves coming from far beyond our Milky Way galaxy.

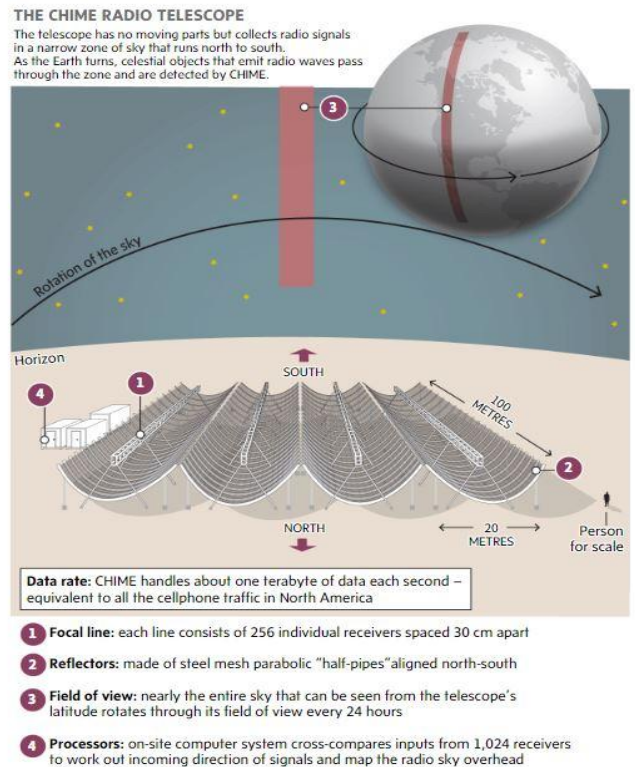
- The phenomenon was first reported in 2007 and as of mid-2017, roughly two dozen have been reported and their origin is unknown.
- However, they are ubiquitous: current best estimates suggest these events are arriving at Earth roughly a thousand times per day over the entire sky.
- Of the known detected FRBs, one, FRB 121102, has been observed to repeat and has been shown to come from a small dwarf galaxy at redshift 0.2.
- Whether all FRBs repeat and/or are in dwarf galaxies is yet unknown.

### What is CHIME?

- The CHIME Telescope is located at the Dominion Radio Astrophysical Observatory (DRAO), a national facility for astronomy operated by the National Research Council of Canada.
- The DRAO site is protected against man-made radio-frequency interference by municipal, provincial and federal regulation.
- The CHIME telescope's large collecting area, wide bandwidth and enormous field-of-view make it a superb detector of FRBs.
- The CHIME FRB event rate is predicted to be between 2 and 50 FRBs per day.
- So high an event rate promises major progress on this puzzling new astrophysical phenomenon.
- Bright CHIME-discovered FRBs will be found in real time and reported immediately to the worldwide astrophysical community for multi-wavelength follow up.

### What are the recent reporting of the CHIME?

- A mysterious radio signal emanating from a galaxy far, far away has been detected by CHIME.
- The discovery is significant because it's only the second time ever a repeating signal has been observed by scientists.
- In addition to the second repeater, the researchers were able to shed new light on FRBs because they detected them at a much lower frequency than previously recorded finds.
- The radio bursts were observed by CHIME at frequencies between 400 megahertz (MHz) and 800 MHz.
- The majority of previously detected FRBs were found at frequencies near 1400 MHz.



## 13. ENVIRONMENT

### 13.1 Rulebook at Katowice - Concerns for Developing Countries

#### What is the issue?

- The recent climate conference in Katowice, Poland finalised the “rulebook” for the implementation of the Paris Agreement.
- But it brings little cheer on the climate front for developing countries, given its drawbacks.

#### What are the shortfalls in the rulebook?

- **Developing countries** - At Paris, the developed nations were allowed to make voluntary commitments to climate mitigation, on par with the developing nations.

- At Katowice this process went further, with uniform standards of reporting, monitoring and evaluation for all countries.
- The real targets of this uniformity are not the poorest nations, who have been provided exemptions, but the larger developing nations.
- These reporting requirements, in their uniformity, are intended as much for Maldives as the U.S.
- All developing nations are apparently allowed flexibility in these reporting requirements.
- But the concession comes with a number of conditions, with the intention of forcing them to full compliance in short order.
- **Rationale** - The reporting requirements are also marked by a pseudo-scientific concern for stringency.
- The recent Special Report of the IPCC (Intergovernmental Panel on Climate Change) highlights uncertainties in fixing global emission targets in relation with global carbon budget.
- Given such uncertainty, the requirement of reporting as little as 500 kilo tonnes or 0.05% of national emissions per country has little scientific rationality.
- Moreover, the uniformity of the stringency in reporting is being expressed in percentage terms.
- But a smaller percentage of the emissions of a large emitter will be a larger quantity in absolute terms compared to the larger percentage of emissions of a small emitter.

#### What are the larger concerns?

- **Mitigation** - There is lack of initiative by the developed countries in taking the lead in climate mitigation.
- All developed countries continue to invest in fossil fuels either through direct production or imports.
- Some do so because of the downgrading of nuclear energy due to domestic political pressures.
- Others are still trying to wean themselves off coal by shifting to gas.
- Overall, the use of fossil fuel-based electricity generation continues to rise for OECD (Organisation for Economic Co-operation and Development) countries.
- **Finance** - Developing countries have for long demanded that the bulk of climate finance must be from public sources.
- In contrast, the developed countries have succeeded in putting other sources of finance, including FDI and equity flows.
- But private sector flows or loans will increase the indebtedness of developing countries.
- Much of the pressure exerted by developed countries at COP24 (Conference of Parties), Katowice had the active backing and instigation of the U.S.
- The marked synergy between the U.S. and its political and strategic allies pushed through several critical elements of the “rulebook”.

#### What is the case with India?

- India has been articulating the need for equity in climate action and climate justice.
- But it failed to obtain the operationalisation of these notions in several aspects of the “rulebook”.
- In contrast, Brazil held its ground on matters relating to carbon trading that it was concerned about.
- It postponed finalisation of the matter to next year’s summit.
- India underestimated what was at stake at Katowice and the outcome mean a serious narrowing of India’s developmental options in the future.
- In all, the “rulebook” adoption at COP24 signals a global climate regime that benefits and protects the interests of the global rich.
- It has left the climatic fate of the world, and the developmental future of a substantial section of its population, still hanging in the balance.

## 13.2 IMD Statement on Climate of India in 2018

### What is the issue?

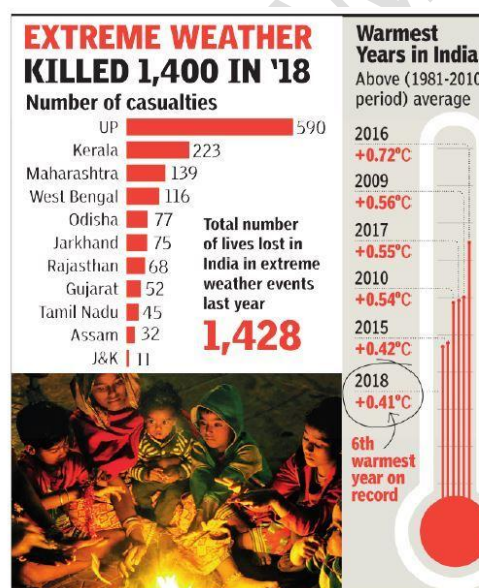
- A recently released IMD (India Meteorological Department) statement shows 2018 as the sixth warmest year on record.
- In this context, a look at the temperature and rainfall trends last year and a series of extreme weather events becomes essential.

### How was 2018 overall?

- 2018 was the sixth warmest year on record, with the average temperature over India being “significantly above normal”.
- [The 5 warmest years on record (nationwide records began in 1901) are, in order, 2016, 2009, 2017, 2010, 2015.
- Notably, 11 of the 15 warmest years were during the recent past fifteen years (2004-18).
- The 20 warmest years on record have been in the past 22 years, with the top four in the past four years.

### How was the temperature trend?

- The temperature trends of recent years are part of the larger “global warming” trend.
- The rate of increase of temperatures over India is almost similar to the global average.
- The winter and pre-monsoon seasons, with an anomaly of +0.590°C and +0.550°C respectively, mainly contributed to the warming in 2018.
- Mean temperature during the monsoon and post-monsoon seasons were also above normal.
- The mean monthly temperatures were warmer than normal during all months of the year across the country, except December.
- Broadly, temperatures are increasing during both day and night time.
- Heat waves are increasing in frequency as well as in magnitude.
- Consequently, extreme rainfall and rainstorms which can cause floods are increasing.
- Dry spell duration is also increasing.



### What is the case with extreme weather events?

- The increase in temperatures is predicted to lead to more extreme weather events.
- Apart from the six cyclonic storms that formed over the northern Indian Ocean, India experienced “high impact weather” events.
- These were extremely heavy rainfall, heat and cold waves, snowfall, thunderstorms, dust storms, lightning and floods.
- Uttar Pradesh was the most adversely affected state during 2018.
- It reported nearly 600 deaths due to cold waves, thunderstorm, dust storm, lightning and floods.
- Flood and heavy rain related incidents reportedly claimed over 800 lives from different parts of the country.
- North India also witnessed high-velocity dust storms and thunderstorms in April and May and then, later in June-July.
- Dust storm claimed over 150 lives from Uttar Pradesh and adjoining parts of Rajasthan.
- Thunderstorm was another major event of the year over the northeastern parts of the country.



- Notable cyclones in the year are Titli, Gaja, and Phethai which crossed the Odisha, Tamil Nadu, and Andhra Pradesh coasts respectively.

### How was the monsoon rainfall trend?

- Rainfall over India as a whole during the southwest monsoon season was near normal with 90.6% of Long Period Average (1951-2000).
- But the northeast monsoon season rainfall was substantially below normal with 56% of LPA and was the sixth lowest since 1901.
- The seasonal rainfall during the northeast monsoon season over the core region of the south peninsula was also below average (66% of LPA).
- It comprises of 5 subdivisions - Coastal Andhra Pradesh, Rayalaseema, Tamil Nadu & Puducherry, South Interior Karnataka and Kerala.
- Out of these, Kerala received normal rainfall and the other four subdivisions received deficient rainfall.

### 13.3 National Clean Air Programme

#### Why in news?

The Centre recently launched the National Clean Air Programme (NCAP).

#### What are the features of the programme?

- **Objective** - The overall objective of the programme includes comprehensive mitigation actions for prevention, control and abatement of air pollution.
- It also aims to augment the air quality monitoring network across the country and strengthen the awareness and capacity building activities.
- Also, city-specific action plans are being formulated for 102 non-attainment cities that are considered to have air quality worse than the National Ambient Air Quality Standards.
- The Smart Cities programme will be used to launch the NCAP in the 43 smart cities falling in the list of the 102 non-attainment cities.
- **Target** - It proposes a tentative national target of 20%-30% reduction in PM<sub>2.5</sub> and PM<sub>10</sub> concentrations by 2024, with 2017 as the base year for comparison.
- However, the government has stressed that NCAP is a scheme, not a legally binding document with any specified penal action against erring cities.
- **Implementation** - NCAP talks of a collaborative, multi-scale and cross-sectoral coordination between central ministries, state governments and local bodies.
- The CPCB will execute the nation-wide programme for the prevention, control, and abatement of air pollution within the framework of the NCAP.
- NCAP will be “institutionalised” by respective ministries and will be organised through inter-sectoral groups that will also include the Ministry of Finance, Ministry of Health, NITI Aayog, and experts from various fields.
- Other features of NCAP include –
  1. Increasing the number of monitoring stations in the country including rural monitoring stations
  2. Technology support
  3. Emphasis on awareness and capacity building initiatives
  4. Setting up of certification agencies for monitoring equipment
  5. Source apportionment studies
  6. Emphasis on enforcement
  7. Specific sectoral interventions.



### What are the proposed mitigation measures?

- **Enforcement** - It calls for stringent enforcement through a web-based, three-tier mechanism that will review, monitor, assess and inspect to avoid any form of non-compliance.
- The experience indicates lack of regular monitoring and inspection as the major reason for non-compliance.
- Trained manpower and regular inspection drive will be ensured for stringent implementation purpose.
- It also calls for an “extensive plantation drive” at pollution hotspots and execution.
- However, it is not made clear how much air pollution this will seek to reduce.
- **Elaborating existing schemes** – While some of the strategies are not new to India, NCAP appears to be targeting effective implementation.
- For example, it talks of “congestion management” at traffic junctions by the traffic police, solid waste management by municipal corporations, and stringent industrial standards put in place by concerned ministries.
- For power sector emissions, it refers to emission standards set by the Ministry of Environment and Forests for Thermal Power Plants in December 2015 to be implemented within a two-year period.
- It notes that this has since been extended to December 2022.
- For agricultural stubble burning, it highlights the initiatives already in place by way of the central assistance of Rs 1,151 crore for in situ management of crop residue and provides for general action points to be explored.
- **Focus** - NCAP calls for a city action plan that needs to be guided by a comprehensive science-based approach involving source apportionment studies.
- It also advises that state capitals and cities with a million-plus population be taken up on priority.

### What are the concerns?

- NCAP takes into account available international experiences and national studies.
- It notes that internationally, actions have been “city-specific” rather than country-oriented, and cites examples such as Beijing and Seoul that saw 35%-40% PM<sub>2.5</sub> reductions in five years.
- However effective this might have been abroad, reductions by similar levels might leave Indian cities still heavily polluted.
- Delhi’s very severe pollution levels are four times the permissible limits now, and a 30% reduction by 2024 would still leave it very dangerous for health.

### 13.4 New Coastal Regulation Zone Notification

#### Why in News?

Union cabinet has approved amendments to the Coastal Regulation Zone (CRZ) Notification.

#### What is Coastal Regulation Zone (CRZ) about?

- Ministry of Environment and Forests (MoEF) under the Environment Protection Act, 1986, issued the Coastal Regulation Zone notification for regulation of activities in the coastal area.
- As per the notification, the coastal land up to 500m from the High Tide Line (HTL) and a stage of 100m along banks of creeks, estuaries, backwater and rivers subject to tidal fluctuations, is called the Coastal Regulation Zone (CRZ).
- CRZ along the country has been placed in four categories, which are as follows
- **CRZ I - Ecologically Sensitive Areas.**
- They lie between low and high tide line.
- Exploration of natural gas and extraction of salt are permitted
- **CRZ II - Shore Line Areas**

- The areas that have been developed up to or close to the shoreline.
- Unauthorized structures are not allowed to construct in this zone.
- **CRZ III - Undisturbed Area**
- Rural and Urban localities which fall outside I and II.
- Only certain activities related to agriculture even some public facilities are allowed in this zone.
- **CRZ IV - Territorial Area**
- Area covered between Low Tide Line and 12 Nautical Miles seaward.
- Fishing and allied activities are permitted in this zone.
- Solid waste should be let off in this zone.

#### **What are the recent changes in the CRZ notification?**

- Union government made significant relaxation of development controls along the coastline through the Coastal Regulation Zone (CRZ) Notification 2018.
- **CRZ-II Urban** - The CRZ-II urban category, as per the CRZ notification of 2011, pertains to areas “that have been developed up to or close to the shoreline”, and are legally designated municipal limits already provided with roads, water supply, sewerage connections and so on.
- Under the new notification, decision has been taken to permit current Floor Space Index (FSI) or Floor Area Ratio (FAR) in urban areas coming under CRZ-II which governs the size of buildings.
- This does away with the restrictions on construction which date back to the Development Control Rules of 1991.
- **CRZ- III Rural** - For rural areas, the newly approved notification adds a sub-category to CRZ-III.
- The new provision, CRZ-III A, applies development restrictions to a much smaller area of 50 meters from the high tide line, compared to the 200 meters that was earmarked as the no development zone (NDZ) earlier for densely populated areas.
- These are defined as places with a population of 2,161 per sq km as per the 2011 Census.
- Areas with a population density below that will continue to have 200 meters as the NDZ (No-Developmental Zone)

#### **What are the changes made to the regulatory framework?**

- The system of granting clearances has also been changed. States will have the authority to approve proposals for urban (CRZ-II) and rural (CRZ-III) areas.
- The Ministry of Environment, Forests and Climate Change will grant clearances for ecologically sensitive areas (CRZ-I), and areas falling between the low tide line and 12 nautical miles seaward.
- The modifications also include demarcation of a 20-metre no development zone for all islands and guidelines to deal with sensitive areas.

#### **What is the significance of the move?**

- The notification aims to encourage construction of buildings and launch tourism activities in areas that are closer to the high tide line.
- Government has taken the view that both affordable housing availability and tourism will grow if restrictions on coastal zones are relaxed.
- However, for tourism expansion, the new scheme will allow temporary facilities such as shacks, toilet blocks and changing rooms, maintaining only a slim margin of 10 meters from the high tide line.

#### **What are few issues with the plan?**



- When the draft of the new CRZ notification was published in 2018, concerns were raised that it ignored two major issues:
  1. Maintaining a well demarcated hazard line,
  2. Factoring in the effects of climate change on sea levels.
- The disastrous impacts of periodic cyclones show that coastlines will become even more vulnerable.
- Protection of fishers poses a challenge, since the relaxation of development controls could subject them to severe commercial pressures.
- The decision to allow construction and tourist facilities closer to the coast may boost employment and grow local business, but without strong environmental safeguards, these could damage fragile ecosystems.

## 14. INTERNAL SECURITY

### 14.1 Reforming Defence Acquisition in India

#### What is the issue?

India has taken many initiatives on its defence acquisition policy landscape, yet it has failed in its implementation.

#### What were the initiatives taken on defence acquisition?

- The Defence Production Policy 2018 had set targets for getting India into the world's top five defence producers and creating 3 million jobs in the defence industry by 2025.
- It has promised to increase defence exports ten-fold to \$5 billion, while becoming self-sufficient in building fighter aircraft, helicopters, warships, armoured vehicles, missiles and other systems.
- A draft offsets policy was issued later which proposed that vendors will be allowed to discharge offsets by creating defence manufacturing infrastructure. (such as testing laboratories, ranges and skill centres)
- This will be made through sponsoring projects that generate high-technology, and through transferring critical technologies that do not exist in India.
- It has also proposed special incentives for investments in two defence industry corridors in Tamil Nadu and Uttar Pradesh.
- Also, Raksha Mantri's Advisory Committee on Ministry of Defence Capital Projects (RMCOMP) was set up to review critical weapon procurements and to identify why they were facing delays.
- All these initiatives, though had grand objectives to promote defence acquisition, have failed to make a mark in its implementation.
- This has created the need to form a defence procurement organisation in India.

#### What are the progress made in forming DPO?

- The Dhirendra Singh Committee in 2015 articulated the need for setting up a Defence Procurement Organization (DPO) outside Ministry of Defence.
- Another committee constituted under Vivek Rae in 2016 told that it would be better to refashion and strengthen the existing defence acquisition structure.
- The committee under Pritam Singh in 2017 recommended the creation of a central, autonomous and an empowered professional organization.
- This organisation will help building up indigenous defence capability as a strategic imperative for long-term self-reliance.
- However, the implementation of these committee's recommendations is getting delayed.

#### What should a DPO contain?

- **Focus** - The new DPO must holistically focus on defence acquisition, not just procurement.
- Procurement involves the straight purchase of existing defence equipment from global or domestic "original equipment manufacturers (OEMs)".





- Acquisition includes meeting the military's need through channels such as indigenous development.
- The DRDO is currently pursuing 52 mission-mode projects (MMPs) involving an outlay of over Rs 370 billion.
- But since the military is not a stakeholder in these MMPs, it does not seriously consider MMPs as acquisition options.
- To overcome this, the military must take financial stakes in MMPs and participate in their oversight.
- The reformed DPO must be empowered to meet a service requirement through direct purchase, manufacture under technology transfer, or through an MMP nearing fruition.
- **Specialisation** - The requirements for each acquisition must be met through purpose-built Integrated Programme Teams (IPTs).
- Each IPT should include the specialists needed for that specific task.
- The specialist requirement will vary not just from project to project, but also at different times within the same project.
- The IPT, therefore, must be constituted and re-constituted continually, in order to optimise the use of manpower to contribute to IPTs when required.
- Such flexible IPT structures should eliminate the rationale for a rigid and centralised DPO.
- **Roleallocation** - A refurbished DPO must focus exclusively on equipment acquisition.
- At present, the defence secretary spends 60% of his time on procurement rather than focussing on long-term strategy and defence diplomacy.
- To overcome this, the defence acquisition wing should be upgraded, which is currently under the Department of Defence, into a full-fledged department under a secretary-level official.
- Also, the dilemma regarding chairing the DPO either with a cadre of specialist acquisitions managers or with the serving bureaucrats needs to be resolved.

## 14.2 Shortfalls in Fighter Jets - IAF

### What is the issue?

The Indian Air Force (IAF) does not have enough fighter jets and hence there is an immediate requirement to address the shortfall.

### What is the background?

- The IAF is now left with only 30 fighter squadrons and in a couple of years, it will be down to 26 squadrons.
- The reason for this include –
  1. Gradual decommissioning of obsolete aircraft over time
  2. The loss of aircraft in crashes
  3. Massive delays in purchases of new aircraft
- In comparison, the Pakistan Air Force will have 25 squadrons of fighter aircraft, while China will be able to unleash as many as 42 squadrons upon India in case of a conflict.
- The government's mandate for the IAF is to be prepared for a two-front collusive threat from China and Pakistan.
- For this, the IAF is authorised 42 squadrons of fighter aircraft, which is the bare minimum it needs to dominate a two-front conflict.
- But the last time the IAF had the full complement of 42 squadrons was nearly 17 years ago, and the numbers have only fallen since.

### What should be done?

- **Tejas** is the first advance Fly-by-wire (FBW) fighter aircraft designed and developed indigenously by Aeronautical Development Agency (ADA) and produced by Hindustan Aeronautics Limited (HAL).
- Tejas is a 4th Plus generation aircraft with a glass cockpit and is equipped with state of the art Satellite aided Inertial Navigation System.
- It has a digital computer based attack system and an autopilot.
- It can fire Air to Air Missiles, Bombs as well as Precision Guided Munitions.
- The IAF is committed to get six squadrons from HAL, four of them of the Tejas Mark1A version.
- While HAL hopes to provide 18 aircraft per year, it has not been able to ramp up capacity to even half that number so far.
- This situation can impinge on the availability of fighter squadrons in the near future.
- The other option is to import more fighter aircraft.
- IAF will get two squadrons of Rafale by 2023, and it has plans for six squadrons of another foreign fighter within a decade.
- But the latter is still a proposal on the planning board, and a long way away from getting implemented.
- Thus, the IAF is looking at a scenario where it will have to undertake emergency imports, perhaps at an exorbitant cost, to make up the demand for fighter jets.

### How do other major powers tackle situations like these?

- The US, Russia and the Europe, all have highly developed defence industries that can design, develop, produce and supply fighter jets to their air forces.
- Countries like Pakistan and Israel can depend upon their allies, wherein Pakistan Air Force earlier got F16s from the US and now it gets the JF17 from China.
- Since India has no such option, the long-term answer is to promote indigenous manufacturing in a major way.
- But in the immediate term, there is a need to take steps to ensure that this shortfall is made up quickly as a national security imperative.

### 14.3 Indigenous Defence Production - Tejas Case

#### What is the issue?

- The polarising debate in recent times over defence acquisitions has raised questions about indigenous defence production.
- A key proposal in this regard, is Tejas, the indigenous Light Combat Aircraft, which is getting delayed due to procedural challenges.

#### How is Tejas developed?

- The Tejas, or 'radiance', is an indigenous fighter aircraft.
- It is the smallest lightweight, multi-role, single-engine tactical fighter aircraft in the world.
- It is designed jointly by the Aeronautical Development Agency (ADA) in partnership with Hindustan Aeronautics Limited (HAL).
- This works as per the Air Staff Requirement (ASR) issued by the Indian Air Force (IAF) in 1985.



India's first indigenously designed and developed

## LIGHT COMBAT AIRCRAFT *Tejas*

Project first conceived and launched in 1983	Maiden test flight took place on Jan 4, 2001	Designed for air-to-air, air-to-ground and air-to-sea combat roles	Intended to replace the phased out MiG-21 fighter jets
--	--	--	--

### Specifications

Crew One	Length 13.2 m	Height 4.4 m	Wingspan 8.2 m	Max speed 1.6 mach	Engine F-404-GE-IN20
Project development cost ₹ 17,269 crore		Unit cost ₹ 220-250 crore		Max take-off weight 13,200 kg	

KBK Infographics



- At all stages, the IAF has wholeheartedly participated and supported in this vital indigenous design and development project.

### **Why is the delay in production?**

- The ADA, the design authority for Tejas, incorporates design changes based on observations made during test flights.
- The ADA makes all such changes in consultation with HAL and other agencies.
- These changes are issued as “change notices” with requisite documentation and manufacturing technology.
- While the IAF participates in all these consultations, it is not authorised to issue “change notices”.
- But Tejas production is getting delayed due to the IAF changing specifications.
- HAL blames the IAF for changing specifications as the IAF is a customer and it can only issue the ASR.
- It is the HAL, as the original equipment manufacturer, which has to issue the specifications of the aircraft and its components.
- [The IAF has not changed the 1985 ASR, except for granting concessions after limitations were encountered during the design and development of the aircraft.
- So, many design changes were incorporated in the Tejas to bridge the shortfall from ASR.
- Other changes were incorporated to enhance the safety of flight, based on lessons learnt from recent accidents and incidents.]

### **What are the challenges and the way forward?**

- The production of Tejas aircraft is very different and complex because the aircraft is still at the design and development stage.
- The standard of preparation of an aircraft defines its capability, which is just evolving for Tejas.
- This requires a production capability with a robust supply chain supported by competent sub-vendors to help HAL production line to quickly adapt to such changes.
- So HAL needs to bring in institutional flexibility to quickly adapt its production line to such evolving changes during the design and development phase of Tejas or any subsequent aircraft.
- In all, the IAF and HAL have to work together for indigenous aircraft production process to be smooth.

## **PRELIM BITS**

### **HISTORY AND ART & CULTURE**

#### **Monuments of National Importance**

- Archaeological Survey of India has recently declared 6 monuments as protected and of national importance.
- According to the Ancient Monuments and Archaeological Sites and Remains Act, 1958, an “Ancient Monument means any structure, erection or monument, or any tumulus or place of interment, or any cave, rock-sculpture, inscription or monolith which is of historical, archaeological or artistic interest and which has been in existence for not less than 100 years.”
- With the new addition of 6 new sites, there are 3,693 centrally protected monuments/sites under the ASI in the country.
- Uttar Pradesh (745 monuments/sites), Karnataka (506) and Tamil Nadu (413) have the highest number of ASI-maintained sites.
- The New Monuments which are added recently are
  1. 125-year-old Old High Court Building in Nagpur,
  2. Mughal-era monuments in Agra - Haveli of Agha Khan and Hathi Khana,
  3. Ancient Neemrana Baori in Rajasthan's Alwar district,

4. The Group of Temples at Ranipur Jharail in Odisha's Bolangir district &
  5. The Vishnu Temple in Kotali, Pithoragarh district, Uttarkhand
- The last monument to be included in the previous list, in 2015, was the Vishnu Temple in Nadavayal in Kerala's Wayanad district.

### Harappan Excavations in Haryana

- Rakhigarhi in Haryana was one of the most prominent sites of the Harappan civilisation.
- A team of Indian and South Korean researchers carried out excavations in Rakhigarhi between 2013 and 2016.
- The skeletal remains of a young male and female have recently been discovered.
- Of the 62 graves discovered in Rakhigarhi, only this one had more than one skeleton and of individuals of the opposite sex, together.
- Most archaeological recoveries show individuals were buried separately in Harappan times.
- But this kind of **joint graves** have been very rare, and almost none have been found containing a couple.
- The only joint burial of a couple discovered earlier has been from Lothal in Gujarat.

### Graves in Harappan sites

- Broadly, three types of graves have been discovered at Harappan sites.
  - i. Primary grave, the most common type, where archaeologists have found full-body remains of the person placed inside a pit.
  - ii. Secondary pits were those that contained partial remains of a few bones placed in the pit.
  - iii. In the third type, instead of skeletal remains there were just some accessories, presumably the belongings of the deceased person. (Perhaps the body could not be ever retrieved, due to deaths caused by wild animals or during wars.)
- Most of the graves at the Harappa sites have been that of men, with only 20% of graves are of women, while fewer than that of 1% are of children.
- However, excavations of cemeteries so far have found that graves of women were positioned in the centre of the cemetery, and surrounded with bangles, jewellery, and other ornaments.
- This could mean that the Harappan society gave a higher status to women.

### Sanjhi - Mujh Mein Kalakar

- It is an initiative to document and promote the Intangible Cultural Heritage and diverse cultural traditions of the country by direct public-participation.
- SĀNJHI means “to share” and “to partner”.
- Sangeet Natak Akademi is about to launch the second phase of the Web Campaign SANJHI - MUJH MEIN KALAKAR.
- The second phase of this campaign has its main focus area- the folk, traditional, customary, socially events and ritualistic art forms- woven as a cultural fabric around the harvest festival season of January
- This is also a talent search where the participant will showcase their talent in the fields of art.

### Sangeet Natak Akademi

- It is the first National Academy of the arts set-up by the Republic of India in 1952.
- It was created by a resolution of the then Ministry of Education.
- In 1961, it was reconstituted as a society and registered under the Societies Registration Act of 1860.
- It is now the nodal agency of the Ministry of Culture.
- It establishes and looks after institutions and projects of national importance in the field of the performing arts.



- It also coordinates the matters related to Intangible Cultural Heritage and various UNESCO Conventions.

### Mudiyettu

- Mudiyettu is a ritualistic dance drama from Kerala.
- It is based on the mythological tale of a battle between the goddess Kali and the demon Darika.
- It is performed in the Bhadrakali temples of Central Kerala.
- It is a community ritual in which the entire village participates.
- It found a place in the UNESCO's intangible heritage list in 2010.

### Folk Arts

- The Vice President witnessed folk and classical dances presented by Tableaux Artists in Republic Day Parade.

State	Dance	Description
Arunachal Pradesh	By Monpa Tribes	Yak Dance commemorating discovery of Yak & Aji Lhamu Dance depicting Tibetan version of the Hindu Epic Ramayana
Assam	Sattriya Nritya	Classical dance centered in Vaishnavism
Sikkim	Tamang Selo	Danced to the tune of Damphu instrument
Tripura	Mamita	Performed on the occasion of Mamita, the harvest festival
Tamil Nadu	Karakkatam	Water pot is balanced on the heads during performance
Maharashtra	Koli	Koli fisher folk incorporates elements of sea and fishing by holding oars
Jammu & Kashmir	Mentoq Stanmo from Ladakh	Flower dance originated in Kargil
	Rouf from Kashmir	Performed by women and known for the artistic footwork
	Kud from Jammu	Performed by young as well as old people and known for its spontaneity

### Kurumba Painting

- Kurumbas are the tribe who live in the mid-ranges of the Nilgiris or "blue-mountains".
- The Kurumba art is traditionally practiced by only either by the male members of the temple caretakers, or priest to the Kurumba village.
- The women of the family contribute to the decorations at home in the form of borders around the door and windows and kolams on the floor.
- The art are primarily ritualistic, describing various facets of tribal life.
- Often it is painted on the outer wall of the temple and the house.
- Eluthu paarai is an ancient 3000-year-old rock-painting site of Kurumbas in the Kothagiri region of the Nilgiris.

- The rock art depictions in this site come under the category of ‘petrographs’ means “rock art”.
- Rock engravings are called ‘petroglyphs’.

### Pithora Paintings

- The Pithora painting form is traditionally performed on walls inside the homes of the Rathvas tribe.
- In times of difficulty, Rathva seek the guidance of Badva, the chief priest or shaman of the village.
- Badva performs readings based on the skills he has acquired through ancestral schooling, and recommends undertaking a vow to paint Pithora in the home in order to gain a boon from Baba Pithora.
- The person who undertakes the vow is known as Ghardhani, or in simple terms, home owner.

### Elephanta Caves

- An event that showcased the rich handloom and textile tradition of India was held at Elephanta Caves.
- It was organized by the Ministry of Textiles.
- Elephanta Caves is a UNESCO World Heritage site constructed about the mid 5<sup>th</sup> centuries AD.
- The Caves are located on Elephanta Island near Mumbai.
- It contains a collection of rock art linked to the cult of Shiva.
- Sadashiva sculpture dominates the entrance to one of the caves.
- It represents three aspects of Shiva: the Creator, the Preserver, and the Destroyer.



### Etikoppaka Bommalu

- Etikoppaka is a small village located on the banks of the river Varaha in Vishakhapatnam district of AP.
- Etikoppaka toys or Etikoppaka Bommalu, toys made of wood, are made in this region.
- The wood used to make the toys is soft in nature and the art of toy making is also known as Turned wood Lacquer craft.
- They are also called as lacquer toys because of application of lacquer coating.
- They are colored with natural dyes derived from seeds, lacquer, bark, roots and leaves.



### Budithi Brass Craft

- Budithi Brass Craft are the products made out of alloy like brass at Budithi, a village in Srikakulam district of the Indian state of Andhra Pradesh.
- It was registered as one of the geographical indication handicraft from Andhra Pradesh as per Geographical Indications of Goods (Registration and Protection) Act, 1999.
- The art form is generally expressed in traditional cooking utensils and also in forms that suit contemporary needs - like flower pots and planters.
- Usually made of brass, the objects have patterns that are geometric, with straight lines and curves forming simple and striking presentations.



### Kumbh Mela

- Prayagraj (Allahabad) will host the Ardh Kumbh Mela 2019.
- Millions of people attend the holy festival making it the largest public gathering and collective act of faith.
- The pilgrimage is celebrated four times over a course of 12 years.



- The geographical location of Kumbh Mela spans over four locations in India.
- The Mela site keeps rotating between one of the four pilgrimages on four sacred rivers as listed below -
  1. Haridwar on the Ganges in Uttarakhand
  2. Ujjain on the Shipra in Madhya Pradesh
  3. Nashik on the Godavari in Maharashtra
  4. Prayagraj (Allahabad) at the confluence of the Ganges, the Yamuna, and the mythical Sarasvati in Uttar Pradesh.

### Maagh Bihu

- Bihu is the most important festival of Assam, which is actually a set of three festivals.
- Bhogali Bihu or Maagh Bihu is celebrated during the month of January in Assam.
- It the second largest Bihu festival of Assam after Bohag Bihu.
- It marks the end of the harvest season.
- People worship Lord Indra, who according to the Hindu mythology is “God of rains and clouds”.

Bihu	Month	Reason
Kaati Bihu	October	Much duller than other two festival, praying for good harvest. Granaries are empty
Maagh Bihu	January	Harvest festival. Granaries are full
Bohaag/ Rongali Bihu	April	Assamese New Year & Spring festival

### Losar Festival

- It is the Tibetan New Year.
- The structure of the Tibetan calendar is based simultaneously on the cycles of the sun and the moon.
- The Tibetan year begins the day of the new moon following the entry of the sun in the constellation of the Ram.
- It generally falls on February.
- The Tibetan year is composed of twelve “lunar” months.
- Lunar month is the period between two new moons i.e begins the 1st day following the new moon to finish with the following new moon.
- Lunar months consist of 30 lunar days and 1 lunar day = 0.984 solar day (24 hrs).
- So 1 lunar month lasts approximately 29,5 solar days.
- Thus, a Tibetan year, is composed 354 solar days.
- Therefore, they add a 13th lunar month approximately every 30 months in order to catch up with the Western year.
- The calendar is known as “lunisolar”, as it catches up with the solar calendar by adding one month.
- Given its Tibetan population, Ladakh also celebrates this festival with much excitement,

### Guru Gobind Singh

- Prime Minister will release a commemorative coin to mark the birth anniversary of Guru Gobind Singh.
- He is the 10<sup>th</sup> and the last Sikh Guru.

- He was a spiritual master, warrior, philosopher and poet.
- Due to his huge contribution to Sikhism, he is considered as the eternal guru by many of his followers.
- His father Guru Tegh Bahadur was the ninth guru of the Sikhs.
- Guru Gobind Singh and his Khalsa army inspired Sikh devotees to fight the Mughal rulers for their religious freedom and political liberty.
- The Var Sri Bhagauti Ji Ki, popularly called Chandi di Var, written in 1684, was his first composition and his only major work in the Punjabi language.

### First Swadesh Darshan project in Meghalaya

- Development of North East Circuit: Umiam (Lake View) - U Lum Sohpetbneng- Mawdiangdiang - Orchid Lake Resort was recently inaugurated.
- It is implemented under Swadesh Darshan Scheme (SDS).
- SDS is one of the flagship schemes of the Ministry of Tourism for development of thematic circuits in the country in a planned and prioritized manner.
- Lake Umiam is a part of a dam, constructed as a first Hydel Power Project in this North-East Indian State.
- U Lum Sohpetbneng is a legendary mountain peak which symbolizes the deep rooted spiritual belief of the Hynniewtrep – the seven huts people.
- The Seven Huts people are predominating in the West Khasi Hills, East Khasi Hills, Ri-Bhoi and Jiantia Hills districts of East Meghalaya.

### Gandhi Circuit

- The Government commemorated centenary of Champaran Satyagrah during the period for April, 2017 to April, 2018.
- As a part of this, a project for “Development of Gandhi Circuit: Bhitiharwa-Chandrahia-Turkaulia under Rural Circuit theme of Swadesh Darshan Scheme” has been sanctioned in Bihar with central financial assistance.
- The most famous Gandhian site in Champaran, Bihar is Bhitiharwa.
- It is a place where Gandhi set up a school and ashram in 1917.
- Recently government has erected an ashram complex which includes a museum.
- On April 18, 1917, Mahatma Gandhi embarked on a journey from Motihari to Jasauli Patti in the then undivided Champaran district of Bihar.
- During the journey Mahatma Gandhi was served an order by the British rulers at Chandrahia village, prohibiting him from traveling any further.
- As a result, he had to return to Motihari to face trial.
- However, he continued to be in Champaran until the plight of the indigo farmers was addressed.

### Champaran Satyagraha

- During British rule, many tenant farmers were forced to grow row indigo on part of their land, which was used to make dye.
- But the demand for indigo dropped when the Germans invented a cheaper artificial dye.
- However, during the First World War the German dye ceased to be available and indigo once more became profitable.
- So a tinkathia system was put in place by the British.
- According to it, a Champaran tenant was bound by law to plant 3/20th parts of his land.
- This led to anger and resentment among the tenants.
- A farmer named Raj Kumar Shukla appealed to Gandhiji to organize the struggle to save the plantation workers.
- Gandhi visited the district in April 1917.





- Gandhi's was charged with violating Section 144 of Cr. PC (creating unrest) and was ordered to leave the district.
- Gandhi refused, leading to India's first civil disobedience movement.
- He was arrested which led to massive non-violent protests and rallies, which eventually led to his release.
- Further, the Collector wrote to Gandhi saying he was free to conduct the inquiry.
- 8,000 statements were taken from of *ryats* (tenants) by volunteers.
- The Bihar administration grew anxious and so the then Lieutenant Governor of Bihar declared the formation of a Champaran Inquiry Committee with Gandhi aboard.
- The Government accepted almost all its recommendations, including complete abolition of Tinkathia system.
- During this time, Gandhi also
  1. deliberately stayed away from INC
  2. reiterated that he was there on humanitarian basis &
  3. promoted primary education in the region

### Pravasi Bharatiya Divas

- It is celebrated once in every two years to strengthen the engagement of the overseas Indian community with the Government of India and reconnect them with their roots.
- It sponsored by the Ministry of External Affairs.
- The day commemorates the return of Mahatma Gandhi from South Africa to Mumbai on 9<sup>th</sup> January 1915.
- During the Convention, selected overseas Indians are also honored with the prestigious Pravasi Bharatiya Samman Award to recognize their contributions to various fields both in India and abroad.
- The 15<sup>th</sup> PBD was held in Varanasi.
- The theme was "Role of Indian Diaspora in building New India" and PM of Mauritius was the Chief Guest.

### World Capital of Architecture

- UNESCO has named the Brazilian city of Rio de Janeiro as the World Capital of Architecture for 2020.
- Rio has a mix of modern and colonial architecture.
- It will be the first city to receive the title under a programme launched together by UNESCO and the International Union of Architects (UIA) in November 2018.
- Rio houses some world-renowned sites like the statue of Christ the Redeemer and contemporary constructions like the Museum of Tomorrow.
- The city is also home to works of renowned architects such as Oscar Niemeyer, who also designed the capital city of Brasilia.

## GEOGRAPHY

### Vaduvvoor Bird Sanctuary

- Vaduvvoor Bird sanctuary is situated in Thanjavur, Tamil Nadu.
- Vaduvvoor lake is home to thousands of avian visitors every year from different continents.
- The lake is surrounded by fertile wetlands and offers a perfect spot for the birds for food, shelter and reproduction.
- It is a ideal spot when the temperature drops in their home countries in Europe, the Americas and sometimes Russia.
- The entire sanctuary is declared a protected area and the lake is periodically desilted.
- Ruff, spot billed duck, pin tailed duck, cotton teal and black headed ibis are the common visitors.



## Chadar Trek

- Air force Station, Thoise, in Nubra Valley of J&K conducted a trekking expedition called Chadar Trek to commemorate 70<sup>th</sup> Republic Day.
- The Chadar Trek is one of the toughest and most challenging trails in the country.
- This arduous expedition was on the frozen Zaskar river.
- The Zaskar River is a north flowing tributary of the Indus River in Jammu and Kashmir.
- The river meanders north-westwards through the gorge of Zaskar.
- It finally meets the Indus River near Nimmu of Ladakh region.

## POLITY

### Nagaland under AFPSA

- The Central government has recently extended the Armed Forces Special Powers Act in Nagaland for 6 more months.
- Under AFSPA, security forces have the powers to conduct operations anywhere and arrest anyone without any prior notice.
- The AFSPA has been in force in Nagaland for several decades.
- It has not been withdrawn even after a framework agreement was signed on August, 2015 by Naga insurgent group NSCN-IM.

Click [here](#) to know more about AFPSA.

### Renaming of Allahabad

- Union Home Ministry has approved the UP government's proposal to rename Allahabad as Prayagraj.
- For changing the name of a village or town or a city, just an executive order is needed.
- The renaming of a state requires amendment of the Constitution with a simple majority in Parliament.
- A bill to change the name of the state shall be introduced in either House of Parliament only on the recommendation of the President.
- The bill should also referred by the President to the Legislature of that State for expressing its views.
- According to the existing guidelines for renaming of railway stations, villages, towns and cities,
  - i. It is mandatory to obtain a No Objection Certificate (NOC) from the Union Home Ministry by the respective state government.
  - ii. The Union Home Ministry considers the proposals of name change in consultations with Ministry of Railways, Department of Posts and Survey of India.
  - iii. These organisations have to confirm that there is no such city, town or village in their records with a name similar to the proposed one.

### Vote on Account (VoA)

- The Union Budget is nothing but a projected income and expenditure statement for the coming year.
- As per the Constitution, all the revenue received and the loans raised by the Union government are parked in the Consolidated Fund of India (CFI).
- **Article 266** mandates that Parliamentary approval is required to draw money from the CFI
- So the Budget has to be approved by Parliament before the commencement of the new financial year.
- But the discussion and passing of Budget generally goes beyond the current financial year.
- So a special provision called "Vote on Account" is used, where the government obtains the vote of **Lok Sabha** to withdraw money from CFI to keep the money flowing for the government's day to day functions, until the Budget is passed. (**Article 116**).
- e.g Salary to government employees, loan interest payments, subsidies, pension payments etc.

- It is also used in the years where Lok Sabha elections are due.
- But here vote on account is also presented along with minor policy changes, as it would be improper for the outgoing government to impose major budgetary constraints on its successor.
- Such a measure that includes both short term expenditure and income part is called an Interim Budget.
- The vote-on-account is normally valid for **2 months** and is in operation till the full Budget is passed.
- But during an election year, it may be extended for more than **2 months**.
- VoA is usually passed without much discussion as it typically does not seek funds for major projects or new initiatives.
- It usually does not contain any direct tax proposals, as that requires amendments to the Finance Bill.
- On indirect taxes though, there could be clarifications or minor tweaks.
- On the downside, the country may lose crucial time on developmental projects during the hiatus after the vote on account.

### Poll Symbols

- Aam Aadmi Party moved the Delhi High Court, seeking to restrain another party named Aapki Apni Party from using the battery torch symbol.
- It is because the battery torch, with rays of light on top, is similar to AAP's broom symbol.
- This along with the similar name is likely to confuse voters.
- The Election Commission has two lists of symbols namely **reserved and free**.
- Reserved symbols are allotted to candidates sponsored by recognized state or national parties.
- Similarly a list of free symbols is prepared by ECI for independent candidates or those from unrecognized parties.
- These candidates have to choose three symbols from the list at the time of submission of nomination papers.
- One of the three will be allocated to him.
- Any choice other than from the list will be summarily rejected.
- Two or more recognized political parties can have the same symbol provided they are not contenders in the same State or Union Territory.

### Law Ministry on Judges' Retirement Age

- In 2010, the Constitution (114th Amendment) Bill, was introduced in the Lok Sabha.
- The Bill sought to increase the retirement age of High Court judges to 65.
- This could not be taken up for consideration in Parliament and lapsed with the dissolution of the 15th Lok Sabha.
- Recently, Parliamentary Standing Committee proposed that rising the retirement age of judges would help retain the existing judges, which in turn would help in reducing both vacancy and pendency of cases in short run.
- The Law Ministry replied that there was no proposal as of now to increase the retirement age of Supreme Court judges from 65 to 67 and of High Court judges from 62 to 65.
- As per the existing memorandum of procedure (MoP), the judge appointment proposal has to be initiated by the Chief Justice of the High Court 6 months before the occurrence of vacancy.
- Within six weeks, the CM/Governor has to recommend on the proposal received from the Chief Justice.
- And within four weeks, the CJI/SC Collegium has to recommend the proposal to the Law Ministry.

### Consultative Committee

- The Union Minister of Consumer Affairs chaired an Inter-Session Consultative Committee Meeting.

- The Ministry of Parliamentary Affairs constitutes Consultative Committees of Members of both the Houses of Parliament for different ministries.
- The Minister in-charge of the Ministry concerned acts as the chairman of the Committee.
- The main purpose of these Committees is to provide a forum for informal discussions between the Government and Members of Parliament on policies and programs of the Government and the manner of their implementation.
- Meetings of these Committees are held both during the session and inter-session period of Parliament.

## GOVERNMENT INITIATIVES

### Department for Promotion of Industry and Internal Trade

- The government has notified changing the name of the Department of Industrial Policy & Promotion (DIPP) to the Department for Promotion of Industry and Internal Trade (DPIIT).
- The notification has also included four new categories of responsibilities to it.
- It includes
  1. The promotion of internal trade (including retail trade)
  2. The welfare of traders and their employees
  3. Matters relating to facilitating Ease of Doing Business
  4. Matters relating to start-ups.
- The erstwhile responsibilities include general industrial policy, administration of the Industries Act, 1951, industrial management, productivity in industry, and matters related to e-commerce.
- Internal Trade has so far remained under the domain of the Department of Consumer Affairs.

### Unispace Nano-satellite Assembly & Training Program

- It is a capacity building program on Nanosatellite development.
- It is an initiative by ISRO to commemorate the 50<sup>th</sup> anniversary of the first UN conference on the exploration and peaceful uses of outer space (UNISPACE-50+).
- The program provides opportunities to the participants from developing countries to strengthen in assembling, integrating and testing of Nanosatellite.

### Small Farmers' Agri-Business Consortium

- It was established as a Society in 1994 and it is celebrating silver jubilee this year.
- It is an Autonomous Society promoted by Ministry of Agriculture.
- It was established to facilitate agri-business ventures by catalyzing **private investment through Venture Capital Assistance Scheme**.
- It is the pioneer in organizing small and marginal farmers as Farmers Interest Groups, Farmers Producers Organization and Farmers Producers Company for increasing their bargaining power and economies of scale.
- It provides a platform for increased accessibility and cheaper availability of agricultural and in establishing forward and backward linkages in supply chain management.
- It is also the lead agency for implementing eNAM.

### Technical Textile

- Ministry of Textiles will hold National Conclave on Technical Textiles in Mumbai.
- Technical textiles are textile material and products manufactured primarily for technical performance and functional properties rather than aesthetic and decorative characteristics.
- They are used for automotive applications, medical usages, crop protection, protective clothing etc.
- They are also used in areas like agriculture, infrastructure, automotive, aerospace, sports, defense and packaging.

- They constitute 12-15% of the total textile value chain in India, whereas in some of the European countries they constitute 50% of the value chain.
- The industry is also import-intensive.

### Vande Bharat Express

- Train 18 was recently renamed as Vande Bharat Express.
- It is India's first semi-high speed train equipped with world class passenger amenities.
- It is scheduled to commute between New Delhi and Varanasi.
- It is 40-50% faster than the fastest train currently connecting these two cities.
- Integral Coach Factory (ICF), Chennai, built the train with its completely in-house design and manufacture, computer modelling in just 18 months.

### Chin refugees

- Eight organizations of the Chakma community submitted a memorandum to the Ministry of Home Affairs seeking the inclusion of Chin refugees in India by amending the Citizenship (Amendment) Bill, 2016.
- The bill currently allows illegal migrants who **are Hindus, Sikhs, Buddhists, Jains, Parsis & Christians** from **Afghanistan, Bangladesh and Pakistan**, eligible for citizenship.
- They want to add Myanmar to the list.
- The Chins are one of the major ethnic groups in Myanmar, and are mostly Christians.
- They are ethnically related to Mizos of Mizoram and the Kuki-Zomi groups in Manipur.
- Buddhist-majority Myanmar was governed by a military junta since the 1960s, until recently.
- They carried out forced assimilation and repression of the Chin people.
- About 4,000 Chin refugees were registered with the UNHCR in New Delhi.
- But in June 2018, the UNHCR decided to cancel their 'refugee status' on the ground that Myanmar has now become "stable and secure" and they don't need "international protection".

### ELISA Kits

- Recombinant Enzyme-linked immune sorbent assay (ELISA) kits are for Glanders and Equine Infectious Anaemia.
- It was developed by ICAR-National Research Centre on Equines.
- Both these diseases are notifiable diseases in India and require special diagnosis for control and eradication in the country.
- Glanders is a fatal infectious and notifiable disease of equines like horses, donkeys and mules.
- It is caused by a bacterium known as Burkholderia mallei and has zoonotic potential.
- Equine infectious anaemia (EIA) is a chronic, debilitating and persistent infectious disease of equines caused by a retrovirus.

### Tamil Nadu Defense Industrial Corridor

- Defense Minister launched the Tamil Nadu Defense Industrial corridor.
- The Corridor, also called the Tamil Nadu Defense Production Quad, will connect Chennai, Hosur, Salem, Coimbatore and Tiruchi around which investments are expected to grow.
- Ordnance Factory Board (OFB), Defense public sector units and private sector companies like TVS group announced investments along the corridor.
- Development of these corridors will help in accelerated growth and regional industry agglomeration, which will lead to increased defense production in the country and the region.
- Besides a defence innovation hub was also launched in Coimbatore.



### Deen Dayal Hastkala Sankul

- PM inaugurated Centres of Excellence at Deen Dayal Hastkala Sankul in Varanasi recently.
- It is a trade facilitation centre for handicrafts.
- It aims to facilitate weavers, artisans and exporters in promoting handlooms and handicrafts.

### GOVERNMENT SCHEMES

#### Development of Particularly Vulnerable Tribal Groups (PVTG)

- It is implemented by the Ministry of Tribal Affairs for the welfare of PVTGs.
- It strives to retain the culture and heritage of the community by adopting habitat development approach.
- This is a **demand driven** scheme. i.e Conservation-cum-Development (CCD)/Annual Plans are prepared by each State/UT **based on their need assessment**, which are then appraised and approved by the Project Appraisal Committee of the Tribal Affairs Ministry.
- Activities under the scheme include housing, land distribution, land development, agricultural development, animal husbandry, and construction of link roads etc.
- Tribal communities generally have specific signs such as primitive traits, distinctive culture, geographical isolation, shyness to contact with the community at large and backwardness.
- But some tribal groups have some specific features such as dependency on hunting, gathering for food, having pre-agriculture level of technology, zero or negative growth of population and extremely low level of literacy.
- Due to this factor, these groups are more vulnerable and need more focussed approach for their development.
- So a separate categorization called PVTG was formed.
- Categorization of tribal groups as PVTGs is done by Ministry of Home Affairs.

#### Deendayal Disabled Rehabilitation Scheme

- It is a Central Sector Scheme implemented by Department of Empowerment of Persons with Disabilities under MoSJ.
- The objectives of the scheme are
  1. To create an enabling environment to ensure equal opportunities, equity, social justice and empowerment of PwDs.
  2. To encourage voluntary action for ensuring effective implementation of the Rights of Persons with Disabilities Act 2016.
- It is being implemented since 1999 for providing financial assistance to NGOs working for education and rehabilitation of PwDs and was revised in 2018.
- According to Census 2011, there were about 2.68 crore persons with disabilities in India, constituting 2.21% of the total population.

#### National Agricultural Higher Education Project (NAHEP)

- ICAR has recently launched Rs.1100 crore worth NAHEP.
- It is to attract talent and strengthen higher agricultural education in the country.
- This project will be funded by the World Bank and the Indian Government on 50:50 basis.
- Student Rural Entrepreneurship Awareness Development Yojana (READY) scheme is being run in order to promote the participation of students in agricultural business.
- Under the scheme practical experience of agriculture and entrepreneurship is provided to undergraduate students.

#### Indian Post Payment Bank (IPPB)

- IPPB completed two years since its pilot launch recently.
- It was setup under the Department of Posts, Ministry of Communication.
- Government of India owns 100% equity in IPPB.

- It will provide the banking services to urban and rural areas.
- It will enable money transfer, transfer of government benefits, bill payments and other services such as investment and insurance.
- Postmen would deliver these services at the doorstep.
- These services will be offered through multiple channels like counter services, micro-ATM, mobile banking app, SMS etc.

### Menstrual Hygiene for Adolescent Girls Scheme

- It is a scheme under **Ministry of Health and Family Welfare**
- It aims to address the need of menstrual hygiene among adolescent girls residing primarily in rural areas.
- Funds are provided to States/UTs through National Health Mission.
- The funds are for decentralized procurement of sanitary napkins packs for provision primarily to rural adolescent girls.
- The napkins packs are provided at subsidized rates as per proposals received from the States and UTs.
- ASHAs across the country are trained and play a significant role in promotion of use and distribution of the sanitary napkins.
- It also a part of **Rashtriya Kishor Swasthya Karyakram** that aims to achieve adolescent participation, leadership, Gender Equity and inclusion.

### Cyber Crime prevention against Women and Children Scheme

- It is a scheme under the **Ministry of Home Affairs**.
- It aims to have an effective mechanism to handle cybercrimes against women and children in the country.
- The main features of the scheme are given below:
  - a. Online cybercrime reporting platform
  - b. One national level cyber forensic laboratory
  - c. Training of Police officers, judges & prosecutors
  - d. Cybercrime awareness activities
  - e. Research & Development
- 'Police' and 'Public' are State subject as per the Constitution of India
- So States are primarily responsible for prevention, detection and investigation of crime through their Law Enforcement Agencies.
- The Agencies take legal action as per the relevant sections of the IPC and the IT Act, 2000.
- The online cybercrime reporting portal [www.cybercrime.gov.in](http://www.cybercrime.gov.in) has been operationalized.

## NATIONAL INSTITUTES IN NEWS

### Central Information Commission

- The government has appointed Sudhir Bhargava as the new Chief Information Commissioner.
- The Commission has been constituted under the Right to Information Act, 2005.
- The jurisdiction of the Commission extends over all Central Public Authorities.
- It is the highest appellate body under the Right to Information Act.
- The Commission includes 1 Chief Information Commissioner (CIC) and not more than 10 Information Commissioners (IC) who are appointed by the President of India.
- Section 12(3) of the RTI Act 2005 provides for search committee to appoint CIC and IC which includes,
  - i. The Prime Minister, who shall be the Chairperson of the committee;
  - ii. The Leader of Opposition in the Lok Sabha ; and

iii. A Union Cabinet Minister to be nominated by the Prime Minister.

- CIC and other ICs shall hold office for a term of five years from the date on which he enters upon his office and shall not be eligible for reappointment.
- Every IC shall on vacating his office be eligible for appointment as the CIC, provided that the term of office shall not extend 5 years in aggregate.
- The salaries and allowances payable to and other terms and conditions of service of the CIC and IC shall be the same as that of the Chief Election Commissioner and Election Commissioner respectively.
- The decisions of the Commission are final and binding.

## BILATERAL ISSUES

### India-Myanmar-Thailand Trilateral Highway

- The IMT trilateral highway will connect Moreh in Manipur to Mae Sot in Thailand.
- India is undertaking construction of two sections of the Trilateral Highway in Myanmar.
- The two sections are,
  1. Construction of Kalewa-Yagyi road section
  2. Construction of 69 Tamu-Kyigone-Kalewa (TKK) road section.
- Both the projects are being funded by Government of India under grant assistance to the Myanmar.
- They were awarded on Engineering, Procurement and Construction mode.
- The highway will facilitate easy movement of goods and people among the three countries.
- The National Highways Authority of India has been appointed as the technical executing agency and project management consultant.



## INTERNATIONAL ORGANISATIONS

### US & Israel Quits UNESCO

- U.S and Israel have formally quitted the UNESCO recently.
- It followed the allegations that UNESCO criticised Israel's policies of East Jerusalem's occupation and the grant of full-time membership to Palestine in defiance of the American and Israeli pressure.
- Israel initiated the withdrawal process after the US declared to step out of UNESCO in 2017.
- Withdrawal of these countries would not affect the UN organisation financially as both Israel and the US had stopped funding it since Palestine's membership was granted in 2011.

Click [here](#) to know more about the issue

### UNESCO

- It is responsible for promoting peace, social justice, human rights and international security through International cooperation on educational, science and cultural programs.
- It has 195 member states and is based in Paris, France.
- It accorded recognition in 2011 to Palestine as its 195th member.
- It is a global development agency with missions that include promoting sex education, literacy, clean water and equality for women.
- It is also responsible for promoting peace, social justice, human rights and international security through International cooperation on educational, science and cultural programs.
- It is known for its World Heritage Mission which encourages world countries to protect Natural & Cultural Heritage sites.
- It publishes the Global Education Monitoring report and Gender Parity Index.
- It also leads the Man and Biosphere Programme for protecting Biosphere reserves across the world.





## World Economic forum (WEF)

- The Annual Meeting of World Economic Forum was held in Davos, Switzerland.
- The theme of WEF 2019 is “Globalization 4.0: Shaping a New Architecture in the Age of the Fourth Industrial Revolution”.
- WEF was established in 1971 as a not-for-profit foundation and is headquartered in Geneva, Switzerland
- Its objective is to improve the state of the world.
- The key reports & indices by WEF are
  1. Global Competitiveness Report
  2. Global Enabling trade Report
  3. Global Gender Gap Index
  4. Human Capital Index
  5. Inclusive Development Index

## ECONOMY

### Swap ratio

- When a company pays for an acquisition by issuing its own shares to the shareholders of the target company, this is known as a share swap.
- The number of shares to be issued in lieu of their existing holdings in the target company is called the swap ratio.
- The swap ratios are based on stock prices.
- It is determined by valuing the target company after looking into metrics such as its revenues and profits, as well as its market price.
- **Advantages** - As shareholders of the target company will also be shareholders of the merged entity, the risks and benefits of the expected synergy from the merger will be shared by both the parties. In a cash deal, if the synergies don't materialise, shareholders of the acquiring company alone bear the fallout.
- In a share swap, there is no cash outgo involved for the acquirer, saving the acquirer borrowing costs. Cash rich companies can put their cash to use for investments in the business or for other buyouts.
- **Disadvantages** - Issuing fresh shares could lead to reduction in promoter holding and dilution in earnings for shareholders of the acquiring company.

### U K Sinha Committee

- RBI has set up an expert committee under former Sebi chairman U K Sinha to suggest long-term solutions for the economic and financial sustainability of the MSME sector.
- They will identify the 'structural problems' affecting the growth of the small scale sector.
- The eight-member committee will also examine the factors impacting credit flow to MSMEs and propose measures for leveraging technology in accelerating growth of the sector.
- Such a high level committee has been assigned to examine MSMEs because these enterprises contribute about 40% to India's export and 45% in the manufacturing sector.
- The report will be submitted by the end of June 2019.

### Currency Swap Arrangement

- Cabinet approved the Framework on Currency Swap Arrangement for SAARC Member Countries in 2012.
- A currency swap agreement between two countries is signed between the central banks.
- The local currency of the country that needs the loan will be exchanged for Dollar/Currency of the country that provides the loan.
- The intention is to provide a line of funding for short term foreign exchange requirements or to meet balance of payments crises.



- Under the agreement, RBI offers swaps of varying sizes in USD, Euro or INR to each SAARC member country depending on their 2 months import requirement.
- This will not exceed US\$ 2 billion in total.
- Each Drawl will be for 3 months tenure and up to maximum of 2 rollovers.
- Recently union cabinet approved an amendment to the arrangement to incorporate 'Standby Swap' amounting to USD 400 million operated within the overall size of the facility USD 2 billion.
- BSA between India & Japan works on the same principle.

### **Bilateral Swap Arrangement**

- The Union Cabinet has approved the proposal for entering into an Bilateral Swap Arrangement (BSA) between the RBI and the Bank of Japan for a maximum amount of USD 75 billion.
- This facility will enable the agreed amount of Capital being available to India on tap for use.
- Availability of such swap line to tide over difficulties arising out of Balance of Payment (BOP) would deter speculative attacks on the domestic currency and greatly enhance the RBI's ability to manage exchange rate volatility.
- Click [here](#) to know more about it.

### **Status paper on Government Debt**

- The Central Government has been bringing-out an Annual Status Paper on Government Debt since 2010-11.
- 8<sup>th</sup> Edition of the Status Paper was recently released.
- It enhances transparency by providing a detailed account of debt operations of the government during the year.
- The paper also covers details of fiscal deficit financing operations of the Central Government during the year 2017-18.
- It states that the overall liabilities of the Central Government are on a medium-term declining trajectory.
- Government is primarily resorting to market linked borrowings for financing its fiscal deficit.
- It also found that the government is comfortably placed in terms of debt sustainability parameters and is consistently improving.

### **e-Nam Inter State Trade**

- The e-NAM is a pan-India e-trading portal to network the existing physical regulated wholesale market (APMC market) through a virtual platform.
- It aims to create a unified national market for agricultural commodities.
- It promotes better marketing opportunities for the farmers to sell their produce through online, competitive and transparent price discovery system and online payment facility.
- Initially, only inter-mandi trade within the state was allowed.
- Recently, inter-state trade was started.
- The first inter-State trade on e-NAM was carried out between UP and Uttarakhand followed by that between AP and Telengana.

### **Diffo Bridge**

- It is a 426m long bridge recently built over Diffo River in Arunachal Pradesh.
- The work was executed by Project Udayak, Border Roads Organization (BRO) in this region.
- It would provide uninterrupted access between Dibang valley and Lohit valley region of Eastern Arunachal Pradesh.
- It serves as an all-weather Road to the troops deployed on the China Border.
- Click [here](#) to know about Border Roads Organisation (BRO).

## Renukaji Multipurpose Dam Project

- An agreement for Renukaji Dam Multipurpose Project is to be signed soon among six states- Uttar Pradesh, Haryana, Himachal Pradesh, Delhi, Rajasthan and Uttarakhand.
- Three storage projects are proposed to be constructed on the river Yamuna and two of its tributaries.
- They are
  1. Lakhwar on river Yamuna in Uttarakhand
  2. Kishau on river Tons in Uttarakhand and HP &
  3. Renukaji Dam on Giri River in HP.
- These three projects were identified as National Projects in 2008 under which 90% funding will be provided by the centre and the rest will be borne by the beneficiary states.

## ENVIRONMENT

### POLLUTION

#### Lake Urima

- It is a saltwater lake.
- It is situated in the mountains of northwest Iran i.e the west of the southern portion of the Caspian Sea and is fed by 13 rivers.
- It is designated as a site of international importance under the **UN Convention on Wetlands**.
- The lake has been shrinking since 1995, due to a combination of prolonged drought, elevated summer temperatures that speed up evaporation, over-farming and dams.
- It became one of the worst ecological disasters of recent decades as the lake's surface which was 2,366 km<sup>2</sup> in 2011 shrank to just 700 km<sup>2</sup> in 2013.
- This has threatened the habitat of shrimp, flamingos, deers and wild sheep and caused salt storms that pollute nearby cities and farms.
- It has started stabilising in recent times after the implementation of a joint program between Iran and the UNDP.



#### Invasion of Shola Grasslands

- Shola forest-grassland ecosystem is characterised by patches of forest of stunted evergreen shola trees in the valleys and grasslands on hill slopes.
- They are spread across Western Ghats of Tamilnadu and Karnataka.
- Over four decades, almost one-fourth of the grasslands in the high-altitudes of the ecosystem were lost.
- The exotic invasive trees like pine, acacia and eucalyptus that were earlier used for afforestation in these areas are primary reason behind it.
- Broadly, these grasslands in Tamil Nadu showed the highest rates of invasion than in Karnataka.
- Though the practise has been ceased in 1996, the exotics still invade these ecosystems.
- But the shola forests in the valleys have remained “relatively unchanged” over these years.
- The Anamalai-Munnar areas have also remained stable during this time.

#### Firecracker ban on Galapagos Islands

- Galapagos Islands are an archipelago of volcanic islands distributed on either side of the equator in the Pacific Ocean.
- It is a World Heritage Site that comes under the jurisdiction of Ecuador.
- The islands are known for their large number of endemic species and were studied by Charles Darwin

- Ecosystems are very sensitive in the islands and its fauna that is so unique that they are easily affected by even fireworks.
- Animals have suffered from elevated heart rates, nervous stress and anxiety, which have “notably” changed their behaviour and affected the survival of species
- So the local government has recently banned fireworks on the Islands to protect the its unique fauna
- Those fireworks that produce light but no noise have been excluded from the ban.
- It is also to avoid any potential deterioration in air quality or pollution of water sources.



### Thawing of Permafrost

- Permafrost is any type of ground—from soil to sediment to rock—that has been frozen continuously for a minimum of **2 years** and as many as hundreds of thousands of years.
- It can extend down beneath the earth’s surface from a few feet to more than a mile.
- Across the Arctic, communities and infrastructure are built on top of a thick layer of permafrost.
- But as global temperatures rise, this frozen soil is melting, causing homes and businesses to collapse and roadways to crumble.
- Now, a new study has found that most of the Arctic’s built environment will be damaged by the thaw, even if nations meet their Paris Agreement climate targets.
- It has found that nearly 70% of infrastructure in the Arctic is built on permafrost that is at risk of thawing by mid-century.
- In addition, nearly half of the oil and gas drilling sites in the Russian Arctic are in regions where thaw-related ground instability can cause severe damage to the built environment.

### GOVERNMENT INTERVENTIONS

#### Vulture and Raptor Survey

- The first-ever vulture and raptor survey was held in the Wayanad Wildlife Sanctuary.
- It recorded 24 species of raptors and four species of vultures.
- It was organized by the Forest and Wildlife Department, and the South and North Wayanad Forest Divisions.
- A raptor is a bird that hunts and kills other animals for food. e.g Eagles, Falcons, Hawks etc
- They come under Schedule I of the Wildlife (Protection) Act, 1972 and have apex predator status in an ecosystem.
- Indian vulture, White-rumped vulture, Red headed vultures were also spotted.



### Satkosia Tiger Reserve

- It is being planned to use trained elephants to help ground-level forest guards to patrol deep in the forest of Satkosia Tiger Reserve.
- Satkosia spreads along the gorge over the river **Mahanadi** in Odisha.
- The area is also a part of the Mahanadi elephant reserve.
- Satkosia is the meeting point of two bio-geographic regions of India; the Deccan Peninsula and the Eastern Ghats, contributing immense biodiversity.
- The Reserve comprises of two adjoining Sanctuaries of central Odisha named as Satkosia Gorge Sanctuary and Baisipalli Sanctuary.

### Pong Dam Wetlands

- The State Forest Department is organizing the annual census of waterfowl species at Pong wetlands of Kangra Valley, Himachel Pradesh.
- Water fowls are the birds that depend on water bodies for roosting and feeding.
- Pong is a man-made wetland formed by the construction of Pong Dam during 1974 across the Beas River.
- The reservoir is also known Maha Rana Pratap Sagar.
- It was declared a Ramsar Site in the year 2002.
- It is the only place in the country after the Bharatpur sanctuary in Rajasthan where the red-necked grebe descends every year.
- Other visitors include White Fronted Goose, Whooper Swan, Indian Skimmer, White rumped Vultures, Black bellied Tern.

### ZSI Amphibian List

- An updated list of Indian amphibians was released by Zoological Survey of India (ZSI) recently.
- The current list bears the names of 432 amphibian species from India along with their IUCN status.
- In the list 19 species are being treated as critically endangered and 33 species as endangered.
- ZSI was established in 1916 to promote survey, exploration and research leading to the advancement in our knowledge of various aspects of exceptionally rich life.
- It has its genesis in the establishment of the Zoological Section of the Indian Museum at Calcutta in 1875.

### SPECIES IN NEWS

#### Cinereous Vulture

- It is one of the heaviest and largest raptors in the world.
- It is listed as Near Threatened in IUCN Red list and in Appendix II of CITES.
- Its geographical range expands from European countries (such as Portugal, Spain, Croatia, Serbia etc), Middle East countries (Turkey, Lebanon, Saudi Arabia etc), Central Asia (Russia, Azerbaijan, Georgia, Kazakhstan, Tajikstan, Iran etc) to Asia (India, Afghanistan, Myanmar, Korea, Vietnam).
- It suffers an ongoing decline of population in its Asiatic strongholds, despite the fact that in parts of Europe numbers are now increasing.
- It generally occupies forest, shrubland and grassland.
- During the winter, it migrates from the mountainous regions of Europe and Asia to warmer places, including India.
- The species was recently spotted in the state of Jharkhand for the first time in the region.

#### Mugger Crocodile

- The Gujarat Forest Department has started evacuating mugger crocodile from two ponds on the Sardar Sarovar Dam premises on the Narmada.



- This evacuation is to facilitate a seaplane service at the Statue of Unity.
- The mugger/marsh crocodile is a species native to freshwater habitats from southern Iran and Pakistan to the Indian subcontinent and Sri Lanka.
- It is already extinct in Bhutan and Myanmar.
- So the mugger has been listed as vulnerable on the IUCN Red List since 1982.
- In India, it is protected under Schedule I of the Wildlife Protection Act, 1972 mainly to prevent their trade.
- The transfer of these reptiles in such large numbers is against the principles of the Act.
- Crocodiles need space on land to nest and also to come out of the waters during winters.
- So releasing them into the dam reservoir would mean that the female crocodiles may not be able to nest if the slope of the dam is more than about 40 degrees.
- It might also disturb the ecological balance.

### Sarus Crane

- According to 2018 Census, the population of Sarus Crane in UP has steadily grown since 2013.
- The habitat is outside protected areas, in natural wetlands with low water depth, marshy and fallow areas and agricultural fields.
- So the population was threatened by habitat degradation and human callousness.
- The main reason attributed for their revival was the awareness created among the public.
- As a result farmers and fisherfolk involved in the protection of Sarus nests in wetlands as well as rice paddies.
- Sarus Crane is the world's tallest flying bird.
- As per the Wildlife Trust of India it is also India's only resident breeding crane.
- It is omnivorous, feeding on fish and insects, as well as roots and plants.
- They play a vital role in ecological balance by controlling the population of harmful insects and have significant cultural importance, while also being sociable.
- It is also the official State bird of Uttar Pradesh.
- It has marked been marked as 'vulnerable' by IUCN.

### Golden Langur

- Assam announced the success of the Golden Langur Conservation Breeding Program in the State.
- Gee's golden langur is a leaf-eating monkey found only in northeastern India and Bhutan.
- It is currently marked endangered in the IUCN list.
- It inhabits evergreen and deciduous tropical forests.
- Like most fruit eating primates they play a vital role in forest repopulation i.e via seed dispersal, seed predation, and pollination.

### Living Fossils

- The term "living fossil" is meant to describe an organism that has remained relatively unchanged over millions of years, or one that has no, or very few, close surviving relatives.
- It was originally used by Charles Darwin to describe ancient species, like the ginkgo tree or horseshoe crab that appeared little changed over millions of years.
- If a species does not constantly have to adapt to survive, it will have little need to change.
- The coelacanth (a fish) is the most famous and widely recognized species of "living fossil".

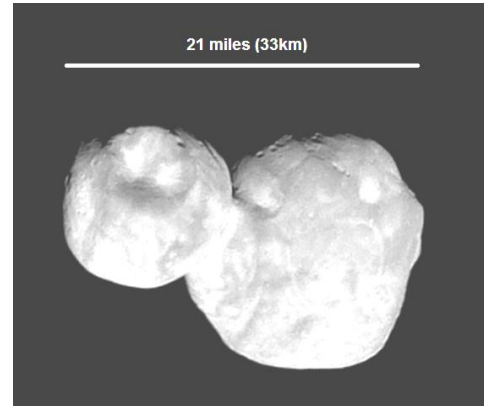


## SCIENCE AND TECHNOLOGY

### SPACE

#### Ultima Thule

- Officially called, **MU<sub>69</sub>**, is a contact binary composed of two joined bodies 19 km and 14 km across that are nicknamed "Ultima" and "Thule", respectively.
- When two asteroids collide and get stuck together it is known as a contact binary.
- It is named after a mythical island in medieval literature.
- Ultima Thule means 'beyond Thule', beyond the borders of the known world, symbolizing the exploration of the distant Kuiper Belt and Kuiper Belt objects.
- It was discovered in 2014 with the help of the Hubble Space Telescope.
- Scientists are not sure whether it is round or oblong or even if it is a single object or a cluster.
- It is the farthest and quite possibly the oldest, cosmic body ever photographed by humankind.
- Scientists decided to study it with New Horizons launched in 2006 after the spaceship completed its main mission of flying by Pluto in 2015 and returning the detailed images of the dwarf planet.



#### Juno and Jupiter Volcanic Plumes

- NASA's solar-powered Juno spacecraft has sent new images of volcanic plume on Jupiter's moon Io.
- Jovian moon Io is the most volcanic body in our solar system.
- The images can lead to new insights into the gas giant's interactions with its five moons.
- Juno will improve our understanding of the solar system's beginnings by revealing the origin and evolution of Jupiter.
- Juno will
  1. Determine how much water is in Jupiter's atmosphere
  2. Look deep into Jupiter's atmosphere to measure composition, temperature, cloud motions and other properties
  3. Map Jupiter's magnetic and gravity fields, revealing the planet's deep structure
  4. Explore and study Jupiter's magnetosphere near the planet's poles, especially the auroras – Jupiter's northern and southern lights.

#### Super Blood Wolf Moon

- It is a phenomenon wherein the Moon appears particularly large and bright with a reddish glow.
- A supermoon happens when the full moon coincides with the moon's closest approach to Earth in its orbit (perigee).
- It makes the moon appear a little brighter and closer than normal.
- Blood during a total lunar eclipse when the Earth passes in between the Sun and the Moon.
- Earth blocks the Sun's light from falling directly on the Moon so the only light the moon gets is reflected off of Earth.
- Earth's atmosphere scatters blue so only the red light gets reflected onto the Moon's surface and makes it look red.
- Wolf Moon is the name given by Native Americans to a full moon that appears in January.
- So Super Blood Wolf Moon = Full Moon + Perigee + Lunar Eclipse + January
- A lunar eclipse only takes place when there is a full Moon.

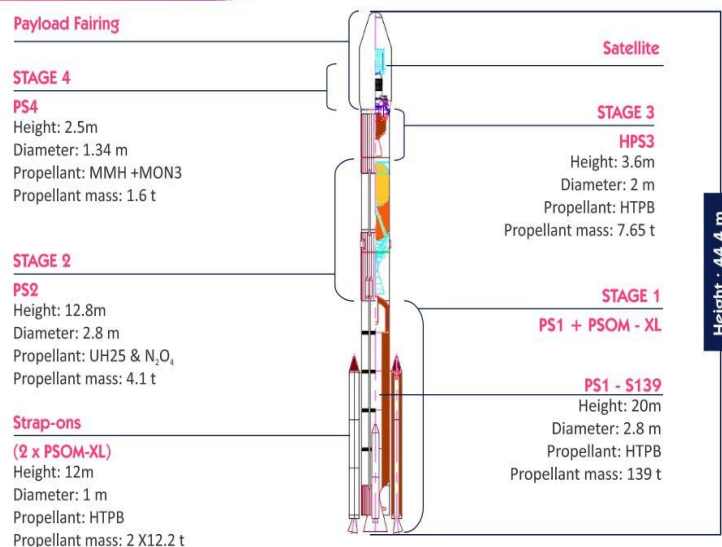
## X-Calibur Telescope

- It is a telescope that has been successfully launched recently by US scientists from the McMurdo Station in Antarctica.
- It was launched on a helium balloon intended to reach an altitude of 130,000 feet i.e at nearly four times the cruising altitude of commercial airliners, and above 99 per cent of the Earth's atmosphere.
- It will analyse X-rays arriving from distant neutron stars, black holes and other exotic celestial bodies.
- The prime observation target will be Vela X-1, a neutron star in binary orbit with a supergiant star.
- Neutron stars are objects of very small radius (typically 30 km) and very high density, composed predominantly of closely packed neutrons.
- Neutron stars are thought to be formed by the gravitational collapse of the remnant of a massive star after a supernova explosion.
- It is the same process by which black holes are formed except that here the star is not massive enough to produce a black hole.
- Supergiant stars are the largest stars in the universe. They can be thousands of times bigger than our Sun and have a mass up to 100 times greater.
- The largest known supergiant star, **VY Canis Majoris**, is up to 2,100 times the size of the Sun.
- Binary stars are two stars orbiting a common center of mass.

## MICROSAT-R and KALAMSAT

- PSLV-C44 successfully injected Microsat-R and Kalamsat-V2 satellites into their designated orbits.
- Microsat-R is a 130-kg military imaging satellite.
- It was put together by a handful of DRDO laboratories.
- The Kalamsat is a 10cm cube communication nano-satellite weighing about 1.2kg designed by students.
- Its life span is about two months and its cost is about Rs. 12 lakh.
- The PSLV is a four-stage engine expendable rocket with alternating solid and liquid fuel.
- In a normal launch vehicle, each stage falls off after fuel completes burn-off.
- However, stage four, after releasing the payload, wanders around in space as junk.
- The PSLV-DL, used for Kalamsat, will follow the same pattern, except that the fourth stage (PS4) won't fall off.
- It will serve as a platform for the satellite like deploying solar panels or other tools to aid the satellite.
- It is the first satellite to use PS4 as an orbital platform, thus reducing space debris.
- A 64-gram earlier version of the Kalamsat nicknamed "gulab jamun" was launched by NASA in 2017. But it never reached orbit.
- PSLV-C44 is a new variant of PSLV called PSLV-DL (D standing for demonstration).
- In its normal configuration, the rocket will have six strap-on motors in the first stage.
- However, PSLVDL will have just two strap-on motors for the first time.

### THE VEHICLE







## Yutu 2

- China has named their lunar rover as 'Yutu 2'.
- The rover is part of China Chang'e-4 lunar probe.
- It was successfully deployed to carry out a string of experiments on the unexplored far side of the moon.
- It would also analyse soil and rock samples for minerals, apart from activating.
- China's lunar probe is part of its 'Made in China-2025' project, which focuses on advanced technology, including space applications.
- Click [here](#) to know more about Chang'e 4 lunar space probe.

## OTHERS

### Sub-glacial Antarctic Lakes Scientific Access

- An international team of scientists will begin hunting for microbes and other living specimens in an unexplored lake far beneath the surface of the Antarctic ice sheet.
- The place of exploration is bottom of the ice sheet that covers Mercer Sub-glacial Lake about 370 miles from the South Pole.
- **SALSA** is an expedition that will shed light on what kind of life can survive in such remote regions.
- Mercer will be the second sub-glacial lake that humans have sampled directly.

## HEALTH

### Kyasanur Forest Disease

- Six people have died in Karnataka due to Kyasanur forest disease (KFD).
- It is a re-emerging zoonotic disease endemic in Karnataka caused by KFD Virus.
- It was first identified in 1957 from Kyasanur forest area in Shivamogga district of Karnataka.
- It causes viral hemorrhagic fever i.e the overall vascular system is damaged, and the body's ability to regulate itself is impaired.
- Hard ticks (*Hemaphysalis spinigera*) are the carriers of KFD virus.
- Rodents, shrews, and monkeys are common hosts for KFDV after being bitten by an infected tick.
- KFDV has high fatality in primates.
- The disease is also referred to as 'monkey fever' by local people due to its association with monkey deaths.

### Congenital Central Hypoventilation Syndrome

- It is a disorder of the nervous system in which the cue to breathe is lost when the patient goes to sleep.
- This results in a lack of oxygen and a build-up of carbon dioxide in the body, which can sometimes turn fatal.
- A typical presentation of the lack of breathing is when the lips start turning blue and it is a typical feature of a carbon dioxide build-up.
- The disease is also known as Ondine's Curse.
- The mutation of a gene called PHOX2B, which is crucial for the maturation of nerve cells in the body, can cause CCHS.

### Global Syndemic

- A syndemic is defined as "the presence of two or more disease states that adversely interact with each other".
- A Lancet Report states that the pandemics of obesity, under nutrition, and climate change are interlinked.
- It terms it as "global syndemic".
- They represent as the paramount challenge for humans, the environment and our planet that presses the need for urgent action.
- Until now, undernutrition and obesity have been seen as polar opposites.



- But the report states that they are both driven by the same unhealthy, inequitable food systems, underpinned by the same political economy that is focused on economic growth.
- Few instances are-
  - i. Climate change > extreme weather events > increased food insecurity > under nutrition
  - ii. Climate change > increased prices of fruit and vegetables > increasing consumption of processed foods > obesity
  - iii. Foetal and infant under nutrition > risk of adult obesity.
- Not a single country has reversed the obesity epidemic across the world.

### **New Delhi metallo-beta-lactamase-1**

- A new study has found traces of antibiotic resistance (AR) genes in the High Arctic region (Svalbard).
- It includes the 'superbug' or the **New Delhi metallo-beta-lactamase-1** protein (coded by blaNDM-1 gene), which was first detected in urban India in 2008.
- The detection reinforces how rapidly AR can globalize.
- Bacteria with the NDM-1 gene are part of a larger group of superbug bacteria that are extremely hard to treat and can spread easily in hospitals.
- Most NDM-1 strains are resistant to all commonly used antibiotics.

## **DEFENCE**

### **INS Kohassa**

- Naval Air Station (NAS) Shibpur was established in 2001 in Shibpur of North Andaman.
- It has a 1,000 feet-long airfield that permitted short-range maritime reconnaissance (SRMR) aircrafts.
- Many Indian aircrafts, which participated in the abortive search for the missing Flight 370, operated from NAS Shibpur.
- It is now commissioned as INS Kohassa, a full-fledged naval base.
- It is the fourth military airfield in the Andaman & Nicobar archipelago.
- It has been named after a White-Bellied Sea Eagle, which is a large bird of prey endemic to A&N Islands.
- It is set up as a Forward Operating Air Base (FOAB) for surveillance in North Andaman.
- The station will function as a base for joint operation of both military and civil aircraft in keeping with the UDAN scheme of the government.

### **Biojet fuel for Aircraft**

- IAF flew an An-32 aircraft in 'vic' formation, whose lead plane used a mix of Aviation Turbine Fuel blended with 10% biofuel.
- The biofuel has been extracted from Jatropha plant seeds using a technology patented by the CSIR and the Indian Institute of Petroleum, Dehradun.
- Following the clearance given by the Centre for Military Airworthiness and Certification IAF is expected to use biofuel for its transport fleet and helicopters.
- The 'vic' formation comprises 3 or more aircraft flying in close formation with the leader at the apex and the rest to left and right, the whole resembling the letter 'V'.

### **IAFTX 2019**

- Indian Africa Field Training Exercise (IAFTX)-2019 was held recently in Pune.
- The joint training exercise is being conducted with more than a dozen African countries & India.
- It aims at synergizing humanitarian mine action and joint peace operations.

## Sea Vigil 2019

- It is a defense exercise conducted along the coastline by the Navy in coordination with the Coast Guard and other stakeholders.
- It will aim to test the country's preparedness to thwart any attempt by anti-national elements to carry out an attack on its territory or against its citizens by infiltrating through the sea route.
- The exercise will provide an opportunity to stakeholders to assess the capability and preparedness of individual organizations, identify deficiencies if any and address them on priority.

## INDEX AND REPORT

### Global Talent Competitiveness Index

- It is released by INSEAD business school in partnership with Tata Communications and Adecco Group.
- It looks at 68 variables such as ease of hiring, gender earnings gap, and prevalence of training in firms.
- GTCI 2019 addresses the topic of entrepreneurial talent and global competitiveness.
- Switzerland followed by Singapore, the US, Norway and Denmark were the top five on the list of countries.
- China emerged as the best performer among the BRICS countries, with an overall position of 45<sup>th</sup>.
- India has moved up one position to rank 80<sup>th</sup> on the 2019 Global Talent Competitiveness Index.
- According to it, India's biggest challenge is to improve its ability to attract and retain talent.
- However, India performed better than its lower-income peers when it comes to growing talent and access to growth opportunities.

### Climate Change Performance Index

- It is an annual publication by German watch and Climate Action Network Europe.
- It evaluates and compares the climate protection performance of 56 countries and the EU, which are together responsible for more than 90% of global greenhouse gas (GHG) emissions.
- 80% of the evaluation is based on objective indicators of emissions trend and emissions level.
- 20% of the index results are built upon national and international climate policy assessments by more than 200 experts from the respective countries.
- The CCPI ranking is qualified in relative terms (better–worse) rather than in absolute terms.
- Sweden leads the ranking, followed by Morocco and Lithuania in the CCPI 2019.
- Morocco significantly increased the share of renewable over the past five years and increased new renewable energy capacity.

### Total Fertility Rate

- It is the number of children born or likely to be born to a woman in her lifetime.
- A TFR of 2.1 is seen as replacement level fertility.
- According to National Family Health Survey, India's current overall total fertility rate is 2.18.
- Bihar and UP have the highest TFR among the major states.
- Population is falling in many states including Andhra Pradesh.
- AP is one of the several Indian states where the TFR has fallen below replacement rate 2.1.

### The Future of Rail report

- It was launched recently by International Energy Agency (IEA).
- It is the first-of-a-kind report that analyses the current and future importance of rail around the world through the perspective of its energy and environmental implications.

#### STATES WITH LOWEST TFR

Kerala	1.56
Punjab	1.62
Goa	1.66
Tamil Nadu	1.70
West Bengal	1.77
Delhi	1.78
Telangana	1.78
Karnataka	1.80
Andhra Pradesh	1.83
Maharashtra	1.87
Himachal Pradesh	1.88
Jammu & Kashmir	2.01
Gujarat	2.03
Haryana	2.05
Odisha	2.05
Uttarakhand	2.07
Arunachal Pradesh	2.10

Source: Reply to unstarred question in Lok Sabha, January 4. Smaller northeastern states and Union Territories not included.



- It also explores the key policies that could help to realise an enhanced future rail.
- It stated that the rail sector carries 8% of passengers across the world and 7% of global freight movement.
- However, it utilises 2% of the total transport energy demand, signifying its efficiency.
- So the rail sector can provide substantial benefits for the energy sector, as well as for the environment by diversifying energy sources and providing more efficient mobility.
- IEA is an inter-governmental organization.
- It works to ensure reliable, affordable and clean energy for its 30 member countries and 8 association countries.
- It also releases the World Energy Outlook.

### **Oxfam Report 2019**

- It is an annual report by anti-poverty the development charity Oxfam.
- According to it, the world's richest 26 billionaires own as much wealth as the 3.8 billion people in the bottom half of humanity.
- Globally, billionaires' fortunes rose by 12% to \$900 billion, or \$2.5 billion a day in 2018.
- The poorest half of the world's population saw their wealth decline by 11%.
- India's top 9 billionaires own as much as the country's poorest half.
- 13.6 crore Indians, who make up the poorest 10% of the country, continued to remain in debt since 2004.
- India's richest 1% pays just 0.5% extra tax on their wealth could raise enough money enough to increase the government spending on health by 50%.
- Women and girls are hardest hit by rising economic inequality.