



# IAS PARLIAMENT

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A Shankar IAS Academy Initiative

## MONTHLY MAINSTORMING

JANUARY 2020

**Shankar IAS Academy™**

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**JANUARY 2020**

**I N D E X**

1. <i>Society</i> .....	3
2. <i>History</i> .....	3
3. <i>Geography</i> .....	4
4. <i>Government Policies</i> .....	5
5. <i>Polity</i> .....	7
6. <i>Education</i> .....	8
7. <i>Social Justice</i> .....	8
8. <i>Health</i> .....	9
9. <i>Governance</i> .....	9
10. <i>Health</i> .....	10
11. <i>International Relations</i> .....	11
12. <i>Indian Economy</i> .....	14
13. <i>Agriculture</i> .....	18
14. <i>Energy</i> .....	20
15. <i>S&amp;T</i> .....	21
16. <i>Environment</i> .....	21



## JANUARY 2020

### G.S PAPER I

#### 1. SOCIETY

*The decision to settle displaced Brus in Tripura is humanitarian, but could lead to conflicts in the State. Analyse*

#### KEY POINTS

- Bru tribal people, who were displaced from Mizoram and are living in Tripura as refugees since 1997, to settle permanently in Tripura.
- The Centre, State governments of Tripura and Mizoram, and representatives of Bru organisations signed the agreement in the presence of Union Home Minister.

#### Why did the Mizoram rehabilitation package not work out?

- The package included Eklavya residential schools, permanent residential and ST certificates besides funds to the Mizoram government for improving security in Bru resettlement areas.
- The refugees were given a deadline, September 30, to move or face harder times at the relief camps. But most stayed back, demanding resettlement in close-knit clusters and an autonomous council for Brus in Mizoram.

#### What are the implications of the Tripura resettlement?

- The demand to rehabilitate the Brus in Tripura was first raised by Pradyot Manikya, the scion of the Tripura royal family.
- The decision was humanitarian from the point of view of the Brus, who were apprehensive about returning to Mizoram, but felt it could lead to conflicts with the locals of Tripura.
- The displaced Brus who returned to Mizoram have already begun demanding a package equivalent to the one those who stayed behind in the Tripura relief camps would be getting. And conflicts between the Brus and the local Bengali non-tribal people have started taking place in Tripura.

#### 2. HISTORY

*Discuss Savitribai Phule's contribution to women's education and establishing equality in India.*

#### KEY POINTS

- Among her accomplishments, she is especially remembered for being India's first female teacher who worked for the upliftment of women and untouchables in the field of education and literacy.
- Significantly, it was not easy for the Phule's to advocate for the education of women and the untouchables since in Maharashtra a nationalist discourse was playing out between 1881-1920 led by Bal Gangadhar Tilak. These nationalists including Tilak opposed the setting up of schools for girls and non-Brahmins citing loss of nationality.

#### Her work

- The Phules also started the Literacy Mission in India between 1854-55. Also started the Satyashodhak Samaj (Society for Truth-Seeking), through which they wanted to initiate the practice of Satyashodhak marriage, in which no dowry was taken.
- Because of the role Phule played in the field of women's education, she is also considered to be one of the "crusaders of gender justice".
- The two also worked against discrimination based on caste-based identity, something vehemently opposed by the orthodox sections of society in Pune.
- She went on to establish a shelter for widows in 1854 which she further built on in 1864 to also accommodate destitute women and child brides cast aside by their families.
- Savitribai opened a clinic in 1897 for victims of the bubonic plague that spread across Maharashtra just before the turn of the century.



***Why are findings of Nagardhan excavations are important to understand Vakataka dynasty?  
Explain***

**KEY POINTS**

Recent archaeological excavations at Nagardhan in Ramtek taluka, near Nagpur, have provided concrete evidence on the life, religious affiliations and trade practices of the Vakataka dynasty that ruled parts of Central and South India between the third and fifth centuries.

**Why is the excavation important?**

- Very little was known about the Vakatakas, the Shaivite rulers of Central India between the third and fifth centuries.
- It was after archaeological evidence from here that Nagardhan was understood to have served as a capital of the Vakataka kingdom.

**What is the significance of these finds?**

- It is the first time clay sealings have been excavated from Nagardhan. The oval-shaped sealing belongs to the period when Prabhavati Gupta was the queen of the Vakataka dynasty.
- The copperplate issued by Queen Prabhavati Gupta starts with a genealogy of the Guptas, mentioning the Queen's grandfather Samudragupta and her father Chandragupta II.
- These are strong indicators of Vaishnava signatures on the royal seals of the Vakatakas, reiterate that Queen Prabhavati Gupta was indeed a powerful woman ruler.
- An intact idol of Lord Ganesha, which had no ornaments adorned, too was found from the site. This confirmed that the elephant god was a commonly worshipped deity in those times. Remains of seven species of domestic animals cattle, goat, sheep, pig, cat,

**3. GEOGRAPHY**

***Despite existing challenges, the potential resources of the north eastern region can contribute to the development goals of the country. Analyse***

**KEY POINTS**

A smooth economic take-off by NER is central to India's moving closer to the \$5-trillion-dream.

**Challenges**

- The north eastern region continues to be a net importer of food grains even for its own consumption. Even with 33% of country's water resources, the region reels from acute water distress.
- The RBI's "Report on State Finances: A Study of Budgets 2017-18 And 2018-19" shows that visible fiscal pressures are emerging for NER states on the expenditure side, particularly on account of pay revisions and interest payments.
- Limited borrowing capacities and a limited supply of central funds raises bigger challenges. Revenue mobilisation remains the key to attaining the budgeted targets.
- Thousands of farmers still can't access small ticket loans for poultry, dairy and piggery projects. With a less than 1% share of the total credit flow in India, sustained gaps in credit to lakhs of small and marginal farmers has haunted the entire region for decades.

**Potential resources**

- Hydropower potential of nearly 50,000 MW, natural gas reserves of 190 billion cubic metres, coal reserves of over 900 million tonnes and oil reserves of over 500 million tonnes.
- Innovative PPP models may be the solution with the state governments facilitating access to land on a long-term basis to the private sector, and village councils becoming a part of the partnerships from the very inception.
- The entire region with rich soil types, sufficient rainfall and diverse agro-climatic conditions is home to unique organic agri-produce with untapped export potential. This produce, its grading, packing, processing and marketing will be the dynamic key differentiators for NER someday.
- Then there is the immense potential of tourism. Most footfalls are restricted to Sikkim, Mizoram, Meghalaya and Nagaland are virtually untapped destinations.

- For these states, with limited financial resources to launch aggressive marketing campaigns, social media-based advertising campaigns and strategic tie-ups under CSR may just be the answer.
- On the credit front, banks need to partner with other service providers to expand their reach through innovative tie-ups in this difficult region.
- Small finance banks with their entire business model centred around financial technology can prove to be the connecting links. It is imperative for state governments to use funds judiciously and build adequate road infrastructure to further the agenda of both bank credit, as well as, network connectivity.

## GS PAPER -II

### 4. GOVERNMENT POLICIES

*What are the major reforms in Indian Railways in the recent times? Examine the Organisational Restructuring of Indian Railways which will help it go a long way in sustaining the industry.*

#### KEY POINTS

##### Major reforms

- Unification of the existing eight Group A services of the Railways into a Central Service called Indian Railway Management Service (/RMS)
- Re-organisation of Railway Board on functional lines headed by CRB with four Members and some Independent Members
- The existing service of Indian Railway Medical Service (IRMS) to be consequently renamed as Indian Railway Health Service (IRHS).

#### Restructuring of Indian Railways

##### Why was the reform needed?

- The government wants to end inter-departmental rivalries, which it says have been hindering growth for decades, departments were working “in silos”.
- Several committees including the Bibek Debroy committee in 2015 have noted that “departmentalism” is a major problem in the system.
- Most committees have said merger of the services in some form would be a solution.
- What will change with the restructure?
- In inter-departmental seniority a complex process to fix, which has led to court cases in the past problems arise when different services compete for posts that are open to all – like those of Divisional Railway Managers (DRMs), GMs, and subsequently, the Chairman Railway Board.
- Another aspect is the suitability of jobs. The move, many say, emerges from the “simplistic” belief that while non-technical specialists cannot do technical jobs, technocrats can do both.
- The counter-argument is that civil servants in government, by virtue of the screening process and subsequent training, possess acumen and skills that go beyond academic specialisation.
- What happens next?
- The current demand is for two distinct services instead of one – a civil services, and one that encompasses all engineering specialisations. The logic is that functionally, departments will continue to exist through various technical and non-technical specialisations, so merging them will not end departmentalism per se.
- The government has on record assured all existing officers that no one’s seniority will be hampered and promotion prospects will be protected.

*Despite various benefits, the idea of Minimum support price need to be revisited and made flexible to adapt the dynamic changes happening in the country. Critically Analyse*

#### KEY POINTS

Minimum Support Price is a sound policy as it gives assurance to farmers of a fair price. As it based on a scientific formula that covers all costs plus a return on capital, it is fairly remunerative.

### **Criticisms of MSP**

- The major problem with this MSP is that it does not work for all crops. It works where the government has machinery for procurement and that too in specific States.
- As it is an open-ended scheme, there are no limits to procurement, which creates a different set of problems for the government.
- However, for the other crops there is no systematic procurement, which means that while MSPs are announced, they are not credible if government agencies are not there to procure the crop and the farmer has to sell at the market prices.

### **Time to revisit**

- To begin with it should be announced only when there is back-end procurement so that it is relevant.
- If there is no or limited procurement, then the MSP actually sends incorrect signals to the farmers.
- As these announcements are made before the seeds are sown, farmers take sowing decisions based on these prices.

A well-developed derivatives market can offer a viable alternative to the farmers and the government where a market solution is used for a pervasive problem of sale of product.

### **For better MSP**

- The way forward is to develop the futures market across all crops and ensure that multiple contracts are in force all the time, especially during the harvest time.
- This will help in making better sowing decisions on the crop as well as quantum that is sown. They would provide advantage of the upside and cover for the downside at the cost of the option premium.

### ***Will the new terms of Air India disinvestment meet the desired objective of Government of India?*** ***Comment***

#### **KEY POINTS**

- The government has tweaked the terms of sale with room for more changes and is now putting 100% of its equity in the airline on the block.
- The government has also laid down a principle for calculating debt, which will be bundled with airline, and relaxed the minimum net worth criteria for potential bidders to Rs 3,500 crore from the Rs 5,000 crore in 2018.

#### **What will the new investor get?**

- The most attractive proposition in acquiring Air India is the slots and landing rights that it holds at airports such as Delhi, Mumbai, London, New York, Chicago, Paris, etc.
- These could be helpful both to airlines looking to expand into long-haul international operations, and to entities looking to set up global operations from scratch.

#### **How will consumers and employees be impacted?**

##### **CONSUMERS:**

- If and when Air India is taken over by a private entity or consortium, experts believe the first move could be pruning of operations to ensure the airline inches closer to profitability.
- This could cause Air India to cease operations on certain loss-making domestic and international routes — leading to a rise in fares.
- Cutting certain routes could also impact consumers in terms of the unique offerings by Air India, such as higher baggage allowance, etc.

##### **EMPLOYEES:**

- Air India's bloated staff strength was flagged by potential investors in the last disinvestment attempt.
- Air India's Chairman and Managing Director insisted that the airline did not have any "excess staff".



- The government is expected to provide more clarity on conditions for retaining staff in the request-for-proposal stage, which will come after expressions of interest are received.

#### **So will the airline be finally sold?**

- A lot also depends on the global politico-economic scenario that enables bidders, from India or abroad, to show interest in acquiring the loss-making airline.
- Given that there are specific parts of the airline that are considered attractive for different entities, experts are of the view that if this second attempt too fails, the government will have no choice but to take a piecemeal approach at divesting the national carrier.

***Considering the problem of rural jobs scheme fund crunch, the government can use the MGNREGS as a means to spur the rural economy. Analyse***

#### **KEY POINTS**

- It needs no reiteration that the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) has acted as insurance for landless labourers during crop failures, agrarian crises and periods of a stressed economy.
- With the ongoing economic slowdown resulting in depressed rural wages and the lack of adequate opportunity to work, the MGNREGS has provided much needed succour and this explains why demand for it has peaked in the last few months across various parts of the country.
- While in absolute terms, the allocations for the scheme in the budget presented in 2019 were higher compared to the previous financial year, the outlay fell in relative terms as a percentage of the overall allocations.
- The outlay was also lower than the actual expenditure in the previous year, which indicated the importance of the scheme in arresting rural distress.
- Several studies have pointed to its effect on the lives of the rural poor by providing employment in the agricultural off-season, offering alternative jobs during years of lean agricultural growth and as a safety net during crop failures.
- The scheme, by now, should have been an ideal vehicle for rural development and not just a fallback option. It could also involve rural workers in skilled work and pay them more wages for asset creation beyond just roads, wells and check-dams.
- A change in mindset is therefore key in not just tiding over problems such as funding and wage-delays, but also in using them as an opportunity to address the slowdown.

### **5. POLITY**

***Should the allocation of revenues and parliamentary seats to states continue to be based on the 1971 census? Analyse***

#### **KEY POINTS**

- Allocation of tax revenues by successive Finance Commissions has been invariably correlated to populations of individual states.
- Using the 2011 census numbers, per capita incomes in northern states are substantially lower than those for southern states. This could result in higher proportions of overall revenues to be allocated to northern states by the 15th Finance Commission compared with allocations made by the 14th Finance Commission and could potentially cause disaffection in southern states.
- By linking 1971 population numbers to allocations made by Finance Commissions is not necessarily unfair to the northern states. If the large northern states had managed development efforts better, the faster rise in their populations would have been to their advantage.
- States need to be treated fairly but poor past economic performance should not be the basis for preferential treatment.
- The weight assigned to the population should be decided (as per the 1971 census) and an indicator for demographic changes (since then) be introduced separately.

- For some time now there has been concern in south Indian states about how their numbers of seats in the Lok Sabha would decrease once the next delimitation exercise is done.
- According to the 84th Amendment of the Constitution in 2002, this reallocation of parliamentary constituencies is to be done as per the 2031 census.
- The speculation is that south India may lose as many as 45 seats to north India. Clearly, this would not be acceptable to southern states.
- Ten years from now, post 2031 southern states are likely to be highly agitated if their numbers in the Lok Sabha were to decrease.

## 6. EDUCATION

*In the light Annual Survey of Education Report 2019, a reworking of curriculum in the country is urgently needed for the age band from four to eight years. Justify*

### KEY POINTS

- The 2019 Annual Status of Education Reports (ASER) report focuses on 'Early Years' (ages 4-8) since these are critical to later-stage learning.
- Experts argue cognitive development in the pre-school years is key to learning outcomes in school, and, thus, children entering schools early the Right to Education law and the new National Education Policy both set 6 years as the age when a child should enter formal schooling (Standard I)—will be at a disadvantage compared to those who did so at the appropriate age.
  - Indeed, Early Years points at the same, with older children in the same class demonstrating sharper cognitive abilities, and, consequently, higher learning outcomes.
  - ASER 2019 shows how poor the quality of education in government schools is even at the foundational levels. While only 6.7% of government school students in Std I who were aged 4-5 could correctly do early language tasks, this figure was 24.1% for private schools. In cognitive skills, too, government institutions lagged their private peers by six to 18 percentage points when performance of 5-year-olds was compared.
  - India has one of the largest pre-school care programmes in the world—the Integrated Child Development Services (ICDS), but it remains primarily focussed on nutrition/healthcare/immunisation, with early learning often neglected at the anganwadis.
  - Moreover, as the report notes, the approach to this is quite flawed, with content knowledge and instruction being the preferred method when research shows that play-based activities geared towards building memory, reasoning, and problem-solving abilities have a much larger impact on building the foundation for later learning.
  - India needs to aggressively bolster its early education programme—in FY20, the Centre budgeted \$3.9 billion for the umbrella ICDS programme while in 2017, China was spending nearly \$19 billion on just early childhood education.

## 7. SOCIAL JUSTICE

*Will the Jal Jeevan Mission, latest in a series of nationwide programmes empower women and reduce their drudgery? Comment*

### KEY POINTS

- According to a report by the National Commission for Women, on an average, a rural woman in Rajasthan walks over 2.5 km to reach a water source.
- The Jal Jeevan Mission (JJM) aims at providing Har Ghar Jal or piped water supply to all households by 2024. While 57 per cent of the country is covered with public stand posts for their daily water supply, the JJM will connect individual households to appropriate and adequate water supply. Currently, only 18 per cent of rural households have this amenity.
- The new Ministry of Jal Shakti breaks the silos in which the water sector had been working in, allowing for institutional integration from the centre till the grass roots.
- The schemes are being designed with local flexibility to allow for effective adaptivity to local situations.



- Source sustainability is being mandatorily built into schemes to ensure that every drop of water is recycled and reused.
- These efforts must take form of a jan andolan for water to ensure the overall water security of our great nation.
- With women playing a leadership role in managing their community's water resources, minus the drudgery of walking for miles to fetch water for their families, the Jal Jeevan Mission will provide a massive fillip to the ease of living for women, and they will no longer be beasts of burden.
- The signs are all there and the winds of change are in tandem with the mood of the nation. For real change, it is optimal that we ensure that the real heads of the households — our mothers and sisters — continue to be at the centre of our country's development agenda.

## 8. HEALTH

***Recently Vaccine derived Polio comeback in a number of countries. Should India be worried? What should be the response from India? Examine***

### KEY POINTS

- In 2019, the Ministry of Health in Malaysia announced the country's first case of polio since 1992. The Philippines had declared an outbreak of polio.
- The World Health Organization (WHO) announced that tests have confirmed that the virus is genetically linked to poliovirus circulating in the Philippines.

### Where does India stand?

- In January 2014, India was declared polio-free after three years on zero cases, an achievement that is widely believed to have been spurred by the successful pulse polio campaign in which all children were administered polio drops.
- In fact, lessons from the programme were later incorporated in Mission Indradhanush to bump up India's immunisation campaign, and with great success.
- In 2018, there was a brief scare when some vials of the polio vaccine were found contaminated with the polio 2 virus that had been eradicated from the country in 1999.
- However, WHO quickly issued a statement saying that all vaccines used in the government programme in India were safe.
- The last case due to wild poliovirus in the country was detected on January 13, 2011.

### What do multiple outbreaks in the vicinity mean for India?

- India introduced the injectable polio vaccine in the Universal Immunisation Programme. This was to reduce chances of vaccine-derived polio infection, which continues to happen in the country.
- If both wild and vaccine-derived polio infection are reduced to zero, it would mean there is no trace left of the virus anywhere in the world, except in controlled situations in laboratories for future contingencies.

## 9. GOVERNANCE

***The gram sabha-based forest governance has to be implemented effectively to maintain sustainability of forests, along with implementation of community forest resource rights under the Forest Right Act, 2006. Elaborate***

### KEY POINTS

- Ecological security is the prime objective of National Forest Policy, 1988, but forest-dwelling communities cannot be separated from forests.
- India's Constitution places trust in village-level institutions for conservation of forest resources, with the 73rd amendment providing importance to such institutions for resource management.
- Provisions of the Panchayats (Extension to Scheduled Areas) Act, 1996 and Forest Right Act, 2006 have gone further to empower gram sabhas for the management of forest resources.
- The supremacy of the gram sabha must be maintained while preparing governance models under the umbrella of national and state government policies, regulations and judicial orders.
- The bureaucracy must share authority with gram sabhas and the state forest department must perform the regulatory and monitoring role.

- There are examples when some gram sabhas have shown both authority and responsibility, including when mining projects in Odisha were stopped by the gram sabha to save forests and livelihood.
- But the present system of so many committees for the natural resource management at village level, including Joint Forest Management Committee, Biological Diversity Management Committee, Watershed Management Committee, and Forest Right Committee, is creating confusion.
- The gram sabha can maintain three bank accounts—operating account for implementing government schemes, core account for revenue received through sale of forest produce, and biodiversity account for receiving money for allowing access benefit sharing of bio-resources utilized by industry.
- The gram sabha-based forest governance has to be implemented in a large way to maintain sustainability of forests and improve their quality, along with implementation of community forest resource rights under the Forest Right Act, 2006.

### ***Does the integrity pact form an effective tool against corruption in the country? Comment***

#### **KEY POINTS**

- The Integrity Pact is an agreement between the contracting government agency and private companies that they will abstain from bribery and ensure accountability through a monitor.
- Defence contracts can be a touchstone to examine the efficacy of the IP, as it is necessary for all procurements of and above Rs 100 crore.
- Oaths are private behaviour that are impossible to detect in a bribery-conducive environment. This reduces the IP as a window-dressing for the benefit of a third party.
- If someone is willing to commit a crime, then breaking one's word by signing an honesty pledge and not abiding by it is a minor inconvenience. This is the central credibility problem of the IP.
- In highly-corrupt environments where it is an impossibility to win a contract without bribery, alongside a low probability of detection of bribery and/or low penalties for bribery, an IP serves no useful purpose.
- In February 2010, the Indian government contracted to purchase 12 AgustaWestland AW101 helicopters for the Indian Air Force (IAF).
- In 2014, India cancelled the AgustaWestland chopper deal on the ground that they violated the IP.
- If the IP had been an effective instrument, the monitor should have raised the red flag when the IAF changed the technical specification of the tender to enable AgustaWestland to re-enter the bidding process.
- Furthermore, when India cancelled the deal in January 2014 for the breach of the IP by AgustaWestland, the latter challenged the cancellation through the launch of an arbitration against India.
- The amended Prevention of Corruption Act (PCA), 1988, which penalises the supply side of corruption (the private sector), also renders the IP infructuous.
- Section 9 of the amended PCA penalises commercial organisations for bribing public servants for obtaining/retaining business or an advantage in the conduct of business.

## **10. HEALTH**

### ***India needs a multilingual, multi-stakeholder awareness effort to ensure that every single Indian knows about the challenges of Tuberculosis and to eradicate it by 2025. Elaborate***

#### **KEY POINTS**

- India still has the highest TB burden in the world and despite the disease being fully curable, people still die from it.
- The first step is the creation of awareness and empowering of communities. TB affects millions, yet very few know enough about it. We need a multilingual, multi-stakeholder awareness effort to ensure that every single Indian knows about the challenges of TB and where to seek treatment.
- This is the first step towards ensuring that people are empowered with the necessary information to identify and recognise TB symptoms, and seek diagnosis and treatment.
- The second step is ensuring that we provide every Indian with access to correct diagnosis and treatment for TB, regardless of their ability to pay for it.

- This can only happen if we work with the private sector as we did in the case of polio. We need to go door to door, identify TB patients, and provide each of them care with compassion.
- We must track these missing cases and ensure that those in need of care and treatment are able to access it, also working with the private sector through organisations like the Indian Medical Association and Indian Academy of Paediatrics, to ensure patient-centric care as per “Standards of TB Care in India” (STCI) help eradicate TB.
- A key challenge is building a forward-looking plan to address and control drug resistance, a man-made menace that is a major roadblock in our fight against TB. Every TB patient must be tested for drug resistance at the first point of care, whether in the public or private sector, to rule out any drug resistance.
- The Nikshay Poshan Yojana — besides numerous other schemes — under which TB patients receive Rs 500 every month while on treatment to ensure that the patients have economic support and nutrition during the required period.
- We need to come together as a country to fight the disease and end the stigma surrounding it, so that every patient can seek care that is free from discrimination and with dignity.
- The community must act as a source of support for the patient. This will only happen as we educate more and more people about the nature of the disease.

### 11. INTERNATIONAL RELATIONS

*The Indian government should keep a wary eye on developments in the Gulf, impending west Asian crisis and make its own preparations. Analyse*

#### KEY POINTS

- There are three axes along which the Indian government will need to prepare.
- The supply of oil, India imports 84 per cent of the oil it needs. Thus, a spike in the price of oil makes a big difference not just to domestic cost conditions but also to the balance of payments.
- An increase in oil prices will naturally cause inflationary pressures throughout the economy; the Reserve Bank of India will, therefore, be forced to exercise greater caution than it would have otherwise when it comes to setting interest rates.
- In the past, high oil prices have severely weakened the external account; a previous crisis in West Asia was, in fact, part of the reason for the balance of payments crisis that precipitated the 1991 liberalisation.
- Today, India’s foreign exchange reserves are relatively comfortable, at over \$450 billion, and can easily cover 9-10 months’ imports at current prices. An increase in the price of oil would have to be both sharp and sustained in order to erode this buffer.
- However, there are two other axes of concern for the government, and both are related to the large Indian diaspora in West Asia, and particularly the Persian Gulf.
- Their safety will have to be a priority. India has in the past organised big evacuations — famously from Kuwait at the time of the first Gulf War, and more recently from Libya.
- In 2016-17, for instance, 27 per cent of remittances into India came from the United Arab Emirates, and 27 per cent from other Gulf states.
- This inward flow is concentrated geographically as well, with more than half flowing to Kerala, Maharashtra, Tamil Nadu, and Karnataka.
- A sharp decrease in remittance income would further stress the external account and the economies of these states. The Indian government should thus keep a wary eye on developments in the Gulf and make its own preparations.

*As India and China resolve their border dispute, Asia is providing the multilateral alternative to a world divided by values, and no longer by ideology. Analyse*

#### KEY POINTS

- China, in 2013, after attaining 15% of global wealth, announced the multilateral Belt and Road Initiative (BRI) and in 2014, launched the Asian Infrastructure Investment Bank, challenging the global governance paradigm.

- In 2015, emerging India established the International Solar Alliance, laying out a distinct global sustainable development framework.

### Potential of BRI

- The BRI provides a strategic framework for new global institution building as its scope is as wide as multilateral treaties.
- With the speed and scale of such change, rising Asia remains wary of China and is eager, as is China, that India joins the Regional Comprehensive Economic Partnership, poised to become the world's largest trading bloc because of the huge Indian market.
- The recent India-China Summit on boundary issues resolved to work out a "framework on a roadmap to a final solution on border issues"
- India has rejected American opposition to Huawei taking part in 5G trials. The Indian government has allowed all applicants, including Huawei Technologies Co. Ltd, to participate.

### Implications

- Clearly, the U.S., China and India will retain their civilisational models into the future.
- In Asia, differences will centre on overlapping priorities security (the U.S.'s efforts to maintain hegemony), economic (China's emphasis on connectivity, markets and growth) and equitable sustainable development (India-led framework of digital infrastructure designed as a public good).
- Asia, and Africa, former colonies with conditions closer to India than to China, are waiting for late-comer India, a civilisational state like China, to lay out its vision of a digital, cooperative, sustainable multilateral strategic framework to complement the frameworks of the other two powers.

***Apart from vaccination, a comprehensive approach has to be involved in dengue cases for efficient vector control and proper case management. Examine***

#### KEY POINTS

- The advent of a new tetravalent vaccine against the dengue virus has thrown new light into the evidence-based management of dengue.
- This vaccine confers about 80% protection to children vaccinated between 4 and 16 years of age without any major side effects.
- Apart from promoting the use of the vaccine, gaining control over dengue will also require a holistic approach that has to include within its ambit vector control and proper case management.
- Urbanisation, poor town planning, and improper sanitation are the major risk factors for the multiplication of such mosquitoes. Aedes mosquitoes cannot fly beyond a hundred metres.
- Hence, keeping the ambience clean can help prevent their breeding. Further, these mosquitoes bite during the daytime, so keeping the windows shut in the day hours is also useful.

#### Shortage of skilled manpower

- Unfortunately, the number of skilled workers available for such measures is low; many posts in government departments remain vacant despite there being a dire public health need.
- Due to this deficiency of manpower, active surveillance is not being done in India, says the National Vector Borne Disease Control Program.
- There is a lack of coordination between the local bodies and health departments in the delivery of public health measures. A comprehensive mechanism is required to address these issues.
- Fluid management is the cornerstone in the management of severe diseases like dengue hemorrhagic fever and dengue shock syndrome.

#### Alternative medicine drugs

- Finally, despite the adequate and well-formed guidelines for the management of dengue cases by the WHO and the Indian government, the usage of complementary medicines like Nilavembu kudineer (a Siddha medicine) and papaya leaf extract are rampant among the people.

***The stalemate at the global level offers India the opportunity to focus earnestly on developing its climate change action at State and sub-State levels. Explain***

#### **KEY POINTS**

- With support from bilateral agencies, States initially took different approaches in the first round of State Action Plans on Climate Change (SAPCCs).
- As the next round of the SAPCCs are being drawn up, under recommendations from the Centre, the focus ought to be on integrating the response to climate change with the development plan in different departments.

#### **On integration**

- The integration should take place at district and sub-district levels.
- There will not be enough from the Green Climate Fund, Adaptation Fund and bilateral agencies to support all States unless new sources are found.
- The coal cess in India is a good initiative, and as others have pointed out, could be used for environment and climate-related expenses.
- If States are to develop SAPCCs that would ultimately add up to India's NDCs, then the country needs reliable greenhouse gas inventories.
- Individual research groups and the civil society initiative, GHG Platform India would be useful in synchronising and co-ordinating State and Central mitigation programmes.
- States must also develop their programmes with longer timelines, with mid-course correction based on lessons and successes that can be integrated into the next stage of the plan.

***India's role in strengthening ties with Brazil will send out a strong signal of South-South co-operation. Discuss***

#### **KEY POINTS**

- The India-Brazil bilateral summit will be an important occasion to consolidate relationship between the two countries.
- Both countries are multi-cultural, with a commitment to democracy; where the leadership has a strong mandate and a compatible profile.
- Having cooperated on international issues, with BRICS as a cementing factor, the visit of Brazilian president can be the starting point for a comprehensive strategic partnership.
- Brazil's number one export to India is crude oil, it is experiencing an oil production boom. India needs Brazil to sustain its energy security.
- As a large producer of sugarcane, Brazil started a bioethanol programme which is highly effective and is a means of bio-energy which can fire up thermal cogeneration plants. Synchronization of bioethanol programme of India is crucial at this juncture.
- One resultant by-product are bio-pellets (a substitute for coal) and a means of clean energy, the urgent need of the hour in India.
- In wind energy, Brazil is the cheaper source; a Brazilian company manufacturing wind turbine generators Wind Energy Generator is already in India. This resource can be fully tapped.
- Brazil is not only self-sufficient in food production, but exports commodities including pulses to the Indian market.
- India consumes a variety of different foods, its growing and expanding population requires a perennial source, especially for proteins.
- India can start with a clean slate, having opted out of trade agreements, to put in place a bilateral framework/agreement. This will be a "First" as we look beyond our neighbourhood principle.
- It will also facilitate the flow of investments, and strengthen and fortify India's strategic interests. It will send out positive signals to foreign investors.
- A bilateral agreement between the two countries will secure this, which, in turn, will globally push India up in the 'World Bank Ease of doing' index.



## GS PAPER III

### 12. INDIAN ECONOMY

***Although RBI's latest Financial Stability Report says that macroindicators have stabilised, the financial system is on the right path, but should tread cautiously as the economic cycle turns around.***

***Explain***

#### KEY POINTS

- The latest FSR does indicate that the financial system has sort of stabilised, given the myriad challenges faced in the last couple of years.
- The good part of the story is that the NPA levels have stabilised at 9.3% It indicates that on an incremental basis NPA accretion is moderate, and the overall NPA ratio indicates that the AQR issue is tackled almost completely.
- The fact that the CRAR (capital to risk weighted assets ratio) has improved to 15.1% is reflective of a great deal of resilience built in the system, with substantial support coming from the government in the form of recapitalisation of PSBs.
- An interesting outcome of the stable picture presented is the capital adequacy ratio of 15%. While it was necessary for banks to be well-capitalised to fund future growth, the CRAR is a delicately balanced concept.
- The focus must be on expanding credit in a judicious manner, or else it will not be an efficient use of capital. Quite clearly, banks must use their capital in lending, or else the purpose of dis-intermediation would be dented.
- The other area of concern has been the non-banking financial companies (NBFCs), and here RBI is more cautious.
- The fact that funding to these institutions has been a challenge from markets as well as banks is well known. The asset-liability mismatch that engendered the crisis is being addressed gradually by NBFCs, which will help in stabilising the system.
- Interestingly, it shows that PSBs have lowered their exposures to this sector, while that of private banks and housing finance companies (HFCs) have increased.
- NBFCs, cooperative banks have to pay more attention to risk to strengthen their balance sheets and make them more resilient to shocks.

***In a rapidly growing interdependent global economy, the Indian audit and secretarial business needs to globalise. Explain***

#### KEY POINTS

- It is in the best interest of Indian firms to globalise by adopting best practices, state-of-the-art technology and invest in people, rather than resisting international networking, especially when we have one of the best talent pool.
- If the Indian chartered accountant (CA) firms, in their own right, aspire to have a global presence, it may be necessary to adopt the internationally accepted and applied policies under the laws of the country.
- Indian CAs and company secretaries (CSs), too, should be allowed to perform advertising and marketing activities that do not bring the profession into disrepute.
- In such activities, the professional advertising should be honest and truthful, and not make exaggerated claims for the services offered, qualifications possessed, or experience gained, or make disparaging references or unsubstantiated comparisons to the work of a fellow professional.
- Indian audit and secretarial firms need to equip themselves to manage stakeholder expectations, disclosure of financial information, and global accounting practices, as domestic companies are looking to move beyond the country.
- A government-appointed committee of experts (COE) in its report on Regulating Audit Firms and the Networks last year also held out similar views, concluding that branding with international networks would increase the competitiveness of Indian audit firms.

***How Small entrepreneurs act as a key to India's urban future, job creation, and growth revival? Elaborate***

**KEY POINTS**

- India's urban transformation is taking place at a 100-times faster pace than what developed countries have experienced.
- India is also the youngest country in the world, riding a wave of youth bulge that will continue to add 10 million additional workers to the labor force every year for decades to come.

**Tax reforms, demonetisation and financial stress**

- While the goal of Goods and Service Tax reform is commendable, its hasty implementation has adversely impacted small entrepreneurs in the informal sector.
- It has broken the link between formal and informal sectors. Large enterprises that outsource a lot of tasks to small enterprises are now less inclined to outsource it to the informal sector that barely come under the GST net.
- The informal sector has been badly affected by the economic slowdown and much of this may not be captured in official statistics.
- Insolvency and bankruptcy reforms are important and needed for more efficient resource allocation. But it is not of a great consequence to the informal sector.
- There is mounting evidence that economic shocks that worsen infrastructure affect informal sectors by reducing their access to markets and basic services.

**Policy agenda**

- The FM could explicitly recognise the role of informal sector as an important driver of growth and job creation in the next Budget.
- While the agenda on smart cities has caught the attention of policy makers, it needs to be made more inclusionary by integrating the informal sector into city planning, budgeting and financing.
- Technological revolution has made the informal sector as partners in development.
- Smartphones have become the key tool for women entrepreneurs, putting instant information about safety alerts, traffic, tourism, health services, and community news into millions of hands.

***The investment in the infrastructure sector of the country in different avenues can transmit into a manifold effect leading to better GDP growth and inclusive employment generation. Discuss***

**KEY POINTS**

- The recent announcement of `102 lakh crore by the finance minister was shot in arm for acceleration of mega infrastructure projects allocated across the various sectors like power, railways, urban irrigation, mobility, education and health. This will spur up the demand for alternative infrastructure projects funding.
- It is difficult to fund new projects due to limited availability of capital and liquidity with the Banks/NBFCs and Bank's sectoral limits.

**Alternative funding avenues**

- The government needs to encourage privatisation. In India, the government has only issued sovereign bonds in local currency in the domestic market to finance the fiscal deficit.
- Foreign portfolio investors have evinced interest in Indian government bonds traded locally in recent years, as the real interest rate on Indian bonds is attractive compared to other developed economies.
- There is a need to construct a financial bond market which runs for five years and moves assets into a 20-30 year bond / InvIT, essential to ensure constant capital flows.
- Mobilising funds via divestment of profit-making state-run companies and revive private participation to fill the financing gap.
- Disinvestment provides the government the much-needed fiscal resources and withdrawal from several activities that can be transferred to private sector without sacrificing any public cause.
- Inclusive employment

- Better allocation of funds and utilization of resources automatically leads to employment generation.
- But the fault lines in the society with respect to employment must be avoided by recognizing the talents rather than social identities.
- Human capital formation is a crucial factor in generating inclusive employment.

***Restrictions imposed by India on the import of refined and processed palm oil, coupled with the EU's proposal to phase out the use of palm oil as transport fuel, are likely to prove game-changers for the global palm oil sector. Explain***

#### **KEY POINTS**

- India and the EU are the largest importers of this oil from Indonesia and Malaysia, which together account for 85 per cent of the world production.
- The EU's move emanates from the perceived adverse impact of expansion in oil palm cultivation on the environment, owing to deforestation and habitat destruction.
- Palm oil is Malaysia's biggest agricultural export and accounts for 2.8 per cent of its gross domestic product (GDP).
- Unsurprisingly, therefore, Malaysia is already considering price discounts and barter deals involving import of Indian sugar and buffalo meat in exchange for palm oil.
- Malaysia frequently rejigs its palm oil duty structure to promote the export of refined oil vis-à-vis unprocessed oil. This hurts the Indian edible oil industry, which has invested heavily in creating vegetable oils refining capacity, much of which is currently lying idle or underutilised.
- Going by the industry's reckoning, the average capacity utilisation has plummeted to merely 46 per cent. Many small and medium scale refineries have shut down, rendering thousands of workers jobless.
- Cheaper imports have also kept domestic edible oil prices down to the detriment of the local oilseed growers. This has been one of the significant reasons for the failure of the domestic oilseed output to keep pace with growing demand.
- India, however, has huge potential to raise the output of other crop and tree-based oilseeds to meet the demand for cooking and use in industries such as food processing, cosmetics and pharmaceuticals.
- Checking the inflow of cheaper edible oils through measures like the new curbs on import of refined palm oil can prove a step in that direction.

***Does the current national accounting and analytical framework misses out on many key dimensions of a complex economy? Comment***

#### **KEY POINTS**

- The new series of Gross Domestic Product (GDP) figures with 2011-12 as base, released in 2015, has not gone well with analysts; the withholding of employment-unemployment data for some time and consumer expenditure data, which is not released, added to this unease
- The System of National Accounting (SNA) is designed to measure production, consumption, and accumulation of income and wealth for assessing the performance of the economy.
- The present series encountered serious problems for price adjustment, specifically for the services sector contributing about 60% of GDP, in the absence of appropriate price indices for most service sectors.
- The use of MCA21 data and blow up factors thereof without weeding out defunct enterprises, and then insufficient work on mapping of comparable ASI data, followed by similar survey on services sector enterprises were another major lacunae.

#### **Unchanged approach**

The approach for collection of data remains largely the same for long: The initiative under e-governance enabled the capturing of huge data, which need to be collated for their meaningful use for production of official statistics. The process for collection and collation of data needs modernisation using technology.

#### **For better statistics**

- We need to re-engineer the existing system, creating an integrated system populated with granular data. The country is vast, heterogeneous. There are non-linearities and path dependence, which should be considered while setting goals for development, reducing regional imbalance.
- The economics now is deeply rooted in data, measuring and impacting competitiveness, risks, opportunities and social welfare in an integrated manner, going much beyond macroeconomics.
- As these statistics reflect on the performance of the government, it is necessary that its independence is maintained scrupulously.

***Indian demographics faces the new challenge of ageing related problems. In this context, discuss the strategies to overcome the challenge, also to increase the productivity of the ageing population.***

#### **KEY POINTS**

- Population stagnation, once associated only with the rich economies, is now also seen in middle-income countries – and in those states of India that are also at the upper-middle income level.
- The Economic Survey of 2019 projects total Indian population growth in the two decades between 2020 and 2041 as being just over 12 per cent.
- But this conceals great variation in population growth and fertility across regions and states. Some states, such as Bihar, will grow by 25 per cent – in other words, at historically comparable levels.
- Others, such as Andhra Pradesh (AP), will barely see any population increase the Economic Survey suggests that AP will have its population grow by only 3.4 per cent between 2021 and 2041.
- By the fourth decade of this century, the Survey suggests that the population of Tamil Nadu will actually be shrinking.
- The implications of a changing age distribution will begin to be felt even sooner. By 2031, the size of the working-age population will start to decline in 11 states.
- Kerala, which has impressive human development indicators, saw annual population growth of only 0.5 per cent between 2001 and 2011.
- The Survey reported that the number of elementary schools with under 50 students has increased in the 2010s for every state in the country, with the sole exception of Delhi.
- Health infrastructure will also have to be upgraded to deal with more older patients. With fewer students and a large number of older people to support, the level of human capital imparted to each member of the workforce becomes vital. The macro-economic effects must also be kept in mind.
- India can no longer hope to depend on the growth impetus that came from an increasing proportion of the workforce – unless that is augmented in other ways. Getting more women into the workforce is the only way to counteract this phenomenon.

***The budget needs to provide direction to India's feeble economy and a boost to aggregate demand, investment for better economic revival. Discuss.***

#### **KEY POINTS**

- The prolonged, and ongoing, slowdown, is the main reason behind the depressing employment scenario, though several structural factors have also contributed to the situation.
- The GDP growth for the second quarter of Financial Year 2019-2020 is 4.5%, the lowest in the last six years, for which a decline in private consumption and investment are the factors primarily responsible.

#### **Boosting urban employment**

- Due to the crisis in the real-estate and infrastructure sectors, construction activities have come to a grinding halt.
- To revive demand for housing, the Budget can raise the limit for availing tax exemption on home loans. The Rs 25,000-crore fund set up by the centre to bailout 1,600 housing projects should be put to use immediately.

#### **Private sector's risk appetite**

- The private sector has very little appetite for risky investments and State finances are shaky due to low GST collection, the onus is on the Centre to ensure that the programme does not come a cropper.
- The budgetary support to infrastructure will have to be much more than the NIP projection at 1.11% of the GDP.

- Job openings that arise in the private sector put a premium on practical skills and work experience. Here, popular perception is that a good job requires a college or university degree.
- This misperception is the result of failure of the governments to provide affordable and good quality vocational training programmes.
- To stop the demographic dividend from becoming a national burden, there is a need to invest heavily in skilling of the youth. Besides, the Budget should give tax incentives to companies and industrial units to encourage them to provide internships and on-site vocational training opportunities.

***Market borrowings of the government do not always squeeze credit for the private sector in India. In the context of crowding out effect, analyse***

#### **KEY POINTS**

- The so-called “crowding out” effect refers to how increased government spending, for which it must borrow more money, tends to reduce private spending.
- The government funds its fiscal deficit by borrowing from the domestic bond market. Its expenditure is also local in nature. The Reserve Bank of India (RBI) is the official banker to the government, which spends money by first taking an overdraft from the central bank.
- This overdraft gets repaid through bond market borrowings. The understanding is that any such government spending should ideally not affect the availability of funds to other borrowers in the market.
- However, excessive government borrowing from the bond market, many caution, could lead to a rise in interest rates for the government itself and consequently for everyone else in the economy.
- We find that we have a unique money market, different from the rest of the world, since we have investors who are explicitly required to invest in government debt.
- Banks, non-banking financial companies, insurers, provident funds, and pension funds are all forced to invest in government debt as a condition for their licence to operate in India.
- This has worked for us very effectively all these years. We also find that RBI works towards aiding the government borrowing programme rather effectively, ensuring that interest rates do not change too adversely.

### **13. AGRICULTURE**

***Discuss the relevance of India's commitment to landmark Koronivia Joint Work on Agriculture.***

#### **KEY POINTS**

- While agriculture remains vulnerable to climate change effects—low productivity and food production are areas of concern—it also contributes 23% to global GHG emissions.
- It needs to be understood that KJWA has the potential to transform agricultural and food systems, while enabling the overall achievement of Sustainable Development Goals (SDGs) by 2030. Bold action is called for at COP 26.
- According to the UN's Emissions Gap Report 2019, India, along with Russia and Turkey, is projected to surpass its NDC target emission levels by 15%, and has room to raise its NDC ambition significantly. Whether it engages fruitfully with the KJWA proposals remains to be seen.
- India has been witnessing fast depleting groundwater resources, resulting from widespread use of pump-sets for irrigation, powered by heavily subsidised electricity, and highly polluting diesel.
- Perverse subsidies on farm power supply in India over the last four decades, have not only made irrigation by deep tube-well profitable for farmers, but have, in fact, incentivised wastage of energy, too.
- The Nabard-Icier report, Water Productivity Mapping of Major Indian Crops, argues that Punjab and Haryana, which require more irrigation water input to produce unit output of paddy, are less suited for rice production, as compared to the eastern region.
- Therefore, the report has recommended re-aligning cropping pattern with available water resource endowments across states. One of the fallouts of the paddy-wheat cycle in Punjab and Haryana is the problem of paddy stubble burning and its toxic air pollution effect.
- Sustainable solutions for water use efficiency like System of Rice Intensification, Sustainable Sugarcane Initiative, Better Cotton Initiative with drip irrigation need to be mainstreamed.



- A viable model of “solar trees” in farms where farmer producer organisations (FPOs) can own solar panels as source of irrigation and also income for farmers by selling power to the grid, needs to be promoted.

***Do you think that the country’s hybrid seed model for cotton favours seed companies over farmers?***

***Analyse***

**KEY POINTS**

- India is the only country that grows cotton as hybrids and the first to develop hybrid cotton back in 1970. Hybrids are made by crossing two parent strains having different genetic characters.
- These plants have more biomass than both parents, and capacity for greater yields. They also require more inputs, including fertilizer and water.
- A key difference between hybrids and varieties is that varieties can be propagated over successive generations by collecting seeds from one planting and using them for the next planting;
- Hybrid seeds have to be remade for each planting by crossing the parents. So for hybrids, farmers must purchase seed for each planting, but not for varieties.
- Using hybrids gives pricing control to the seed company and also ensures a continuous market.
- Agricultural distress is extremely high among cotton farmers and the combination of high input and high risk has likely been a contributing factor. Compact varieties would have significantly reduced distress as well as increased yield.
- Therefore, the hybrid seed model for cotton that India, and India alone, has followed for over three decades, is inferior to the HDP model being used in other countries on three important counts: much lower productivity; higher input costs; and increased risk particularly for low resource farmers in rain-fed areas.
- India is a signatory to international treaties on GMO regulation (the Convention on Biological Diversity, and the Cartagena Protocol on Biosafety), which specifically provide for inclusion of socioeconomic considerations in GMO risk assessment.
- However, socioeconomic and need-based considerations have not been a part of GMO regulatory process in India.

***Natural farming is an alternative to chemical fertiliser-based and high input cost agriculture consequently results in fiscal prudence. Explain***

**KEY POINTS**

- Natural farming is an alternative to chemical fertiliser-based and high input cost agriculture.
- It embodies principles of agroecology, activating microbial life in soil via bio-inoculums (prepared using cow dung, cow urine, jaggery, etc.), thereby improving both soil and plant health.
- A central proposition of natural farming is that chemical fertiliser use and related input costs could be significantly reduced.
- Based on a survey of 600 farmers across all agro-climatic zones in Andhra Pradesh, the study found significantly lower fertiliser consumption (more than 95 per cent reduction in most cases) for naturally farming rice and maize.
- Farmers also reported 90-93 per cent lower expenditure on fertiliser and pesticide inputs compared to conventional farming, or savings of Rs 5,000-7,000 per acre.
- India is the world’s second largest producer of urea (and the largest importer in 2016). Fertiliser subsidies are budgeted to be Rs 80,000 crore in 2019-20. Andhra Pradesh, alone, received more than Rs 3,500 crore in 2018-19 as fertiliser subsidy.
- Another link is between natural farming and climate adaptation and mitigation. Chemicals and fertilisers account for 12 per cent of greenhouse gas emissions from India’s manufacturing sector.
- A systemic shift in agriculture would mean vastly upgrading resource productivity, increasing economic viability of alternative practices, and greater social inclusion of the small and marginal farmer.

***The suggestion from the Commission for Agricultural Costs and Prices to introduce dual pricing of sugar is unlikely to resolve the recurring financial woes. Do you agree with this view? Comment***

**KEY POINTS**

- A suggestion was made in 2017 by the National Federation of Cooperative Sugar Factories, citing the differential rates for electricity supply to the industrial and domestic sectors.
- Currently, the sugar industry is having a good run for several reasons. Exports have turned feasible, thanks to government subsidy and a spike in international prices. Realisations from domestic sales of sugar and its byproducts, notably ethanol, have also improved.
- The uncertainty on this count arises also because the official sops are neither limitless nor unending. Besides, the sugar sector is notorious for its cyclic ups and downs.
- There is also another disquieting dimension of the recent policy modifications, especially those concerning ethanol production.
- The permission for converting sugarcane juice and sugar syrup directly into alcohol, without making any sugar, and fixing higher prices for such ethanol can be a case in point.
- Thus, instead of further complicating the matters through dual pricing, it would be far better to dig up the report of the Rangarajan committee on sugar, submitted in 2012, and implement the prudent pricing system mooted by it.
- The proposed benefit sharing formula envisages apportioning 70 per cent of the revenue earned by sugar mills from the sale of sugar and its byproducts to the cane growers.
- The objective is to link the prices of sugarcane with those of sugar and its byproducts. This would, in turn, allow the output of both sugarcane and sugar to be determined by market dynamics and stave off scarcities and gluts. Most importantly, it would safeguard the interests of all stakeholders – cane farmers, sugar industry, traders and consumers.

***Considering the Sub-par performance of e-NAM, Central law should override state marketing laws for better outcomes. Do you agree with this view? Critically Analyse***

#### **KEY POINTS**

##### **Centre should override state law**

- Though e-NAM links as many as 585 mandis operated by the Agricultural Produce Marketing Committees (APMCs) in 16 states, just about 14 per cent of farmers in the country are registered with it to sell their produce.
- What is worse, most of the business transacted through this portal comprises the deals within the same mandi or the mandis in the same state.
- Instances have also come to light where the business is conducted as usual but the data is uploaded on e-NAM's portal at the end of the day.
- Inter-state dealings, for which e-NAM was primarily set up, have been very few – totalling just 136 till now.
- Most of these transactions, too, have been between the adjoining states like Telangana and Andhra Pradesh, and Uttarakhand and Uttar Pradesh.
- Only 21 mandis in eight states have so far acquired the facilities needed for inter-state trade in farm goods.

##### **Centre should't override state law**

- Agriculture is a state subject, amending APMCs influences the autonomy of states and affects the balance of cooperative federalism.
- States are unlikely to amend APMCs so a model act need to effective implemented with the cooperation from states.
- Implementation of e-NAM will be effective only with cooperation from states, so their autonomy should be preserved.

## **14. ENERGY**

***Unified Ministry of Energy will not only enable India to keep up with the global energy transition but also to continue to be a leader in adopting cleaner energy sources. Examine***

#### **KEY POINTS**

- Petroleum and natural gas, coal, renewable energy and nuclear energy have separate ministries or departments.
- We also have a Ministry of Power, along with State-level bodies that regulate electricity distribution companies, or DISCOMS.

- Add to this, the presence of different regulators for each type of fuel and energy source which makes it cumbersome for businesses operating in this sector.

#### **Data constraints**

- No single agency collects energy data in a wholesome and integrated manner. Data pertaining to consumption are barely available while supply side data collected by agencies of respective ministries are riddled with gaps.
- The Ministry of Statistics and Programme Implementation collates data available from various ministries and conducts surveys at sporadic intervals.
- In the Draft National Energy Policy (NEP), the NITI Aayog has advocated that a Unified Ministry of Energy be created by merging the Ministries of Petroleum and Natural Gas (MoPNG), Coal (MoC), New and Renewable Energy (MNRE) and Power (MoP).

#### **Enabling optimisation**

- A single unified ministry of energy would help India to have an integrated outlook on energy that would enable us to optimise our limited resources to meet the goals of energy security, sustainability and accessibility.
- In the fast-changing energy landscape of our country, having a single energy ministry would be beneficial as it would allow for a quicker policy response.
- Formulating an integrated and wholesome energy policy in the current governance structure is a complex and challenging task not only due to lack of coordination among ministries but also due to the absence of good quality consumption data and an inadvertent promotion of their own fuels over other choices, which may not always be the best option.

### **15. S&T**

***Do you think that strategic Science & Technology ties between countries are the only way to address climate change? Comment***

#### **KEY POINTS**

- The importance of S&T innovations in achieving the 2030 Agenda for UN Sustainable Development Goals (SDGs) to which most nations, including India, are committed points towards a new opportunities for cross-border collaboration in scientific research and development.
- The Global Innovation and Technology Alliance (GITA) was launched by India a few years ago and has provided an enabling platform for frontline techno-economic alliances.
- This industry-led collaboration, with the government as an equal partner, is aimed at supporting the last phase of technology-based high-end, affordable product development which can connect to both global and domestic markets.
- The India-led International Solar Alliance (ISA), with more than 79 sunshine countries as signatories and nearly 121 prospective countries as partners, is another excellent example of modern-day science diplomacy.
- The vision and mission of the ISA is to provide a dedicated platform for cooperation among solar resource-rich countries. Such a platform can make a positive contribution towards achieving the common goals of increasing the use of solar energy.
- Coalition for Disaster Resilient Infrastructure (CDRI) yet another example of international partnership piloted by India in consultation with 35 countries that will support developed and developing nations in their efforts to build climate and disaster-resilient infrastructure, required to face the vagaries of climate change.
- The CDRI will provide member countries technical support and capacity development, research and knowledge management, and advocacy and partnerships.
- It is aimed at risk identification and assessment, urban risk and planning, and disaster risk management.
- No nation alone has the capacity, infrastructure and human resources to address the massive challenges that the earth and mankind faces, threatening our very existence.
- It is inevitable, therefore, that science, technology and innovation should increasingly become an intrinsic diplomatic tool for India.

### **16. ENVIRONMENT**



***Increasing the total area of forest is crucial for India to meet its Intended nationally determined contributions under the ambit of Paris agreement 2015. Analyse***

**KEY POINTS**

- India, as part of its contribution to the global fight against climate change, has committed itself to creating an “additional carbon sink of 2.5 to 3 billion tonnes of carbon dioxide equivalent” by 2030.
- The other targets relate to an improvement in emissions intensity, and an increase in renewable energy deployment. India has said it would reduce its emissions intensity (emissions per unit of GDP) by 33% to 35% by 2030 compared to 2005.
- It has also promised to ensure that at least 40% of its cumulative electricity generation in 2030 would be done through renewable energy.
- Forests, by absorbing carbon dioxide from the atmosphere for the process of photosynthesis, act as a natural sink of carbon.
- Together with oceans, forests absorb nearly half of global annual carbon dioxide emissions. An increase in the forest area is thus one of the most effective ways of reducing the emissions that accumulate in the atmosphere every year.
- It is estimated that India’s tree cover outside of forests would contribute another couple of billion of tonnes of carbon dioxide equivalent.
- An additional 2.5 to 3 billion tonnes of sink, as India has promised to do, would mean taking the size of the sink close to 35 billion tonnes of carbon dioxide equivalent.
- India’s emissions intensity target uses a 2005 baseline, so there is an argument that the forest target should also have the same baseline.
- But there is a strong demand for a 2015 baseline as well, so that it results in some concrete progress in adding new forest cover. When India announced its NDC in 2015, it did not mention the baseline year. It has to decide on it before it reconfirms its NDC targets ahead of the next climate change meeting in Glasgow towards the end of the year.

***Outcomes of Climate change has been reflected in Australia and the ongoing crisis calls for India to strengthening the bilateral relationship with Australia. Examine***

**KEY POINTS**

- Clearly, as a consequence of the bushfires, the debate on global warming, climate change and fossil fuels is going to intensify while scientists grapple with the new evidence.
- Environmental activism has gained ground throughout the country, and while the Indian Ocean Dipole may have triggered the drought that is related to the fires, the campaign against fossil fuels and the export of coal is sure to intensify.
- As two economies with a great stakeholding in fossil fuels, it is critical for India and Australia to ensure that their dialogue on energy acquires momentum.
- This will require a joint scientific task force to disinter the latest evidence linking climate change and extreme climatic events with fossil fuels and to study the promise and potential of “clean” coal technology.
- In addition, Indians are today the largest source of skilled migrants in Australia and the economic relationship, already robust, could potentially be transformed.
- In Canberra, there is considerable sensitivity to India’s concerns over the Regional Comprehensive Economic Partnership while there is still hope that there is an early conclusion of a bilateral Free Trade Agreement.

**An important partner**

- While Australia postponed his visit to India because of the bushfires, it will be missed at the Raisinia Dialogue, one hopes that one immediate decision that be will taken by New Delhi and Canberra is to elevate the ‘two plus two’ format for talks from the secretary level to the level of foreign and defence ministers. That should signal that New Delhi recognises Canberra as important a partner as Washington and Tokyo.

***Recently the Supreme Court allowed the Centre to introduce the African cheetah to a suitable habitat in India. Discuss about the implications and outcomes of the decision.***



## KEY POINTS

- With India's own cheetahs vanishing, a plea for this had been filed by the National Tiger Conservation Authority (NTCA), seeking permission to introduce the African cheetah from Namibia.
- 'Reintroduction' of a species means releasing it in an area where it is capable of surviving.
- In 1952, the cheetah was officially declared extinct from India.

## Why does NTCA want to reintroduce cheetahs?

### Implications

- Reintroductions of large carnivores have increasingly been recognised as a strategy to conserve threatened species and restore ecosystem functions.
- The cheetah is the only large carnivore that has been extirpated, mainly by over-hunting in India in historical times.
- India now has the economic ability to consider restoring its lost natural heritage for ethical as well as ecological reasons.
- The habitat of cheetah is needed to support a genetically viable population.

### Outcomes

- Introduction of keystone species in the ecosystem will provide stability and there is more chance to increase the biodiversity of the region.
- Creation of Genetically viable population in the ecosystem.
- Sociocultural identity of tribes will be preserved and provides sustainability to lives of people.

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