



# IAS PARLIAMENT

*Information is a Blessing*

A Shankar IAS Academy Initiative



# MONTHLY MAINSTORMING

OCTOBER  
2021

A compilation of Mains questions with model answers, from Current Affairs of the month



SCAN TO  
DOWNLOAD

[iasparliament.com](https://iasparliament.com)

## INDEX

<b>G.S PAPER I .....</b>	<b>3</b>
1. Geography.....	3
2. History.....	3
3. Society .....	4
<b>G.S.PAPER -II .....</b>	<b>4</b>
4. Indian Polity.....	4
5. Government Policies .....	6
6. Health.....	8
7. International Relations.....	10
<b>G.S PAPER - III .....</b>	<b>13</b>
8. Indian Economy.....	13
9. Agriculture .....	16
10. Energy .....	19
11. Infrastructure .....	21
12. Environment .....	21
13. Internal Security.....	23
14. Disaster Management .....	24



**IAS Parliament**  
@IASParliament

Out of 100 questions asked in UPSC Civil Services (Preliminary) Examinations – Paper I, **38 questions** are directly reflected from the IAS Parliament. 8 are partially reflected.



## MONTHLY MAINSTORMING

**OCTOBER 2021**

### **G.S PAPER I**

#### **1. GEOGRAPHY**

***Kerala and Uttarakhand received record rainfall in October, with several districts reporting 24-hour highs that exceeded the figures from over a century. What explains this incessant rain?***

##### **KEY POINTS**

- There are different factors at play in Kerala and Uttarakhand. There have been two rain-bearing 'low pressure systems' that are active in the Arabian Sea as well as the Bay of Bengal since the past week.
- Western disturbances, which are periodic influxes of moisture-laden clouds from the Mediterranean, and common during winter, are what caused the rain in northern India.
- The Bay of Bengal is still warm and strong winds from there are reaching as far as Uttarakhand and will contribute to rainfall in several parts of north-eastern India.
- Overall elevated temperatures are also contributing to warmer waters in the Arctic Ocean and drawing colder air from the poles with greater intensity.
- This added to the increased moisture, thereby seeding more intense western disturbance activity over north India.
- The monsoon cycle is prone to large variations, and every year regional factors get accentuated it's hard to predict which in advance that then lead to extreme climate events.
- This year, India was poised to receive below normal rainfall until August when global meteorological factors changed and caused a torrential September that largely repaired the monsoon deficit.
- Kerala and Uttarakhand have large tracts of hilly terrain that are prone to landslips. But construction has continued unabated even on land unsuited for human habitation.

#### **2. HISTORY**

***Despite having power was within his reach, Jayaprakash Narayanan preferred to work at the grassroots, strengthening India's democratic foundation. Elaborate***

##### **KEY POINTS**

- Jayaprakash Narayan was an outstanding leader of modern India. He was a freedom fighter of great courage and one of the pioneers of the socialist movement in the country.
- He galvanised support for the Bhodan movement, worked relentlessly for the poor and the underprivileged and, above all, became a symbol of the national conscience in the fight against corruption
- His formative years, evolution as a political leader, his Congress-socialist years; how he waged a guerrilla struggle against the British in the Terai region of Nepal.
- He grew from socialism to Sarvodaya, becoming the leader of resistance against a repressive, anti-democratic regime.
- This led to the conclusive defeat of the Indira Gandhi government in 1977 and the installation of the first-ever non-Congress government at the
- Subsequent events brought JP closer to Jawaharlal Nehru, and he became an important leader of the freedom movement.

- He also became associated with the socialist movement.
- After India's independence, Nehru was keen to involve him in the government but JP was not meant for power politics.
- It is truly a remarkable story about one of the greatest sons of India who personified ethics and morality in the public life of the country.

### 3. SOCIETY

***Though good Samaritans plan can help reduce accident deaths, but more work have to be done for road safety. Elaborate***

#### KEY POINTS

- The initiative of the Ministry of Road Transport and Highways to award Good Samaritans who save lives of road accident victims with a cash prize is a welcome attempt to reduce India's staggering annual death toll from mishaps.
- Ranking third among 20 nations that have the highest number of accidents, India fares far worse on an important metric cases to fatalities ratio.
- During 2020, even with severely disrupted mobility due to COVID-19, National Crime Records Bureau data show 1,33,715 lives were lost in 1,20,716 cases attributed to negligence relating to road accidents.
- Under the Motor Vehicles law, a Good Samaritan voluntarily helps an accident victim with no expectation of payment or reward, and has no legal obligation to record his involvement or aid the investigation in the case.
- In spite of an entire chapter being added to the Motor Vehicles Act last year to sensitise police forces and hospitals on this, altruism is affected by the perception of harassment and legal complications.
- The Ministry's latest move seeks to overcome reticence by rewarding socially minded individuals who offer immediate assistance and rush a victim with certain kinds of injuries to hospital, with Rs 5,000 and a certificate of recognition for saving a life.
- The Good Samaritan plan can work well if District Committees tasked with awarding these individuals readily recognise their contribution, aided by the police, hospitals and RTOs.

### G.S.PAPER -II

### 4. INDIAN POLITY

***Do you think that the Indian federalism needs institutional amendment in order to become democratically federal? Comment***

#### KEY POINTS

- Events coinciding with the jubilee of India's Independence draw attention to the federal structure of India's Constitution, which is a democratic imperative of multi-cultural India.
- This built-in structural potential for conflict within and among the units, and that between them and the sovereign state, need imaginative federal craftsmanship.

#### Fault lines

- The Parliament session, where the Rajya Sabha Chairperson broke down 2021 unable to conduct proceedings despite the use of marshals;
- Cross-border police firing by one constituent State against another, inflicting fatalities.
- Such unfamiliar events of federal democracy are recurrent in India, except their present manifest intensity.
- Democratic federalism presupposes institutions to ensure equality between and among the units and the Centre so that they coordinate with each other.

- But India's federal structure is constitutionally hamstrung by deficits on all these counts, and operationally impaired by the institutional dents.
- India's federal structure, underpinned on the colonial '1935 Act' which initiated 'provincial autonomy', attempted democratising it by: renaming "Provinces" to autonomous "States";
- The Indian Constitution itself has been amended 105 times in 70 years compared with 27 times in over 250 years in the United States.
- Whenever any party with a massive majority in any state finds itself marginalised in the central legislature, it disrupts proceedings, just as popular issues not reflected in legislative proceedings provoke undemocratic expressions.

***A fine balance between elected representatives and bureaucrats/professionals is required for the Indian parliamentary system to handle various challenges. Explain***

**KEY POINTS**

- It is good to see professionals in the recently reshuffled council of ministers.
- Since Independence, India has often fallen short of efficient execution of policies.
- India, with its diversity in respect of geography, demography, climate, economy, culture and social structures, requires specialised treatment for its problems at various locations
- The experience of bureaucrats helps them shape policy which is both feasible and execution-friendly.
- Another advantage of their induction into the council of ministers is that their relatively low allegiance to any ideology means little or no political baggage, thus paving the way for long-term decisions in public interest.
- Professional qualifications equip them with technical acumen, which enhances their decision-making capabilities in extraordinary circumstances.
- This sort of lateral entry into the Cabinet may prove to be a catalyst in transforming lagging ministries and departments into high performers.
- The experiment of involving professionals with elected representatives will not only strengthen our parliamentary democracy but also help in quick and seamless implementation welfare measures for the common man.
- Crisis management and skill sets to utilise resources optimally give professionals the extra edge vis-à-vis their elected counterparts in the Cabinet.
- Participation of both would be vital for the government to improve governance and service delivery to its people.

***What is the need for registering a political party with the Election Commission? Discuss the various recognitions accorded by the Election Commission.***

**KEY POINTS**

- According to the Election Commission, any party seeking registration has to submit an application to the Commission within a period of 30 days following the date of its formation as per guidelines prescribed by the Commission.
- More importantly, these registered political parties, over course of time, can get recognition as a 'state party' or a 'national party' subject to the fulfilment of the conditions prescribed by the Commission in the Election Symbols (Reservation and Allotment) Order, 1968.
- Recognised 'state' and 'national' parties need only one proposer for filing the nomination and are also entitled for two sets of electoral rolls free of cost and broadcast/telecast facilities over state-owned Akashvani/Doordarshan during the general elections.

**Recognition**

- For recognition of a 'national party' if a political party is treated as a recognised political party in four or more states, only then will it be recognised as a 'national party' throughout the whole of India.
- The rules also state if a political party is treated as a recognised political party in less than four states, it will be a 'state party' in the state but only so long as that political party continues to fulfill the conditions.



## 5. GOVERNMENT POLICIES

***Though the saubhagya scheme has performed well, but there's a need to conduct socio-economic impact audits. Elaborate***

### KEY POINTS

- Saubhagya is one of the largest household electrification drives in the world.
- According to reports, the International Energy Agency (IEA) had lauded it as one of the greatest successes in the history of electrification, raising the bar on implementation of government programmes and almost managing to meet the target of providing power to all the unconnected.
- The focus of the scheme was on strengthening and augmentation the existing infrastructure and metering of existing feeders/distribution transformers to improve the quality and reliability of power supply in rural areas.
- Even though audits do happen, they are mostly transactional about physical presence and assets which doesn't indicate the overall socio-economic impact.
- An extensive impact assessment with stakeholder engagement is imperative to enhance policy mileage and outcome, rather than just technical and commercial audits.
- A major challenge is lack of knowledge dissemination, as the beneficiaries rarely understand the incentives made available to them.

### Push for audits

- The Power Ministry has been doing its bit to conduct audits and ensure seamless functioning. It has also proposed forming of District Committees.
- For success of schemes like Saubhagya what is needed is fixing accountability. While all agree that there has to be audit, most feel that it should also focus on the socio-economic impact.

***A sustainable refugee policy is a necessary step to intelligently manage population movements and ensure transparency in India's administrative actions. Discuss***

### KEY POINTS

- According to the UN, over 82.4 million people were forced to leave their homes in 2020 and more than 20 million of them are refugees.
- Welcoming refugees lies at the core of India's secular, spiritual and cultural values.
- Interventions on refugee assistance in India have largely depended on interim policies and administrative decisions.
- refugees have contributed significantly to India's economy — as well as culturally. The manufacturing, automotive, retail, hospitality and food industries bear the positive imprints of their endeavours.
- Treatment of refugees must receive the same attention that other human rights protection issues receive this is consistent with the constitutional emphasis on the rule of law.
- This is also an important national security consideration that cannot be relegated to a bureaucratic exercise as it is currently.
- It will also provide a platform for dialogue on sharing responsibility and aid the search for durable solutions to the root causes of a refugee problem.
- The law should differentiate between various categories of refugees and migrants and assign each a relevant form of protection.
- It should anticipate secondary movements and protect the most vulnerable. Progressive states and economic powerhouses like India, with traditional experience and values, can serve as catalysts for global humanitarian action and asylum management.
- The current global refugee and economic crises present an opportunity for India to better calibrate its asylum management by enacting a national refugee law.

***Do you think that India needs comprehensive urbanisation policy to meet its growth ambitions in future? Discuss***

**KEY POINTS**

- Cities are drivers of economic growth. As India urbanises, it must ensure that its cities offer a decent quality of life and facilitate job creation.
- These imperatives are fundamental to India's ambitions of becoming a five trillion-dollar economy by 2025 and a 10 trillion-dollar economy by 2030.
- From a population of 377 million in 2011, Indian cities are projected to house 870 million people by 2050, according to the UN's projections — by far the highest among all nations.
- Water supply is unreliable. Mountains of solid waste sit on the fringes of our cities. Poor drainage, congested roads and deteriorating air quality are other challenges.
- Dense cities are harbingers of infrastructure-related economies but are vulnerable to the spread of disease, as evident from the Covid-19 pandemic.
- A proper balance between agglomeration economies and manageability as well as density and distance will hold the key in determining the right size for our cities.
- Capital markets are an obvious choice but involving them would require pricing basic services in a manner that allows a reasonable return on investments.
- An urbanisation policy should take cognisance of future mobility patterns. Increasingly, travel patterns are getting limited to shorter distances, requiring more non-motorised transport infrastructure rather than high-speed systems better suited to longer trips.

***Discuss the approaches that are required to set about the revival path of tourism in India fostering inclusive growth.***

**KEY POINTS**

- The global travel and tourism industry is considered to be the most adversely affected, owing to the strict lockdowns, interrupted air travel, closed down hotels and other such travel restrictions imposed to prevent spread of the pandemic.
- Almost 27 million Indians travelled abroad in 2019 prior to Covid, spending over \$20 billion.
- The ultimate responsibility to promote domestic tourism through increased coordination and cooperation, and formulation of mutually beneficial policies and strategies lies with the States.
- Maharashtra's initiative to promote homestay tourism in partnership with Airbnb, aimed at encouraging travel to lesser-known destinations and enabling inclusive community-led tourism, is another welcome move.
- It is crucial for curbing the impact of the prevalent over-tourism challenge. Unchecked tourism can deplete natural resources causing water shortages, loss of biodiversity, land degradation, and contribute to climate change and pollution.
- Hence, regular carrying capacity assessment of popular destinations and sustainable management is imperative.
- Initiatives such as Virtual Reality, webinars, digital walk-throughs offering an immersive experience of popular as well as unexplored destinations, via initiatives like 'Dekho Apna Desh', need to be further promoted.
- Therefore, it is essential that we leverage this into rethinking business models for the future while also prioritising the preservation of our heritage and ecology through sustainable and responsible tourism.

***Government of India must focus more on pneumoconiosis policy to protect the lives of labor from the occupational disease in the country. Examine***

**KEY POINTS**

- Rajasthan with the top-most share of over 17% in value of mineral production in the country and a long history of civil society activism, was the first to notify silicosis as an 'epidemic' in 2015.

- A 'silicosis portal' was hosted by the Department of Social Justice and Empowerment and a system of worker self-registration was put in place.

#### Gaps in the system

- In the mining sector alone, none of the silicosis cases diagnosed has been notified by mine owners or reported by the examining doctors to the Directorate General of Mines Safety (DGMS), Ministry of Labour and Employment.
- The present system is designed to 'consume' the worker and dispense with him with a small compensation.

#### Steps for prevention

- State governments need to be alive to these dreadful regressions and use their powers to contain the damage.
- Rajasthan could lead the way by establishing a robust system of preventive annual health checks.
- Local manufacturers must be incentivised to innovate and develop low-cost dust-suppressant and wet-drilling mechanisms.
- DMFT funds are both underutilised and spent in an entirely ad hoc manner.
- A systematic identification ultimately lies in the hands of the authorities and their will to enforce the law in this regard and a rising among the workers for their rights.

### ***This ranking in Global hunger index enables the country to rethink of policy interventions against hunger including pandemic-induced nutrition insecurity. Elaborate***

#### KEY POINTS

- Global Hunger Index (GHI) did not go down well with the government, ranks India 101 out of 116 countries for which reliable and comparable data exist.
- Child stunting in India declined from 54.2% in 1998–2002 to 34.7% in 2016–2020, whereas child wasting remains around 17% throughout the two decades of the 21st century.
- Child wasting can manifest as a result of an immediate lack of nutritional intake and sudden exposure to an infectious atmosphere.
- If India can tackle wasting by effectively monitoring regions that are more vulnerable to socioeconomic and environmental crises, it can possibly improve wasting and stunting simultaneously.
- India's relatively better performance in the other component of GHI child mortality merits a mention.
- India's child mortality rate has been lower compared to Sub-Saharan African countries despite it having higher levels of stunting.
- This implies that though India was not able to ensure better nutritional security for all children under five years, it was able to save many lives due to the availability of and access to better health facilities.
- The low ranking does not mean that India fares uniformly poor in every aspect. This ranking should prompt us to look at our policy focus and interventions and ensure that they can effectively address the concerns raised by the GHI, especially against pandemic-induced nutrition insecurity.

## **6. HEALTH**

### ***Do you think that the country should explore on world's first Malaria vaccine to prevent the incidence of the disease? Comment***

#### KEY POINTS

- The WHO recommending 'widespread use' of RTS,S/AS01 (RTS,S), the world's first malaria vaccine.
- As per the World Malaria Report (WMR) 2020, there were 229 million cases of malaria and 409,000 related deaths reported in 2019; the burden continues to be high.
- The WHO's recommendation of RTS,S is based on the results from an ongoing pilot in three African countries;



- RTS,S acts against Plasmodium falciparum, the more virulent strain of the parasite that also happens to account for over 95% of the malarial cases across the globe.
- The fact that cases of resistance against anti-malarial (treatment) drugs, including artemisinin, are getting reported with increased frequency suggests vaccines will have to be relied upon more.
- India, a high malaria-endemic country, has made significant strides against malaria.
- The WMR 2020 makes particular note of the fact that it reported the largest absolute decline in annual cases in the WHO's Southeast Asian region—from 20 million in 2000 to 5.6 million in 2019.
- But, even when malaria is not fatal, research shows, with repeated attacks, it alters the body's immunity in ways that weaken defences against pathogens, especially among children.
- Besides, the African pilot shows it has had no negative impact on use of insecticide-treated bednets and health-seeking behaviour for febrile illnesses.

***As the problem of antimicrobial resistance (AMR) is threatening public health worldwide, its mitigation must top pharma industry's agenda. Examine***

#### KEY POINTS

- The economic and social consequences of the Covid-19 pandemic have reiterated the destructive capacity of untreatable infectious diseases.
- Increased AMR in microbes like bacteria, fungi, and parasites diminish the efficacy of antibiotics in treating simple infections.
- A recent WHO-supported report has found high rates of AMR in the bloodstream and urinary tracts among the population of countries with reported data on AMR.
- Apart from the collaboration between governments and multi-lateral agencies, the pharmaceutical sector is a key player for the One Health Approach to have the desired impact.
- While stabilising the supply chain to absorb future shocks is important, the industry must pivot towards environmentally responsible ways of manufacturing APIs and drugs in finished dosage forms.
- The government announced a slew of policy measures and incentives for the pharma sector to leverage the industry's growth potential with incentives for domestic production of APIs and Key Starting Materials (KSMs) and incentivisation of setting up bulk drug parks.
- In the absence of laws restricting antibiotic residue concentration limits in water bodies, irresponsible production practices continue to drive environmental AMR and weaken the One-Health Approach.
- The pharmaceutical industry has shaped the lives of millions world over through their medicines, the unsustainable procurement and production practices can offset benefits of these medicines due to increased AMR.

***Discuss the methodology of the Global Hunger Index and its shortcomings.***

#### KEY POINTS

The Global Hunger Report (GHR) ranks India at 101 out of 116 countries, with the country falling in the category of having a serious hunger situation.

#### The indicators

- The GHI is based on four indicators percentage of undernourished in the population ;percentage of children under five years who suffer from wasting; percentage of children under five years who suffer from stunting, and percentage of children who die before the age of five.
- The first and the last indicators have a weight of one-third each and the two child malnutrition indicators account for one-sixth weightage each in the final GHI.

#### Shortcomings

- They have based their assessment on the results of a four question opinion poll, which was conducted telephonically by Gallup, is not based on facts.

- The situation of food insecurity at the end of the year 2020 was concerning, and things are most likely to have become worse after the second wave.
- Services such as the Integrated Child Development Scheme (ICDS) and school mid-day meals continue to be disrupted in most areas.
- So there can be huge deviations in the collection of data.
- The argument that the GHI is an indicator of under nutrition and not hunger, is only diverting attention away from more substantial issues.

## 7. INTERNATIONAL RELATIONS

***In pursuing its Indo-Pacific strategy, India needs to be mindful of the geo-politics of major powers in the region. Analyse***

### KEY POINTS

- In pursuing its Indo-Pacific strategy, India needs to be mindful of the China-U.S. equations in the region
- If the rising confrontation between the United States and China erupts into a clash of arms, the likely arena may well be the Taiwan Strait.
- Taiwan could not be occupied militarily by the newly established People's Republic of China (PRC) as it became a military ally of the United States during the Korean War of 1950-53.
- Nevertheless, the U.S. has declared that it will "maintain the ability to come to Taiwan's defence" while not committing itself to do so. This is the policy of "strategic ambiguity".
- Taiwan business entities have invested heavily in mainland China and the two economies have become increasingly integrated.
- Between 1991 and 2020, the stock of Taiwanese capital invested in China reached U.S. \$188.5 billion and bilateral trade in 2019 was U.S. \$150 billion, about 15% of Taiwan's GDP
- The recent crystallisation of the Quad, of which India is a part, and the announcement of the Australia-U.K.-U.S. alliance, AUKUS, with Australia being graduated to a power with nuclear-powered submarines, may act as a deterrent against Chinese moves on Taiwan.
- But they may equally propel China to advance the unification agenda before the balance changes against it in the Indo-Pacific.

***How does the European Union can give a fillip to India's mission for a multi-polar world order? Discuss***

### KEY POINTS

- Since Europe got involved in the Indian diplomatic agenda today and smaller European states draw unprecedented political attention from Delhi.
- EU's Indo-Pacific strategy got little public attention in Delhi is part of the entrenched indifference to Europe in India's foreign policy discourse.
- To be sure, the release of the EU's approach to the Indo-Pacific was overshadowed by the controversial announcement of the AUKUS partnership on nuclear-powered submarines.
- Defence and security are important elements of the EU's Indo-Pacific strategy that "seeks to promote an open and rules-based regional security architecture, including secure sea lines of communication, capacity-building and enhanced naval presence in the Indo-Pacific.
- The EU outlined a strategy for India in 2018 to focus on four themes sustainable economic modernisation, promotion of a rules-based order, foreign policy coordination, and security cooperation.
- The EU and India agreed to resume free trade talks and develop a new connectivity partnership that would widen options for the world beyond the Belt and Road Initiative.



***India's participation in a meeting with Taliban officials in Moscow signals a decisive shift in the country's approach towards the Islamist group. Analyze the significance of India's engagement with the Taliban.***

**KEY POINTS**

- India had earlier taken a strong position against any kind of engagement with the Taliban.
- The Taliban were making steady advances towards Kabul, India had established contacts with the Taliban's political office in Doha, Qatar, but this is the first time India met a top Taliban delegation.
- Last time the Taliban, which have close ties with anti-India terrorist groups such as LeT and the JeM, were in power, India saw a rise in violent incidents in Kashmir as well as the hijacking of an Indian plane to Kandahar.
- Now the Taliban say they will not allow Afghan soil to be used by any terrorist organisation.
- It would also not like to see an isolated Taliban being a Pakistani satellite. To meet these goals, given the new reality in Afghanistan, engagement with the Taliban looks a strategic necessity.
- The Moscow 10, which includes China, Pakistan, Iran and the Central Asian republics, has some leverage.
- India and the others asked the Taliban to keep their commitment on forming an inclusive government and ensure that their territory is not being used by terrorist groups.
- These calls should not end with the statements. While India and other regional countries should help Afghans during this period of economic miseries.

***India's participation in a meeting with Taliban officials in Moscow signals a decisive shift in the country's approach towards the Islamist group. Analyze the significance of India's engagement with the Taliban.***

**KEY POINTS**

- India had earlier taken a strong position against any kind of engagement with the Taliban.
- The Taliban were making steady advances towards Kabul, India had established contacts with the Taliban's political office in Doha, Qatar, but this is the first time India met a top Taliban delegation.
- Last time the Taliban, which have close ties with anti-India terrorist groups such as LeT and the JeM, were in power, India saw a rise in violent incidents in Kashmir as well as the hijacking of an Indian plane to Kandahar.
- Now the Taliban say they will not allow Afghan soil to be used by any terrorist organisation.
- It would also not like to see an isolated Taliban being a Pakistani satellite. To meet these goals, given the new reality in Afghanistan, engagement with the Taliban looks a strategic necessity.
- The Moscow 10, which includes China, Pakistan, Iran and the Central Asian republics, has some leverage.
- India and the others asked the Taliban to keep their commitment on forming an inclusive government and ensure that their territory is not being used by terrorist groups.
- These calls should not end with the statements. While India and other regional countries should help Afghans during this period of economic miseries.

***Border dispute is the long pending challenge in India – China relations. Discuss.***

**KEY POINTS**

- The winter is setting in in the icy cold deserts of Ladakh and there is no respite for Indian and Chinese soldiers who will remain deployed against each other.
- These actions are not limited to Ladakh but have also been initiated in the middle and eastern sectors of the 3,488-kilometre long Line of Actual Control (LAC).
- The incursion into Barahoti in Uttarakhand in August was a significant pointer to the renewed Chinese aggression against India.
- This was violated when Chinese soldiers came deep into Indian territory in uniform and damaged some infrastructure. T

- In response to the PLA's actions on the LAC, the Indian military has also inducted more modern military platforms and systems on the China border which has been backed by infrastructure construction.
- The lack of institutional checks and balances on the political executive, which imposes an even bigger cost in decision-making on national security issues.
- In areas of disengagement, a new status quo has been created which curtails Indian patrolling rights while the PLA remains ensconced on Indian territory in Dopsang, Hot Springs and Demchok.
- India now has no choice but to be prepared for all eventualities on the Sino-India border.

***India has been increasingly leaning toward green transition and Russia has the potential to be long-term partners with India in aiding its energy transformation. Examine***

#### KEY POINTS

- India has been at the forefront of the transformation of global energy and striving to diversify its trade relations.
- One of the examples of cooperation between the two countries in energy transformation is the joint venture between India's Reliance Industries Ltd and Russia's Sibur, the country's largest petrochemicals producer.
- Sibur is bringing to India unique technology, which is not commercially available in the market and the most advanced in terms of [an] ecological footprint.
- Commitment to net zero emissions could positively impact the country's growth trajectory.
- Russia, one of the key global players across the energy market, could emerge as an indispensable partner for such a transition.
- Russian companies have been involved in the construction of six nuclear reactors in the Kudankulam nuclear power project at Tamil Nadu. Of these, unit 1 and unit 2 have been operating at total capacity. Unit 3 is still under construction.
- India's nuclear power generation capacity of 6,780 MW may increase to 22,480 MW by 2031, contributing to the country's efforts to turn to green energy.
- India needs approximately U.S.\$500 billion of investments in wind and solar infrastructure, grid expansion, and storage to reach the 450 GW capacity target by 2030. Therefore, more efforts are needed to expand cooperation with such partners as Russia.

### G.S PAPER - III

## 8. INDIAN ECONOMY

***The Indian GI economy can be a platform for India to showcase to the world a model for comprehensive development in various ways. Explain***

#### KEY POINTS

- Geographical Indications were either assigned to the dusty pages of history books or left to rural artisans to propagate and preserve.
- A 2017 UNCTAD report on inclusive growth and e-commerce deems China's e-commerce-driven growth as inclusive.
- That means China has successfully empowered micro, small and medium enterprises (MSMEs) to compete with large companies on the same stage, with no geographic boundaries.
- Strong GI ecosystem will automatically resolve the three fraught India issues of poor pay for talent, low female participation in the labour force, and urban migration.
- It will convert talent into entrepreneurship with gig workers, and create a "passion" economy, that is, a new way for individuals to monetise their skills and scale their businesses exponentially.



- The labour-intensive nature of GI offers the best solution to boosting the employment-to-population ratio in India, an abysmal 43 per cent compared with the 55 per cent global average.
- Monetising artisanal work done at home will increase India's low female labour force participation rate, which at 21 per cent in 2019 was half the 47 per cent global average.
- The hyper-localised nature of GI offers solutions to reverse urban migration and conserve India's ancient crafts, culture and food.
- A rejuvenation of MSMEs, which account for 31 per cent of India's GDP and 45 per cent of exports, will follow.
- It encompasses the concept of trusteeship, as advocated by Mahatma Gandhi and more recently, by Prime Minister.

***Explain the measures that can be adopted by the Government of India to make public debt sustainable in the medium to long term.***

**KEY POINTS**

- India's public debt to gross domestic product (GDP), at constant prices, increased to a record high of 100.86 per cent in 2020 as against 76.86 per cent in 2014, as per the data from the Reserve Bank of India.
- It is well-recognised that excessive public debt leads to higher risk premium in interest rates, which results in reduction of private investment (crowding out effect) as well as contraction of GDP in the long run.

**Suggested measures**

**Privatisation of loss-making PSUs:**

- The government may think of privatising loss-making public sector undertakings (PSUs) such as Air India.
- Further, 'minimum government and maximum governance' principle may be adopted in privatising any PSU.

**Prudential stance:**

- As per the Fiscal Responsibility Budget Management (FRBM) Act 2003, it is the onus of the government to control fiscal prudence and to achieve long term macro-economic sustainability.

**Leveraging of PFMS:**

- As part of better fiscal deficit management, the Public Financial Management System (PFMS) should be leveraged to the maximum financial accountability.

**PPP model in social schemes:**

- The government may think of public private partnership (PPP) model in social schemes such as Deen Dayal Upadhyay Grameen Kaushalya Yojna (DDU-GKY).

**Harmonisation of tax regime:**

- The government should create an investor-friendly environment for additional source of financing to replace the high public debt.
- Robust expenditure planning, privatising loss-making PSUs, reducing dependence on fossil fuels are among steps that will help.

***The global corporate tax agreement engineered by Organisation of Economic Cooperation Development offers more equitable taxation of Multi National Corporations. Explain***

**KEY POINTS**

- The global corporate tax agreement engineered by OECD and spearheaded by the US puts forth a feasible solution to address these issues.
- While a concerted attempt to address these concerns began in 2015 with the adoption of OECD's Base Erosion and Profit Shifting package by 140 countries including India.
- The formula proposes that 25 per cent of pre-tax profits exceeding 10 per cent of MNCs with revenue above €20 billion shall be taxed in jurisdictions where the revenue is earned.

- While India will have to cease its equalisation levy on foreign digital players, the right to tax the revenue earned by these companies in India is likely to compensate the loss to some extent.
- With 136 countries accounting for 90 per cent of the global GDP signing the agreement, there is likely to be substantial reduction in tax evasion following the implementation.
- Making low-tax jurisdictions such as Ireland, Estonia and Hungary join the deal paves the way for smooth implementation.
- The deal should be welcomed by all jurisdictions since it will help establish a more equitable global tax system and free countries from long drawn litigations with large MNCs.

***With the Gati Shakti National Master Plan, India's economic growth can find renewed momentum through major infrastructure upgrades. Explain***

**KEY POINTS**

- With the Gati Shakti National Master Plan India's economic growth engine can find renewed momentum through major infrastructure upgrades that will cut logistics costs for industry and raise all round efficiency.
- A technocentric administrative initiative that promises integration of 16 Ministries including railways, roads and ports through information technology, satellite mapping and data tools.
- The importance given in the plan to rail-road multimodal connectivity and higher share of freight for the railways articulated also by NITI Aayog has multiple benefits.
- There is also the challenge of reducing vehicular emissions from road freight growth in order to meet climate change commitments.
- The observations in the Economic Survey for 2020-21 underscore the role of active Centre-State partnerships for infrastructure building.
- Significant delays to projects can often be traced to incompatible and hostile land acquisition decisions that alienate communities or threaten to violate environmental integrity.
- Given the Centre's preference for Geographic Information Systems and remote sensing to identify potential industrial areas, policymakers would do well to reclaim lands already subjected to degradation and pollution.
- Convincing citizens that they stand to benefit from such grand plans through better social welfare, lower service costs and higher efficiencies.

***We need smart regulation to unlock the true potential of crypto assets. Analyse***

**KEY POINTS**

- Countries are in various stages of banning, un-banning, re-banning and regulating crypto assets.
- In the past seven years, 430 million bank accounts have been created for the under-banked. There are 45,000 chit funds (and many more unregistered ones).
- Software technology parks (STPs) and special economic zones (SEZs) enabled the IT services boom. Creative 'crypto export zone' schemes can incubate clusters of excellence and create world-class financial services firms and unicorns.

**Concerns about crypto assets**

**Investor protections:**

- Investor protection has been a top priority for Indian regulators. Crypto assets are seen as high-risk, speculative assets.

**Sidestepping current regulations:**

- Some crypto assets may allow individuals to bypass securities issuance laws. That's a potential risk to capital markets. That's a potential risk to macroeconomic stability.

**Illicit transfers:**

- Anonymous transfers of crypto assets may weaken anti-money laundering laws or combating the financing of terrorism rules. That's a potential national security issue. Robust know-your-customer (KYC) norms are the solution here.

- In summary, a smart regulatory approach considers both the potential upside and downside. It fosters financial innovation, safeguards investors and unshackles the Indian crypto ecosystem.

***With gig economy expanding in India, trace the development of rights available to gig workers and evaluate the role of "gig worker organizations" in protecting their rights.***

#### KEY POINTS

- Trade unions are actively engaging with the emergent gig economy.
- Multiple gig worker organisations have emerged in India. Claiming significant membership, they seek to address wide-ranging concerns (including wages, compensation and working conditions) and not solely social security (as envisaged by the recently enacted Code on Social Security, 2020).
- Recent demands such as reducing commissions and waiver of vehicle loans have reportedly gone unheard, while gig worker organisations remain dispersed.
- One reason why gig worker organisations have not gained a stronghold yet could be the dearth of traditional employment opportunities in India, and the low entry barriers for gig work.
- The enactment of the Code on Social Security, 2020, has further spotlighted the gig economy, as also the social media engagement. Trade union-platform interactions are rising in India, with social media becoming a potent tool to represent issues and negotiate with platforms.
- The last Economic Survey highlights India's flexi-staffing industry as one of the world's largest.
- With the gig economy's steady growth, gig worker organisations will engage deeper with larger issues such as compensation and working conditions.
- The growing engagement of unions with the gig economy will ensure the sector grows sustainably, benefitting everyone.

## 9. AGRICULTURE

***In the context of increase of carbon emissions in absolute terms, the Indian agriculture needs a carbon policy. Explain***

#### KEY POINTS

- Delhi is the world's most polluted capital as per the World Air Quality Report, 2020.
- According to the Global Carbon Atlas, India ranks third in total greenhouse gas emissions by emitting annually around 2.6 billion tonnes (Bt) CO<sub>2</sub>eq.
- The share of agriculture in total emissions has gradually declined from 28 per cent in 1994 to 14 per cent in 2016.
- However, in absolute terms, emissions from agriculture have increased to about 650 Mt CO<sub>2</sub> in 2018, which is similar to China's emissions from agriculture.
- A carbon policy for agriculture must aim not only to reduce its emissions but also reward farmers through carbon credits which should be globally tradable.
- Rice cultivation on around 44 million hectares is the other culprit for methane emissions, especially in the irrigated tracts of north-west India.
- The real solution lies in switching areas from rice to maize or other less water-guzzling crops.
- Agricultural soils are the largest single source of nitrous oxide (N<sub>2</sub>O) emissions in the national inventory.
- An alternative for better and efficient fertiliser use would be to promote fertigation and subsidise soluble fertilisers.
- Ultimately, the government should incentivise and give subsidies on drips for fertigation, switching away from rice to corn or less water-intensive crops.

***Despite better performance, the incomes of small farmers are still low in the country. Do you agree with this view? Substantiate***

**KEY POINTS**

- The report of the 'Situation Assessment of Agricultural Households and Land and Holdings of Households in Rural India 2019' released by the National Statistical Office in September 2021 reveals the pathetic income level of Indian farmers.
- The average annual increase of total farm income was 20.38 per cent between 2002-03 and 2012-13, which decelerated to 11.90 per cent between 2012-13 and 2018-19.
- The SAS data clearly shows the income is not coming from crop cultivation, but mainly from wages and farming of animals; they registered an average annual increase of 19.24 per cent and 21.47 per cent respectively between 2012-13 and 2018-19.

**What needs to be done**

- The government must move away from production-centric approach to a market-centric approach. Experience shows that increased production of agricultural commodities does not guarantee enhanced income for farmers even in highly irrigated areas.
- the mere announcement of MSPs will not help farmers unless procurement infrastructure is strengthened.
- The procurement level in most crops (except paddy and wheat) is poor, which is evident from SAS data as well.
- Farmer managed markets in States such as Tamil Nadu and Andhra Pradesh is a win-win for farmers and consumers.
- Therefore, producers' markets should be encouraged throughout the country to improve farm income and eliminate middlemen as underlined in the National Agricultural Policy of 2000.

***Fruits, vegetables, spices, and livestock are high value in nature, not linked to MSPs, and market and demand-driven. Discuss how this can help increase the incomes on a per hectare basis, and also do farming more sustainably.***

**KEY POINTS**

Fruits, vegetables and spices have more demand in market so the prices are based on market demand.

**Increasing the income**

- As the demand increases so the production of horticultural crops, increase in urbanization in the country induces farmers to produce more crops.
- This correspondingly increases the net sown area of the horticultural crops and increases the yield, the government also supports the farmers in providing cold storage infrastructure via Pradhan mantra kisan sampada yojana.
- Further value added fruits and vegetables have high export value and are demanded more at international level.
- This increases the income of entrepreneurs and provides more employment to the skilled youth.
- The establishment of mega food parks in various states provides the comprehensive infrastructure for the processing of food at various levels allows for sustainable farming.

**Sustainable farming**

- The government advises the farmers to alter the cropping pattern so that the yield is more. Example: use of inter cropping, mixed cropping.
- Integrated farming system in animal husbandry allows the farmers to use the existing resources to use as inputs and increase the yield with minimum level of investment.
- The wastage from the yield is used as input for bio-ethanol plants resulting in the production of bio-gas and minimize the cumulative carbon emission.

***There is an urgent need for the mapping of traditional knowledge of Indian farmers. In this context, discuss the need and viability of a sustainable digitalization drive for agriculture.***

**KEY POINTS**

- Notwithstanding the various start-ups' attempts to harness the potential of mobile/smartphone telephony and internet penetration, the agricultural sector has been characterised by interlocked arrangements and exploitative credit, input, and output markets.
- But the inequitable power structure and resource endowments confer differential abilities to economic agents to derive benefits from available data.
- While there are privacy and security concerns to contend with, there are also issues of exploitation of farmers and unfair appropriation of traditional community knowledge.
- While business can leverage granular data of agriculture for generating mutually beneficial outcomes, the absence of appropriate checks and balances can create avenues for exploitation.
- They can also use unfair means to appropriate benefits from value creation. Such fears or apprehensions are more pronounced in the case of community-based traditional knowledge societies.
- This knowledge evolved through years of experience in harmony with their natural environment seems suitable to facilitate value creation from locally available resources.
- Because of their communal ownership, non-recorded and non-exclusive nature, community-based knowledge is vulnerable to unfair appropriation by businesses.
- There is a need for other complementary interventions and appropriate safeguards against inequitable appropriation of traditional knowledge, decline in local employment opportunities, and businesses resorting to enhancing their topline and bottomline at farmers' cost.

***Farmers preparing to sow their rabi crop early to take advantage of soil moisture, are facing a shortage of phosphatic fertilizer. This highlights the need for structural fixes. Analyse***

**KEY POINTS**

- While the Centre has been insisting that there is no 'real' shortage, reports of farmers in Punjab, Haryana and Madhya Pradesh scrambling to procure DAP (Di-Ammonium Phosphate) under police watch and the Centre setting up a war-room for real-time monitoring, suggest that the situation on the ground is not comfortable.
- While official data shows that supplies of DAP were above requirements, opening stocks of both DAP and complex fertilisers were significantly below usual levels at the start of this rabi season.
- a runaway rise in global prices of phosphatic fertilisers and their inputs have shorted profit margins of domestic producers and importers.
- Though DAP and complex fertilisers are ostensibly 'decontrolled', producers/traders are forced to sell them far below production costs, with the Centre compensating for the losses through subsidies.
- Relatively benign global prices of phosphatics for the last six years allowed manufacturers to keep their selling prices stable while the Centre kept a tight lid on its subsidy.
- the immediate solution appears to lie in allowing manufacturers/importers to effect moderate price hikes, while expediting imports.

**TOPPER  
TALK**

**ANSWER COPIES OF  
CSE 2020 TOPPERS**

[iasparliament.com/upsc-toppers-list](https://iasparliament.com/upsc-toppers-list)



**SCAN TO  
VIEW**



## 10. ENERGY

***Brazil's success in biofuels can be replicated in India to combat air pollution and reduce dependence on imported oil. Explain***

### KEY POINTS

- The continued use of fossil fuels for addressing the world's energy needs is leading to rapid depletion of natural resources and a simultaneous increase in environmental pollution.
- The 2021 Report of the World Biogas Association estimates that around 105 billion tonnes of organic waste is generated every year, which can be used to produce biofuels.
- Through its ethanol programme, São Paulo, the largest Brazilian city, witnessed a 50 per cent reduction in particulate emissions despite nearly doubling its car fleet.
- Ethanol has reduced Brazil's dependence on imported oil and substituted almost 50 per cent of petrol with ethanol.
- India launched the Ethanol Blended Petrol (EBP) scheme in 2003. With concerted efforts by the government over the past seven years, the production of fuel-grade ethanol touched three billion litres in Ethanol Supply Year 2020-21.
- Using biofuels for sustainable mobility can help in addressing three of the biggest challenges of the 21st century: climate change, air pollution in large cities, and high dependence on imported oil.

### Key areas for cooperation

- At a household level, bioethanol can facilitate clean cooking. At the industry level, ethanol fuel cells can complement hydrogen fuel cells.
- As agriculture is the backbone of emerging and developing economies, they stand to benefit from knowledge-sharing on practices for effective agricultural management.

***The current crisis in coal sector is an opportunity for the country to cut coal dependence and push renewable energy for the long term. Discuss***

### KEY POINTS

- India is the second-largest importer, consumer and producer of coal and it had enough coal stocks to generate electricity for barely.
- This shortage threatens India's post-pandemic economic recovery and the welfare of its citizens.
- It's hard to meet this shortage through imports as global coal prices are up by 50 per cent and India's coal imports are at a two-year low.
- Any immediate solution will comprise of increasing declining coal reserves in whether through push in domestic production, diversion of coal from industries like steel, cement and construction, or purchase of expensive global coal.
- Another alternative could be waste-to-energy treatment plants using garbage/liquid waste to produce steam to generate electricity.
- The Amberpet plant in Hyderabad treats the city's faecal sludge by converting it into biogas which produces electricity, and the remaining sludge is converted to compost which is sold to the farmers.
- The transport of coal contributes to 44 per cent of Indian Railways' freight revenue and since it is India's largest employer.
- Therefore, for the long term, such concerns about the phasing out of coal to produce electricity from the communities in the coal mining regions should be duly acknowledged and adequately addressed.

***Discuss the most significant obstacles which prevents the attainment of India's solar energy goals and suggest measures to overcome it.***

**KEY POINTS**

- As part of the Paris Agreement, India has committed to produce 40% of its installed energy capacity from non-fossil sources by 2030.
- India's solar business is now largely dependent on solar equipment imports.
- According to the Ministry of New and Renewable Energy (MNRE), India imported \$2.5 billion worth of solar wafers, cells, modules, and inverters in 2019-20.
- To meet its RE aspirations and address its increasing power requirements, we need to shift our reliance on imports and boost domestic production through policy measures.

**Addressing the roadblocks**

- To begin with, it is important to build a strong grid infrastructure. This could be accomplished through financial incentives and technological advancements.
- These utility-scale renewable energy projects have seen the lowest tariffs and are critical to our energy transformation.
- It is also necessary to train and upskill the youth in order to fulfil the demands of a flourishing RE industry.
- A key role would be played by expanding the MNRE's Surya Mitra training programme and delivering certification through empanelled institutions.
- In conclusion, for more organic growth of the renewable sector, the RE targets should be enforced through the State Governments.

***India has never been more primed for increased investment in renewable energy technology, not just because of the impending threat of climate change but also due to the fact that any new coal-fired power plants in India will be economically unviable. Evaluate***

**KEY POINTS**

- The post-covid boom in economic demand, coupled with flooding in coal-producing regions, has led to major shortages of coal at power plants across the country.
- The post-covid boom in economic demand, coupled with flooding in coal-producing regions, has led to major shortages of coal at power plants across the country.
- These random power cuts that last 5-7 minutes hurt commercial operations more than the long scheduled cuts this is especially true for small-scale industrial outfits with basic operational setups (like power loom shacks).
- Most of the 33 gigawatts (GW) of coal power generation capacity under construction and the 29GW in pre-construction stage will end up as stranded assets.
- Existing regulation allows 100% foreign direct investment in renewable energy projects, without prior government approval.
- A \$600-million incentive scheme for new solar power projects will boost the production of polysilicon, wafers, cells and modules over the next five years.
- Most importantly, there is also an appetite to reform the power distribution sector, if budgetary allocations are an indication of the government's inclinations.

**TOPPER  
TALK**

**ANSWER COPIES OF  
CSE 2020 TOPPERS**

[iasparliament.com/uptsc-toppers-list](https://iasparliament.com/uptsc-toppers-list)



**SCAN TO  
VIEW**

## 11. INFRASTRUCTURE

***In spite of spending on infrastructure, policies need to minimize the income loss from the impact recent pandemic. Discuss***

### KEY POINTS

- The problems with using year-ago growth rate as an indicator of an economy's cyclical position have been known at least since the 1940s, the key issue being it does not provide any sense of the current cyclical position, i.e., whether the economy is accelerating or decelerating.
- We expect growth in 2022-23 to be around 7.5%. But even with this reasonably strong rate, the income loss will widen further to 11% of the pre-pandemic path, amounting to around \$350 billion.
- The damage to balance sheets might not be showing up in banks' credit quality at present because of RBI's extensive regulatory forbearance, but as regulations are normalised, NPLs of households and SMEs are likely to surge.
- If the existing resources (and the added revenue) is spent on building infrastructure, which today is highly capital-intensive and mechanised such that these projects no longer generate jobs.
- Over time, the investment in infrastructure today will increase productivity and open up many business opportunities.
- But India needs to have strong balance sheets across corporates, SMEs, and households to reap these benefits. At the risk of sounding like a broken record, the problem at present is not inadequate public revenue, but the imbalance in public spending.

## 12. ENVIRONMENT

***Do you think that the domestic green bond market is the key for the country's energy transition? Comment***

### KEY POINTS

- India's installed renewable energy (RE) capacity, excluding large hydro, recently crossed the 100 GW mark.
- This has happened in a year that saw Indian RE developers raise more capital in international bond markets than ever before.
- Green Bond markets can help developers access debt capital directly from its source instead of going through intermediaries like banks and NBFCs.
- Debt capital raised through bond markets is thus cheaper and typically carries relatively lenient covenants.
- Many institutional lenders are currently near RBI's power sector lending limits, so refinancing debt from them through bond markets frees up capital from their books.
- Since 2014, Indian RE developers (including large hydro) have raised almost Rs 90,000 crore (\$12.7 billion) through 'green bonds' in overseas markets.
- Green bond issuances in overseas markets are dominated by some of India's largest developers (Greenko, ReNew Power, Azure Power, and Adani Green Energy).
- Despite the perceived risk of payment delays, developers have generated strong market interest by diversifying portfolios to include multiple utilities.
- INX offers a dedicated green bond listing category and saw its first exclusive developer green bond in 2021: a \$585 million issuance from ReNew Power.
- In closing, overseas bond markets have been strong supporters of India's energy transition.

***The natural gas crisis has highlighted the obstacles on the road to the green energy transition. Discuss***

**KEY POINTS**

- The current surge in the price of natural gas in Europe and its rippled impact on the price of coal and oil is seen as just one more twist in the sector's business trajectory.
- On the demand side, the strongest driver has been the global economic recovery. The severe summer heat in the US, Europe and China has also been a factor.
- On the supply side, the economic blockers were the cold wave in Texas in February this year, which froze gas wells and throttled the export of US LNG
- The price increase would incentivise companies to jack up the production of natural gas, and consumers would switch to the cheaper alternatives of coal (and even oil) and conserve demand.
- Such a market-led response would, however, render hollow the commitments to phase out coal and limit the production of fossil fuel and call into question the targets for achieving net-zero carbon emissions.
- The sustainable response would be to leverage this price shock to improve energy efficiency, intensify demand conservation, intervene to prevent the switch to coal and increase investments in battery.
- Leaders will have to work together to smoothen these bumps especially those created by our continued dependence on fossil fuels.

***Despite existing challenges, the participation of local communities adequate financing and incentives are essential in forest restoration process. Examine***

**KEY POINTS**

- The State of the World's Forests report 2020, says that since 1990, around 420 million hectares of forest have been lost through deforestation, conversion and land degradation.
- India lost 4.69 MHA of its forests for various land uses between 1951 to 1995.

**Key challenges**

- Local ecology with a research base: forest restoration and tree planting are leading strategies to fight global warming by way of carbon sequestration.
- Similarly, planting a forest in the wrong places such as savannah grasslands could be disastrous for local biodiversity.
- Nearly 5.03% of Indian forests are under protection area (PA) management needing specific restoration strategies.
- Out of its 21.9% population living under the poverty line, nearly 275 million people including local tribals depend on the forest for subsistence.

**Fundamental to the strategy**

- There have been remarkable initiatives to involve local people in the protection and development of forests by forming joint forest management committees (JFMC).
- More than 1,18,213 JFMCs involving around 20 million people manage over 25 MHA of forest area.
- The active approach of restoration which includes tree planting and the involvement of communities seeks incentives and rewards and make the whole affair quite cost-intensive.

**TOPPER  
TALK**

**ANSWER COPIES OF  
CSE 2020 TOPPERS**

[iasparliament.com/upsctoppers-list](https://iasparliament.com/upsctoppers-list)



**SCAN TO  
VIEW**

***Despite being the home to more than a sixth of humanity, India contributed just around 4% of cumulative emissions of carbon dioxide since the pre-industrial era. In this context, analyze how far India should commit itself to Net Zero targets.***

#### KEY POINTS

- Despite the net zero campaign by a number of countries and non-state actors, the timing of the world's carbon dioxide emissions reaching net zero is not the critical parameter for the safety of humanity.
- India's per capita emissions are less than half the world average, less than one-eighth of the U.S.'s, and have shown no dramatic increase like China's post 2000.
- The global carbon budget has been subject to no such restriction allowing the developed countries to exploit it fully, in the past and the present.
- It enables the responsible use of coal, its major fossil fuel resource, and oil and gas, to bootstrap itself out of lower middle-income economy status and eradicate poverty, hunger and malnutrition for good.
- The agriculture sector, the second largest source of greenhouse gas emissions for India after energy, needs to double its productivity and farmers' incomes and build resilience.
- Without restriction of their future cumulative emissions by the big emitters, to their fair share of the global carbon budget, and the corresponding temperature target that they correspond to made clear, India cannot sign on to net zero.

***Climate Vulnerability Index has analyzed 640 districts in India to assess their vulnerability to extreme weather events. Discuss how the various Indian states have fared.***

#### KEY POINTS

- Environmental think tank Council on Energy, Environment and Water has carried a first-of-its-kind district-level climate vulnerability assessment, or Climate Vulnerability Index (CVI), in which it has analysed 640 districts in India to assess their vulnerability to extreme weather events such as cyclones, floods, heatwaves, droughts, etc.
- According to CVI, Assam, Andhra Pradesh, Maharashtra, Karnataka and Bihar are most vulnerable to extreme climate events such as floods, droughts and cyclones in India.
- The CVI has ranked 20 states out of which Assam and Andhra Pradesh are the most vulnerable to extreme weather events, and Kerala, Tripura and West Bengal are the least vulnerable.
- The study points out that the difference in the vulnerability of states ranked is marginal, making all states vulnerable.
- But Kerala and west Bengal have performed well comparatively, despite both being coastal states and dealing with the threat of cyclones and floods annually.
- The reason why these states have performed better is because they have stepped up their climate action plans as well as preparedness to handle an extreme weather event.
- The Index takes into account certain indicators when assessing the preparedness of a state or district.
- These include availability of critical infrastructure like cyclone and flood shelters, government mechanisms in place including updating of disaster management plans, mitigation strategies.

### 13. INTERNAL SECURITY

***The dynamics present in the national security of the country forms an integral part of the cooperative federalism. Do you agree with this view? Examine***

#### KEY POINTS

- The Ministry of Home Affairs recently issued a notification extending the jurisdiction of the Border Security Force from 15 km to a depth of 50 km along the international borders in three states Punjab, Assam and West Bengal.



- The controversial change is in Assam, West Bengal and Punjab, where the BSF jurisdiction has been extended from 15 km to 50 km.
- The threat perception from across the international borders has undergone a change in the context of recent developments in the Afghanistan-Pakistan region.
- West Bengal has already undergone a huge demographic change.
- Assam faces multiple problems of ethnic insurgencies, smuggling, counterfeit currency, drug trafficking, etc.
- the police across the country need the assistance of central armed police forces even for maintaining normal law and order.
- The jurisdiction of the state police has neither been curtailed nor its powers reduced in any manner.
- It is just that the BSF will also be exercising powers of search, seizure and arrest in respect of only the Passport Act 1967, Passport (Entry into India) Act 1920.
- The power to register FIR and investigate the case remains with the state police.
- National security is a paramount consideration. It is unfortunate that the BSF is being dragged into political controversy when it would actually be over-stretching itself to strengthen national security.

## 14. DISASTER MANAGEMENT

***It is essential to make disaster resilience an integral part of community culture in the country. Do you agree with this view? Comment***

### KEY POINTS

- When the traditional top-down disaster response system was compromised during the bad months of the pandemic, it was Panchayati Raj Institutions that played a remarkable role.
- The PRIs provided essential leadership at the local level. They performed both regulatory and welfare functions.
- For instance, during the nationwide lockdown, PRIs set up containment zones, arranged transport, identified buildings for quarantining people and provisioned food for the incoming migrants.
- Moreover, effective implementation of welfare schemes like MGNREGA and the National Rural Livelihood Mission quickened the pace of recovery while ensuring support to the vulnerable population.
- During the COVID-19 crisis, they organised community-based surveillance systems involving village elders, the youth and self-help groups (SHGs) to keep a strict vigil in quarantine centres and monitor symptoms in households.
- The Yokohama strategy during the International Decade for Natural Disaster Reduction in May 1994 emphasised that it is important to focus on disaster prevention, mitigation and preparedness rather than disaster response alone, to reduce vulnerability.
- Since the community is usually the first responder in case of a disaster, community-based disaster management plans would help.
- These would provide a strategy for resource utilisation and maintenance during a disaster. Such plans should tap the traditional wisdom of local communities which will complement modern practices.

***With studies and IPCC reports warning about more destructive floods the country must boost investments in disaster management systems. Discuss***

### KEY POINTS

- This monsoon season has given ample evidence of extreme weather events, long foretold by climate science experts.
- At least 20 people are feared to have lost their lives in another bout of floods in Uttarakhand.
- In Kerala, incessant downpour in the past four days has swelled rivers and caused landslides, sweeping away homes, bridges and claiming at least 38 lives worse is feared with the IMD predicting another spurt of rainfall.

- The topography of most hilly regions makes them prone to landslides. Deforestation, quarrying, road construction and other land-use changes that pay short shrift to ecology increase vulnerabilities of such areas during episodes of heavy rainfall.
- In 2011, for example, the Madhav Gadgil committee recommended that a roughly 1,30,000 sq km stretch spanning Gujarat, Karnataka, Kerala, Maharashtra and Tamil Nadu be declared an environmentally sensitive zone.
- Kerala, in particular, objected to the proposed ban on mining, restrictions on construction activities and embargoes on hydroelectricity projects.
- The Kerala government has opened the shutters of the Idukki dam as the state's largest reservoir is rapidly filling up with heavy rainfall.
- This would ensure the timely opening of dam spillways and create holding capacity in the reservoirs to absorb excess rainfall.



**IAS PARLIAMENT**  
*Information is a Blessing*  
A Shankar IAS Academy Initiative

## DAILY SUBJECTWISE QUIZ



A

5 Questions/Day

B

Covering entire UPSC Prelims GS Syllabus

C

Break-up of topics & weightage of the questions mimics UPSC pattern



**For Schedule & Quiz**

**[iasparliament.com/daily-subjectwise-quiz](http://iasparliament.com/daily-subjectwise-quiz)**

**SCAN TO  
VIEW**

