



# Monthly Editorial Consolidation



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# Digital Blackout: The Shadow of Internet Shutdowns

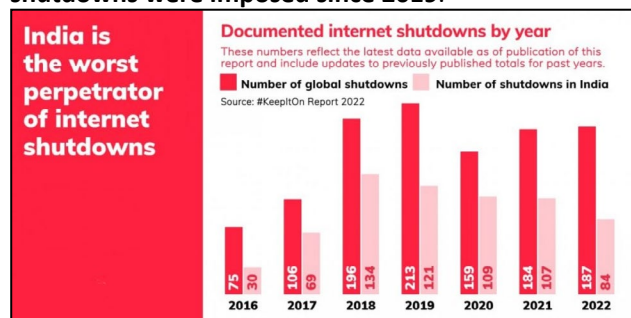
*This editorial is based on Not so Digital India which was published in The Indian Express on 30/07/2023. It talks about the internet shutdowns in India and its implications.*

**Tag:** Governance, GS Paper-2, Indian Constitution, Government Policies & Interventions.

Internet shutdowns are **deliberate disruptions of internet or electronic communications**, rendering them **inaccessible or effectively unusable**, for a specific population or within a location, often to exert **control over the flow of information**. They can affect mobile internet, broadband internet, or both.

Nearly **three months** after the initial imposition of an **internet shutdown in Manipur**, the residents of the state are **still facing restricted and obstructed access to the internet**. The Manipur government granted **limited and conditional access** to certain types of **online services**, aligning with some of the suggestions put forth by an expert committee.

According to a **report by Access Now and the KeepItOn coalition**, India enforced as many as **84 internet shutdowns in 2022** and was **on top of the list for the fifth year in a row**. According to the **Internet Shutdown Tracker**, a portal maintained by **Software Freedom Law Centre**, a legal services organisation working in this field in India, there have been a **total of 665 internet shutdowns in India since 2012**, and **over 50 per cent of these shutdowns were imposed since 2019**.



## What are the Causes of Internet Shutdowns?

- **Law and Order Concerns:**
  - One of the primary reasons for internet shutdowns is to **maintain law and order** during periods of **civil unrest, protests, or communal tensions**.
  - Authorities may impose shutdowns to prevent the spread of misinformation, curb the organization of protests, or control potential violence.
- **National Security:**
  - Internet shutdowns can be enforced in the name of national security **to prevent terrorist activities**,

**potential threats, or to maintain confidentiality** during critical operations.

- **Preventing Exam Cheating:**
  - In some cases, internet services are temporarily suspended **during important examinations to prevent cheating** and leakage of question papers.
- **Curbing Hate Speech and Fake News:**
  - Governments may order internet shutdowns to **contain hate speech, rumours, and fake news** that could incite violence or create social unrest.
- **Public Safety Concerns:**
  - Shutdowns may be implemented **during natural disasters or emergencies to manage communication channels** and avoid spreading panic or misinformation.
- **Social Media Control:**
  - Shutting down specific social media platforms or apps may be aimed at controlling the **spread of information during sensitive events** or to address concerns related to privacy and security.
- **Controlling Content Circulation:**
  - Internet shutdowns can also be used to prevent the circulation of **specific content, such as videos or images** that are deemed harmful or objectionable.
- **Protests and Dissent:**
  - In some cases, internet shutdowns are **imposed to stifle dissent and prevent the coordination of protests** or opposition against the government.

## What are Laws Governing Internet Shutdowns in India?

- **Section 5(2) of the Indian Telegraph Act, 1885, read with Temporary Suspension of Telecom Services (Public Emergency and Public Safety) Rules, 2017:**
  - These rules **allow the union or state home secretary** to order the suspension of any telegraph service (including internet) in case of public emergency or public safety.
  - Such an order **must be reviewed by a committee within five days and cannot last for more than 15 days**. In an urgent situation, an officer of joint secretary level or above, authorized by the union or state home secretary, can issue the order.
- **Section 144 of the Code of Criminal Procedure:**
  - This section empowers a district **magistrate, a sub-divisional magistrate** or any other executive magistrate specially empowered by the state government to issue orders to prevent or stop any nuisance or disturbance of public tranquillity.

- Such orders can include the suspension of internet services in a particular area for a specified period.
- **Section 69A of the Information Technology Act, 2000:**
  - This section empowers the central government to block access to any information on the internet that it considers to be prejudicial to the **sovereignty, integrity, defence, security or friendly relations of India, or to public order or decency, or to incitement of any offence.**
  - However, this section only applies to blocking specific websites or content, not the entire internet.

### ***What are the Impacts of Internet Shutdowns?***

- **Impacts Freedom of Expression and Information:**
  - Internet shutdowns violate the **right to free expression and information, which is guaranteed by Article 19(1)(a) of the Constitution of India and Article 19 of the Universal Declaration of Human Rights.**
  - They prevent people from sharing and accessing information, expressing opinions, participating in online civic spaces, and holding authorities accountable.
  - They also affect the flow of information from and to regions affected by shutdowns, weakening reporting and public awareness.
- **Economic Impact:**
  - Internet shutdowns also have very real economic costs that impact individuals as well as the country at large.
  - They directly contribute to economic loss and unemployment, especially for those who depend on online platforms for their livelihoods.
  - They also **disrupt digital payments, online services, e-commerce, education, health care,** and other sectors that rely on internet connectivity.
    - According to one estimate by **Top10VPN.com**, a UK-based digital privacy group, internet shutdowns cost India over Rs 20,000 crore (\$2.8 billion) in 2020 alone.
  - **Kashmir's Six-Month Communication Blockade in 2019:**
    - The communication blockade in Kashmir, which lasted for six months in 2019, resulted in **over five lakh people losing their jobs.** This prolonged internet shutdown severely disrupted businesses and economic activities in the region.
  - **Rajasthan's Losses Due to Shutdowns in 2021:**
    - In Rajasthan, shutdowns over one month in 2021 led to losses of Rs 800 crore.

- This highlights the **immediate and significant financial toll that even short-term internet shutdowns** can have on the local economy.

### ○ **Internet Shutdown at a Country Level:**

- In 2022, internet shutdowns across the country caused **economic losses of over Rs 1,500 crore.**
- This figure demonstrates the cumulative impact of multiple shutdowns carried out in different regions of the country during that period.
- In just the **first half of 2023, internet shutdowns have already cost an estimated Rs 2,091 crore.** This indicates a worsening situation in terms of the financial consequences of internet disruptions in the country

### ➤ **Deepen Digital Divide:**

- Internet shutdowns also deepen the **digital divide between those who have access to reliable and affordable internet and those who do not.**
- They disproportionately affect marginalised groups such as **rural populations, women, minorities, low-income households, and people with disabilities.**
- They also contradict the government's vision of a **Digital India** that aims to empower citizens through digital public infrastructure and services.

### ***What are the Important Judgments Related to internet shutdowns in India?***

#### ➤ **Anuradha Bhasin v Union of India (2020):**

- In this landmark case, the **Supreme Court** delivered a significant judgment, **recognizing that the right to free speech and the right to carry out trade and business through the internet** are fundamental rights protected **under Article 19(1)(a) and Article 19(1)(g) of the Constitution of India**, respectively.
- The court also held that **internet shutdowns are subject to constitutional scrutiny and must adhere to the principles of necessity and proportionality.** The court emphasized that any restriction on internet access must be based on relevant material facts and be the least restrictive measure to achieve the objective sought.
- The judgment **laid down guidelines to ensure that internet shutdowns** are not imposed indefinitely, and any order suspending internet services must be published and subject to judicial review. The judgment **provided a significant legal precedent and framework for evaluating the legality and constitutionality** of internet shutdowns in India.

#### ➤ **Foundation for Media Professionals v. Union Territory of Jammu and Kashmir (2020):**

- In this case, the **Supreme Court of India** directed the Jammu and Kashmir administration to **review all existing restrictions on internet access**, stating that the right to internet access is a fundamental right and must be respected.
- **Internet Freedom Foundation v. Union of India (2020):**
  - The Supreme Court of India heard a petition filed by the Internet Freedom Foundation (IFF) challenging the internet shutdowns in various parts of the country, including during the protests against the Citizenship Amendment Act (CAA).
  - The court **issued notice to the government, seeking a response to the IFF's contentions.**

### ***What are Various Arguments Related to Internet Shutdowns?***

- **Arguments For:**
  - **Preventing Hate Speech and Fake News:**
    - The internet can be used to spread hatred and hostility against different religious and ethnic groups.
    - Internet shutdowns **can help to counter xenophobic tendencies and misinformation.**
  - **Maintaining Law and Order:**
    - Internet shutdowns can be used as a last resort by the authorities to deal with mass protests and civil unrest, by stopping the circulation of provocative messages and rumours that can incite violence and chaos.
  - **Avoiding Anarchy:**
    - In some extreme situations where social media platforms become a source of disruption and confusion, it may become necessary to suspend internet services to restore calm and order.
- **Arguments Against:**
  - **Violating Human Rights:**
    - The Kerala High Court in **Faheema Shirin v/s State of Kerala case** recognised the **right to internet access as a fundamental right** that is part of the right to privacy and the right to education under **Article 21 of the Constitution.**
    - Internet shutdowns infringe on these rights and limit people's ability to communicate, express, learn, and access information.
  - **Imposing Social Costs:**
    - Internet shutdowns affect essential services such as **education, health, public services, etc. that rely on internet connectivity.**
    - Internet shutdowns also create a **digital divide and disparity in education**, especially during the **Covid-19** pandemic when online learning has become crucial.

- **Failing to Achieve the Objective:**
  - There is **no conclusive evidence that internet shutdowns lead to the preservation or restoration of public order.**
  - In fact, internet shutdowns can have the opposite effect of creating more resentment, frustration, and anger among the people.
- **Creating Social Chaos:**
  - Shutting the internet results in a lack of information and transparency that **can also cause panic and hysteria.**
  - It can also **hamper the efforts of civil society, media, and human rights defenders** to monitor and report on the situation on the ground.

### ***What Should be the Way Forward?***

- **Reforming the Legal Framework:**
  - The government **should repeal or amend the Telegraph Act and its rules**, which are **outdated and vague, and do not comply with the constitutional and human rights standards** that require any restriction on internet access to be necessary, lawful, proportionate, and time bound.
  - The government should **also issue clear guidelines for state governments** on when and how to impose internet restrictions in exceptional circumstances, **as recommended by a parliamentary panel report on internet shutdowns.**
- **Respecting the Supreme Court Judgment:**
  - The authorities should **follow the directions of the Supreme Court in Anuradha Bhasin case**, which recognised the right to internet access as a fundamental right and laid down the principles of reasonableness and proportionality for any internet restriction.
  - The authorities should **also publish all orders suspending internet services** and make them accessible to the public and subject to judicial review.
- **Exploring Alternatives to Shutdowns:**
  - The government should consider other less intrusive measures to **deal with law-and-order disturbances, communal violence, terrorist attacks, examinations, and political instability**, such as blocking specific websites or content, issuing warnings or advisories, engaging with civil society and media, or deploying more security forces.
- **Assessing the Impact of Shutdowns:**
  - The government should **conduct regular impact assessments of internet shutdowns on human rights, democracy, and development.**



- It should also compensate those who suffer losses or damages due to internet shutdowns, especially the vulnerable groups such as rural populations, women, minorities, low-income households, and people with disabilities.



## India's Digital Public Infrastructure

*This editorial is based on Pathways for digital inclusion which was published in The Indian Express on 31/07/2023. It talks about challenges and benefits of the digital public infrastructure (DPI).*

**Tag:** Governance, GS Paper-2, Government Policies & Interventions, E-Governance, GS Paper-3, Inclusive Growth, Achievements of Indians in Science & Technology, Space Technology.

**Digital Public Goods (DPGs)** are digital pathways that play a crucial role in providing essential services, benefiting society as a whole. These DPGs are built on **Digital Public Infrastructure (DPI)**, which consists of open and interoperable platforms, accessible to anyone for usage and development.

India, being a pioneer in the field, has successfully implemented various DPI experiments, including **Aadhaar**, **UPI**, and **account aggregators**. These initiatives have revolutionized the digital landscape, enabling financial and social inclusion across different sectors. India's DPI ecosystem, known as "**India Stack**," consists of interconnected yet independent "**blocks**" that serve as identity, payment, data sharing, and consent mechanisms. The modular layers of India Stack create opportunities for innovation, inclusion, and competition in the digital realm.

### What is India Stack?

- India Stack is a set of APIs (Application programming interface) that allows governments, businesses, startups and developers to utilize a unique digital Infrastructure to solve India's hard problems towards presence-less, paperless, and cashless service delivery.
- It aims to unlock the economic primitives of identity, data, and payments at population scale.
- The vision of India Stack is not limited to one country; it can be applied to any nation, be it a developed one or an emerging one.
- This project was conceptualized and first implemented in India, where its rapid adoption by billions of individuals and businesses has helped promote financial and social inclusion and positioned the country for the Internet Age.



### What are the Key Elements Essential for Inclusive DPIs?

- **User-Centric Design:**
  - Prioritizing user needs and preferences, **reducing technology risks**, and **catering to diverse groups**, including those with limited smartphone access or low digital literacy.
- **Policy Objective:**
  - Embedding inclusion as a key policy objective within the regulatory framework, **ensuring data protection and privacy for all users**, and avoiding information disparities between regions or communities.
- **Developing Use Cases:**
  - Identifying underserved segments and **developing use cases tailored to their specific needs**.
    - Regularly monitoring the impact on vulnerable consumers through disaggregated **data collection and feedback mechanisms**.
- **Engagement:**
  - Building engagement with users **through offline channels, institutional capacity building, trust-building**, and awareness generation. Leveraging trusted human points of contact, such as business correspondents or community leaders, to foster digital comfort among vulnerable consumers.

### What are the Benefits of Inclusive DPIs for India?

- **Equitable Digital Economy:**
  - Inclusive DPIs foster a more equitable and accessible digital economy that **provides essential services** to all citizens and organizations.

- **Wealth Gap Reduction:**
  - Bridging the **wealth gaps and building an efficient and resilient digital economy** that drives economic growth and social development.
- **Digital Inclusion and Empowerment:**
  - Inclusive DPIs ensure that **all segments of society**, including marginalized and underserved communities, **have access to essential digital services**. This fosters digital inclusion, empowering individuals to participate in the digital economy, access information, and avail themselves of various online services.
- **Enhanced Service Delivery:**
  - Inclusive DPIs **improve the delivery of public services such as healthcare, education, and governance**. Through digital channels, government agencies can reach citizens more efficiently, reducing bureaucracy and ensuring better service outcomes.
- **Reduced Transaction Costs:**
  - Digital transactions through inclusive DPIs often have **lower transaction costs** compared to traditional methods. This benefits businesses, consumers, and the government by reducing the cost of conducting various transactions.
- **Data-Driven Governance and Decision Making:**
  - Inclusive DPIs facilitate the collection and analysis of data from various sources. This **data-driven approach enables more informed decision-making** in governance, public policy, and service delivery.
- **Improved Agricultural Practices:**
  - Inclusive DPIs can **provide farmers with real-time information on weather, market prices, and agricultural best practices**. This empowers them to make better decisions, leading to improved agricultural productivity.
- **Disaster Management and Emergency Response:**
  - Inclusive DPIs can **play a crucial role in disaster management** and emergency response. They enable authorities to disseminate information quickly and coordinate relief efforts more effectively.

### ***What are the Challenges of DPIs in India?***

- **Lack of Access to Infrastructure:**
  - In many regions, **especially rural and remote areas**, there is inadequate or no access to reliable internet connectivity and digital infrastructure. Limited access to **electricity and the absence of necessary digital hardware** like computers and smartphones further exacerbate the problem.
- **Digital Divide:**

- India faces a **significant digital divide between urban and rural areas**. While urban centers generally have better access to digital infrastructure and services, rural regions often lack reliable internet connectivity and face technological disparities.
- **Affordability:**
  - Even if digital infrastructure is available, **the cost of internet access and digital devices can be prohibitive** for many individuals and families, particularly in low-income communities.
- **Language and Content Barriers:**
  - The dominance of content in a few major languages can exclude non-English speakers or those who are not proficient in the predominant language. The **lack of localized and relevant content** can hinder access to vital information and services.
- **Physical and Cognitive Disabilities:**
  - Persons with disabilities might face challenges in accessing and using digital technologies due to **limited accessibility features and design considerations** in digital platforms.
- **Privacy and Security Concerns:**
  - Fear of **privacy breaches and data security issues** can deter individuals from embracing digital technologies, especially when it comes to sensitive personal information.
- **Geographical Disparities:**
  - Urban areas often have better access to digital infrastructure and services compared to rural and remote regions, leading to disparities in digital inclusion.

### ***What Should be the Way Forward?***

- **Policy and Regulatory Support:**
  - The government should formulate and implement policies that prioritize digital inclusion as a key objective. Regulatory frameworks should **ensure data protection, privacy, and non-discriminatory access to digital services**. Encouraging public-private partnerships can help mobilize resources and expertise.
- **Investment in Digital Infrastructure:**
  - There should be increased investment in digital infrastructure, particularly in rural and remote areas, to improve internet connectivity and access to digital services. This includes **expanding broadband networks** and ensuring affordable and reliable internet services.
- **Localized Content and Language Diversity:**
  - Efforts should be made to promote digital content in **regional languages to cater to diverse linguistic communities**. This will ensure that information and services are accessible to a broader audience.

### ➤ Targeted Use Cases and Services:

- Identifying and developing targeted use cases and services that address the needs of underserved communities can drive digital adoption.
  - For example, **digital healthcare solutions, agricultural advisories,** and digital education platforms can benefit rural populations.



## Big Cats Challenge in India

*This editorial is based on Big concerns over big cats which was published in The Hindu on 02/08/2023. It talks about the conservation of tigers and related issues.*

**Tag:** Biodiversity & Environment, GS Paper - 3, Conservation

India's sprawling landscapes are graced by the **presence of majestic big cat species**, each embodying power, grace, and an integral part of the nation's natural heritage. From the **Royal Bengal tiger** that prowls through dense forests to the elusive **snow leopard** that leaves its mark in the high Himalayas, these apex predators are not just emblematic of India's biodiversity, but also guardians of the delicate ecological balance. Recognizing the urgent need for their protection, India pioneered a visionary initiative known as **Project Tiger in 1973**, marking a crucial step in the conservation of big cats and their habitats.

The **Management Effectiveness Evaluation (MEE) of tiger reserves in India, 2022 (Fifth Cycle)** report for **Indian tiger reserves** prepared by the **Wildlife Institute of India** and the **National Tiger Conservation Authority** revealed a mixed picture of **progress and challenges**. Concerns are emerging as **India's wild tiger population has increased to a healthy 3,167 from just 1,400 in 2006**, prompting discussions about the nation's forest capacity to sustain these numbers.

### What is Project Tiger?

#### ➤ About:

- Project Tiger is a tiger conservation programme launched on **April 1, 1973**, by the Government of India.

#### ➤ Objectives:

- Reduce factors that lead to the depletion of tiger habitats and to mitigate them by suitable management.
- The damages done to the habitat shall be rectified to facilitate the recovery of the ecosystem to the maximum possible extent.

- Ensure a viable tiger population for economic, scientific, cultural, aesthetic and ecological values.

### What are the Benefits of Project Tiger?

#### ➤ Tiger Population Recovery:

- One of the primary objectives of Project Tiger was to **reverse the declining trend** of the tiger population.
- Through dedicated conservation efforts, the project has successfully increased the number of tigers in designated tiger reserves across the country.
  - This increase in population **not only preserves the species itself but also contributes to the overall health** of the ecosystem.

#### ➤ Habitat Preservation:

- Project Tiger emphasizes the protection of tiger habitats, which has a **positive ripple effect** on the entire ecosystem.
- By safeguarding these landscapes, the project **indirectly benefits a wide range of flora and fauna** that depend on these habitats for survival.
  - This contributes to maintaining biodiversity and ecological balance.

#### ➤ Economic Value and Tourism:

- Tigers are charismatic megafauna that attract tourists from around the world. The project's success in conserving tiger populations has led to **an increase in eco-tourism, generating revenue for local communities** and the country.
  - This economic benefit helps incentivize local communities to participate in conservation efforts.

#### ➤ Ecological Balance:

- Tigers are apex predators that play a crucial role in maintaining the balance of their ecosystems.
- By **controlling prey populations, they prevent overgrazing** and help manage the health of herbivore species.
  - This, in turn, has cascading effects on vegetation and other animal populations, contributing to a healthier ecosystem.

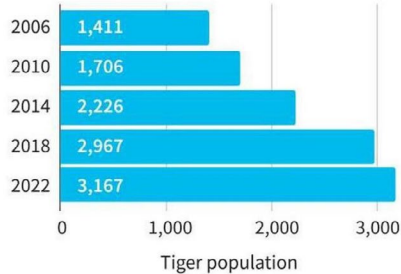
#### ➤ Protection of Keystone Species:

- Tigers are considered keystone species, as their presence or absence can dramatically affect the structure of their ecosystems.
- By protecting tigers, Project Tiger **indirectly safeguards a host of other species** that are interconnected within the food web.
  - This helps maintain the overall stability of the ecosystem.



## Big cat count

According to the data released by the PM, the number of tigers in India increased by 200 in the past four years. A look at the tiger population



**Steady rise:** A tiger at Van Vihar National Park in Bhopal on Sunday. PTI

### What are the Challenges of Project Tiger?

- **Habitat Loss and Fragmentation:**
  - Rapid **urbanization, infrastructure development, and agricultural expansion** have led to habitat loss and fragmentation.
    - This poses a significant threat to tigers by reducing their living spaces.
- **Human-Wildlife Conflict:**
  - As tiger habitats shrink and human populations expand, instances of human-tiger conflicts have risen.
  - Tigers may **attack livestock or even humans, leading to retaliatory killings** and negative perceptions about tiger conservation. Balancing the needs of local communities and tiger conservation is a delicate challenge.
- **Poaching and Illegal Wildlife Trade:**
  - Despite conservation efforts, poaching remains a critical issue. **Demand for tiger body parts**, driven by **traditional medicine and illegal trade**, continues to threaten the species.
  - Effective enforcement against poachers and traffickers is essential to curb this illegal activity.
- **Lack of Connectivity between Habitats:**
  - Isolated tiger populations in fragmented habitats **face genetic bottlenecks and reduced genetic diversity**.
  - Establishing corridors to connect these populations is crucial for maintaining genetic health and allowing tigers to move freely between areas.
- **Climate Change Impact:**
  - Changing climatic conditions can alter tiger habitats and prey availability, impacting their survival.
  - Project Tiger **must incorporate climate resilience strategies** to adapt to these changes and ensure the long-term survival of tigers and their ecosystems.

### ➤ **Limited Community Participation:**

- Involving local communities in conservation efforts is vital for success. However, limited community engagement and benefits from tiger reserves **can lead to resistance and lack of support** for conservation initiatives.

### ➤ **Conflict between Conservation and Development:**

- Balancing conservation goals with development projects, such as **dams or roads**, can lead to conflicts.
- Ensuring sustainable development that **considers both human needs and environmental conservation** is a delicate task.

### What are the Concerns about

### India's Forest Capacity

### Reaching its Limit to Support Tigers?

#### ➤ **Roaming Outside Protected Areas:**

- Almost **30% of the tiger population roams outside protected areas** and regularly **enters human habitations**, leading to human-tiger conflicts.

#### ➤ **Shrinking Tiger Corridors:**

- The construction of **linear infrastructure, such as railway lines, highways, and canals**, has resulted in the **shrinking of tiger corridors**, essential patches that connect two large forest areas.

#### ➤ **Foraging into Human-Dominated Landscapes:**

- Tigers are believed to **leave forests in search of herbivores** that increasingly venture into human-dominated landscapes.
- This behaviour is driven by the takeover of **natural flora by invasive species like lantana**, which **disrupts the natural ecosystem** and forces herbivores to seek food in areas inhabited by humans.

#### ➤ **Carrying Capacity:**

- With the **increasing tiger population**, questions arise about whether India's forests are nearing their carrying capacity to sustain these apex predators.

#### ➤ **Inequitable Population Distribution:**

- While India has **53 tiger reserves spread over 75,000 sq km**, **just 20 reserves cover one-third of the area for tiger conservation**, leading to inequitable population distribution.

#### ➤ **Human-Tiger Conflict:**

- Emergent conflicts have been addressed through compassionate yet unscientific solutions, such as feeding and rescuing incapacitated wild tigers, artificially enriching tiger habitats, and translocating "problem" tigers.

### What are the Conservation Efforts of Big Cats in India?

#### ➤ Project Lion:

- To conserve the critically endangered Asiatic lion, Project Lion was launched, primarily focusing on the **Gir Forest National Park in Gujarat**.
- This initiative emphasizes **habitat management, scientific research, anti-poaching** measures, and community participation. It aims to ensure a sustainable and growing population of Asiatic lions.

#### ➤ Project Leopard:

- Considering the widespread distribution of leopards and their adaptable nature, Project Leopard **focuses on studying and conserving these elusive predators**.
- It involves monitoring leopard **populations, mitigating human-leopard conflicts, and preserving their habitats** through a mix of protected areas and corridors.

#### ➤ Snow Leopard Conservation:

- India's Himalayan landscapes are home to the elusive snow leopard. Conservation efforts include **habitat protection, community engagement, research, and anti-poaching measures**.
- Collaboration with neighbouring countries and international organizations helps in **safeguarding this high-altitude predator**.

#### ➤ Cheetah Reintroduction Project:

- India has reintroduced the cheetah, an extinct species, in its original habitat. This initiative involves selecting **suitable areas, restoring ecosystems, and addressing potential challenges** in reintroducing and maintaining a viable cheetah population.

#### ➤ Legislation and Policy Framework:

- Wildlife protection acts, like the **Wildlife Protection Act of 1972**, provide the **legal foundation for conserving big cats**. These laws regulate hunting, poaching, and trade in wildlife and their derivatives.

- Strengthen law enforcement through **modern technology, intelligence networks**, and rapid response teams to curb poaching and wildlife trafficking.
- Implement **stringent penalties for offenders** and work collaboratively with international partners to dismantle illegal wildlife trade networks.
- **Promoting Sustainable Human-Wildlife Coexistence:**
  - Develop and implement **community-based conservation models** that engage local communities in conservation efforts, provide alternative livelihoods, and reduce human-wildlife conflicts.
  - Employ innovative technologies such as early warning systems to **minimize human-tiger conflicts and enhance safety** for both humans and animals.
- **Integrating Climate-Resilient Strategies:**
  - Develop climate adaptation plans within tiger reserves to mitigate the impacts of climate change on tiger habitats and prey availability.
  - Establish **buffer zones that can serve as refuges for wildlife** during extreme weather events.
- **Addressing Carrying Capacity Concerns:**
  - Conduct comprehensive studies to assess the carrying capacity of India's forests and ensure that the current and future tiger populations remain sustainable.
  - Prioritize the creation and restoration of tiger corridors to facilitate genetic exchange and enable tigers to thrive.

■■■

## G20 and Opportunities of Better Global Governance

*This editorial is based on **The trajectory of progress must change** which was published in The Hindu on 03/08/2023. It talks about the global governance systems and issues related to it.*

**Tag:** International Relations, GS Paper-2, Global Groupings, Important International Institutions, Groupings & Agreements Involving India and/or Affecting India's Interests

The world is facing multiple crises of **climate change, socio-economic inequality, poverty, and conflict**. The current model of economic growth is not equitable. Mere economic growth will not solve the world's problems; it needs to be sustainable and equitable too.

The **G20**, which represents **80% of the world's GDP (Gross Domestic Product)** and **2/3<sup>rd</sup> of the global population**, is one of the most influential forum for global governance. However, it is at an impasse because the **US**

### What Should be the Way Forward?

#### ➤ Strengthening Habitat Protection and Restoration:

- Identify and **protect critical tiger habitats** from further **encroachment, ensuring adequate space for population** growth and genetic diversity.
- Invest in habitat restoration efforts, including reforestation and removal of invasive species, to create resilient and interconnected ecosystems.

#### ➤ Enhancing Anti-Poaching Measures:

# G-20 (The Group of Twenty)

## About

- In 1999, following the **Asian Financial Crisis** of the **1990s**, **G20** was established as a Forum for **Finance Ministers and Central Bank Governors**.
- Raised to the **Summit level in 2008** to address the global financial and economic crisis of 2008.

## Aims

- Secure global financial stability by involving world's largest advanced and emerging economies.

## Structure and Functioning of G20

- The **G20 Presidency** rotates annually
- No permanent **Secretariat** or **Headquarters**
- **19 countries** are divided into **5 groups**
- The presidency rotates between each group

## Troika

- It is a working association between the **current presidency**, **past presidency** and **next presidency**.

## Challenges

- No Enforcement mechanism
- No legal binding
- Polarization of Interests:
  - Russia Ukraine Conflict
  - China's strategic rise
  - NATO's expansion

# G20 India 2023

- India assumed the **18th G20 Presidency** from **December 1, 2022** for a **one-year period**.
- **Theme:**
  - **"Vasudhaiva Kutumbakam"** a Sanskrit word which Stands for **"One Earth - One Family. One Future"**.
  - This is taken from the ancient Sanskrit text of the **'Maha Upanishad'**.

## G20 COUNTRIES





wants its members to shut out Russia and China who it sees as obstacles in its personal gains.. India, as the chair of the G20, is not easily swayed by **pressure from the G-7** and wants the G20 to concentrate on the agenda of 90% of humanity outside the G-7.

India, as chair of the G20, has offered a **vision of Vasudhaiva Kutumbakam (One Earth, One Family, One Future)** to bring all citizens of the world together and make the world better for everyone. India has also proposed an **approach of LIFE (lifestyles for sustainable development)** to the G20. It requires "coherent actions amongst stakeholders at all levels rooted in collective actions across society". It also **recognizes and amplifies the role of local communities, local and regional governments** and traditional knowledge in supporting sustainable lifestyles.

### ***What is the G20's Role in Shaping Global Governance?***

- **Economic Coordination:**
  - Economic issues transcend **national borders, necessitating coordinated efforts.**
  - The G20 acts as a platform for major economies to discuss and align their economic policies, **promoting global stability and growth.**
  - The G20 accounts for more than **80% of world GDP, 75% of global trade.**
- **Crisis Management:**
  - The G20 emerged as a **response to the 2008 financial crisis.** Since then, it has played a critical role in crisis management by convening leaders to address immediate challenges and formulate strategies for recovery.
  - In response to the **Covid-19 pandemic**, G20 leaders held an Extraordinary **Virtual Leaders' Summit** to coordinate global efforts. They committed to supporting research, ensuring access to medical supplies, and sharing best practices.
- **Global Financial System Reform:**
  - The G20 aims to enhance the resilience and stability of the global financial system. It has pushed for reforms to **financial institutions, regulations, and oversight mechanisms** to prevent future crises.
  - The G20's commitment to financial regulation led to the establishment of the **Financial Stability Board (FSB)**, which monitors and makes recommendations about the global financial system.
- **Climate Change and Sustainable Development:**
  - While not its primary mandate, the G20 addresses **environmental issues and sustainable development.** The group's decisions impact resource allocation, energy policies, and international climate commitments.

### ➤ **Shaping Agendas:**

- The G20 can set agendas and influence priorities on a global scale. Its discussions often drive international discourse and guide policies adopted by other international organizations.

### ***What are the Challenges of Global Governance?***

#### ➤ **Diverse Interests and Priorities:**

- Countries have varied and often conflicting interests and priorities. Balancing these **diverse perspectives while seeking common solutions** can be immensely challenging.
- Disagreements over climate change commitments in international agreements like the **Paris Agreement** showcase how countries' diverse interests hinder reaching common solutions.

#### ➤ **Lack of Coordinated Action:**

- Global governance requires coordinated action among numerous stakeholders, including **governments, international organizations, non-governmental organizations (NGOs)**, and the private sector.

#### ➤ **Inequitable Resource Distribution:**

- Unequal distribution of resources, **both financial and technological, creates disparities in addressing global challenges.**
- Developing countries often lack the resources and infrastructure to fully participate in and benefit from global governance initiatives.
  - **Limited access to Covid-19 vaccines** in low-income countries highlighted resource disparities and challenges in providing equitable global public goods.

#### ➤ **Complexity of Global Issues:**

- Many global challenges are multifaceted, **spanning economic, social, environmental, and political dimensions.**
- Addressing these issues requires comprehensive and integrated approaches that can be difficult to develop and implement.

#### ➤ **Power Imbalances:**

- Power imbalances among countries can lead to **unequal influence in global governance processes.**
- Powerful nations may **exert disproportionate control over decision-making**, sidelining the voices of less powerful countries.
  - Unequal representation in global decision-making bodies like the **UN Security Council** can lead to **skewed priorities and resolutions.**



- **Environmental Degradation and Climate Change:**
  - Environmental issues, including **climate change**, **require global cooperation** to mitigate their impact. Disagreements over responsibility, **mitigation strategies**, and **resource allocation** hinder effective global responses.
  - The lack of consensus on climate finance commitments and emission reduction targets reflects the difficulty of achieving global cooperation on environmental issues.
- **Short-Termism and Political Pressures:**
  - Short political cycles and domestic pressures within individual countries may lead to **decision-making that prioritizes immediate gains** over long-term global benefits.
  - This short-term focus can hinder efforts to address complex, gradual challenges.
- **Challenges of G20 in Global Governance:**
  - The G20 has a limited membership that excludes many countries and regions, which may undermine its legitimacy and representation.
  - Feud among member countries, some even major economies, also hinders better coordination at global level

#### How Strengthening Local Governance can Strengthen Global Governance?

- **Community-Led Solutions for SDGs:**
  - Engaging the people most affected by the **SDGs'** challenges, such as **local farmers for sustainable agriculture or healthcare workers for healthcare access**, can lead to context-specific, innovative solutions.
    - **Example:** In rural areas, engaging local farmers in adopting **climate-smart agriculture** practices tailored to their environment boosts agricultural productivity and environmental conservation.
- **Strengthening Local Services and Resilience:**
  - Enhancing access to basic services like **education, healthcare, clean water, and social safety nets directly ensures well-being** and reduces vulnerability to shocks, ensuring a stronger foundation for communities.
    - **Example:** Constructing water purification units in **remote villages enhances health and hygiene, addressing clean water** and health-related SDGs.
- **Participatory Governance and Accountability:**
  - Promoting **transparent decision-making processes** involving local citizens, civic organizations, and-

elected representatives ensures that policies align with community needs, building trust and accountability.

- **Cooperative Networks for Shared Progress:**
  - Establishing platforms for local and international collaboration, knowledge exchange, and resource-sharing enables communities to collectively address challenges like climate change, poverty, and inequality.

#### How India is Changing the Trajectory of Progress?

- Promoting a vision of **Vasudhaiva Kutumbakam that respects diversity and fosters solidarity** among nations and peoples.
- Advocating for an approach of LiFE that **encourages sustainable lifestyles and consumption** patterns that are compatible with planetary boundaries and human dignity.
  - Inspiring other countries to follow its example and learn from its successes and failures.
- Besides these steps, the Government of India shall empower **local communities and local governments to find and implement solutions** to their own problems using their own resources and knowledge.

#### How G20 Can Strengthen Global Governance?

- **Collaborative Leadership and Agenda Setting:**
  - The G20 should prioritize collaborative leadership, focusing on **setting agendas that reflect the diverse interests of its member nations** while also promoting sustainable development, equitable resource distribution, and global stability.
  - Regular dialogues and consultations can ensure that decisions made are inclusive and holistic.
- **Integration of Sustainable Practices:**
  - The G20 should take proactive measures to integrate sustainability into **economic policies and decisions**.
    - This could involve incentivizing **green investments**, supporting **renewable energy adoption**, and encouraging **circular economy models**.
  - Member nations could also collectively commit to **carbon neutrality targets** and align their energy policies with the Paris Agreement.
- **Strengthening Crisis Preparedness:**
  - Building upon its role in crisis management, the G20 should **establish a framework for rapid response to global emergencies**, whether financial, health-related, or environmental.

- This framework could involve preemptive planning, information sharing, and coordinated resource allocation to ensure a swift and effective response to crises.
- **Bridging the Gap in Resource Distribution:**
  - To address inequitable resource distribution, the G20 should **create initiatives that facilitate technology transfer, knowledge sharing, and capacity building** for developing nations.
    - Investment in **education, healthcare, and infrastructure** can **empower** these countries to actively participate in global governance and contribute to sustainable solutions.
- **Empowering Local Governance:**
  - The G20 should encourage member nations to empower **local communities by devolving decision-making powers and resources**.
  - Support for participatory governance, capacity development at the local level, and mechanisms for sharing best practices can enhance the effectiveness of local initiatives in addressing global challenges.

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## Multilingualism and Education

*This editorial is based on **Education in regional languages will foster inclusivity** which was published in The Hindu Businessline on 02/08/2023. It talks about the role of multilingualism in education.*

**Tag:** Governance, GS Paper-2, Education, Government Policies & Interventions

Multilingualism is the **ability to speak, understand, read, and write** more than one language. It can be individual or societal, depending on whether a person or a community uses multiple languages. Multilingualism can also be **classified into different types, such as additive or subtractive, balanced or dominant**, sequential or simultaneous, depending on how languages are **acquired, used, and valued**. Language is a powerful tool for communication, learning, and cultural expression. It is also a **key aspect of human development and identity**. However, in a diverse and multilingual country like India, language can also pose significant challenges for education.

### Why is Multilingualism Important in Education?

- **Enhancing Cognitive Development:**
  - Research shows that learning **more than one language can boost brain functions, such as memory, attention, problem-solving, and creativity**.

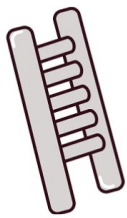
- It can also improve metalinguistic awareness, which is the ability to reflect on and manipulate language structures and rules.
- **Fostering Cultural Diversity:**
  - Learning multiple languages can expose students to **different cultures, perspectives, and values**. It can also help them **develop intercultural competence**, which is the ability to communicate effectively and appropriately with people from diverse backgrounds.
  - With over **22 officially recognised languages and hundreds of dialects**, each with its own unique cultural and historical significance, language is a crucial aspect of our identity.
- **Improving Academic Achievement:**
  - Studies have consistently shown that students who receive instruction in their mother tongue or home language **perform better in school than those who are taught in a foreign or unfamiliar language**.
  - This is because they can access the **curriculum content more easily and confidently**, and transfer their skills and knowledge to other languages.
- **Promoting Social Inclusion:**
  - Providing education in multiple languages can **ensure that every child has equal access and opportunity to learn, regardless of their linguistic background**.
  - It can also foster a sense of belonging and identity among minority language speakers, and reduce discrimination and marginalization.

### How Can Multilingual Education be Implemented Effectively?

- **The Choice of Languages:**
  - Multilingual education should be based on the linguistic realities and needs of the learners and the communities.
  - It should also respect the constitutional provisions and the three-language formula of the **National Education Policy** (NEP 2020).
  - Ideally, multilingual **education should start with the mother tongue or home language** of the learners as the medium of instruction, and gradually introduce other languages as subjects or additional media of instruction.
- **The Pedagogy of Languages:**
  - Multilingual education **should adopt a learner-centered and interactive pedagogy** that fosters language awareness and proficiency.

- It should also **promote cross-linguistic transfer and multiliteracy skills** among the learners.
  - Moreover, it should use culturally relevant and contextually appropriate materials and methods that reflect the diversity and richness of languages and cultures.
- **The Assessment of Languages:**
  - Multilingual education **should use fair and valid assessment tools and criteria** that measure the learning outcomes and progress of the learners in multiple languages.
  - It should also provide **constructive feedback and support to the learners** to improve their language skills.
  - Furthermore, it should **recognize and reward the achievements and efforts** of the learners in multilingual education.

### Multilingual Education Program Stages



- Stage 1: Learning takes place entirely in the child's home language.
- Stage 2: Building fluency in the mother-tongue. Introduction of oral fluency in second language.
- Stage 3: Building oral fluency in the Second language. Introduction of literacy in second language.
- Stage 4: Using both first language and second language for lifelong learning

### What are the Benefits of Multilingual Education for India?

- **Enhancing Human Capital:**
  - Multilingual education can equip the learners with the **necessary language skills and competencies to participate in various domains** of life, such as education, employment, research, innovation, etc.
  - It can also increase their employability and mobility in the globalized world.
- **Preserving Linguistic Diversity:**
  - Multilingual education can help **preserve and revitalize the linguistic diversity and heritage of India**.
  - It can also promote **linguistic rights and dignity of the speakers** of different languages, especially those who are endangered or marginalized.
- **Strengthening National Unity:**
  - Multilingual education can **foster mutual understanding and respect among the speakers** of different languages and cultures.
  - It can also **enhance social cohesion and harmony** among the diverse groups of people in India.

### ➤ Stronger Foundation for Learning Additional Languages:

- Starting education in **one's mother tongue provides a solid foundation for learning additional languages**, including the national language and English, promoting multilingualism.

### ➤ Higher Retention Rates:

- When students can understand what they are being taught, they are **more likely to stay in school and complete their education**.

### What are the Challenges of Multilingualism in Education?

#### ➤ Lack of Resources:

- Implementing multilingual education requires adequate resources, **such as trained teachers, appropriate curricula, quality textbooks, assessment tools, and digital platforms**.
  - However, many schools **lack these resources, especially in rural and remote areas**.

#### ➤ Lack of Policy Support:

- Although the **NEP 2020 and the NIPUN Bharat Mission** advocate for multilingual education, there is still a gap between policy and practice.
  - Many states have not yet adopted or implemented these policies effectively.
- There is also a need for more **coordination and collaboration among different stakeholders**, such as central and state governments, educational institutions, civil society organizations, and communities.

#### ➤ Lack of Awareness:

- Many parents, teachers, students, and policymakers are **not aware of the benefits of multilingual education**.
  - They **may have misconceptions or prejudices** about certain languages or dialects.
- They may also **prefer English as the medium of instruction, believing that it will provide better opportunities for their children's future**.

#### ➤ Curriculum Alignment:

- Balancing the use of mother tongues or regional languages **with national or standardized curricula can be challenging**.
- Ensuring that students have access to a well-rounded education while also valuing their linguistic backgrounds is crucial.

#### ➤ Assessment and Evaluation:

- Developing fair and **standardized assessment methods across different languages** can be difficult.

- Ensuring that students are evaluated fairly and consistently can be a challenge when using multiple languages.

➤ **Transition to Higher Education and Employment:**

- While multilingual education can be **effective at the primary level, transitioning to higher education or the job market** might require proficiency in a more widely spoken language, potentially disadvantageous to students who were educated in their mother tongue.

### ***What are the Policy Recommendations for Multilingualism in Education?***

➤ **Adopting a Flexible and Inclusive Approach:**

- Multilingual education should be **tailored to the needs and contexts of different learners and communities**.
- It should also be **inclusive of all languages and dialects spoken in India**, including tribal languages, sign languages, classical languages, foreign languages, etc.

➤ **Developing a Continuum of Language Learning:**

- Multilingual education should not be limited to the foundational years of schooling.
- It should be extended throughout the educational system, **from pre-primary to higher education**. It should also provide opportunities for students to learn new languages at different stages of their academic career.

➤ **Strengthening Teacher Capacity:**

- Teachers play a crucial role in delivering multilingual education.
- They should be provided with **adequate training and support to teach effectively** in multiple languages.
- They should also be encouraged to **use innovative pedagogies and technologies** to enhance language learning.

➤ **Engaging Parents and Communities:**

- Parents and communities are key partners in promoting multilingual education.
- They **should be informed about the benefits of multilingualism** for their children's development and learning.
- They should also be involved in **decision-making processes regarding language policies** and practices.

➤ **Creating a Culture of Multilingualism:**

- Multilingualism should be **celebrated as a valuable asset for India's social and economic development**.
- It should be integrated into various aspects of public life, **such as media, arts, sports, governance, etc.**

- It should also be recognized and rewarded in various domains, such as education, employment, research, etc.

### ***Conclusion:***

India needs to adopt **LEAP - Language Empowerment for Achieving Potential**. By supporting multilingualism and providing sufficient training and resources to teachers, LEAP will **help enhance linguistic skills, improve cognitive development and create a more culturally diverse and intellectually enriching educational environment**.



## **Rural India: Progress and Problems**

*This editorial is based on **Rural poverty declines, but lifestyle issues emerge** which was published in The Hindu BusinessLine on 04/08/2023. It talks about the rural development and role of NITI Aayog in the progress of rural India.*

**Tag:** Indian Economy, GS Paper-2, Human Resource, GS Paper-3, Poverty, Growth & Development, Inclusive Growth

India is a country of contrasts, where **rapid economic growth coexists with persistent poverty** and social problems. The rural areas, which house **about two-thirds of the population**, are undergoing significant changes in terms of living standards, education, health, and environment.

As India's rural landscape undergoes a transformative journey, **marked by a commendable decline in multidimensional poverty**, a complex tapestry of changes emerges. The updated **National Multidimensional Poverty Index (MPI)** released by **NITI Aayog** unveils an encouraging narrative of progress, **showcasing a substantial reduction in poverty rates between 2015-16 and 2019-21**.

### **What is NITI Aayog's National MPI?**

- **About:** The National MPI is a **measure of poverty that captures the progress of a country** in three equally weighted dimensions - **health, education and standard of living**.
  - It considers **10 indicators, such as nutrition, child mortality, years of schooling, cooking fuel, sanitation, etc.**
- **Components of National MPI:** The National MPI can be broken into two components:
  - The **incidence of poverty** (the percentage of people who are poor) and the **intensity of poverty** (the average deprivation score of the poor).



- **Findings of the National MPI:** According to the Progress Review 2023 of NITI Aayog, India has made remarkable progress in reducing multidimensional poverty between 2015-16 and 2019-21.
  - The **incidence of poverty fell from 24.85% to 14.96%**, while the intensity of poverty fell from **47.14% to 44.39%**.
  - The rural areas have also witnessed a **significant decline in poverty, from 32.59% to 19.28%**.
    - The improvement in rural poverty can be attributed to various targeted development initiatives taken by Union and State Governments along with other stakeholders.

### ***What are the Signs of Improvement in Rural Living Standards?***

- **Enhanced Housing Infrastructure:**
  - Increased **access to pucca or semi-pucca houses** signifies improved structural integrity and better living conditions.
    - **Durable housing** fosters resilience against natural elements, ensuring safety and comfort for rural inhabitants.
  - **Pradhan Mantri Awaas Yojana-Gramin (PMAY-G)** provided for availability for rural housing.
- **Improved Sanitation Facilities:**
  - Greater **availability of toilets** reflects a heightened focus on hygiene and health, **reducing open defecation and related health risks**.
    - **Improved sanitation contributes** to community well-being and a cleaner environment.
  - **For example:** Over 1 lakh villages declared themselves as **ODF (Open Defecation Free) Plus** under **Swachh Bharat Mission Grameen (SBM-G)**
- **Extended Electricity Access:**
  - Widening **access to electricity empowers** rural communities with **improved connectivity, lighting, and opportunities** for economic activities.
    - Electricity enables **better educational outcomes**, increased productivity, and enhanced quality of life.
  - **For example:**
    - **Pradhan Mantri Sahaj Bijli Har Ghar Yojana (Saubhagya)** launched to enhance rural electrification.
- **Clean Cooking Fuel Adoption:**
  - Increased usage of **clean cooking gas reduces indoor air pollution**, positively impacting respiratory health and overall well-being.
    - **Clean cooking fuel** supports sustainable environmental practices, promoting a healthier ecosystem.

### ○ **Pradhan Mantri Ujjwala Yojana (PMUY):**

- Under Ujjwala 1.0, the target was to provide LPG connections to 50 million women from BPL households by March 2020.
- Under Ujjwala 2.0, an additional 10 million LPG connections were to be provided to the beneficiaries.

### ➤ **Educational and Social Empowerment:**

- Rising participation of girls in education reflects **progressive societal values and contributes to gender parity and inclusive development**.
- Knowledge dissemination through connectivity aids educational growth and fosters informed decision-making.
- **For example: Saansad Adarsh Gram Yojana** aims to empower the villagers to make choices and provide them with opportunities to exercise those choices.

### ➤ **Diversification of Income Sources:**

- Growing **non-farm employment opportunities** diversify income streams, reducing dependence solely on agriculture.
  - Income diversification **enhances financial stability and resilience** against agricultural uncertainties.
- **For example:**
  - **MGNREGA:** The primary objective of the scheme is to **guarantee 100 days of employment in every financial year** to adult members of any rural household willing to do public work-related unskilled manual work.
  - **National Rural Livelihood Mission (NRLM)** aims at creating efficient and effective institutional platforms of the rural poor enabling them to increase household income through sustainable livelihood enhancements and improved access to financial services.

### ➤ **Other Government Initiatives related to Rural Development:**

- **Public Distribution System (PDS)**
- **Mission Antyodaya**
- **Deen Dayal Upadhyaya Grameen Kaushalya Yojana**
- **Pradhan Mantri Gram Sadak Yojana**

### ***What are the Challenges in Development of Rural India?***

#### ➤ **Poverty and Inequality:**

- Widespread **poverty persists**, characterized by low income, limited access to basic services, and unequal distribution of resources.

- Income **inequality between rural and urban areas** and within rural regions hampers equitable development.
- **Agricultural Distress:**
  - Dependence on **agriculture as a primary livelihood exposes** rural communities to risks posed by unpredictable weather patterns, market fluctuations, and crop failures.
  - Fragmented **land holdings, inadequate irrigation, and outdated farming practices** hinder productivity and income generation.
- **Unemployment and Underemployment:**
  - **Inadequate non-farm employment opportunities** lead to **seasonal unemployment and underemployment** in the agricultural sector.
  - Lack of skill development and market-oriented vocational training limits rural workforce engagement in diverse sectors.
- **Infrastructural Gaps:**
  - Insufficient rural connectivity, including roads, electricity, and telecommunication, limits access to markets, services, and information.
  - Basic amenities such as **clean drinking water, sanitation facilities, and healthcare remain inadequate** in many rural areas.
- **Climate Change and Biodiversity Loss:**
  - Rural areas are impacted by the effects of climate change, such as droughts, floods, **heat waves, and extreme weather events**.
  - These can affect the availability and quality of natural resources, such as water, soil, and forests, and the livelihoods of rural communities, especially farmers and pastoralists.
    - **For example**, the population of **farmland birds declined** by one-third between 1990 and 2016.
- **Migration and Urbanisation:**
  - Rural areas are experiencing a **high rate of out-migration**, especially of young and educated people, to urban and semi-urban areas in search of better opportunities and services.
    - This can **result in labour shortages**, land fragmentation, social isolation, and loss of cultural identity in rural areas.
  - On the other hand, urbanization can also bring some **benefits to rural areas, such as improved connectivity, market access, remittances, and innovation**.
- **Addiction and Mental Health:**
  - Rural areas are facing a rise in addiction to **tobacco, gutka, liquor, and social media** among rural youth and adults.

- These can have negative impacts on the **health, productivity, social relations, and safety of rural people**.

- Moreover, rural areas often lack adequate mental health services and awareness, which can lead to stress, depression, suicide, and violence.

#### ➤ **Waste Management and Sanitation:**

- Rural areas often **lack proper waste management systems** and facilities, such as segregation at source, composting/biogas plants/recycling units for organic/inorganic waste respectively.
- This can lead to **environmental pollution, health hazards, aesthetic degradation, and loss of resources**.
  - Rural areas still face challenges in achieving universal access to sanitation facilities and hygiene practices.

### ***What are the Possible Solutions to Address the Issues Related to Rural Development?***

#### ➤ **Localized Employment Opportunities:**

- Focus on skill development and entrepreneurial opportunities can **anchor the workforce in rural areas**.
- Creating more employment opportunities near villages through skill development programs, micro-enterprises promotion, rural infrastructure development, etc.
  - This can **reduce the need for migration, increase the income and livelihood security** of rural people, and enhance their self-reliance and dignity.

#### ➤ **Curbing Addiction and Substance Abuse:**

- Stricter regulations and awareness campaigns are essential to reduce tobacco, gutka, and alcohol consumption.
- Holistic community interventions can promote healthier lifestyles and curb substance dependence.

#### ➤ **Balancing Technology Usage:**

- Raising awareness about the detrimental effects of excessive internet use can encourage healthier digital habits.
- Community initiatives can foster interpersonal interactions and strengthen social bonds.

#### ➤ **Comprehensive Waste Management:**

- Keeping the focus of **Swachh Bharat Mission 2.0** on waste management **at the village level through segregation at source, composting/biogas plants/recycling units** for organic/inorganic waste respectively.

- This can improve the environmental quality, health hygiene, aesthetic appeal, and resource efficiency of rural areas, and also generate income and employment opportunities for rural people.

### **How can NITI Aayog Play a Role in Addressing Rural Issues?**

- **NITI Aayog can:**
  - **Devise policies that specifically target rural challenges** such as addiction, digital dependency, and waste management.
  - **Facilitate collaborations between government agencies, NGOs, private sector, and communities** for comprehensive solutions.
  - **Conduct research to understand the root causes of these challenges** and their regional variations, aiding in crafting effective solutions.
  - **Implement robust monitoring systems** can gauge the progress of initiatives and fine-tune strategies for optimal impact.
  - **Support and fund innovative projects** that address addiction, technology dependence, waste management, and more.

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## **Recurring Communal Violence**

*This editorial is based on **Clashes will exact a stiff economic cost** which was published in The Hindustan Times on 07/08/2023. It talks about growing communalism in India.*

**Tag:** Social Issues, GS Paper-1, Secularism, Communalism, Salient Features of Indian Society

**Communal violence** is a form of collective violence that involves clashes between groups belonging to different religious, ethnic, linguistic, or regional identities.

In India, communal violence is often associated with **Hindu-Muslim conflicts**, but it can also involve other groups such as **Sikhs, Christians, Buddhists, Dalits, and tribals**.

The Indian Penal Code (IPC) defines communal violence as any act that promotes enmity between different groups on grounds of religion, race, place of birth, residence, language, etc., and does acts prejudicial to maintenance of harmony.

Communal violence has a long history in India, dating back to the pre-colonial and colonial periods. Communal violence has continued to plague India in the post-independence era. Some of the major incidents which

had communal overtones include the **Moplah rebellion of 1921**, the Noakhali riots of 1946, the **Partition riots of 1947**, the **Babri Masjid demolition of 1992**, and most recently **Manipur violence** and Nuh violence.

**Communal violence** is often triggered by political, social, economic, or cultural factors, such as elections, religious festivals, cow protection, conversions, inter-faith marriages, land disputes, migration, media propaganda, hate speech, etc.

Communal violence has serious implications for India's **democracy, secularism, human rights**, social harmony, **national security, and development**.

### **What are the Causes of Communal Violence in India?**

- **Political Causes:**
  - The role of political parties and leaders in mobilizing **communal sentiments for electoral gains** or ideological agendas.
  - The use of communal polarization as a **strategy to divide and rule**.
  - The failure of political institutions and mechanisms to prevent or resolve communal conflicts. The **lack of accountability and impunity for perpetrators** of communal violence.
- **Social Causes:**
  - The existence of **deep-rooted prejudices and stereotypes against different communities**.
    - The lack of inter-community dialogue and trust.
  - The influence of **extremist groups and organizations** that propagate communal hatred and violence.
  - The **manipulation of religious symbols and sentiments** for communal purposes.
- **Economic Causes:**
  - The **competition for scarce resources and opportunities** among different communities.
  - The perception of **relative deprivation or discrimination among marginalized groups**.
  - The **impact of globalization and modernization** on traditional livelihoods and identities.
  - The exploitation of communal grievances for economic benefits.
- **Cultural Factors:**
  - The **clash of values and lifestyles** between different communities. The erosion of cultural diversity and pluralism.
  - The **challenge posed by secularism and liberalism to religious orthodoxy** and conservatism. The **appropriation or desecration of cultural heritage** and sacred sites.

➤ **Lack of Education and Awareness:**

- Misinformation can spread easily, deepening mistrust and misunderstanding, and eventually contributing to the eruption of communal violence.

**What are Impacts of Communal Violence in India?**

➤ **Loss of Human Lives:**

- One of the most devastating consequences of communal violence is the **loss of human lives. Individuals, families, and entire communities** are torn apart by the tragedy of lives cut short, leaving scars that last for generations.

➤ **Destruction of Property:**

- Communal violence leads to the **destruction of homes, businesses, and places of worship.**
- The economic losses resulting from this destruction can be substantial, affecting the livelihoods of individuals and communities.

➤ **Social Disintegration:**

- The breakdown or **weakening of social cohesion, tolerance, solidarity, etc.,** among different communities.
  - The fabric of trust and unity that binds a society together is often torn apart by communal violence.
- Communities that once lived in harmony can find themselves **divided along religious lines, eroding the bonds** that have held them together.

➤ **Economic Setbacks:**

- Communal violence can have significant economic ramifications. The **diversion or wastage of resources and funds.**
- Investors may be hesitant to invest in areas prone to violence, economic activities can be disrupted, and developmental projects can be derailed, slowing down progress and growth.

➤ **Psychological Impact:**

- The trauma inflicted by communal violence **extends beyond physical harm.**
- Survivors often experience psychological **distress, anxiety, and depression,** affecting their overall well-being and ability to lead fulfilling lives.

➤ **Political Impact:**

- The erosion or **subversion of democracy, secularism, rule of law, justice, etc.,** in India. The loss of legitimacy and credibility of political institutions and actors.
- The **increase in corruption, nepotism, patronage, violence, etc.,** in political processes. The rise or **resurgence of authoritarianism, populism, nationalism, communalism, etc.**

➤ **Impact on Security:**

- The threat or challenge to national, regional, and international security.
- The involvement or interference of external actors or forces in communal conflicts.
- The spillover or escalation of communal violence **across borders.**
  - The linkages or nexus between communal violence and other forms of violence, such as **terrorism, insurgency, militancy, etc.** The proliferation or misuse of weapons or explosives.

**What are Potential Solutions for Curbing Communal Violence?**

➤ **Strong Legal Framework:**

- The enactment or implementation of **laws and policies that protect the rights** and interests of different communities.
- The prevention or **prohibition of hate speech, hate crimes, communal riots, etc.** The prosecution or punishment of perpetrators or instigators of communal violence.
- The provision or compensation of justice or relief to victims or survivors of communal violence.

➤ **Strengthening Institutional Mechanism:**

- The strengthening or reforming of political institutions and mechanisms that deal with communal issues.
- The establishment or empowerment of **independent or impartial bodies or agencies that monitor or investigate** communal violence.
- The promotion or enhancement of transparency, accountability, responsiveness, and inclusiveness in governance.

➤ **Educational Reforms:**

- The development or revision of curricula and textbooks that **foster a culture of peace, tolerance, respect,** and diversity among different communities.
- The training or sensitization of **teachers, students, parents, media, etc.,** on communal harmony and coexistence. The creation or expansion of opportunities for inter-community dialogue and exchange.

➤ **Social Reform:**

- The building or rebuilding of **social capital and trust among different communities.** The mobilization or involvement of civil society actors, such as NGOs, religious leaders, women groups, youth groups, etc., in promoting communal harmony and coexistence.



- The recognition or celebration of the contributions and achievements of different communities to India's society and culture.

➤ **Economic:**

- The improvement or redistribution of economic conditions and opportunities among different communities.
- The alleviation or elimination of poverty, inequality, discrimination, etc., among marginalized groups.
- The facilitation or integration of economic cooperation and collaboration among different communities.

➤ **Cultural:**

- The preservation or **restoration of cultural diversity and pluralism** in India. The **protection or promotion of cultural heritage and sacred sites** of different communities.
- The encouragement or appreciation of cultural exchange and innovation among different communities.

➤ **Community Engagement:**

- Local community leaders, religious figures, and civil society organizations can play a pivotal role in promoting interfaith dialogue and understanding.
- Grassroots efforts can foster connections that transcend religious differences.

➤ **Media Responsibility:**

- Media outlets bear a responsibility to **report objectively and responsibly**, avoiding sensationalism and biased coverage that can fan the flames of communal tensions.

### ***What Should be the Way Forward?***

➤ **Promoting Social Cohesion:**

- Efforts should be directed toward building a **strong national identity that transcends religious affiliations**.
- Celebrating cultural diversity and promoting a sense of unity can help bridge communal divides.

➤ **Economic Empowerment:**

- Addressing economic disparities through policies that ensure equal access to opportunities can **reduce feelings of marginalization and create a more inclusive society**.

➤ **Youth Engagement:**

- Empowering the youth with the tools to champion peace, tolerance, and unity is essential for nurturing a generation that upholds these values.



## **Five Years of AB-PMJAY**

*This editorial is based on **Five years of Ayushman Bharat** which was published in **The Indian Express** on 09/08/2023. It talks about the achievements and challenges of Ayushman Bharat health scheme.*

**Tag:** Governance, GS Paper-2, Health, Government Policies & Interventions

**Ayushman Bharat Pradhan Mantri Jan Arogya Yojana** (AB-PMJAY) is a flagship health protection scheme **launched by the Government of India in 2018**. It aims to **provide universal health coverage to the poor and vulnerable sections** of society by ensuring access to quality healthcare services agnostic of economic status. It has the potential to transform the healthcare landscape of the country by **reducing poverty, enhancing productivity, and promoting social justice**.

### **What are the Main Objectives of AB-PMJAY?**

- To reduce the financial burden of out-of-pocket expenditure (OOPE) on healthcare for the beneficiaries.
- To improve the access and affordability of healthcare services for the beneficiaries.
- To enhance the quality and efficiency of healthcare delivery systems in the country.
- To promote preventive, promotive, and curative health interventions for the beneficiaries.

### **What are the Key Features of AB-PMJAY?**

➤ **Health Cover:**

- The scheme provides a health cover of **Rs 5 lakh per family per year for secondary and tertiary care hospitalization** to more than **12 crore families (bottom 40% of the population)**.

➤ **Packages:**

- The scheme covers medical and surgical procedures for almost all health conditions through a **comprehensive list of 1,949 packages**, including **cancer care, cardiac care, neurosurgery, orthopedics, burns management, mental disorders**, etc.

➤ **Funding:**

- The scheme is a centrally sponsored scheme, which means that it is funded by both the central and state governments.
  - The **funding ratio is 60:40 for most states, 90:10 for northeastern states** and Himalayan states, and **100:0 for union territories without a legislature**.

➤ **IT Platform:**

- The scheme uses a robust IT platform to ensure **seamless delivery of services and prevent fraud and abuse.**
- The platform includes features such as **beneficiary identification system, hospital empanelment module, transaction management system, claim management system, grievance redressal mechanism, etc.**
- **Hospitals:**
  - The scheme has a network of **more than 27,000 empanelled hospitals** across the country, out of which more than half are private hospitals.
    - The scheme also encourages public-private partnership models such as **trust-based models, insurance-based models, or hybrid models** for effective implementation.
- **Portability:**
  - The scheme has an interstate portability feature, which means that a beneficiary registered in **one state can avail services in any other state** that has an AB-PMJAY programme.
    - This has proved helpful to migrants, **especially in emergencies.**
- **Arogya Mitras:**
  - The scheme has a **dedicated workforce of Pradhan Mantri Arogya Mitras (PMAMs)** who guide and assist the beneficiaries at every step of their journey under the scheme.
    - They are responsible for **beneficiary verification, registration, pre-authorisation, claim submission, etc.**
- **Monitoring and Evaluation:**
  - The scheme has a **monitoring and evaluation mechanism to ensure accountability and transparency.**
  - The scheme has a public dashboard where the implementation details can be tracked on a day-to-day basis.
    - The scheme also publishes the details of beneficiaries who have availed treatment under the scheme without compromising their privacy.
    - The claim **processing is completely faceless.**
- **Anti-fraud:**
  - The scheme has a **National Anti-Fraud Unit (NAFU)** that designs, implements and oversees anti-fraud initiatives.
    - There are also Anti-Fraud Units at the state level.
  - The NAFU uses **Artificial Intelligence (AI) and Machine Learning (ML) technologies** to detect suspicious transactions/potential frauds.

- The NAFU also conducts **desk and field audits (including surprise ones)** to check abuse.
- More than **210 hospitals have been de-empanelled** for fraud or malpractice.

#### ➤ **Call Centre:**

- The scheme has a call center that makes calls to every beneficiary who has availed treatment **within 48 hrs of discharge** to verify the quantity and quality of the treatment.
  - Another **call is made after 15 days** to know about the prognosis.

### ***What are the Achievements of AB-PMJAY?***

#### ➤ **Coverage:**

- As AB-PMJAY completes its fifth year, it has **covered more than 15.5 crore families** (about 50 crore beneficiaries) with a health cover of Rs 5 lakh per family per year for secondary and tertiary care hospitalization.
  - Eleven states/UTs have **pushed for 100% coverage** of their respective population.

#### ➤ **Savings:**

- The scheme has catered to **more than 5.39 crore admission events worth Rs 66,284 crore in the last five years.**
- If the beneficiaries had availed the same care outside AB-PMJAY's ambit, the total cost of treatment would have been nearly two times higher.
  - This has **resulted in savings of more than Rs 1 lakh crore** for the beneficiaries.

#### ➤ **Impact:**

- The scheme has reduced the Out of Pocket Expenditure(OOPE) of the beneficiaries by **60 % and increased their access to tertiary care by 65 %.**
  - The scheme has also **improved the health-seeking behavior** and satisfaction of the beneficiaries.

#### ➤ **Quality and efficiency:**

- The scheme has enhanced the quality and efficiency of healthcare delivery systems in the country by introducing standard treatment protocols, quality certification, and performance-based incentives for the empanelled hospitals.
  - The scheme has also **increased the bed occupancy rate and revenue generation** of the public hospitals.

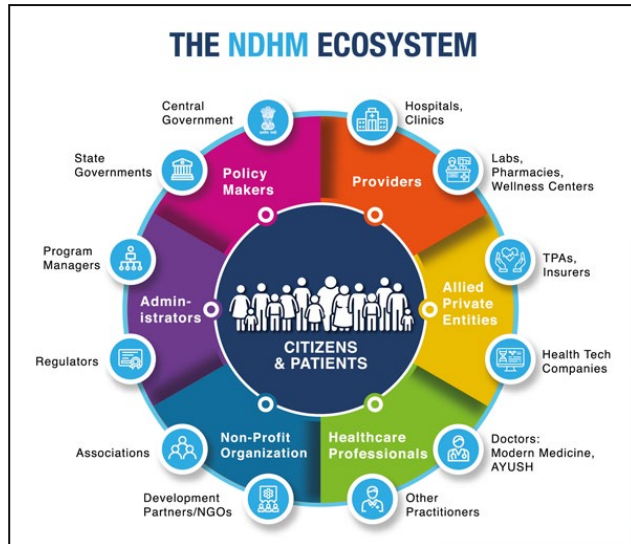
#### ➤ **Innovations and initiatives:**

- The scheme has launched several innovations and initiatives to enhance the quality and accessibility of healthcare services.

- Some of these are **Ayushman Bharat Digital Mission (ABDM)**, **Ayushman Bharat Health Infrastructure Mission (ABHIM)**, **Ayushman Bharat PM-JAY Startup Grand Challenge**, **Ayushman Bharat PM-JAY Awards**, etc.

➤ **Inclusivity:**

- The scheme has stayed true to its promise of **inclusivity by adding people from the transgender community** to its list of beneficiaries.
- Around **50 packages were designed specifically for the community**, including packages on **Sex Reassignment Surgery (SRS)**.



### What are the Challenges of AB-PMJAY?

➤ **Lack of Awareness:**

- The scheme faces a low awareness level among the potential beneficiaries, **especially in rural areas**.
  - Many eligible beneficiaries are not aware of their entitlements or how to avail them.
  - There is a need to increase the outreach and communication efforts of the scheme to create more awareness and demand.

➤ **Supply-Side Constraint:**

- The scheme faces a supply-side constraint **due to the uneven distribution and availability of healthcare infrastructure** and human resources in the country.
- Many states have a shortage of empanelled hospitals, **especially in remote and tribal areas**.

➤ **Reimbursement Issues:**

- The scheme faces a challenge of **ensuring timely and adequate reimbursement of claims to the empanelled hospitals**, especially private ones.
- Many hospitals have complained of **delayed payments, low package rates, high denial rates, and cumbersome processes**.

- There is a need to streamline and expedite the claim settlement process and revise the package rates periodically to ensure sustainability and viability of the scheme.

➤ **Fraud and Abuse:**

- The scheme faces a challenge of preventing and detecting fraud and abuse by some unscrupulous elements who try to exploit the scheme for personal gain.
- Recently, the **Comptroller and Auditor General of India** has revealed that **nearly 7.5 lakh beneficiaries were linked to a single cell phone number(9999999999)**.
- There is a need to strengthen the anti-fraud mechanisms and take strict action against those who indulge in fraud or malpractice under the scheme.

### What are the Future Prospects of AB-PMJAY?

➤ **Transformation:**

- The scheme has a potential to transform the healthcare landscape of the country by providing universal health coverage to half of India's population.
- The scheme can also contribute to achieving the **Sustainable Development Goal 3.8**, which envisions **universal health coverage for all by 2030**.

➤ **Integration:**

- The scheme can also act as a catalyst for **strengthening the primary healthcare system in the country by linking it with the secondary and tertiary care system**.
- The scheme can **also leverage the potential of digital health technologies** to improve access, affordability, and quality of healthcare services.

➤ **Development:**

- The scheme can also create a positive impact on the **socio-economic development of the country by reducing poverty, enhancing productivity, and promoting social justice**.
- The scheme can also generate employment opportunities and stimulate economic growth in the health sector.

### What are Some Recommendations for Improving AB-PMJAY?

➤ **Provision of Ayushman Card:**

- The scheme should aim to provide every possible beneficiary with an **Ayushman Card**, which can act as a **pre-paid card worth Rs 5 lakh** that can be used to avail free treatment at any empanelled hospital.

- This can reduce the hassle and delay in beneficiary identification and verification.

➤ **Scope:**

- The scheme should expand its scope and coverage by including more **health conditions, procedures, and services under its ambit.**
- The scheme should also consider covering outpatient care, diagnostics, medicines, etc., which constitute a major part of OOPe for many beneficiaries.

➤ **Convergence:**

- The scheme should enhance its coordination and convergence with other health schemes and programmes at the central and state levels **to avoid duplication, fragmentation, and confusion.**
- The scheme should **also foster collaboration and partnership** with various stakeholders such as civil society organizations, academic institutions, private sector entities, etc., **to leverage their expertise and resources.**



## Gender Responsive Urban Planning

*This editorial is based on **Ensuring women's right to the city** which was published in The Indian Express on 09/08/2023. It talks about the Gender Responsive Urban Planning and Challenges pertaining to it.*

**Tag:** Governance, GS Paper-2, Issues Relating to Development, Government Policies & Interventions, GS Paper-3, Planning, Inclusive Growth,

Gender-responsive urban planning is an approach that **recognizes and addresses the different needs, preferences, and experiences of women and men** in urban spaces. It **aims to create cities that are inclusive, safe, accessible, and sustainable for all genders.** Gender-responsive urban planning considers how gender interacts with other factors such as **age, class, caste, ethnicity, disability, and sexual orientation** to **shape people's access to opportunities** and resources in the city.

In India, where **urbanization** is reshaping the social and economic fabric, the concept of gender-responsive urban planning gains even more significance. This approach involves rethinking traditional urban design strategies and policies to address gender-specific **challenges, and the balancing of domestic and professional responsibilities.** By integrating gender perspectives into urban planning, India can create

environments that empower women, enhance their participation in the urban workforce, and contribute to their overall well-being.

### **Why is Gender-Responsive Urban Planning Important for India?**

➤ **Presence of Violence and Fear:**

- Women experience various forms of violence and harassment in **public spaces, such as streets, markets, parks, buses, trains, etc.**
  - This affects their mobility, freedom, and participation in the city.
- According to a **2021 ORF study** across 140 Indian cities, 52 % of women turned down opportunities for education and employment due to lack of safety.
- A **2019 Ola study** revealed that only 9% of women from 11 cities felt it was safe to use public transport.

➤ **Unpaid Care Work:**

- Women bear the disproportionate burden of unpaid care work, such as domestic chores, child care, elder care, etc.
- This limits their time and energy for paid work, education, leisure, and civic engagement.
- A **2018 ILO research points out** that Indian women spend **297 minutes on housework a day**, while men spend **31.**
- A 2021 **Oxfam report** showed that **Indian women and girls put in 3.26 billion hours of unpaid care work daily.**

➤ **Absence of Gender Policies and Practices:**

- Urban planning and management often do not take into account the diverse realities and needs of women and men in the city.
- **For example**, public transport systems **may not be affordable, accessible, or safe** for women
  - Public toilets may not be adequate or clean for women
  - Public spaces may not be designed or maintained for women's comfort and security; etc.
- These gender inequalities have negative impacts on women's well-being, empowerment, and human rights.
- They also hamper the social and economic development of the city and the country.
  - Therefore, it is crucial to adopt a gender-responsive approach to urban planning that ensures equal opportunities and outcomes for all genders.



**What are the Related Initiatives?**

- **Atal Mission for Urban Rejuvenation and Urban Transformation (AMRUT)**
- **Pradhan Mantri Awas Yojana-Urban (PMAY-U)**
- **Climate Smart Cities Assessment Framework 2.0**
- **TULIP-The Urban Learning Internship Program**
- **Atmanirbhar Bharat Abhiyan (Self-Reliant India)**

**What are the Challenges of Gender Responsive Planning?**

- **Lack of Gender-Disaggregated Data:**
  - Many urban planners and decision-makers do not have access to reliable and relevant data that reflects the different **needs, preferences, and experiences of women and men** in the city.
    - This makes it difficult to identify and **address the gaps and inequalities** that affect women's access to urban opportunities and resources.
- **Lack of Diverse Participation:**
  - Women and other marginalized groups are often **excluded or underrepresented in urban planning and design processes.**

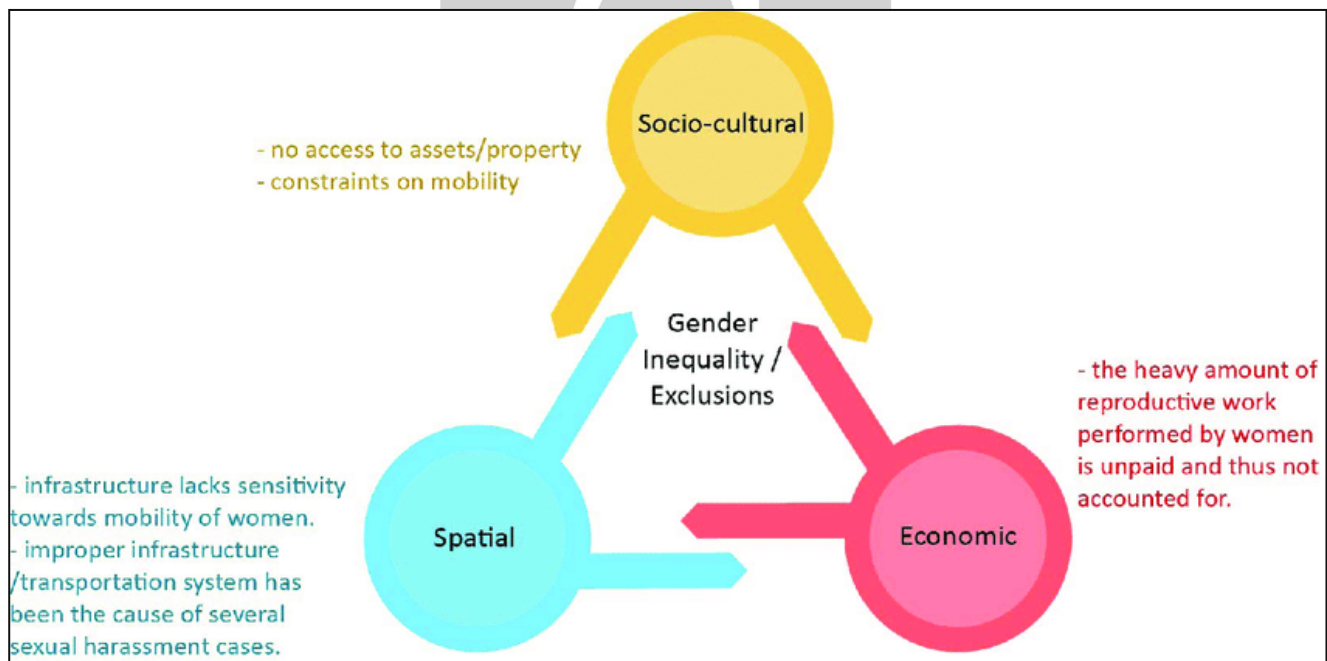
- Their voices and perspectives are not heard or valued in shaping the city.
- This leads to urban policies and programs that **do not reflect or respond to their realities and aspirations.**

➤ **Lack of Gender Awareness and Capacity:**

- Many urban practitioners, government authorities, and communities lack awareness of the importance of gender inclusion in urban planning and design.
- They also lack **the skills, tools, and resources to effectively implement gender-responsive strategies.**
  - This results in urban interventions that are **gender-blind or even gender-biased.**

➤ **Lack of Political Will and Commitment:**

- Gender-responsive urban planning **requires a strong political will and commitment** from all levels of governance and leadership.
- It also requires adequate **funding, coordination, monitoring, and evaluation mechanisms** to ensure its implementation and impact.
  - However, these are often lacking or insufficient in many contexts, especially where gender equality is not a priority or is met with resistance.

**How can Gender-Responsive Urban Planning be Implemented in India?**

- **Generating Gender-Disaggregated Data:**
  - Data is essential for understanding the situation and needs of different groups of people in the city.
  - However, most urban data is not disaggregated by gender or other relevant factors.
    - Therefore, it is important to **collect and analyze data** that reflects the diversity of

urban populations and their experiences. This can help identify gaps, challenges, priorities, and opportunities for gender-responsive interventions.

➤ **Engaging Diverse Stakeholders:**

- Gender-responsive urban planning **should be participatory and inclusive of all stakeholders**, especially those who are often marginalized or excluded from decision-making processes.

- This includes women and men from different backgrounds, ages, abilities, and identities.
- Their voices and perspectives should **inform the design, implementation, evaluation, and monitoring of urban policies** and programs.
- **Addressing Multiple Dimensions of Gender Inequality:**
  - Gender-responsive urban planning should address not only the physical aspects of the city but also the **social, economic, cultural, and political aspects** that affect people's lives.
    - This means tackling the root causes of gender inequality such as **patriarchal norms, stereotypes, discrimination, and violence**.
  - It also means promoting positive changes such as gender awareness, empowerment, and solidarity among urban communities.
- **Implementing Transformative Policies and Programs:**
  - Gender-responsive urban planning **should aim to create tangible changes** in the city that improve the quality of life for all genders.
  - This can **include policies and programs such as:**
    - Providing safe, affordable, accessible, and reliable public transport systems for women.
    - Building adequate, clean, and gender-sensitive public toilets for women.
    - Creating safe, inclusive, and vibrant public spaces for women.
    - Enhancing women's access to employment, education, health care, and social protection.
    - Supporting women's participation in urban governance, leadership, and civic engagement.
    - Preventing and responding to gender-based violence in public spaces.
    - Recognizing, reducing, redistributing, and rewarding unpaid care work.
- **Adopting Some Good Practices:**
  - The **Pink Bus initiative in Bhopal**, which provides free and safe bus services for women and girls.
  - The Gender Inclusive Cities Programme, which works with local governments and civil society organizations in **Delhi, Dar es Salaam, Petrozavodsk, and Rosario** to make public spaces safer and more inclusive for women.
  - The **Women-Friendly City Project in Seoul**, which aims to create a city that is comfortable, safe, and convenient for women through various measures such as gender budgeting, gender impact assessment, gender-sensitive design, and gender education.



## 4<sup>th</sup> Anniversary of Revocation of Article 370

*This editorial is based on **After abrogation of Article 370, there is no normalcy in Kashmir** which was published in Indian Express on 08/08/2023. This editorial discusses abrogation of Article 370, its effect on the ground and on the lives of people in Jammu and Kashmir.*

**Tag:** Indian Polity, GS Paper - 2, Federalism, Co-operative Federalism, Constitutional Amendments, Centre-State Relations.

On the 4<sup>th</sup> anniversary of the abrogation of the **article 370** of the **constitution of India**, which had provided temporary special status to the **erstwhile state of Jammu & Kashmir (now Union Territory of Jammu & Kashmir and Union Territory of Ladakh)**, the Union Home Minister argued that Article 370 had only led to corruption and secessionism, and its removal was very important to end terrorism in J&K.

### What is Article 370 of the Constitution of India?

- **About:** On October 17, 1949, Article 370 was added to the Indian constitution, as a 'temporary provision', which exempted Jammu & Kashmir, permitting it to draft its own Constitution and restricting the Indian Parliament's legislative powers in the state.
  - It was introduced into the draft constitution by N Gopalaswami Ayyangar as Article 306 A.
  - **Under Article 370:** The Constituent Assembly of Jammu & Kashmir was empowered to recommend which articles of the Indian Constitution should apply to the state,
  - The J&K Constituent Assembly was dissolved after it drafted the state's constitution. **Clause 3 of the article 370 gives the President of India the power to amend its provisions and scope.**
- **Article 35A stems from Article 370** and was introduced through a Presidential Order in 1954, on the recommendation of the J&K Constituent Assembly.
  - Article 35A empowers the Jammu & Kashmir legislature to define the permanent residents of the state, and their special rights and privileges.
- On 5<sup>th</sup> August 2019, President of India in the exercise of the powers conferred by Clause (1) of Article 370 of the Constitution had issued the Constitution (Application to Jammu and Kashmir) Order, 2019. Through this, the Government of India has made modifications in Article 370 itself (not revoked it).

## What are the Signs of Peace and Security in J&K After Abrogation of the Article?

- **Reduction in Stone Pelting and Militancy:**
  - **Increased security presence** and action by central agencies like **NIA** led to decrease in stone pelting.
  - **Decreased stone-pelting incidents:** 76 stone-pelting incidents in Jan-Jul 2021, down from 222 (2020) and 618 (2019) over the same period.
  - **Decline in injuries to security forces:** 64 (2019) to 10 (2021).
  - **Civilian injuries from pellet guns and baton charges reduced:** 339 (2019) to 25 (2021).
  - **Improved law and order in J&K:** Only 20 law and order incidents in 2022.

REDUCTION IN MILITANT ACTIVITY SINCE 2019				
	Acts of Terror	Deaths of civilians	Deaths of Security Personnel	Admission of Terrorists
2 October 2016-4 August 2019	959	137	267	459
5 August 2019-6 June 2022	654	118	127	394
% reduction	32%	14%	52%	14%

Source: MHA

- Arrests of Militants and over-ground workers (OGWs):
  - **Arrests of OGWs of militant groups increased** from 82 (2019) to 178 (2021).
  - **Decline in terrorism acts:** 32% decline in terrorism acts (Aug 2019-June 2022) compared to preceding 10 months.

## What are Developments Initiatives Taken in These Four Years?

- **Developments in the UT of J&K:**
- **Development Projects:**
  - The government has launched various development projects in J&K, such as road and rail connectivity, health and education infrastructure, tourism and heritage promotion, sports and youth empowerment, etc.
    - The government has sanctioned 54 projects under the Prime Minister's Development Package (PMDP) for J&K.
  - The government has also implemented various flagship schemes of the central government in J&K, such as **Ayushman Bharat**, **Ujjwala Yojana**, **PM Kisan Samman Nidhi**, **PM Awas Yojana**, etc.
    - Under the Ayushman Bharat scheme, more than 21 lakh beneficiaries have been registered and over 1.5 lakh have availed free treatment in J&K.
  - To showcase the potential of J&K as a destination for tourism and investment, the government

hosted the **G20 Tourism Working Group** meeting in Srinagar.

- This was the first significant international event in J&K to integrate the region with the rest of the country and world.
- The government has also hosted other business meetings in J&K to attract investment and promote industrial development.
  - In June 2022, the government also held a **Global Investors Summit in J&K**, which witnessed participation from more than 200 domestic and foreign companies.
  - The summit showcased various sectors and opportunities for investment in J&K, such as agriculture, horticulture, handicrafts, tourism, IT, renewable energy, etc.
- These events have demonstrated the government's commitment to boost the economy and livelihood of J&K. They have also helped to change the global perception of J&K as a conflict-ridden region and highlight its potential as a peaceful and prosperous destination.

### ➤ Political Reforms:

- **Restoring grassroots democracy:** The government has conducted the first-ever district development council (DDC) elections in J&K in December 2020, which saw a high voter turnout of 51.42%.
- The government has also amended the Jammu and Kashmir **Panchayati Raj** Act, 1989 to provide for reservation of seats for women, scheduled castes, scheduled tribes, and backward classes in panchayats.
- The government has also initiated the delimitation process for J&K to redraw the boundaries of assembly and parliamentary constituencies based on the latest census data.

### ➤ Security Measures:

- The security forces have eliminated more than 800 terrorists and arrested over 5,000 overground workers of terrorist outfits in the last four years.

### ➤ Developments in the UT of Ladakh:

- The development initiatives taken in the Union Territory of Ladakh after the abrogation of Article 370 to improve the infrastructure, education, health, employment, and governance of the region. Some of the major initiatives are:

### ➤ Infrastructure

- The government has accelerated the work on infrastructure projects like:
  - The **Zojila tunnel**, which will provide all-weather connectivity between Srinagar and Leh.

- The **Leh airport expansion**, which will increase the passenger capacity and facilitate more flights to and from Ladakh.
- The government has also improved the telecommunication network in Ladakh by laying **fibre-optic cables** and installing solar-powered towers to provide internet and mobile services to even the remotest villages.
- **Education**
  - Providing employment-oriented skill development training to more than 75,000 youths of Ladakh.
  - Establishing one new medical college, one engineering college, and one National Skill Training Institute in Ladakh.
- **Health**
  - Setting up two new AIIMS-like institutes in Leh and Kargil.
  - Launching a health insurance scheme for all residents of Ladakh under **Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY)**.
- **Employment**
  - Promoting tourism and adventure sports by easing travel restrictions and providing incentives to tourists and operators.
  - Developing organic farming and horticulture by providing subsidies and market linkages to farmers and cooperatives.
- **Governance**
  - Constituting a **Hill Council for Kargil district** to ensure local representation and autonomy.
  - Holding local elections for panchayats and urban local bodies to ensure grassroots democracy.

### **What are the Challenges**

#### **UTs of J&K and Ladakh are Still Facing?**

##### **Challenges Faced by UT of J&K:**

- **Challenges and Concerns:**
  - Rise in targeted killings, particularly of Kashmiri Hindus and non-Kashmiris (migrant laborers).
    - Over 50% of civilian killings since Aug 5, 2019, occurred in the last eight months.
  - Small weapons dropped by low-cost drones from across the border used in killings.
  - Crimes against women and children are on the rise.
- **Detentions and Suppression of Opinion:**
  - Over 5,000 people were detained to prevent protests against the abrogation actions of August 5 and 9, 2019.
  - Journalists and **human rights** defenders have been imprisoned for expressing dissenting opinions.

- **Resurgence of Militancy:**
  - Militancy has resurfaced in the Pir Panjal region, which had experienced a decline in the past 15 years.
  - Casualties among **CRPF troops** have risen significantly since 2019.
- **Suppression of Political Voices:**
  - Occasional house arrest of the leaders in J&K has been going on for several years in the name of peace and security, like the **anniversary of the revocation of the Article 370**.
    - Political leaders are denied permission to protest peacefully, and their offices are sealed.
  - Land alienation, cessation of cross-border trade, and the decline of local businesses are ongoing issues.
  - Legislative elections have been postponed for five years (since Abrogation of the Article).
- **Unemployment and Corruption:**
  - **Unemployment** is alarmingly high at 23.1%, well above the national average. While government job placements have occurred, a significant number of vacancies remain.

#### **Challenges Faced by UT of Ladakh:**

- **Border disputes:** Ladakh shares disputed borders with **Pakistan** and **China**. The violent clash between India and China in the **Galwan Valley in 2020** was volatile and unpredictable, posing a threat to the peace and security of Ladakh.
  - **Indian cattle herders face restrictions by Chinese forces near the Line of Actual Control (LAC)** in Ladakh until the resolution of the border dispute between India and China.
- **Development gap:** Ladakh lags behind other parts of India in terms of infrastructure, education, health, employment, and governance. The region suffers from poor connectivity, low literacy, high mortality, limited opportunities, and weak institutions.
- **Concerns Arise After UT Formation:**
- **Four-Point Agenda:** Leading organizations (Kargil Democratic Alliance and Ladakh Buddhist Association) demand four points for committee's mandate to the Union Government:
  - **Statehood for Ladakh** (need for an elected Assembly in the UT)
  - **Safeguards under the Sixth Schedule** of the Constitution to protect Ladakh's environment and indigenous rights
  - **Job reservations** for Ladakh's youth
  - Creation of **separate parliamentary constituencies** for Leh and Kargil.



### Sixth Schedule

- Article 244 provides for **Autonomous District Councils (ADCs)** with legislative and administrative autonomy.
- **ADC:** ADCs manage land, water, agriculture, policing, etc., with up to 30 members.
- **Current Application:** Applies to Northeastern states: Assam, Meghalaya, Mizoram, and Tripura.
- **Statehood demand:** The people of Ladakh have been demanding full statehood and feel that the UT status does not give them enough autonomy, representation and also fear demographic changes, land alienation, and cultural erosion.
- **Regional divide:** Leh (predominantly Buddhist) and Kargil (predominantly Muslim), the two districts with different religious, ethnic, linguistic compositions and different political affiliations and aspirations as well.
- **Cultural identity:** The people of Ladakh have a distinct cultural identity that is influenced by Tibetan, Balti, Dardic, Mongoloid, and Indo-Aryan elements. They have their own languages, scripts, customs, festivals, arts, and crafts. They want to preserve and promote their cultural heritage in the face of modernization and globalization.
- **Local protest:** Sonam Wangchuk, a Ladakhi engineer and educator, protests for greater autonomy and regional demands. He accused LG of Ladakh for preferring J&K status.
  - **Sonam Wangchuk:**
    - **Founding SECMOL:** Co-founder of Students' Educational and Cultural Movement of Ladakh (SECMOL).
    - **Ice Stupa Inventor:** Creator of Ice Stupas, water storage structures made of ice.
    - **Ramon Magsaysay Awardee:** Awarded in 2018 for reforming learning systems and community engagement.

### What Should be the Way Forward?

- **Navigating Post-Abrogation Landscape in Jammu and Kashmir and Ladakh:**
- **Restoring Normalcy and Trust:**
  - Restore normalcy for trust-building.
  - Release political detainees, foster dialogue, engage local leaders.
- **Inclusive Governance and Participation:**
  - Inclusive governance for diverse aspirations.
  - Prompt local elections, empower through political platforms.
- **Economic Development and Investment:**
  - Focus on economic growth via infrastructure, tourism, tech.
  - **Special economic zones**, incentives, SME support.

- **Strengthening Security and Peace:**
    - Ensure security, stability for development.
    - Counter insurgency, strengthen local law enforcement.
  - **Respecting Cultural Diversity:**
    - Acknowledge and respect cultural differences.
    - Preserve culture, balance regional interests.
  - **Infrastructure and Connectivity:**
    - Develop connectivity for trade, tourism.
    - Boost digital infrastructure, education, business.
  - **International Diplomacy:**
    - Manage external perceptions with a clear stance.
    - Address border disputes, engage with neighbors.
- A multi-pronged approach is needed for a successful transition, combining economic growth, inclusive governance, security, cultural preservation, and effective diplomacy, ensuring a brighter future for the region's citizens while upholding its integrity.

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## Technology in Indian Agriculture

*This editorial is based on **Seeds for growth** which was published in The Indian Express on 10/08/2023. It talks about the use of technology to boost Indian agriculture.*

**Tag:** Agriculture, GS Paper-3, Irrigation, Agriculture Marketing, E-Technology in the Aid of Farmers

Agriculture and allied sectors are central to the Indian economy. Keeping this and a sustainable future in mind, the Indian government, quite rightly, is **promoting technology-enabled sustainable farming**, including natural, regenerative and organic systems, **during its G20 presidency**.

However, India still faces many challenges and opportunities in its agricultural sector, such as meeting the **demand and affordability of some crops, improving the productivity**, quality and nutrition of its agricultural produce, reducing the cost of production and the environmental impact of farming, and coping with climate change and its effects on agriculture. This can be done by adopting seed technology.

India has a rich history and tradition of seed technology, dating back to the 1960s when the **National Seeds Corporation** was established. Since then, India has made **significant progress in developing and adopting various seed technologies**, such as hybridization, tissue culture, molecular markers, transgenics, etc.

Seed technology refers to the science and art of improving the genetic and physiological quality of seeds to enhance their performance under different cultivation conditions. Seed technology can offer significant advantages for sustainable agriculture at little additional cost. The size of the Indian seed market has reached an estimated in between \$ 4.0 to 6.0 billion with untapped potential to be the seed hub for G20 countries.

### Why is Seed Technology Important for Indian Agriculture?

#### ➤ Higher Productivity:

- Seed technology can increase the yield potential of crops by developing improved varieties that have desirable traits, such as high grain or fruit quality, resistance to pests and diseases, tolerance to drought or salinity, etc.
- Seed technology can also improve the germination rate, seedling vigour, and plant establishment of seeds by using priming or physiological advancement protocols.

#### ➤ Higher Input Use Efficiency:

- Seed technology can reduce the amount and cost of inputs such as fertilizers, pesticides, and water by using film coating, pelleting, or seed treatments that can deliver these inputs directly to the seeds or plants in optimal doses.
- Seed technology can also enhance the nutrient uptake and utilization of plants by using bio-stimulants and nutrients that can stimulate plant growth and metabolism.

#### ➤ Higher Resilience:

- Seed technology can improve the adaptability and stability of crops under changing and unpredictable climatic conditions by using genetic manipulation, speed breeding, gene-editing tools, or AI-responsive sensors or substances that can modulate plant responses to external stimuli.
- Seed technology can also improve the diversity and health of crops by using biologicals or microbial inoculum that can enhance plant immunity and soil fertility.

### What are Some Examples of Seed Technologies in Use or Development in India?

#### ➤ Millet Seeds:

- Millets are nutrient-rich, hardy and short-cycle crops that are well-suited for sustainable agriculture.
  - India is the global leader in millet production and has the potential to capture the global seed market by producing quality-assured seeds of improved varieties of millets, especially minor millets.

- India has developed several high-yielding and climate-resilient varieties of millets using conventional breeding and molecular techniques.

- India has also introduced priming and film coating technologies for millet seeds to improve their germination, emergence, uniformity, and protection.

#### ➤ Cotton Seeds:

- Cotton is one of the most important cash crops in India and a major source of income for millions of farmers.
  - India has achieved remarkable success in cotton production by introducing Bt cotton hybrids in 2002.
  - Bt cotton is a transgenic crop that expresses a gene from a soil bacterium called *Bacillus thuringiensis* (Bt) that produces a protein that kills certain insect pests.
  - Bt cotton has increased cotton yield by reducing pest damage and pesticide use.
- India has also developed several new varieties of cotton using molecular breeding and gene-editing tools that have improved traits such as fibre quality, drought tolerance, herbicide resistance, etc.

#### ➤ Vegetable Seeds:

- India has a diverse range of vegetable crops that require different types of seeds.
- India has developed many improved varieties and hybrids of vegetables using conventional breeding and biotechnology methods.
- India has also introduced various seed enhancement technologies for vegetable seeds such as film coating, pelleting, priming, bio-stimulants, nutrients, biologicals, etc., to improve their quality and performance.

**GM CROPS IN INDIA  
A PRIMER**

**What is a GM crop?**

A crop which has a gene artificially inserted into it from another species, even unrelated, to give it some desired properties. GM crops are mostly either pest-resistant or herbicide-tolerant

**When did India get its first GM crop?**

The first GM crop variety approved for commercialisation was Bt cotton. Bollgard-I, which provided immunity against the pink bollworm and developed by Monsanto, was given the go ahead in 2002. Monsanto released Bollgard-II in 2006. India has become the world's largest producer of cotton partly due to Bt cotton, which accounts for over 90% of the total cotton acreage in the country

**Are there other GM crops in India?**

No, the government has not approved commercial cultivation of other GM crops, though efforts have been made for brinjal and mustard

### What are Some of the Policies and Regulations that Support Seed Technology in India?

- **Protection of Plant Varieties & Farmers Rights Act (PPV&FR Act), 2001:**

- This act **provides intellectual property rights protection to plant breeders** and farmers for their varieties and innovations.
- It also encourages the conservation and sustainable use of plant genetic resources.
- **Seeds Act, 1966 and Seeds Rules, 1968:**
  - These acts and rules **regulate the quality control and certification of seeds** in India. They also prescribe the standards and procedures for seed testing, labeling, and marketing.
- **Fertiliser (Inorganic, Organic or Mixed) (Control) Amendment Order, 2021:**
  - This order amends the Fertiliser (Inorganic, Organic or Mixed) (Control Order, 1985 to include **bio-stimulants as a category of fertilizers**.
    - Bio-stimulants are substances or microorganisms that enhance plant growth and development.
    - This order will facilitate the **registration and use of bio-stimulants in India**.

### ***What are the Challenges of Indian Agriculture?***

- **Uncertainty in Water Supply:**
  - Agriculture in India is **largely dependent on monsoon rains, which are often erratic, unreliable, and insufficient**.
    - As a result, production of food grains and other crops fluctuates year after year.
    - A year of abundant output is often followed by a year of acute shortage.
  - Moreover, **only one-third of the cropped area in India is under irrigation**, and the irrigation **infrastructure is often inadequate, inefficient, and poorly maintained**.
  - Water **scarcity and drought are major threats to Indian agriculture**, especially in the semi-arid and arid regions.
- **Lack of Remunerative Income:**
  - The majority of farmers in India **practice subsistence farming**, which means they grow crops mainly for their own consumption and **have little or no surplus to sell in the market**.
    - The prices of agricultural produce are **often low and volatile**, and do not cover the cost of production.
    - The farmers also **face exploitation by middlemen, traders, and moneylenders**, who charge high interest rates and commissions.
  - The farmers have **limited access to formal credit and insurance**, which makes them vulnerable to debt traps and crop failures.

- The farmers also **lack bargaining power and collective action** to demand fair prices and policies.
- **Fragmentation of Land Holdings:**
  - Due to the **growth of population and breakdown of the joint family system**, there has been a continuous **subdivision of agricultural land into smaller and smaller plots**.
    - The **average size of land holdings in India is less than 2 hectares**, and **about 86% of the farmers are small and marginal farmers** who own less than 2 hectares of land.
  - Fragmentation of land holdings reduces the efficiency and productivity of farming, as well as the scope for mechanization and diversification.
  - It also **increases the cost of cultivation and management**.
- **Lack of Access to Quality Seeds and Inputs:**
  - Seeds are the most **critical input in agriculture**, as they determine the yield potential and quality of crops.
  - However, many farmers in India **do not have access to quality seeds of improved varieties that have desirable traits such as high yield**, resistance to pests and diseases, tolerance to drought or salinity, etc.
    - The **seed replacement rate (SRR)**, which is the percentage of area sown with certified seeds out of the total area sown with that crop, **is low for many crops in India**.
    - **For example**, the SRR for **rice is only 39.8%**, while for **wheat it is 40.3%**.
  - The farmers also lack access to other inputs such as fertilizers, pesticides, bio-stimulants, nutrients, etc., which can enhance the performance of seeds under different cultivation conditions.
- **Lack of Mechanization and Modernization:**
  - Little or no use of machines is made in **ploughing, sowing, irrigating, weeding, harvesting, threshing and transporting the crops**.
    - Lack of mechanization reduces the efficiency and productivity of farming, as well as increases drudgery and labour cost.
  - Moreover, many farmers are not aware or trained in using **modern technologies such as precision agriculture, biotechnology, digital agriculture**, etc., which can improve the quality and quantity of agricultural produce.
- **Lack of Allied Infrastructure:**
  - The farmers in India also face challenges due to the lack of allied infrastructure **such as market access, storage facilities, processing units,**



**transport networks, etc.**, which can add value to their produce and increase their income.

- The farmers **often have to sell their produce at low prices** due to lack of market information, competition, regulation, etc.
  - The farmers also **suffer from post-harvest losses** due to lack of proper storage facilities that can preserve their produce from spoilage and damage.
- The farmers also have **limited opportunities to process their produce** into value-added products that can fetch higher prices in the market.
- The farmers also face **difficulties in transporting their produce from farm to market due to poor road connectivity** and high transportation cost.

### What Should be the Way Forward?

#### ➤ Maximizing Income, Minimizing Risk:

- Farmers need to be **empowered to make informed choices about their crops, markets, inputs, technologies, and organizational forms**.
- They also need to be protected from **price volatility, climate shocks, pests and diseases, and other uncertainties**.
- This can be achieved by strengthening the existing institutions and mechanisms such as **Minimum Support Price (MSP), crop insurance, extension services, cooperatives, etc.**, as well as creating new ones such as **contract farming, e-NAM, farmer producer organizations, etc.**

#### ➤ Liberalized Farming:

- Farmers must be made free to determine the **best mix of resources, land, inputs, technology, and organizational forms for their farms**.
  - They must also have access to **diverse and competitive markets** for their produce, both within and outside the country.
- This can be facilitated by **removing the barriers and distortions that hinder the free flow of agricultural goods and services**, such as restrictive trade policies, excessive regulations, inefficient intermediaries, etc.
  - This can also be **supported by creating an enabling environment for private sector investment and innovation** in agriculture.

#### ➤ Sustainable Farming:

- Farmers must be **encouraged and incentivised to adopt sustainable farming practices that conserve natural resources**, enhance soil health, reduce greenhouse gas emissions, and improve biodiversity.

- This can be done by promoting **agro-ecological approaches such as organic farming, integrated pest management, agroforestry, etc.**, as well as adopting new technologies such as precision agriculture, biotechnology, digital agriculture, etc.
- This can also be aided by creating awareness and demand for sustainable agricultural products among consumers and retailers.



## India's Economy Challenges

*This editorial is based on **India needs a new economic policy** which was published in The Hindu on 12/08/2023. It talks about the challenges of the Indian economy.*

**Tag:** Indian Economy, GS Paper-3, Planning, Mobilization of Resources, Liberalization, Globalization

India is a **large and complex economy** that faces many challenges and opportunities in its quest for growth and development. The country has undertaken various reforms to address its challenges and leverage its opportunities. India is one of the **fastest-growing economies in the world**, with a population of over **1.3 billion** and a **GDP of over \$2.7 trillion**. However, the country also faces many economic challenges and has undertaken various reforms to address them. India has the potential to become a global leader in the 21st century if it can overcome its economic challenges and sustain its economic reforms.

### What are the Economic Challenges in India?

#### ➤ Weak Demand:

- The demand for goods and services in India has been **stagnant or declining due to various factors**, such as **low income growth, high inflation, unemployment**, and the impact of the **Covid-19 pandemic**.
- This has **affected the consumption and investment levels** in the economy, and **reduced the tax revenue for the government**.

#### ➤ Unemployment:

- Despite rapid economic growth, unemployment remains a serious issue in both rural and urban areas.
- The Covid-19 pandemic has worsened the situation, **as many businesses have shut down or reduced their operations**, leading to job losses.
- According to the **Centre for Monitoring Indian Economy (CMIE)**, over **1.8 crore** salaried jobs were **lost between April and July 2020**.



- The **unemployment rate was 7.4% in August 2020**, compared to 5.4% in August 2019.
- According to the **National Statistical Office's (NSO) Periodic Labour Force Survey (PLFS) report** for the year **2021-22**, the unemployment rate for **2021-22 was 4.1%**.

#### ➤ **Poor Infrastructure:**

- India lacks adequate infrastructure, such as roads, railways, ports, power, water, and sanitation, which hampers its economic development and competitiveness.
- According to the **World Bank**, India's **infrastructure gap is estimated to be around \$1.5 trillion**. Poor infrastructure also affects the quality of life and health of the people, especially in rural areas.

#### ➤ **Balance of Payments Deterioration:**

- India has been running a **persistent current account deficit**, which means that its imports exceed its exports.
- This reflects its dependence on foreign goods and services, especially oil and gold, and its low export competitiveness.
  - India's **exports and imports decreased by 6.59% and 3.63%**, respectively, in 2022.

#### ➤ **High Levels of Private Debt:**

- India has witnessed a **surge in private debt**, especially in the corporate and household sectors, due to easy credit availability and low interest rates.
- However, this **also poses a risk of default and financial instability**, especially if the income growth slows down or interest rates rise.
  - According to the **Reserve Bank of India (RBI)**, the total non-financial sector debt was 167% of GDP in March 2020, up from 151% in March 2016.

#### ➤ **Inequality:**

- India has a high level of income and wealth inequality, which has increased over time.
- According to the **World Inequality Database**, the top 10% of income earners accounted for 56% of national income in 2019, up from 37% in 1980.
  - Similarly, the **top 10% of wealth holders owned 77% of total wealth in 2019**, up from 66% in 2000.
  - High inequality can lead to social unrest, political instability, and lower economic growth.

### **What Economic Reforms are Taken in India?**

#### ➤ **Liberalization:**

- India started its **process of liberalization in 1991**, when it faced a **balance of payments crisis** and had to seek **International Monetary Fund (IMF)** assistance.

- The reforms aimed at reducing government intervention and regulation in various sectors of the economy, such as industry, trade, finance, and foreign investment.

- The reforms also involved **dismantling the license-permit-quota system**, which restricted entry and expansion of private firms.

- Liberalization has **helped India achieve higher growth rates and integrate** with the global economy.

#### ➤ **Privatization:**

- India has also pursued privatization of public sector enterprises (PSEs), which are owned or controlled by the government.
- The objectives of privatization are to **improve efficiency, profitability, and competitiveness of PSEs; reduce fiscal burden; and generate resources for development**.

- Privatization can take various forms, such as **disinvestment** (selling shares to private investors), strategic sale (transferring management control to private buyers), or closure (shutting down loss-making units).
- Since 1991, India has privatized over 60 PSEs, **raising over Rs 3 lakh crore**.

#### ➤ **Globalization:**

- India has also embraced globalization, which means increasing its openness and integration with the world economy.
- Globalization involves increasing trade flows (exports and imports), capital flows (foreign direct investment and portfolio investment), technology transfers (patents and licenses), and migration flows (workers and students).
- Globalization can bring benefits such as access to new markets, cheaper inputs, foreign exchange, technology, and skills. However, it can also pose challenges such as competition, volatility, dependence, and inequality.

#### ➤ **New Economic Policy:**

- India announced a **new economic policy in 2020**, in response to the Covid-19 pandemic and its impact on the economy.
- The policy consists of a **stimulus package of Rs 20 lakh crore**, equivalent to **10% of GDP**, to support various sectors and segments of the economy.
- The policy also includes a series of reforms in areas such as agriculture, labor, education, health, defence, mining, power, and taxation.
  - The policy aims to make India self-reliant (Atmanirbhar) and resilient in the post-Covid world.

➤ **Insolvency and Bankruptcy Code (IBC):**

- It provides a time-bound and market-based mechanism for resolving insolvency and bankruptcy cases of corporate debtors, financial creditors, and operational creditors.
- It aims to maximize the value of assets, promote entrepreneurship, and improve the ease of doing business.
  - According to a report by the **Insolvency and Bankruptcy Board of India (IBBI)**, as of 2021, **4,541 corporate insolvency resolution processes** have been initiated under the IBC, **out of which 2,029 have been closed by resolution, liquidation, or withdrawal**.

➤ **Labour Codes:**

- These are **four codes that aim to consolidate and simplify central labor laws** into four broad categories: **wages, industrial relations, social security, and occupational safety and health**.
- The codes **seek to provide flexibility to employers in hiring and firing workers, streamline the process of registration** and compliance for businesses, extend social security benefits to informal workers, and enhance the role of trade unions and collective bargaining.

➤ **Production-linked Incentive (PLI) Scheme:**

- India launched a PLI scheme in 2020, to boost manufacturing and exports in key sectors, such as automobiles, electronics, pharmaceuticals, textiles, and renewable energy.
- The scheme offers financial incentives to eligible manufacturers based on their incremental sales and investment over a period of five years.
  - The scheme has a **total outlay of Rs 1.46 lakh crore**, and is expected to create jobs, attract foreign investment, enhance competitiveness, and reduce import dependence.

### ***What are Some Suggestions to Overcome the Economic Challenges?***

➤ **Boosting Consumption and Investment Demand:**

- The government should **provide direct fiscal stimulus to the sectors and segments of the economy** that have been hit hard by the pandemic, such as MSMEs, informal workers, rural households, and low-income groups.
- The stimulus should **aim at increasing their income, purchasing power, and access to credit**.
- The government should also invest in public infrastructure, health, education, and social protection, which can **create jobs, improve productivity, and enhance human capital**.

➤ **Enhancing Export Competitiveness:**

- The government should promote export-oriented sectors, such as manufacturing, services, and agriculture, by **providing incentives, subsidies, tax breaks, and infrastructure support**.
- The government should also pursue trade agreements with strategic partners, such as the US, the EU, Japan, and **ASEAN**, to access new markets and diversify its export basket.
- The government should also address the issues of **quality standards, logistics costs, and trade facilitation** that hamper India's export performance.

➤ **Reforming the Financial Sector:**

- The government should strengthen the financial sector by resolving the problem of **non-performing assets (NPAs)**, **recapitalizing public sector banks, improving governance and regulation, and encouraging financial inclusion and innovation**.
- The government should also develop the **bond market, the insurance market, and the pension market**, which can provide long-term finance for infrastructure and social security for the elderly.

➤ **Improving the Business Environment:**

- The government should **simplify the regulatory framework for doing business in India by reducing red tape, corruption, and policy uncertainty**.
  - The government should also implement the reforms in labour laws, land acquisition laws, contract enforcement laws, and bankruptcy laws that can improve the flexibility and efficiency of the labour market, the land market, the credit market, and the legal system.

➤ **Fostering Innovation and Entrepreneurship:**

- The government should foster a culture of innovation and entrepreneurship in India by supporting **research and development, science and technology, startups, and incubators**.
- The government should also facilitate collaboration between academia, industry, and government to create an ecosystem that can generate new ideas, products, processes, and solutions.
- The government should also **protect intellectual property rights** and incentivize patenting and licensing.

➤ **Addressing Inequality and Poverty:**

- The government should address **inequality and poverty in India by implementing progressive taxation policies that can redistribute income and wealth from the rich to the poor**.
- The government should also **expand the coverage and quality of social welfare schemes that can**

provide basic income support, food security, health insurance, education scholarships, housing subsidies, and skill development to the poor and vulnerable sections of society.

- The government should also **empower women, minorities, dalits, tribals, and other marginalized groups** by ensuring their equal rights, opportunities, and participation in economic activities.
- **Mitigating Climate Change and Environmental Degradation:**
  - The government should mitigate climate change and environmental degradation in India by adopting green policies that can **reduce greenhouse gas emissions (GHGs)**, promote **renewable energy sources**, **enhance energy efficiency**, **conserve natural resources**, protect biodiversity, and improve waste management.
  - The government should also implement adaptation measures that can increase resilience to climate shocks such as floods, droughts, cyclones, heat waves etc.

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## Women Farmers & Climate Challenges

*This editorial is based on “Climate change and women in agriculture: Navigating challenges and fostering resilience” which was published in Financial Express on 15/08/2023. It talks about the significance of women in the agriculture sector and the challenges that they face due to climate change impacts.*

**Tag:** Social Justice, GS Paper 2, Welfare Schemes, Issues Related to Women, Government Policies & Interventions, GS Paper 3

**Climate change**, characterised by **escalating temperatures, shifting weather patterns, and heightened extreme events**, poses a significant threat to various sectors, with **agriculture being the most vulnerable**. As these impacts intensify, it becomes essential to analyse how marginalised groups are affected, particularly focusing on **women involved in agriculture**.

There exists an **intricate connection between climate change and women's roles, responsibilities, and livelihoods in the agriculture sector** with significant economic and social hardships arising out of this issue.

This article highlights the urgency of investigating these challenges from changing weather patterns and extreme events, discussing cultural impacts on gender roles, examining adaptive strategies and addressing gender-specific repercussions within agricultural adaptation efforts.

## How Significant is the Role of Women in Agriculture?

- **Percentage and Role of Women Agri-workers:** Women constitute a significant force in global agriculture, accounting for around **43% of agricultural labourers**. In countries like India, where subsistence farming is prominent, **women constitute 33% of the workforce and nearly half of self-employed farmers**.
  - About **18% of the farm families in India**, according to NSSO Reports, are **headed by women**.
- **Increasing Feminisation of Agriculture:** The increasing migration of rural men in search of better job opportunities has led to the **feminisation of the agriculture sector**, with the participation of women in agriculture and allied activities becoming more significant.
  - Women are actively engaged in cultivating crops, from planting and tending to harvesting and post-harvest activities like threshing, cleaning, processing, and storing crops.
  - Their roles go beyond just **crop cultivation and livestock rearing to food processing and marketing**.
- **Women and Traditional Knowledge:** Women are repositories of traditional agricultural knowledge and practices. They often **pass down skills related to farming, herbal medicine, and resource management** through generations.
  - They often possess traditional **knowledge about local crop varieties and agricultural practices** and play a **crucial role in minimising post-harvest losses and ensuring the quality of harvested produce**.
- **Women as Drivers of Innovation and Sustainability:** Women contribute to the development and adoption of innovative farming techniques and strategies, driven by their **close connection to the land and their ability to adapt to changing conditions**.
  - Women's roles in agriculture often **align with sustainable and regenerative practices**, as they tend to prioritise the long-term well-being of their families and communities.

**Note:** Recognizing the critical role of women in agriculture, the Ministry of Agriculture and Farmers Welfare has declared **15<sup>th</sup> October of every year as Women Farmer's Day**.

### Mahila Kisan Sashaktikaran Pariyojana (MKSP):

- MKSP is a sub component of the **Deendayal Antyodaya Yojana-NRLM (DAY-NRLM)** which seeks to **improve the present status of women in Agriculture**, and to enhance the opportunities available to empower them.

- MKSP recognizes the identity of “Mahila” as “Kisan” and strives to build the capacity of women in the domain of agro-ecologically sustainable practices.
- Its vision is to reach out to the poorest of poor households and **expand the portfolio of activities currently handled by the Mahila Kisan.**

### **How does Climate Change Affect Women Farmers?**

- **Extreme Events disrupt On-Farm Operations:** Changing weather patterns and extreme events deeply impact women’s roles in agriculture. **Variable rainfall and prolonged droughts lead to reduced crop yields**, jeopardising food security for farming-dependent households.
  - Women have **traditionally been integral to on-farm operations** and are often responsible for tending to crops and managing household food supply and **consequently bear the brunt of these disruptions.**
- **Economic Implications:** The economic implications of climate change for women in agriculture are substantial.
  - Floods and extreme weather events can devastate crops and infrastructure, compelling women to prioritise family care and alternative income generation.
  - **Diminished crop yields** due to extreme weather events translate to **reduced incomes**, further **exacerbating existing gender inequalities.**
- **More Vulnerable due to Lack of Resources:** Cultural norms and **discriminatory practices hinder women’s access to land ownership**, a critical asset in agriculture.
  - Women’s lack of control over assets **restricts their access to credit, loans, and insurance**, rendering them **vulnerable to climate-induced losses.**
  - According to the **UN FAO**, if women had the same access to productive resources as men, they could **increase yields on their farms by 20-30%**
- **Water Scarcity and Access:** Women are primary users of water for domestic purposes and irrigation in many communities. Water scarcity, a climate change consequence, **disproportionately affects women who often bear the responsibility of water collection.**
  - Moreover, limited water availability can reduce agricultural productivity, impacting both food security and income.
- **Vulnerability to Health Risks:** Extreme weather events and changing disease patterns associated with climate change can lead to health risks for women working in agriculture.
  - Exposure to harsh weather conditions during farming activities can result in **heat stress or other weather-related health issues.**

- Increased health risks can disproportionately **affect pregnant women** and young children, for whom **women are often the primary caregivers.**

### **What can be Done to Support Women Farmers in Response to Climate Change?**

- **Adaptive Strategies for Women Farmers:**
  - To navigate climate-related challenges, women farmers should be **encouraged to adopt adaptive strategies, including income diversification** and cultivating **climate-resilient crops.**
  - Offering **training programs to help women develop new skills** that align with emerging economic opportunities will enhance their resilience in the face of the evolving agricultural landscape.
- **Training, Capacity Building and Weather Information:**
  - Providing women farmers with **training in climate-resilient farming techniques**, such as **agroforestry**, crop diversification, water-efficient irrigation, and soil conservation practices.
  - Also, ensuring that **women farmers have access to timely and accurate weather forecasts** to help them make informed decisions about planting and harvesting.
- **Financial Inclusion:**
  - Another prudent approach would be providing women with **access to microfinance services and insurance products that cover climate-related risks**, ensuring they have the financial capacity to adapt and recover from climate shocks.
  - Establishing women’s savings groups that serve as **safety nets during times of crop failure or economic stress.**
- **Access to Resources:**
  - Facilitating **women’s access to climate-resilient crop varieties** that are suited to changing climate conditions, emphasising traditional and indigenous knowledge.
  - Enhancing **women’s access to water-saving technologies and efficient irrigation methods to cope with water scarcity** caused by climate change.
- **Role of Policymakers in Resource Availability:**
  - Governments and organizations must **ensure equal resource access, credit availability, and decision-making power** for women.
  - **Land tenure reforms that prioritise women’s rights** and insurance mechanisms tailored to their needs can bolster resilience against climate-induced risks.
- **Social Security:**
  - Ensuring adequate **social cover for all women who work in agriculture** is another indispensable factor in **modern sustainable farming.**



- A **social security** blanket would ensure that women have a robust support system to juggle household responsibilities, child-rearing, and financial burdens while also managing work.

### Conclusion

It is imperative to adopt gender-responsive strategies to address the specific needs of women in agriculture. This includes ensuring access to resources such as credit, training, and technology, enhancing women's participation in decision-making processes, and developing policies that promote equitable adaptation and resilience-building efforts.

Recognizing and addressing the differential impacts of climate change on women in the agriculture sector is crucial for building more sustainable and resilient agricultural systems.



## Reforming Country's Criminal Justice System

*This editorial is based on **Sedition 'repealed', death penalty for mob lynching: the new Bills to overhaul criminal laws** which was published in The Hindu on 11/08/2023. It talks about the need of overhauling of the country's criminal justice system.*

**Tag:** Polity, GS Paper-2, Constitutional Amendments, Parliament.

Recently the Union Home Minister introduced three new Bills in the Lok Sabha that propose a complete overhaul of the country's criminal justice system. The three Bills are:

- The Bharatiya Nyay Sanhita Bill, 2023, which will replace the **IPC, 1860**
- The Bhartiya Nagrik Suraksha Sanhita Bill, 2023, which will replace the **CrPC, 1898**
- The Bharatiya Sakshya Bill, 2023, which will replace the **Evidence Act, 1872**

### Note:

- Indian Penal Code (IPC) is the official criminal code of India drafted in 1860 in the wake of the first law commission established in 1834 under the Charter Act of 1833.
- Code of Criminal Procedure (CrPC) provides procedures for administering criminal law in India. It was enacted in 1973 and became effective on 1 April 1974.
- The Indian Evidence Act, originally passed in India by the Imperial Legislative Council in 1872, during the British Raj, contains a set of rules and allied issues governing admissibility of evidence in the Indian courts of law.

### What is the Criminal Justice System?

- The criminal justice system is the set of laws, processes, and institutions that aim to prevent, detect, prosecute, and punish crimes, while ensuring the rights and safety of all people.
- It includes institutions like police forces, judicial institutions, legislative bodies, and other supportive organizations like forensic and investigation agencies.

### What are the Proposed

### Changes in India's Criminal Justice System?

- **Proposed Changes in the Bharatiya Nyay Sanhita Bill, 2023:**
  - The bill defines **terrorism** and offenses such as **separatism, armed rebellion** against the government, challenging the sovereignty of the country, which were earlier mentioned under different provisions of law.
  - It **repeals the offense of sedition**, which was widely criticized as a colonial relic that curbed free speech and dissent.
  - It prescribes **capital punishment** as the maximum sentence for mob lynching, which has been a menace in recent years.
  - It proposes **10 years imprisonment for sexual intercourse with women on false promise of marriage**, which is a common form of deception and exploitation.
  - The bill introduces **community service as a form of punishment for specific crimes**, which can help in reforming offenders and reducing overcrowding in prisons.
  - The bill fixes a **maximum limit of 180 days to file a charge sheet**, which can speed up the trial process and prevent indefinite delays.
- **Proposed Changes in the Bhartiya Nagrik Suraksha Sanhita Bill, 2023:**
  - It promotes the **use of technology for trials, appeals, and recording depositions**, allowing video-conferencing for proceedings.
    - The bill makes **video-recording of statement of survivors of sexual violence compulsory**, which can help in preserving evidence and preventing coercion or manipulation.
  - The bill mandates that **police must inform about the status of a complaint in 90 days**, which can enhance accountability and transparency.
  - **Section 41A of the CrPC will be renumbered as Section 35.** This change includes an added safeguard, stipulating that **no arrest can be made without prior approval from an officer at least at the rank of**

**Deputy Superintendent of Police (DSP)**, especially for offenses punishable by less than **3 years or for individuals above 60 years**.

- The bill requires that **police consult the victim before withdrawing a case punishable by seven years or more**, which can ensure that justice is not compromised or denied.
- It allows absconding criminals to be **tried in-absentia by court** and sentenced too, which can deter fugitives from escaping justice.
- It empowers magistrates to take **cognizance of offenses based on electronic records such as emails, SMSs, WhatsApp messages etc.**, which can facilitate evidence collection and verification.
- Mercy petitions in death sentence cases to be filed **within 30 days to the Governor and within 60 days to the President**.
  - No appeal shall lie against the President's decision in any court.

### ***Proposed Changes in Bharatiya Sakshya Bill, 2023:***

- The bill defines **electronic evidence as any information generated or transmitted by any device or system that is capable of being stored or retrieved** by any means.
- It lays down specific criteria for **admissibility of electronic evidence such as authenticity, integrity, reliability etc.**, which can prevent misuse or tampering of digital data.
- It provides for special provisions for **admissibility of DNA evidence such as consent, chain of custody etc.**, which can enhance accuracy and reliability of biological evidence.
- It recognises **expert opinion as a form of evidence such as medical opinion, handwriting analysis etc.**, which can assist in establishing facts or circumstances relevant to a case.
- It introduces the **presumption of innocence as a fundamental principle of the criminal justice system**, which means that every person accused of an offense is presumed to be innocent until proven guilty beyond reasonable doubt.

### ***What are the Issues in the Current Criminal Justice System of India?***

- **Pendency of Cases:** According to the National Judicial Data Grid, there are over 4.7 crore cases pending in Indian courts across different levels of the judiciary. This leads to delays in justice delivery, violation of the right to speedy trial, and loss of public trust in the system.

- **Lack of Resources and Infrastructure:** The criminal justice system suffers from inadequate funding, manpower, and facilities. There is a shortage of judges, prosecutors, police personnel, forensic experts, and legal aid lawyers.
  - For a country of 135 million, there are only 21 judges per million population (as of February 2023).
  - There are almost **400 vacancies in the high courts**. And around **35% of the posts are lying vacant in the lower judiciary**.
- **Poor Quality of Investigation and Prosecution:** The investigation and prosecution agencies often fail to conduct thorough, impartial, and professional investigations. They face interference from political and other influences, corruption, and lack of accountability.
- **Human Rights Violations:** The criminal justice system is often accused of violating the human rights of the accused, victims, witnesses, and other stakeholders. There are instances of custodial torture, extrajudicial killings, false arrests, illegal detentions, coerced confessions, unfair trials, and harsh punishments.
- **Outdated Laws and Procedures:** The criminal justice system is based on laws and procedures that were enacted by the British in 1860. These laws are archaic and not in tune with contemporary times. They do not address new forms of crimes such as cybercrime, terrorism, organised crime, mob lynching, etc.
- **Public Perception:** The **Second ARC** has noted that police-public relations are unsatisfactory in India because people view the police as corrupt, inefficient, and unresponsive, and often hesitate to contact them.

### ***What are Committees' and Their Recommendations to Reform the Criminal Justice System of India?***

- **Vohra Committee, 1993:** To deal with the increasing problem of criminalisation of politics and nexus between politicians, bureaucrats, criminals, and anti-social elements.
  - It recommended that an institution be set up to effectively deal with this menace by collecting intelligence from various sources and taking appropriate action against such elements.
- **Malimath Committee, 2003:** To revamp the criminal justice system, it made recommendations covering various aspects. Some of the key recommendations were:
  - Introducing a new category of offences called '**social welfare offences**' for minor violations that can be dealt with by imposing fines or community service.

- Replacing the adversarial system with a 'mixed system' that incorporates some elements of the inquisitorial system such as allowing judges to play an active role in collecting evidence and examining witnesses.
- Reducing the standard of proof required for conviction from 'beyond reasonable doubt' to 'clear and convincing evidence'.
- Making confessions made before a senior police officer admissible as evidence.
- **Madhav Menon Committee, 2007:** This committee was set up to draft a national policy on criminal justice. It suggested various principles and strategies to guide the reform process such as:
  - Ensuring respect for human dignity and human rights in every stage of criminal justice.
  - Promoting restorative justice that focuses on healing the harm caused by crime rather than inflicting punishment.
  - Improving coordination and cooperation among various agencies involved in criminal justice such as police, judiciary, prosecution etc.
- **Supreme Court Directives on Police Reforms, 2006:** In response to a public interest litigation filed by two former police officers Prakash Singh and N.K. Singh, seeking police reforms in India, the Supreme Court issued seven directives to ensure functional autonomy, accountability, and professionalism of the police force. Some of the directives were:
  - Setting up a State Security Commission to lay down policies for police functioning, evaluate performance, and ensure that state governments do not exercise unwarranted influence or pressure on the police.
  - Ensuring a fixed tenure for the Director General of Police, who should be selected from a panel based on objective criteria and not at the whims of the political executive.
  - Separating the investigation and law and order functions of the police to ensure speedier investigation, better expertise, and improved rapport with the people.
  - Establishing a Police Complaints Authority at the state and district levels to inquire into allegations of serious misconduct and abuse of power by police personnel.

### ***What is the Significance of the Proposed Reform?***

- The reform aims to **modernize** and **simplify** the criminal laws, which are outdated and complex. The reform will make the laws more in tune with the Indian spirit

and ethos, and reflect the changing nature of crime, society, and technology.

- The reform will **repeal** the draconian sedition law under Section 124A of the IPC, which has been widely criticised for being misused against dissenters and critics of the government.
  - The reform will also introduce new offences such as terrorism, corruption, mob lynching, and organised crime, which are not adequately covered by the existing laws.
- The reform will make some of the sexual offences **gender neutral**, by including men and transgenders as potential victims and offenders, in addition to women.
- The reform will **increase** the use of electronic evidence and forensics during investigation, prosecution, and adjudication.
- The reform will **empower** the citizens, by allowing them to register a police complaint in any police station, regardless of the location where the crime took place. The reform will also provide for effective protection of the constitutional rights of citizens, such as right to life, liberty, dignity, privacy, and fair trial.

### ***What are the issues in current proposed reforms to the criminal justice system?***

- **Lack of Consultation and Transparency:** The bills were drafted by a **Criminal Law Reforms Committee, 2020**.
  - The composition did not include any representatives from the judiciary, the bar, the civil society, or the marginalized communities. The committee also did not make its report or draft bills public for wider consultation and feedback.
- **Potential Violation of Human Rights:** The bills have been criticized for using vague and broad terms that could infringe on the human rights of the accused, victims, witnesses, and other stakeholders.
  - For example, the **BNS introduces a new offence of "acts endangering sovereignty, unity and integrity of India"** under Section 150, which is similar to the repealed offence of sedition under Section 124A of IPC. This could be used to suppress dissent and free speech.
  - Similarly, the **BSB allows confessions made before a police officer to be admissible as evidence** under Section 27A, which could increase the risk of custodial torture and coercion.
  - **The BNSS also gives wide powers to the police to arrest**, search, seize, and detain without any judicial oversight or safeguards.

- **Lack of Coherence and Consistency:** The bills have been accused of being inconsistent and contradictory with each other and with other existing laws. For example,
  - The **BSB** also introduces a new standard of proof for conviction from “beyond reasonable doubt” to “clear and convincing evidence”, which is not defined or explained in the bill.
  - The **BNSS** also creates a new category of offences called “social welfare offences” that can be dealt with by imposing fines or community service, **but does not specify which offences fall under this category.**

### What Needs to be Done?

To address the challenges and potential shortcomings in the proposed reforms a more inclusive and comprehensive approach is needed.

- **Inclusive Consultation:** Initiate a broader consultation process involving all the stakeholders including the general public to accommodate diverse perspectives before implementing any reforms.
- **Human Rights Safeguards:** To explicitly incorporate human rights principles and safeguards clearly define and narrow down vague terms to prevent potential misuse.
- **Coherent Legal Framework:** Ensure consistency and coherence across the proposed bills and other existing laws.
- **Technology Integration:** Enhance the use of technology in the criminal justice process, including digitized evidence collection, online proceedings, and video-recorded statements for quicker trials, reduced backlog, and enhanced transparency.
- **Capacity Building:** Invest in training, recruitment, and infrastructure to bolster the capacity of law enforcement agencies, judiciary, and legal aid services. Adequate resources will lead to more efficient and fair administration of justice.
- **Restorative Justice:** Embrace restorative justice principles that focus on reconciliation, restitution, and rehabilitation to address the root causes of crime, reduce recidivism, and provide closure to victims.
- **Public Awareness:** Awareness campaigns to educate the public about their rights and responsibilities within the criminal justice system to improve police-public relations.

By pursuing these progressive steps, we as a nation can work towards a criminal justice system that upholds the rule of law, protects human rights, and effectively serves the needs of its diverse population.



## Anti-NEET Movement in Tamil Nadu

*This editorial is based on “**The anti-NEET movement in Tamil Nadu is misguided**” which was published in The Livemint on 11/08/2023. It talks about the Anti NEET movement in Tamil Nadu and issues associated with NEET.*

**Tag:** Governance, GS Paper–2, Federalism, Centre-State Relations, Judiciary, Government Policies & Interventions, Education

Recently, the Tamil Nadu government passed Tamil Nadu Admission to Undergraduate Medical Degree Courses Bill, 2021 to exempt the state from **National Eligibility and Entrance Test (NEET)**, but the Tamil Nadu **Governor** has refused to give his assent to it. This has created a **deadlock between the state and the Centre** and raised serious concerns about the future of medical education and health services in Tamil Nadu.

Tamil Nadu has opposed the NEET since it was made compulsory in 2017. The exam is seen as a **threat to the state’s autonomy, healthcare system, social justice, and educational quality**. In this context, the advantages and disadvantages of NEET need to be discussed in detail.

### What is the National Eligibility and Entrance Test (NEET)?

- The National Eligibility Entrance Test (NEET), formerly the All-India Pre-Medical Test (AIPMT), is the qualifying test for MBBS and BDS programmes in Indian medical and dental colleges.
- It was introduced in 2013 by the Central Board of Secondary Education (CBSE) and is now conducted by the **National Testing Agency (NTA)**.

### What are the Advantages of NEET Exam?

- **Single Entrance Test:** NEET exam is a single entrance test for admission to medical and dental courses in India. It replaces the multiple state-level and private exams that were conducted before. This saves the time, money and effort of the students and the colleges. The students do not have to apply for multiple exams and pay multiple fees. The colleges do not have to conduct separate exams and counselling sessions.
- **Fairness and Transparency:** NEET reduces the possibility of corruption, malpractice and leakage of question papers that were prevalent in some state-based and independent exams. It also eliminates the need for donations or capitation fees for securing seats in private colleges. Admission is based on the merit and rank of the students in NEET exam.



- **Equal Opportunity:** NEET exam provides equal opportunity for all the students across the country. It does not affect the reservation policies of the states or the central government. The states can apply their own reservation system based on the merit list prepared by NTA. The students can also apply for admission under the state quota or all India quota based on their preference and eligibility. The students from rural or remote areas can also compete with the students from urban or metropolitan areas on an equal footing.
- **Language Options:** NEET exam is conducted in **13 languages**, including English, Hindi, Assamese, Bengali, Gujarati, Kannada, Malayalam, Marathi, Odia, Punjabi, Tamil, Telugu, and Urdu. This gives the students the option to choose their preferred language of examination. It also helps them to overcome the language barrier and perform better.

### **What are the Issues Associated with NEET Exam?**

- **High Risk Factor:** NEET exam is a highly competitive exam with lakhs of students appearing every year. The students have **only one chance to clear the exam in a year** and secure a seat in their desired college. If they fail to do so, they have to wait for another year or opt for other courses. This can cause stress, anxiety and depression among the students who have high expectations of themselves and their parents.
- **CBSE Syllabus:** NEET exam is based on the CBSE syllabus, which may not be suitable for all the students. The students who have studied under **different state boards may find it difficult to cope with the syllabus and the level of difficulty of the exam.**
- **Cost Factor:** NEET exam is not cost friendly for all the students. The exam fee is Rs 1500 for general category candidates and Rs 800 for reserved category candidates. Apart from that, the students have to bear other expenses such as coaching fees, study materials, travel expenses, etc. These costs may be unaffordable for some students from poor or rural backgrounds. They may have to compromise on their quality of education or drop out of their dream courses due to financial constraints.
- **Language Barrier:** As NEET is conducted only in 13 languages, some students may face difficulty in understanding the questions or expressing their answers in a language that is not their mother tongue or medium of instruction. This can affect their comprehension and accuracy.
- **Social and Economic Factors:** Some students may face challenges due to their social and economic background, such as lack of access to quality education,

coaching, resources, or guidance. These factors can hamper their preparation and performance in NEET.

### **Why does Tamil Nadu Oppose NEET Entrance?**

- **Violation of Federalism:** NEET has also dismantled the **state's in-service quota for medical graduates in the government sector**, which, according to critics, has undermined quality healthcare.
  - The state has its **own admission system based on the marks obtained in the Class 12 board exams**, which is considered more inclusive and equitable than NEET.
  - NEET, on the other hand, is imposed by the Centre without consulting the state governments and disregards the diversity and needs of different regions.
- **Denies Opportunities to Disadvantaged Students:**
  - According to A.K. Rajan committee (appointed by the Tamil Nadu Government In 2021, to study the impact of NEET on medical admissions in Tamil Nadu), NEET **harms the rights and interests of poor and disadvantaged students** who want to become doctors.
  - The Committee's report concluded that the NEET disproportionately **benefited repeaters (71% in 2021) and coached students (99% in 2020)** and discriminated against first-time applicants.
- **Promoting Coaching Culture:** The report condemned the NEET as **promoting a coaching culture rather than learning**, and as perpetrating cultural, regional, linguistic, and socio-economic biases that go against disadvantaged groups.
  - It was alleged to **favour CBSE students who attend coaching classes**, study in private English-medium schools and are from affluent urban backgrounds.
- **Student Suicides:** NEET has also been linked to **several cases of student suicides in Tamil Nadu**, which have sparked outrage and protests across the state. Many students who have performed well in their board exams or have a passion for medicine have lost hope and confidence after failing to clear NEET.

### **What is the Recent Plea to Supreme Court Related to NEET Exam?**

- The Tamil Nadu government in February 2023, moved the **Supreme Court** challenging the constitutional validity of NEET, **alleging NEET violates the principle of federalism**, which is part of the **Basic Structure of Constitution**.
- The Tamil Nadu government also claimed that NEET takes away the autonomy of states to make decisions regarding education.

- The petition is filed under **Article 131 of the Constitution**, which allows the Supreme Court to adjudicate **disputes between the Centre and state/s**.
- The plea alleged that NEET violates **right to equality under Article 14 of the Constitution** as it “discriminates against students from rural areas and state boards”.
- The state said NEET is modelled on CBSE/NCERT syllabus, which puts rural students at a loss.
  - The state alleged that students from rural parts lack economic resources to afford coaching classes which puts them at a greater disadvantage despite good scores in their state boards.
- The Tamil Nadu government **sought a declaration from the Supreme Court to hold Section 14 of the National Medical Commission Act, 2019** prescribing NEET as “*ultra vires*” the Constitution on multiple grounds.

### What can be the Way Forward?

- **Moving education to the State List:** Education can be shifted from the Concurrent List to the State List of the Constitution, which would give more autonomy and flexibility to the states to decide their own admission policies and criteria.
  - This would also enable the states to design their education system according to their regional needs and aspirations and avoid conflicts with the Centre over common entrance tests like NEET.
- **Balancing equity and quality:** A possible solution could be to **devise a more inclusive and holistic admission process that considers both NEET scores and Class XII marks**, as well as other factors such as aptitude, socio-economic status, regional diversity, and rural service. This would ensure that merit and social justice are not compromised, and that students from different backgrounds have equal opportunities to pursue their dream of becoming doctors.
- Reservation for under-represented communities, a constitutionally enshrined goal, must be protected at all costs.



## Safeguard the Election Panel's Independence

*This editorial is based on **Safeguard the election panel's independence** which was published in The Hindustan Times on 17/08/2023. It talks about the recent changes in Election Commissioners appointment and the need to Safeguard the election panel's independence .*

**Tag:** Polity, GS Paper-2, Parliament, Election Commission.

The Union government's introduction of the **Chief Election Commissioner and other Election Commissioners (Appointment, Conditions of Service and Term of Office) Bill, 2023** in the just-concluded monsoon session of the Parliament has caused significant controversy. A large part of the discussion is focussed on the fact that the bill replaces the mechanism for selection of the **Chief Election Commissioner (CEC)** that was devised by the Supreme Court in **Anoop Baranwal vs Union of India (2023)**, a verdict delivered a few months ago.

### What did the Supreme Court say in the Anoop Baranwal Case?

In that order, the **Supreme Court** held that the selection of the **CEC** must be done by a three-member committee comprising:

1. **The Prime Minister (PM)**
2. **The Leader of Opposition**
3. **The Chief Justice of India (CJI)**

However, the supreme court itself noted that this arrangement was temporary, until Parliament passed a law in this regard.

### What does the Constitution say in this regard?

**Clause 2 of the Article 324 of the Constitution** vests the power of appointment of the CEC and other Election Commissioners in the President, subject to any law that Parliament might make.

- However, the Parliament didn't pass any Law which effectively made the President's (i.e., the executive's) powers permanent to appoint CEC and ECs.
- The supreme court then found in the aforesaid case that giving the executive the power to appoint the CEC was incompatible with the independence of ECI.
  - The reason for this is obvious: **In a parliamentary system, the executive is drawn from the ruling party**, and is, hence, a player in the electoral game.
    - Giving the executive the power to appoint the CEC, therefore, is akin to giving a player the power to appoint the referee.

### So, What is the issue with Respect to the new Election Commissioners bill?

- **Provides Executive Supremacy:** The Election Commissioners bill replaces the CJI with a cabinet minister nominated by the PM. Which again gives the Executive a clear majority — and, therefore, a decisive say — in the appointment of the Election Commissioners.

- Now, the selection committee will consist:
  - The prime minister (chairperson)
  - The leader of opposition in the Lok Sabha (member)
  - A Union cabinet minister **nominated by the prime minister** (member)
- **Against the Will of the Constitution Framers:**
  - The intention of the framers of the Constitution was to secure and guarantee the independence of ECI. Which is why they provided the President (executive) the power to appoint ECs as a stop-gap arrangement, in the expectation that Parliament would enact a law that would secure and guarantee the independence of ECI.
  - The bill giving the executive more power submerges the idea of an Independent ECI as envisioned by the framers of the Constitution.
- **An Umpire who is Subordinate to the Team Captain:**

A former chief election commissioner said that the most concerning aspect of the new legislation is the downgrading of the status of election commissioners as well as the CEC from being at par with Supreme Court judges to that of cabinet secretary.

  - He also said, “**The cabinet secretary** is directly under the government. So a constitutional body like the election commission, that is supposed to call even the ministers and prime minister to discipline if it comes to it, how can you equate that office with the cabinet secretary who is clearly subordinate to the government?”

### ***Why is there the Necessity of Independence of the Election Commissioner in India?***

- **Impartiality and Fairness:** The Election Commissioner is responsible for overseeing the entire electoral process, including the conduct of elections, delimitation of constituencies, voter registration, and more. It is important that this office remains impartial and free from political influence to ensure that all political parties and candidates have an equal and fair opportunity to participate in the electoral process.
  - As former US President Barack Obama said, “The right to vote is sacred. It’s how we choose our leaders and determine our destiny.” So, impartial and fair elections are very crucial in a democracy.
- **Prevention of Manipulation:** An independent Election Commissioner helps prevent any manipulation or bias in the electoral process. If the office is influenced by the ruling party or any other political entity, it could lead to electoral malpractices such as voter suppression, gerrymandering, or tampering with the election results.
  - For example, in 2018, Pakistan’s Election Commission faced allegations of rigging and interference from the military establishment, which cast doubt on the legitimacy of the election results.
- **Public Confidence:** An independent Election Commissioner helps build and maintain public confidence in the electoral process. When people believe that elections are conducted fairly and transparently, they are more likely to participate and accept the results, even if their preferred candidate or party does not win.
  - For example, in 2007, Kenya witnessed post-election violence that killed over 1,000 people and displaced over 600,000 people, after a disputed presidential election that was marred by irregularities and fraud.
- **Rule of Law:** The independence of the Election Commissioner upholds the principle of the rule of law. It ensures that electoral procedures are carried out according to established laws and regulations, rather than being subject to arbitrary decisions or political pressure.
- **Checks and Balances:** In a democracy, the separation of powers and the presence of checks and balances are essential. An independent Election Commissioner acts as a check on the powers of the executive and legislative branches of government, ensuring that elections are not manipulated for political gain.
- **Long-Term Stability:** An independent Election Commissioner can help ensure the long-term stability of the electoral process. If the office is subject to frequent changes or political interference, it could undermine the credibility of elections and lead to instability.
  - For example, **T.N. Seshan**, who served as the **Chief Election Commissioner** of India from 1990 to 1996, is widely credited for ushering in electoral reforms that changed the face of Indian elections.
    - He enforced the authority of the **Election Commission** as per its powers laid out in the Constitution and introduced a list of 150 malpractices during elections, such as distribution of liquor, bribing voters, ban on writing on walls, use of religion in election speeches etc.
    - He also challenged the political parties and candidates who violated the election rules and took strict actions against them.
    - His legacy as an independent and fearless Election Commissioner has inspired many others to follow his footsteps and uphold the integrity and stability of the electoral process in India.
- **International Standards:** The concept of an independent election commission is upheld as a best practice



internationally. Many democratic countries have established independent bodies to oversee elections, and India's Election Commission aims to align with these global standards.

### What should be the Way Forward?

- **The government should review the composition of the Selection Committee** and consider making it more balanced. This might involve giving the opposition more balanced power to ensure a fair decision-making process.
  - For example, the **opposition could have equal seats, veto power, or rotating chairmanship in the Selection Committee**. This would ensure that the selection process is not biased or influenced by the ruling party.
- **To enhance the credibility of the selection process, the government should involve independent experts, jurists, and civil society representatives** in the Search Committee or as observers in the Selection Committee. Their presence could help maintain the integrity of the process.
  - By involving these stakeholders, the government could increase the transparency, accountability, and public trust in the selection process. They could also provide valuable insights, feedback, and recommendations to improve the quality and suitability of the candidates.
- **Before finalizing the Bill, the government should engage in thorough consultations** with opposition parties, legal experts, and stakeholders to gather diverse perspectives and ensure that concerns are addressed adequately.



## India's Gains in the Face of China's Economic Slowdown

*This editorial is based on **China is slowing. What does it mean for India?** which was published in The Hindu Businessline on 20/08/2023. It talks about the slowing down of China's Economic growth and the potential opportunities for India arising from this situation.*

**Tag:** Economy, GS Paper-3, Growth & Development.

The Chinese Economy was expected to rebound this year after three years of zero-Covid policy. But the latest economic data show that the world's second largest economy has slipped into deflationary mode. Both retail sales and industrial production fell short of the predicted expectations. The most worrying aspect is shrinking

domestic demand. The prices of apartments and a range of goods and services have fallen, with the dropping **Consumer Price Index-based inflation**.

### What are the Causes behind this Slowdown?

- **Zero Covid Strategy:** China's policy of eliminating **Covid-19** cases within its borders led to frequent lockdowns, travel restrictions, and mass testing. It created global supply-chain upheavals as well. These, along with geopolitical tensions, triggered manufacturing relocations, weakening domestic growth and consumer spending further.
  - **Decline in Industrial Output:** The value-added industrial output expanded by 3.7% y-o-y, slowing from the 4.4% growth in June.
  - **Falling Exports:** China's exports fell by 14.5% in July 2023 compared with a year earlier, while imports dropped 12.4%.
  - **Rising Unemployment:** While overall **unemployment** rate had risen to 5.3% in July 2023, the Youth unemployment hit a record 21.3% in June.
- **Collapse of Housing Sector:** The Chinese economy is currently facing a crisis of confidence. A confluence of factors has led to this. The major one is the near collapse of the decades-long debt-fuelled housing sector, which contributes to about 30% of China's **GDP**.
- **Debt Overhang:** China's rapid economic growth was fueled, in part, by heavy borrowing. This has led to a significant buildup of debt in the economy, which could potentially hinder future growth if not managed carefully.
  - China's debt is now estimated at 282% of **GDP**, which is more than that of the US.
- **Clampdown on Tech Industry Sparked Economic Turmoil:** The Chinese government began cracking down on its vibrant tech sector — video gaming, edtech, e-commerce — on the grounds that the tech companies were getting too big and powerful. This has resulted in huge losses of revenues and jobs, as many of these firms had to downsize or shut shop.
- **Decline in Investment and Consumer spending:** Amidst the declining and uncertain economic environment, Chinese investors and households are cutting back on spending, leading to a deflationary situation.
  - According to the China's National Bureau of Statistics (NBS), retail sales in July 2023 grew 2.5% year-on-year, compared to a 3.1% in June.
- **Structural shift:** China has been trying to shift its economy from a reliance on exports and investment to a more balanced model that emphasizes domestic consumption and innovation. This transition has been challenging and has resulted in lower growth rates, as well as increased debt and financial risks.



- **Trade War with the US:** The trade tensions between China and the US have escalated since 2018, resulting in tariffs, sanctions, and decoupling measures that have hurt both sides. The trade war has reduced China's exports, investment, and access to key technologies and markets.
  - It has also weakened the confidence of consumers and businesses, as well as the value of the Chinese currency.

### **Why are Global Markets worried about the Slowdown?**

- The **IMF** had previously forecast that China would account for 35% of global growth this year, but that's looking far-fetched now.
- The latest data suggests that China may struggle to achieve the growth target of around 5% set for the year.
  - A slowdown in China will affect global demand.
  - Not only is **China the world's largest manufacturing economy**, but it is also the largest consumer of key commodities.
    - It accounts for almost half of the world's metal consumption.

### **What are the Opportunities for India?**

- **Diversifying global supply chains:** Many countries and companies are looking for alternatives to China as a source of raw materials, intermediate goods, and finished products, especially in sectors such as electronics, pharmaceuticals, textiles, and automobiles.
  - India has the potential to become a preferred destination for these industries, given its large domestic market, skilled workforce, low labor costs, and improving infrastructure.
  - India can also leverage its existing **trade agreements** and strategic partnerships with countries such as the US, Japan, Australia, and the EU to enhance its access to global markets.
- **Attracting foreign investment:** China's economic slowdown has also reduced its attractiveness as an investment destination for foreign capital. **India can capitalize on this opportunity by offering a stable and conducive business environment, easing regulatory hurdles, providing tax incentives, and facilitating land acquisition and labor reforms.**
  - India can also **showcase its strengths in sectors such as IT, digital services, renewable energy, biotechnology, and defense production** to attract foreign investors.
- **Boosting innovation and R&D:** China's economic slowdown has also exposed its vulnerabilities in terms of innovation and R&D, especially in areas such as semiconductors, artificial intelligence, biotechnology, and aerospace.

- India can seize this opportunity **by investing more in its own innovation and R&D ecosystem**, fostering collaboration between academia, industry, and government, and creating a culture of entrepreneurship and risk-taking.
- India can also leverage its talent pool of engineers, scientists, and researchers to develop cutting-edge technologies and solutions that can compete with China on the global stage.

- **Benefits for India's Manufacturers:** Commodity markets are very sensitive to Chinese demand. If China begins exporting base metals and other commodities at reduced prices, due to slowing demand, it could benefit our manufacturers.

### **What has India done to take Advantage of China's Slowdown?**

- **Diversifying Exports:** Increasing its exports to other countries, especially in sectors where China is losing its competitiveness. For example, India's exports of engineering goods, chemicals, pharmaceuticals, and textiles have grown significantly in the last few months.
- **Attracting Foreign Direct Investment (FDI):** Attracting more **FDI** from companies that are looking for alternative destinations to China. India has eased its **FDI** norms, offered incentives, and improved its ease of doing business ranking to lure more investors.
  - To Attract investment India has also introduced reforms in electricity (e.g., Electricity (Amendment) Rules, 2023), land (e.g., **Land Bank**) and labor (codifying labor codes).
- **Promoting Domestic Manufacturing and Consumption:** Boosting its domestic manufacturing and consumption through various schemes and policies, such as the **Production Linked Incentive (PLI) scheme**, the **Atmanirbhar Bharat Abhiyan**, and the **GST reforms**. These initiatives aim to make India more self-reliant and resilient to external shocks.
- **Building Economic and Strategic Alliances:** Enhancing its strategic and economic ties with other countries, especially in the Indo-Pacific region, to counter China's influence and aggression. India has participated in various multilateral forums and dialogues, such as the **Quad**, and the **BRICS** to promote regional cooperation and stability.

### **Conclusion**

India is hoping to compete with China as a major player in the global supply chain and as a manufacturing hub. It has unveiled schemes like **PLI (Production Linked Incentive)** to boost domestic manufacturing. India's '**China plus one**' strategy can get a boost if Chinese exports taper down.



## Challenges of AI Disruption

*This editorial is based on **PREPARING FOR a DISRUPTION** which was published in The Indian Express on 21/08/2023. It talks about the potential challenges posed by Artificial Intelligence and how India should tackle them.*

**Tag:** Science & Technology, GS Paper-3, IT & Computers.

The global Generative AI market is projected to experience explosive growth in the coming years, with a **45% compound annual growth rate expected from 2021 through 2028**. As the commoditization of AI services becomes more widespread, business models of industries, from software development to entertainment, will change drastically. LLMs (Large Language Models) and Generative AI are set to automate various tasks that require natural language understanding – for instance, summarisation, translation, answering questions, coding, and even conversation.

### What are Generative AI and Large Language Models (LLMs)?

- **Generative AI:** Generative AI refers to the subset of **artificial intelligence** that focuses on creating systems capable of generating content that is similar to what a human might produce.
  - These systems learn from patterns in existing data and then use that knowledge to produce new, original content.
  - This content can take various forms, such as text, images, music, and more.
- **Large Language Models (LLMs):** LLMs are a **specific class of generative AI models that are trained to understand and generate human-like text**.
  - These models are built using deep learning techniques, particularly using neural networks.
  - They can generate coherent and contextually relevant text given a prompt or input.
  - One of the most well-known examples of LLMs is OpenAI's **GPT (Generative Pre-trained Transformer)**.

### What are the Applications of Generative AI?

- **Healthcare:**
  - **Symptom Assessment and Disease Detection:** AI-powered apps like **Ada** can provide preliminary assessments of symptoms and guide users towards appropriate medical actions.
  - **Accessibility and Patient Support:** Apps like **Be My Eyes** and conversational AI solutions like **Hyro** are improving accessibility for visually impaired individuals and streamlining patient interactions with health systems.

- **Disease Detection:** This can help early detection of Disease. SkinVision demonstrates how generative AI can aid in the early detection of skin cancer, enhancing the speed and accuracy of diagnosis.
- **Education:**
  - **Content Creation and Personalization:** Generative AI can assist educators in creating educational content, adapting it to different styles, lengths, or languages, and tailoring it to individual student needs.
  - **Assessment and Feedback:** AI-generated content can aid in formative assessment, offering students instant feedback on their work, thereby facilitating a more dynamic learning process.
- **Entertainment:**
  - **Art and Design:** Generative AI can be used to create stunning graphics, designs, and artwork, enhancing the visual aspects of video games, fashion, and other creative industries.
    - For example, **DALL·E 2** is a generative AI model that can create images from text description.
  - **Music Composition:** AI-generated music can provide an endless stream of compositions, catering to various moods, genres, and styles.
    - For example, if any singer is not between us, any songs can be generated in his voice with the help of AI.
  - **Fashion:** The fashion industry can benefit from generative AI by generating new clothing designs, helping designers explore innovative concepts.
- **Content Design and Coding:**
  - **Product Development and Innovation:** Generative AI's ability to generate designs, codes, and schematics based on natural language inputs can accelerate the product development cycle and foster innovation.
    - According to a report by GitHub, a vast majority of developers in the US have embraced AI coding tools, integrating them into their workflows both professionally and personally.
      - Ninety-two percent of programmers based in the US are now leveraging AI to supplement their coding abilities.
  - **Content Summarization:** Generative AI can quickly summarize lengthy articles, emails, and reports, making information consumption more efficient.
  - **Enhancing Visual Content:** By adding animations, voiceovers, and other elements, generative AI can improve the quality and effectiveness of demonstration and explanation videos.

### ***What are the Challenges related to Generative AI before India?***

- **Economic Challenges Amid Media Tech Disruptions:** As these technologies upset the mode of producing and consuming media products and information, there will be significant economic challenges such as the disruption of markets, creation of inequalities, reduction of incentives for human creativity and innovation, and the displacement of workers.
- **Job Losses:** Tasks that involve routine information processing, data entry and filling out forms in sectors such as customer service, research, even blue-collar jobs and legal segments, may be affected. **Even with partial automation, almost 5-10% of roles in the sectors may cease to exist in the near future.** This will create hundreds of millions of unemployed skilled and semi-skilled workers.
  - Also, There is **no guarantee that generative AI and related technologies will create new jobs** to make up for the lost ones.
- **Not So Well Prepared:** India is not as well-prepared as China and the US to face the onslaught of Generative AI and related technologies. **The country doesn't have any major investments in AI chip hardware design.** The absence of audited data sets for training and fine-tuning models is a major shortcoming.
  - India also doesn't have its own foundational or **generative model like GPT or Wu Dao.**
  - Compared to China and the US, India **has significantly fewer experts with PhDs in fields related to AI.**
- **Limitations for Training Large Language Models:** There are limitations in access to **cloud computing** in India for training large language models, and it is expensive. India does not have large corporations that invest heavily in in-house AI research.
- **Brain Drain:** The number of AI policy think tanks and research institutes is also much higher in the US and China. Any good quality talent in these fields in India will quickly migrate to these destinations.
- **Lack of a Comprehensive and Composite AI Strategy:** There is a serious lack of a comprehensive and composite AI strategy that connects government, industry, academia, and society. As the race for large language models heats up, data security and privacy concerns in India will reduce our chances of getting valuable data that can train robust models.

### ***What Policy Measures can be taken?***

- **Develop a Comprehensive National AI Strategy:** Creating a well-defined national AI strategy is crucial. This involves bringing together various stakeholders including government agencies, industry representatives, researchers, and ethicists.

- **The strategy should outline the country's goals for AI development, ethical guidelines, regulatory frameworks, and plans for responsible deployment.** It should also consider potential risks, such as bias and privacy concerns, and how to address them.
- **Establish AI Policy Think Tanks and Research Institutes:** Think tanks and research institutes can play a vital role in fostering innovation and nurturing AI talent. These institutions can conduct in-depth research on AI trends, ethics, and policy implications. They can also provide guidance to policymakers and industry leaders, helping them make informed decisions. Collaborations between these entities and universities can further enhance the ecosystem of AI research and development.
- **Foster Collaborations and Responsible AI Applications:** Collaboration between academia, industry, and international partners is essential for sharing knowledge, expertise, and best practices. By fostering these collaborations, countries can develop responsible AI applications that adhere to ethical standards, privacy regulations, and safety protocols.
- **Policy and Legal Measures for Worker Transition:** To ensure a smooth transition for workers, it's essential to implement policy and legal measures that protect their rights and livelihoods. These measures may include **severance payments, advance notice of automation, and regulations that prohibit discriminatory AI systems in the workplace.** Creating an environment where workers are informed about impending changes and have support can alleviate the anxieties associated with job displacement.
- **Tax Breaks and Incentives for Business Retraining:** Incentivizing businesses to retrain their workers can be achieved through tax breaks, grants, or other financial incentives. This encourages companies to invest in their workforce's skill development, ensuring that their employees are equipped to handle the evolving job landscape. Such programs could provide tax benefits to companies that offer comprehensive training and re-skilling opportunities.
- **Enhancement of Social Safety Nets:** Enhancing social safety nets is vital to provide a safety net for workers facing job displacement. **This may involve reforms to pensions, insurance, and employment regulations to accommodate the changing nature of work.**
  - **Recalibrating unemployment benefits, considering unemployment insurance schemes, and creating temporary income supplements** can help affected workers manage their financial situations during transitions.



- **Job Placement Services and Support:** Creating job placement services as part of the strategy can assist displaced workers in finding new roles that align with their skills and aspirations. These services could **involve career counseling, job matching, and facilitating connections with employers in emerging industries**. Support in navigating the job market can help workers transition more effectively.

#### What are the Steps taken by the Government in the field of AI?

- The **National AI Portal of India**, launched in 2020, is a one-stop digital platform for artificial intelligence-related developments in the country. It showcases AI initiatives, resources, events, research, and innovation by various stakeholders from academia, industry, and government.
- The **Responsible AI for Youth programme**, launched along with the portal, aims to empower young students with the skills and knowledge to create meaningful social impact solutions using AI.
  - It involves online training modules, project-based learning, mentorship, and national-level project competition.
- The **Global Partnership on Artificial Intelligence (GPAI)**, of which India is a founding member, is an international and multi-stakeholder initiative to guide the responsible development and use of AI, grounded in human rights, inclusion, diversity, innovation, and economic growth.
- India's AI strategy is known as **"AI for All"**, which focuses on leveraging AI for inclusive development, representing the country's 'AI for Social Good' vision.
  - It was formulated by **NITI Aayog** in 2018 and covers five core areas for application of AI: agriculture, education, health, smart cities/infrastructure, and transport.
- The **FutureSkills PRIME programme**, launched by **MeitY** in partnership with NASSCOM, is a business-to-consumer (B2C) framework for re-skilling/up-skilling IT professionals in emerging technologies including AI.
  - It offers online courses, assessments, certifications, and recognition badges to learners.



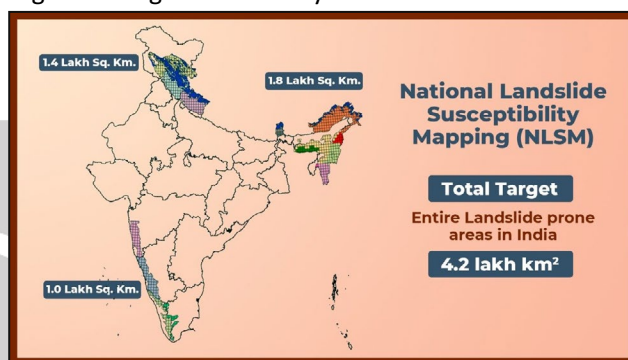
## Building Resilience Against Landslides

*This editorial is based on **Resisting Landslides** which was published in **The Indian Express** on 23/08/2023. It talks about the reasons behind landslides in Himalayan region, destruction caused by them and ways to build a resilient disaster management mechanism against them.*

**Tag:** Disaster Management, GS Paper - 1, Physical Geography, GS Paper - 3, Disaster Management.

The recent deaths and destruction caused by landslides in Himachal Pradesh have once again highlighted the vulnerabilities and challenges posed by the Himalayan ecosystem. The **Himalayas**, often referred to as the world's youngest and roughest mountain chain, are a unique and complex environment that plays a crucial role in shaping the region's geology, climate, and biodiversity.

As per the **Geological Survey of India**, the economic loss due to landslides may amount to as much as 1% to 2% of the **Gross National Product** in many developing countries. Around 15% of the country's landmass is susceptible to landslide hazards. The Himalayas (Northwest and Northeast India) and the **Western Ghats** are two regions of high vulnerability.



### What is a Landslide?

A **landslide** is a geological phenomenon involving the downward **movement of a mass of rock, soil, and debris on a slope**. This movement can vary in scale from small, localized shifts to massive and destructive events.

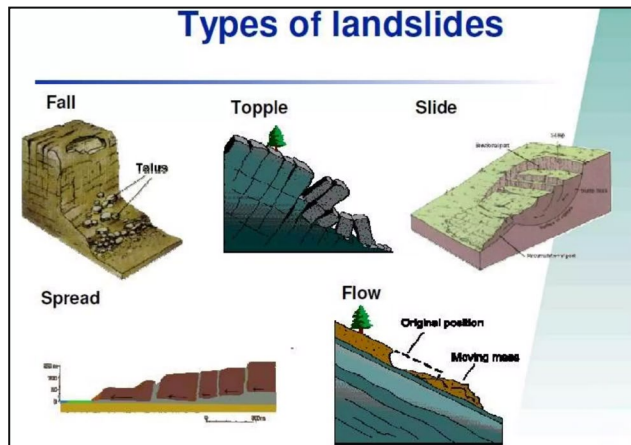
Landslides can occur on both natural and man-made slopes, and they are often triggered by a combination of factors such as heavy rainfall, **earthquakes**, volcanic activity, human activities (such as construction or mining), and changes in groundwater levels.

Landslides are classified into several types based on their movement characteristics:

- **Slides:** These are **movements of soil or rock along a rupture surface or a zone of weakness**. They can be further divided into rotational slides, where the rupture surface is curved, and translational slides, where the rupture surface is planar.
- **Flows:** These are **movements of soil or rock that contain a large amount of water, which makes the mass flow like a fluid**. They can be further divided into earth flows, debris flows, mudflows, and creep, depending on the material and the rate of movement.
- **Spreads:** These are **movements of soil or rock that involve lateral extension and cracking of the mass**. They are usually caused by liquefaction or plastic deformation of the material.



- **Topples:** These are **movements of soil or rock that involve forward rotation and free-fall of the mass** from a vertical or near-vertical cliff or slope.
- **Falls:** These are **movements of soil or rock that detach from a steep slope or cliff** and descend by free-fall, bouncing, or rolling.



### What are the Reasons behind Landslides in Himalayan region?

- **Fragile Ecosystem:** Tectonic or neo-tectonic activities, associated with numerous subsurface processes like rock deformation, exhumation and reworking of rocks and surface processes such as erosion, weathering and rain/snow precipitation make the ecosystem inherently fragile.
  - **Earthquakes:** The **convergence of the Indian plate with the Eurasian plate** in the Himalayan region has created subterranean stresses that get released in the form of earthquakes which, in turn, cause fractures and loosen the litho-structures near the mountain surface. This increases the possibilities of rock movement along the slope.
    - Debris flow and underground water make a slope weak and landmass can slip down it.
- **Climate Induced Excessive Events:** Climate-induced excessive events like freezing/thawing and heavy rain/snow precipitation lead to avalanches, landslides, debris flow, glacial lakes outburst floods, landslide lakes outburst floods and flash floods. They add to the precariousness of the mountain system. The Himalaya is further stressed by anthropogenic activities.
  - Climate change has adverse impacts on glaciers, riverine systems, geomorphology and biodiversity, which, in turn, have increased the vulnerability of people in the mountainous states.
    - Land degradation aggravates the problem.
- **Anthropogenic Factors:** Human activities such as road construction, tunneling, mining, quarrying, deforestation, urbanization, agriculture, excessive

tourism and hydroelectric projects can also cause or worsen landslides in the Himalayas. These activities can disturb the natural balance of the slopes by removing vegetation cover, altering drainage patterns, increasing soil erosion, creating artificial cuts and fills, blasting rocks, and generating vibrations.

- These activities can also increase the exposure and risk of human settlements and infrastructure to landslides.
- The 2013 Kedarnath Tragedy was also influenced by the unplanned development and construction activities in the area, such as hotels, roads, bridges, and dams, that had altered the natural drainage system and increased the soil erosion.
- **Geological Composition:** Some of the **Himalayan rocks are made of limestone, which is more prone to water and landslides** than other types of rocks because it can dissolve in weakly acidic rainwater or groundwater. This process creates caves, sinkholes, and other karst features that weaken the stability of the slopes.
- **Westerly Disturbance & Monsoon:** Confluence of Westerly Disturbance — a low-pressure system, originating from the Mediterranean Sea, moving eastward across central Asia and northern India — and the South West Indian Summer Monsoon cause excessive and concentrated rainfall in parts of J&K, Himachal Pradesh and Uttarakhand leading to landslides and flash floods.

### How are Landslides in Himalayan region different from Landslides in Western Ghats?

Region	Causes
Himalayas	<ul style="list-style-type: none"> <li>➤ High seismicity due to plate tectonic movement</li> <li>➤ Easily erodible sedimentary rocks</li> <li>➤ Young and energetic rivers with high erodibility</li> <li>➤ Heavy downpour and snowfall</li> <li>➤ Anthropogenic factors such as deforestation, jhum cultivation, road construction, etc.</li> </ul>
Western Ghats	<ul style="list-style-type: none"> <li>➤ Concentrated rainfall</li> <li>➤ Overburdening of hills</li> <li>➤ Mining and quarrying</li> <li>➤ Anthropogenic activities such as agricultural activities, windmill projects, etc.</li> <li>➤ Forest fragmentation with dense vegetation on thin soil</li> </ul>

### **What are the Initiatives taken by the Government to mitigate the risk of landslides?**

- **National Landslide Risk Management Strategy (2019):** This is a comprehensive document that addresses all the components of landslide disaster risk reduction and management, such as hazard mapping, monitoring, early warning system, awareness programs, capacity building, training, regulations, policies, stabilization and mitigation of landslides, etc
- **Landslide Risk Mitigation Scheme (LRMS):** This is a scheme under preparation that envisages financial support for site specific landslide mitigation projects recommended by landslide prone states, covering disaster prevention strategy, disaster mitigation and R&D in monitoring of critical landslides, thereby leading to the development of early warning system and capacity building initiatives.
- **Flood Risk Mitigation Scheme (FRMS):** This is another scheme under preparation that covers activities like pilot projects for development of model multi-purpose flood shelters and development of river basin specific flood early warning system and digital elevation maps for preparation of inundation models for giving early warning to the villagers for evacuation in case of flood.
- **National Guidelines on Landslides and Snow Avalanches:** These are guidelines prepared by the **National Disaster Management Authority (NDMA)** to guide the activities envisaged for mitigating the risk emanating from landslides at all levels. The guidelines cover aspects such as hazard assessment, vulnerability analysis, risk management, structural and non-structural measures, institutional mechanisms, financial arrangements, community participation, etc.
- **Landslide Atlas of India:** The Landslide Atlas of India is a document that provides the details of landslides present in landslide provinces of India, including damage assessment of specific landslide locations. It is prepared by the National Remote Sensing Centre (NRSC), one of the centers of **ISRO**.

### **What Measures should be taken?**

- **Resilience Building:** To address these challenges, it's important to develop resilience against geo-hazards caused by natural processes, environmental degradation, and human activities. This involves implementing a network of sensors for real-time monitoring and data collection.
- **Leveraging Technology for Effective Monitoring:**
  - **Web-based sensors** such as **rain gauges**, **piezometers**, **inclinometers**, **extensometers**, **InSAR (Interferometric Synthetic Aperture Radar)**, and **total stations** can help monitor vulnerable

areas. Monitoring should be prioritized in densely populated and built-up zones.

- **Integrated Early Warning System (EWS):** The development of an **integrated Early Warning System (EWS)** using **AI** and **Machine Learning (ML)** algorithms is crucial. Such a system could help predict and alert communities about impending hazards, giving them valuable time to take preventive measures.
- **Formation of Himalayan States Council:** Establishing a collaborative platform that brings together the disaster management authorities from different states in the Himalayan region is a strategic move. This centralized council would enable the sharing of knowledge, experiences, and resources to effectively assess and manage the impacts of various stressors on the region.
  - **Simulation and Hazard Assessment:** The council should focus on simulating and assessing hazard scenarios resulting from natural processes, environmental degradation, climate-induced phenomena, and anthropogenic activities. This will help in understanding potential risks and formulating appropriate mitigation strategies.
  - **Knowledge Dissemination:** While the Himalayan region is diverse and varied, sharing the findings of assessments across different states is essential. Collaborative efforts and shared knowledge can lead to a more comprehensive understanding of the challenges and potential solutions.
  - **Ecosystem Protection:** Protecting the region's ecosystems is a priority. By promoting sustainable practices and responsible resource use, the council can help safeguard the natural environment.
- **Sustainable Socio Economic Development:** Recognizing the valuable natural resources present in the region, such as glaciers, springs, minerals, energy sources, and medicinal plants, offers the potential for sustainable socio economic development. However, it's crucial to strike a balance between resource exploitation and ecological preservation to ensure long-term viability.
- **Environmental Considerations:** Proper town planning that accounts for the unique characteristics of mountainous terrain is vital. **Restricting heavy construction, implementing effective drainage systems, scientifically managing slope cutting, and using retaining walls** are important aspects of environmentally conscious development.
  - **Retaining walls** are relatively rigid walls used for supporting soil laterally so that it can be retained at different levels on the two sides.

- **Building Codes and Assessment:** High-resolution mapping of towns and assessing their load-bearing capacity are essential components in creating effective building codes. This approach ensures that construction is safe and resilient, especially in regions prone to natural hazards like landslides and earthquakes.
- **Sustainable Tourism:** **Sustainable tourism** can reduce landslides by promoting environmental awareness, conservation and protection of natural resources, and respect for biodiversity and ecosystems.
  - It can also **provide economic incentives and social benefits for local communities, which can enhance their resilience and adaptive capacity** to cope with natural hazards.
- **Building Sustainable Govt Projects:** To ensure responsible development in the Himalayan region, key measures include conducting environmental assessments, using eco-friendly technologies, involving local communities, increasing stakeholder awareness, and promoting coordination among governmental sectors.



## Reforming India's Social Security Net

*This editorial is based on **Needed, a well-crafted social security net for all** which was published in The Hindu on 23/08/2023. It talks about the issues and challenges faced by the Social Security Policies and possible ways to mitigate them.*

**Tag:** Governance, GS Paper - 2, Governance. Government Policies & Interventions.

Around 53% of all of the salaried workforce does not have any social security benefits in India, according to the **Periodic Labour Force Survey** Annual Report 2021-22, and which has been cited in the media. In effect, this means that such employees have no access to a provident fund, pension, and health care and disability insurance.

Only 1.9% of the poorest 20% of India's workforce have access to benefits. Meanwhile, **gig workers**, or approximately 1.3% of India's active labor force, rarely have access to any social security benefit. India's social security system is also ranked poorly; Mercer CFS ranked India at 40 out of 43 countries in 2021.

### What is Social Security?

According to **ILO**, Social security is the protection that a society provides to individuals and households to ensure access to health care and to guarantee income

security, particularly in cases of old age, unemployment, sickness, invalidity, work injury, maternity or loss of a breadwinner.

Social security policies cover various types of social insurances, such as pension, health insurance, disability benefit, maternity benefit, and gratuity.

### What are some Existing Social Security Policies in India?

- **The Code on Social Security, 2020:** This is a comprehensive law that consolidates and simplifies nine previous laws related to social security. It covers employees in both the organized and unorganized sectors, and provides for retirement pension, provident fund, life and disability insurance, healthcare and unemployment benefits, sick pay and leaves, and paid parental leaves.
- **The Employees' Provident Fund Organisation (EPFO):** This is a **statutory body** that administers the Employees' Provident Fund Scheme, the Employees' Pension Scheme, and the Employees' Deposit Linked Insurance Scheme. These schemes provide retirement pension, provident fund, and life and disability insurance to employees in the organized sector.
- **The Employees' State Insurance (ESI):** This is a **self-financing social security scheme** that provides medical care and cash benefits to employees in case of sickness, maternity, disability, and unemployment. It covers employees in the organized sector who earn less than a certain threshold.
- **The National Pension System (NPS):** This is a **voluntary**, defined contribution pension scheme that allows individuals to save for their retirement. It is open to all citizens of India, including those working in the unorganized sector. It offers multiple investment options and tax benefits.
- **The National Social Assistance Programme (NSAP):** The NSAP is a social security and welfare programme that provides support to aged persons, widows, disabled persons and bereaved families on death of the primary breadwinner, belonging to below poverty line households.

### What are the Issues and Challenges related to Social Security Policies and their Implementation?

- **Lack of adequate budgetary allocation:** The **National Social Security Fund** was set up for unorganized sector workers with an initial allocation of just ₹1,000 crore, which was far below the estimated requirement of over ₹22,841 crore.



- This shows that the government has not prioritized social security as a key component of its development agenda and has not allocated sufficient resources to meet the needs of the vulnerable sections of the society.
- **Poor Fund Utilization and Management:** The funds allocated for social security schemes have not been utilized effectively or efficiently. **For example, the CAG audit revealed that ₹1,927 crore accumulated in the National Social Security Fund since its inception had not been utilized at all.**
  - Similarly, the cess collected for the provision of social security to construction workers in Delhi was poorly utilized, with approximately 94% of the money remaining unspent.
  - These examples indicate that there are gaps in the fund management and monitoring systems, which result in wastage and underutilisation of public money.
- **Corruption and Leakage:** Another challenge related to social security policies and their implementation is corruption and leakage of funds. In the case of Haryana, where the **CAG** noted that the direct benefit scheme of the State's Social Justice and Empowerment Department had seen the transfer of ₹ 98.96 crore to the accounts of deceased beneficiaries.
  - This suggests that there are loopholes in the identification and verification of beneficiaries, as well as in the delivery mechanism of social security benefits.
  - Moreover, there are instances of fraud, bribery, nepotism, and political interference in the allocation and distribution of social security funds.
- **Inadequate Coverage and Benefits:** There is also a persistent issue of inadequate coverage and benefits of social security schemes in India. **For instance, the contribution by the Centre to old-age pension schemes has stagnated at ₹200 a month since 2006, which is below the minimum wage per day.**
  - Moreover, the eligibility criteria for some of the schemes are very restrictive and exclude many deserving beneficiaries. For example, the **National Social Assistance Programme** focuses on old-age poor individuals with no able-bodied earners in their household, who are eligible to earn a monthly pension of ₹75.
    - This leaves out many poor elderly people who may have some earning members in their household but still face economic hardship and insecurity.

- **Budgetary Cuts:** The reduction in budgetary allocations for the **Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)** suggests a lack of prioritization for social welfare and rural employment generation.
- **Technology and Digital Divide:** Many social security schemes are transitioning to digital platforms for registration and disbursement of benefits. However, a significant portion of the population, particularly in rural areas, may lack access to technology and the internet, creating a digital divide that hampers their participation in these programs.
- **Informal Labor Sector:** Approximately 91% (or around 475 million) of India's workforce works in the informal sector, which often lacks job security, benefits, and access to formal social security programs.

### ***What are the Steps that can be taken up by India?***

- **Universal Social Security:** The time has come for India to **consolidate its existing social security schemes/ad hoc measures and provide universal social security to its entire labor workforce.** With jobs becoming increasingly on-demand and hire/fire policies proliferating, India's workers are increasingly insecure on the job front.
  - To have the fruits of growth trickle down while offering a sense of social security, **policymakers must discard traditional supply-side economic theories to embrace policies that enable equitable growth.**
- **Expanding EPFO Contribution:** For formal workers, **expanding contributions to the Employees' Provident Fund Organisation (EPFO)** system can provide increased social security. This involves both employers and employees contributing to the fund.
  - **Partial Contributions for Informal Workers:** Informal workers with meaningful income, whether self-employed or in informal enterprises, could make partial contributions.
    - Encouraging informal enterprises to formalize and contribute could be part of this approach.
- **Government Support for Vulnerable Workers:** Providing government subsidies or social assistance to those unable to contribute due to unemployment, underemployment, or low earnings ensures that everyone has access to basic social security support.
- **Digitization and e-Shram Platform:** Investing in digital platforms and data systems streamlines the registration, verification, delivery, monitoring, and evaluation of social security services, improving efficiency and transparency.



- The e-Shram platform's expansion and digitization efforts have enabled the enrollment of millions of workers and extended insurance coverage.
  - However, the burden of registration should not solely rest on informal workers; involving employers could encourage formalization.
- **Mandatory Social Security for Employers:** Implementing mandatory social security entitlements for employees, enforced by their employers, would foster formalization and accountability in employee-employer relationships.
- **Pan-India Labour Force Card:** Introducing a nationwide labor force card could simplify the registration process and expand social security coverage beyond the construction and gig worker sectors.
- **Expanding Successful Schemes:** Successful schemes like the Building and Other Construction Workers Schemes could be expanded to cover a broader range of workers. This might require revisiting certain restrictions, such as the cooling-off period, for improved benefit portability.
- **Addressing Specific Worker Groups:** Special attention should be given to vulnerable worker groups, such as domestic workers and migrants. Expanding coverage of social services like child care and organizing efforts for domestic workers could provide them with more stability.
- **Strengthening Existing Schemes:** The govt may also strengthen existing schemes, for example the **Employees' Provident Fund (EPF)**, the **Employees' State Insurance Scheme (ESI)**, and the **National Social Assistance Programme (NSAP)**, with budgetary support and expansion of coverage.
- **Administrative Simplification:** There is a need to **simplify the administrative framework** of social security programs. For example, **the existing social security framework for unorganized workers has become complex, with overlapping areas of authority between the State and Centre**, and confusing definitions being used such as between a platform worker, an unorganized worker and someone who is self-employed.
- **Raising Awareness:** There's a need for a more significant push to raise awareness about social security to ensure that more workers are aware of the available benefits. **Organizations such as the Self-Employed Women's Association (SEWA) which run Shakti Kendras (worker facilitation centers)**, may be funded to run campaigns (especially for women) to provide greater information on social security rights, along with services and schemes that the government offers.

#### What can India learn from other countries?

- **Brazil:** Brazil has a comprehensive and generous social security system that covers more than 90% of the population and provides income replacement for workers and their families in various situations.
  - India can learn from Brazil's experience in expanding the coverage and scope of its social security system, as well as implementing reforms to ensure its fiscal sustainability and efficiency.
- **Germany:** Germany has a well-developed social security system that is based on the principle of social insurance, where workers and employers contribute to various schemes that provide pensions, health care, unemployment benefits, long-term care, and family allowances.
  - India can learn from Germany's model of social insurance, which is widely accepted and trusted by the public and provides adequate protection and incentives for workers.
- **Singapore:** Singapore has a unique social security system that is based on the principle of individual savings, where workers are required to save a portion of their income in a central provident fund that can be used for retirement, housing, health care, and education.
  - India can learn from Singapore's approach of promoting personal responsibility and asset accumulation, as well as providing flexibility and choice for workers to manage their savings.

#### Conclusion

There is a need for more robust policy implementation, proper allocation of funds, transparent utilization of resources, and efficient oversight mechanisms. Without addressing these issues, the intended beneficiaries of social security programs may continue to face challenges and inadequate support. The Code on Social Security proposed by the government in 2020 is a positive step towards providing a statutory framework for social security for various categories of workers, including those in the gig economy and informal sectors.



## Exploring the Ethical Implications of AI

*This editorial is based on **Can AI be Ethical and Moral?** which was published in **The Hindu** on 24/08/2023. It talks about how programming ethics into machines is complex, and the world must proceed cautiously while using AI.*

**Tag:** Ethics, GS Paper-3, Robotics, IT & Computers, GS Paper-4

Increasingly, **machines and Artificial Intelligence (AI)** are assisting humans in decision-making, particularly in governance. Consequently, several **countries are introducing AI regulations**. Government agencies and policymakers are leveraging AI-powered tools to analyse complex patterns, forecast future scenarios, and provide more informed recommendations.

However, **the use of AI in decision-making comes with challenges**. AI can have built-in biases from the data it learns from or the viewpoints of its creators. This **can result in unfair outcomes, posing a significant obstacle to effectively incorporating AI into governance**.

### What is Artificial Intelligence (AI)?

#### ➤ About:

- AI is the **ability of a computer, or a robot controlled by a computer to do tasks that are usually done by humans** because they require human intelligence and discernment.
  - Although **there is no AI that can perform the wide variety of tasks an ordinary human can do**, some AI can match humans in specific tasks.

#### ➤ Characteristics & Components:

- The ideal characteristic of AI is its **ability to rationalise and take actions that have the best chance of achieving a specific goal**. A subset of AI is **Machine Learning (ML)**.
  - Deep Learning (DL) techniques **enable this automatic learning through the absorption of huge amounts of unstructured data** such as text, images, or video.

#### ➤ Different Categories:

- Weak AI/ Narrow AI
- Strong AI

### How Does AI Relate to Certain Philosophical Ideas?

#### ➤ Kantian Ethical Philosophy:

- Immanuel Kant's ethical philosophy underscores three key principles:
  - **Autonomy** (the ability to make one's own decisions),
  - **Rationality** (using logic and reason to make choices), and
  - **Moral duty** (following ethical obligations).
- **Application to AI in Governance:** The act of delegating decision-making processes to AI systems carries the risk of eroding the capacity for nuanced

moral reasoning. Letting machines decide instead of humans might weaken the important ideas of Kantian ethics.

#### ➤ Bounded Ethicality:

- In 2022, two researchers researched bounded ethicality using Delphi, a prototype for modeling human moral judgments. They discovered that machines, like Delphi, **might act immorally if the scenario is framed in a way that separates ethics from the action itself**.
  - This shows that the machine version of bounded ethicality is similar to **how humans sometimes act against their own morals without feeling guilty, often using justifications**.

**Note:** Bounded ethicality is people's ability to make ethical choices is often limited or restricted because of internal and external pressures.

#### ➤ Parallel with Asimov's 'Three Laws of Robotics':

- Asimov's laws were created to guide robots to behave ethically. However, in Asimov's fictional scenarios, these laws often **resulted in unexpected and paradoxical outcomes, demonstrating the complexity of ethical decision-making** even in machines designed to act ethically.

#### ➤ The Intersection of Kant and Asimov:

- Kant's emphasis on rational moral agency and Asimov's fictional exploration of ethical guidelines for robots are interconnected. This combination serves to illustrate the **ethical difficulties and complexities that arise when human responsibilities and functions are delegated to artificial entities**.

### The Asimov's Laws:

- A robot **may not injure a human being** or, through inaction, allow a human being to come to harm;
- A robot **must obey the orders given to it** by human beings except where such orders would conflict with the First Law;
- A robot **must protect its own existence as long as such protection does not conflict with the First or Second Law."**
- Asimov later added another rule, known as the **fourth or zeroth law**, that superseded the others. It stated that **"a robot may not harm humanity, or, by inaction, allow humanity to come to harm."**

### What are the Ethical Challenges of AI?

- **Job Displacement and Socioeconomic Impact:** Automation powered by AI can lead to job displacement in certain industries. The **resulting socioeconomic**

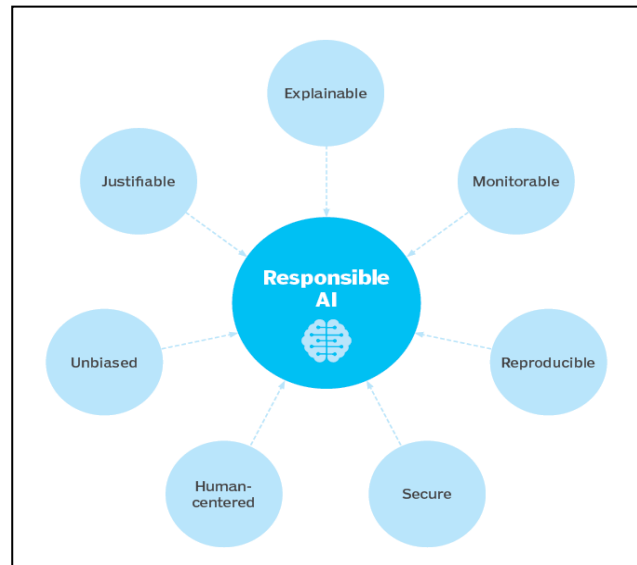
impact, including **unemployment** and **income inequality**, poses ethical questions about the responsibilities of governments and organisations in addressing these consequences.

- **Threat to Moral Reasoning:** When decisions that were traditionally made by humans are handed over to algorithms and AI, **there's a risk that the capacity for moral reasoning could be compromised**. This implies that relying solely on AI might **diminish the human ability to engage in thoughtful ethical thinking**.
- **Challenges of Codifying Ethics:** Attempting to translate ethics into explicit rules for robots or AI-driven governmental decisions is highlighted as a challenging task. Human morals are very complex, and **it's tough to make these complicated ideas fit into computer instructions**.
- **Lack of Accountability & Transparency:** It can be difficult to assign responsibility when something goes wrong with an AI system, **especially when it involves complex algorithms and decision-making processes**.
  - The inner workings of many AI systems are often opaque, **making it difficult to understand how decisions are being made**. This lack of transparency can lead to mistrust and skepticism among users.
- **Informed Consent:** AI systems can be used to collect and analyse **personal data** without the knowledge or consent of the individuals involved. This **raises concerns about informed consent and the right to privacy**.

### ***Can Machines or AI be like Moral Decision-Makers/ Artificial Moral Agents (AMAs)?***

- Some research says that **machines can, in a way, be responsible for their actions in ethical terms**. James Moore (Professor at Dartmouth College) classified machine agents related to ethics into four groups:
  - **Ethical Impact Agents:** These machines, like robot jockeys, don't make ethical choices themselves, but **their actions have ethical effects**. For example, they could change how a sport works.
  - **Implicit Ethical Agents:** These machines have built-in safety or ethical rules, like the autopilot in planes. They **follow set rules without actively deciding what's ethical**.
  - **Explicit Ethical Agents:** These **go beyond fixed rules**. They use specific methods to figure out the ethical value of choices. For instance, systems that balance money investments with social responsibility.
  - **Full Ethical Agents:** These **machines can make and explain ethical judgments**. Adults and advanced AI with good ethical understanding fall into this category.

### ***What are the Ethical Considerations of Responsible AI?***



### ***Conclusion***

Currently, many machine predictions help with decisions, but humans still make the final call. In the future, governments might let machines make simple decisions. But what if a decision made by a machine is wrong or unethical? Who's responsible? Is it the AI system, the one who made the AI, or the person who used its data?

These are some of the tough questions that the world is going to face. Putting ethics into machines is tough, and everyone needs to be careful moving forward.



## **India & Challenges in African Stability**

*This editorial is based on **India's G-20 opportunity for an African Renaissance** which was published in The Hindu on 25/08/2023. It talks about the issues and challenges faced by the African continent and how India could leverage its position to maintain stability in the continent.*

**Tag:** International Relations, GS Paper - 2, Groupings & Agreements Involving India and/or Affecting India's Interests.

Like an absentee landlord, Africa is flagging its demands nowadays on multilateral fora such as **BRICS (Brazil, Russia, India, China and South Africa)**, the **G-20** and the **United Nations General Assembly**. For a continent with 54 countries, over a quarter of the "**Global South**", it is populated at BRICS and the G-20 by South Africa, an atypical representative of the African continent.

### **What are the Challenges and Disruptions faced by African Countries?**

- **Misgovernance:** Many African countries suffer from poor governance, corruption, nepotism, and lack of accountability. These problems undermine the legitimacy and effectiveness of the state institutions and create public discontent and distrust.
- **Unplanned Development:** Many African countries face the challenges of rapid population growth, **urbanization**, environmental degradation, and resource scarcity. These issues require careful planning and management to ensure sustainable development and social welfare.
- **Dominance of Ruling Tribes:** Many African countries are characterized by ethnic and tribal diversity, which can be a source of richness and pluralism, but also of conflict and violence. Some ruling tribes or elites tend to monopolize power and resources, marginalize or oppress other groups, and fuel resentment and rebellion.
  - **Inter-Tribal Scrimmage:** Many African countries witness frequent clashes between different tribes or communities over land, water, cattle, or other resources. These conflicts are often exacerbated by climate change, drought, famine, or displacement.
    - They result in loss of lives, destruction of property, and humanitarian crises.
- **Terrorism:** Many African countries are affected by the **threat of Islamic extremism and terrorism, which is often linked to global networks such as Al-Qaeda or ISIS**. These groups exploit the grievances and vulnerabilities of the local populations, recruit fighters, carry out attacks, and destabilize the security and stability of the region.
- **Changing Climate:** Many African countries are **highly vulnerable to the impacts of climate change, such as rising temperatures, erratic rainfall, floods, droughts, desertification, and diseases**. These effects pose serious challenges to the livelihoods, food security, health, and resilience of the people and the ecosystems.
- **Runaway Food Inflation:** Many African countries face the problem of **high food prices, which are driven by various factors such as supply shocks, demand pressures, market distortions, speculation, or currency depreciation**. These factors reduce the purchasing power and access to food for millions of people, especially the poor and the vulnerable.
- **Urbanization and Youth Unemployment:** Many African countries experience **rapid urbanization, which is often unplanned and unmanaged**. This leads to the emergence of slums, overcrowding, pollution, crime, and social exclusion.
  - Moreover, many African countries have a large and growing youth population, which faces high rates of unemployment, underemployment, or informality. These conditions create frustration, despair, and potential for social unrest.
- **External Interventions:** Military interventions by France, the United States, and Russia's **Wagner Group** to curb militancy have shown that they often worsen the situation. These interventions have costs: keeping dictatorships in power to protect their economic interests, such as uranium in Niger, gold in the Central African Republic and oil in Libya.
- **Return of Military Generals:** In the past decade, military leaders have regained power in Egypt, **Burkina Faso, Mali, and Niger**. Meanwhile, the armed forces in **Libya and Sudan** have divided and are competing for control.
- **Regional and Continental Dynamics:** Regional organizations play a crucial role in maintaining stability. However, when member states themselves have military governments, enforcing democratic norms and stability becomes more challenging.
  - For instance, when the **Economic Community of West African States (ECOWAS)** recently threatened to act militarily against Niger's junta, two member-states, **Mali and Burkina Faso** — both run by military governments — opposed the idea.
- **China's Changing Role:** China's significant investments in Africa have played a substantial role in the continent's economic growth. However, Africa's heavy reliance on exporting raw materials to China has made it vulnerable to shifts in China's economic priorities. As China's economy slows and its focus shifts, African countries that heavily depended on commodity exports may face economic challenges.
  - **Debt Concerns:** While China's **Belt and Road Initiative** has brought infrastructure development to many African countries, it has also led some nations to accumulate high levels of debt.
- **Geopolitical Tensions:** The involvement of various global powers in Africa has historical, economic, and geopolitical dimensions. Former colonial powers like France and the UK, as well as the US, have economic interests and historical ties to the continent. Geopolitical tensions between these powers can impact Africa's stability and development.
- **Economic Challenges:** Economic downturns in major global economies like Europe and the United States can limit their capacity to engage with Africa. This can affect development aid, investment, and trade relationships.



- Europe's focus on curbing illegal migration from African shores has influenced its engagement with African countries. While **addressing migration is important, an overly narrow focus on this issue can overshadow broader development and stability concerns.**

### **How is India**

#### **Affected by these Turmoils in Africa?**

- **Economic Impact:** India has significant trade and investment ties with Africa, which are affected by the instability and insecurity in the continent.
  - **India-Africa trade reached USD 98 billion in 2022-23** and India is the **fifth-largest investor** in Africa.
  - India also provides concessional lines of credit to fund development projects in Africa, has **extended over USD 12.37 billion in concessional loans.**
  - India has completed **197 projects** and has provided **42,000 scholarships** since 2015.
- **Security Impact:** India has a strategic interest in maintaining peace and stability in Africa, especially in the **Horn of Africa region**, which is an essential shipping lane that connects the Indian Ocean to the **Suez Canal.**
  - India also participates in **peacekeeping missions and counter-terrorism efforts** in Africa, as well as provides training and capacity-building to African security forces.
  - The turmoil in Africa poses threats to India's security interests and objectives, as they create breeding grounds for terrorism, piracy, organized crime, and human trafficking.



- **Diplomatic Impact:** India has a long-standing partnership with Africa, based on mutual respect, solidarity, and cooperation. India supports the aspirations of African countries for self-reliance, democracy, and development.

- India engages with them through various platforms such as the **India-Africa Forum Summit (IAFS)**, the **International Solar Alliance (ISA)**, and the **Commonwealth.**
- The turmoils in Africa undermine the credibility and effectiveness of the **African Union (AU)** and other regional organizations
  - They also create divisions and tensions among African countries, and invite more intervention from external actors such as China, Russia, France, the UK, and the US.
- **Humanitarian Impact:** India has a large diaspora in Africa, estimated at about 3 million people, who are mostly engaged in trade, commerce, and professional services.
  - India **also provides humanitarian assistance to African countries affected by conflicts**, disasters, or epidemics, such as food, medicine, equipment, and personnel.

### **How can India**

#### **leverage its Position to Help Africa?**

- **Political Support:** India can use its diplomatic influence and goodwill to support the African countries in their quest for peace, democracy, and development.
  - India can also **advocate for the African voice and interests in the global forums**, such as the **United Nations**, the **G-20**, and the **World Trade Organization.**
  - India can also foster regional cooperation and integration among the African countries, by **supporting the African Union and its initiatives**, such as the **African Continental Free Trade Area (AfCFTA)** and the **African Peace and Security Architecture (APSA).**
- **Economic Partnership:** India can enhance its trade and investment ties with Africa, by providing more market access, preferential tariffs, and quality products and services.
  - India can also **increase its development assistance to Africa**, by offering more concessional loans, grants, and technical cooperation.
  - India can also **share its best practices and experiences with Africa** in fields such as agriculture, rural development, microfinance, small and medium enterprises, and digital economy.
    - India can offer force multipliers such as targeted investments and transfer of relevant and appropriate Indian innovations, such as the **JAM trinity (Jan Dhan-Aadhaar-Mobile)**, **DBT (Direct Benefit Transfer)**, **UPI (Unified Payments Interface)**, and **Aspirational Districts Programme.**

- **Security Cooperation:** India can strengthen its security cooperation with Africa, by providing more training, equipment, and intelligence to the African security forces.
  - India can also **contribute more to the peacekeeping missions and operations in Africa**, by deploying more troops, experts, and resources.
  - India can also **collaborate with Africa in countering the common threats of terrorism, piracy, organized crime, and human trafficking**.
- **Science, Technology, and Innovation Collaboration:** India can boost its science, technology, and innovation collaboration with Africa, by supporting more scientific research and development projects in Africa.
  - India can also **facilitate more technology transfer and adaptation** to Africa, by providing affordable and appropriate solutions to the African challenges and opportunities.
  - India can also **promote more innovation exchange and cooperation** with Africa, by encouraging more start-ups, incubators, and hubs to collaborate across the continent.



## CleanTech: Benefits & Challenges

*This editorial is based on **Cleantech, for an inclusive green future in India** which was published in **The Hindu** on 26/08/2023. It talks about the benefits of adopting CleanTech in India. It also talks about how India could effectively adopt CleanTech.*

**Tag:** Governance, GS Paper - 3, Solar Energy, Renewable Energy, GS Paper - 2, Government Policies & Interventions

India's experience has shown that climate action is only effective and embraced at scale if it aligns with the development aspirations of millions and contributes to economic growth.

The **green economy** paradigm provides an optimistic pathway to align development and environmental outcomes. For instance, building a solar park or an electric vehicle charging station helps expand the much-needed infrastructure in a developing economy while furthering climate action. Similarly, reviving millets helps improve farm incomes in rain-fed areas while making our agriculture climate resilient.

### What do We Understand about CleanTech?

CleanTech, short for "clean technology," refers to innovative technologies, products, and processes that aim to reduce or minimize the negative environmental impact associated with various industries and activities.

CleanTech encompasses a wide range of sectors, including energy, transportation, agriculture, waste management, water treatment, and more. The **primary goal of CleanTech is to promote sustainability, resource efficiency, and environmental protection** while maintaining economic growth and human well-being.

### Some examples of CleanTech are:

- Solar panels that convert sunlight into electricity
- Wind turbines that generate power from the wind
- **Biofuels** that are made from plants or waste materials
- **Electric vehicles** that run on batteries or **hydrogen fuel cells**
- **Smart grids** that optimize the distribution and consumption of electricity
- LED lights that use less energy and last longer than traditional bulbs

### What is the Significance of CleanTech in India?

- **Reducing Dependence on Fossil Fuels:** India's heavy reliance on fossil fuels, coupled with their volatility in pricing and susceptibility to geopolitical disruptions. By embracing CleanTech, India can tap into its abundant renewable energy resources like solar, wind, biomass, and hydro power to diversify its energy mix.
  - **Oorjan**, a roof-top solar platform system that offers solutions to set up and maintain solar panels for households and businesses.
- **Mitigating Climate Change and Emissions:** It can help India achieve its **renewable energy targets** and reduce its dependence on fossil fuels. India has set a goal of installing 450 GW of renewable energy capacity by 2030. **CleanTech adoption can help India meet its emission reduction targets, align with international agreements like the Paris Agreement**, and contribute to global efforts to limit global temperature rise.
  - **Log 9 Materials**, a **nanotechnology** company that has developed an innovative zero emission and low-cost aluminum-air fuel cell.
  - **Ecowrap** is a **biotechnology** company that produces biodegradable and compostable packaging materials from agricultural waste.
- **Enhancing Energy Security and Resilience:** CleanTech allows India to harness its domestic renewable resources, thereby decreasing its dependence on energy imports.
  - **Urjas**, a startup that converts agricultural waste into **biofuel** pellets.
    - The pellets can be used as a substitute for coal, diesel, or wood in various applications such as cooking, heating and power generation.

- **Improving Quality of Life:** CleanTech has the **potential to transform living conditions for millions of Indians by providing access to clean and affordable energy, safe water, reliable sanitation, and efficient transportation.** This is particularly beneficial for rural areas and slums where such services are lacking, leading to improved health, education, and overall well-being.
  - **OxyGarden**, a startup that has launched a product called Forest, which is an indoor natural air purifier.
  - **Karma Healthcare** is a healthcare company that uses solar-powered e-clinics to provide affordable and accessible healthcare services in rural areas.
- **Stimulating Economic Growth:** India's pursuit of CleanTech solutions presents opportunities for innovation and entrepreneurship, stimulating the growth of startups and SMEs. Furthermore, **CleanTech can generate income for rural communities engaged in the CleanTech value chain.**
  - **S4S Technologies** has developed solar-powered food dehydrators that can preserve fruits, vegetables, and grains without using any chemicals or additives.
    - It can help farmers reduce post-harvest losses, increase shelf life, and add value to their produce.
- **Encouraging Innovation:** The adoption of CleanTech requires innovative solutions across multiple sectors. **This can spur research and development activities, leading to technological breakthroughs** that benefit not only India but also have global implications.
  - **Carbon Masters**, a startup that has developed a technology to convert organic waste into carbon-neutral **biogas**. The biogas can be used for cooking, heating, or power generation.
    - It also produces bottled biogas under the brand name **Carbonlites, which can be used as an alternative to LPG cylinders.**
- **Women Empowerment:** CleanTech innovation opens avenues for women entrepreneurs and leaders. Women-led startups and businesses can focus on developing and implementing sustainable solutions, thereby breaking traditional gender norms and fostering a culture of women leadership in a male-dominated field.
  - A recent **Council on Energy, Environment and Water (CEEW)** study has shown that **out of the 13,000 early adopters of clean tech livelihood appliances, more than 80% are women.**
  - By 2030, India is expected to see **30 million women-owned micro, small and medium enterprises (MSMEs)** employing around 150 million people.

- **Rural Empowerment :** India's rural economy that comprises 120 million farmers and 34 million microenterprises often struggles with unreliable electricity access and a dependence on expensive and imported diesel.
  - These renewable energy based CleanTech solutions can help India reduce its diesel imports, avoid the loss of perishable food and **enhance rural livelihood opportunities while posing an investment opportunity worth USD 50 billion for investors and financiers.**
  - According to the CEEW, **just 12 CleanTech solutions have the potential to impact at least 16% of our rural population.**

### ***What are the Challenges in Adopting CleanTech?***

- **Low Product Awareness:** Many potential customers are **not aware of the benefits and features of CleanTech products and services**, or they have misconceptions about their performance and reliability.
- **High Customer Acquisition Cost:** CleanTech solutions often **require a high upfront investment and a long payback period**, which deter many customers from adopting them.
  - Moreover, customers need to touch and feel these products before adoption, which increases the marketing and distribution costs for CleanTech providers.
- **Low Density of Customers:** The **demand for CleanTech solutions is dispersed across rural and remote areas, where the infrastructure and logistics are poor and the access to finance is limited.** This makes it difficult for CleanTech providers to reach and serve these customers efficiently and profitably.
- **Limited After-Sales Service and Market Linkage:** Customers who adopt CleanTech solutions often face challenges in maintaining and repairing them, as there is a lack of skilled technicians and spare parts in the local markets.
  - Additionally, customers who use CleanTech solutions for livelihood enhancement, such as solar dryers or biomass cold storages, **may not have adequate market linkages to sell their processed products at competitive prices.**

### ***What should be the Way Forward?***

- **Leverage Existing Government Programmes:** Utilizing existing government programs like:



- The **Pradhan Mantri MUDRA Yojana** that extends collateral-free loans for microenterprises can be used to enable the adoption of CleanTech solutions.
- The **Pradhan Mantri Formalisation of Micro food processing Enterprises (PM-FME) scheme** that supports the adoption of technology among micro food enterprises can be used to unlock support for solutions such as a solar dryer, an energy-efficient multipurpose food processor or a solar grain mill.
- The **Pradhan Mantri Matsya Sampada Yojana** can be leveraged towards adopting solar refrigerators and dryers for fishing communities.
- The **Agriculture Infrastructure Fund**, which has only seen a 15% fund utilization against a target of Rs 1,00,000 crore, can support the adoption of biomass-powered cold storage and beyond.
- **Enable Large-Scale Financing of CleanTech Solutions:** It requires enhancing bankers' capacity on understanding of CleanTech solutions through training and capacity building to enable informed credit assessment.
  - It also requires **Mitigating risks for financiers in the initial stages by providing partial guarantees.**
  - Moreover, **Collaborating with financiers to design loan products aligned with the unique cash flow scenarios of users**, thereby encouraging investment in CleanTech solutions.
  - Adopting some of these principles '**Powering Livelihoods**' (a CEEW initiative) was able to secure over 300 loans for CleanTech solutions in rural areas for women, **SHGs, FPOs**, and microentrepreneurs.
- **Enable Multi-Actor Partnerships:** Establishing partnerships between various stakeholders, such as technology innovators, manufacturers, distributors and service providers, financiers, and market-linkage players to enable an overall ecosystem.
  - **Addressing challenges faced by CleanTech manufacturers**, such as limited product awareness, high customer acquisition costs, and sparse customer density.
  - **Ensuring a holistic ecosystem where distributors collaborate with manufacturers** to make technology accessible at the grassroots level.
  - **Incorporating service providers to ensure reliable after-sales services** and market-linkage players to facilitate access to markets.
    - For instance, there are solar dryer companies that are not only deploying dryers but are also enabling financing for users to adopt the dryers and buying back the final produce from them to ensure market linkages.



## Rethink India's Fiscal Federalism

*This editorial is based on "Rethink the emerging dynamics of India's fiscal federalism" which was published in The Hindu on 26/08/2023. It talks about the Need of Rethinking India's Fiscal Federalism.*

**Tag:** Polity, GS Paper - 2, Federalism, Co-operative Federalism.

The Indian Constitution can be thought of as a "holding together federation" that leans slightly towards unity. It was created to address the forces pulling the country apart before Independence. Over the past 73 years, it has proven to be very strong and adaptable. However, nowadays, it's important to think again about how money and resources are shared between the central government and the states. This is because the country's economy is changing, and its needs are different now.

### What is Fiscal Federalism?

- **Fiscal federalism** is a term that describes how the financial powers and responsibilities are divided between different levels of government in a country.
- It involves questions such as which functions and services should be provided by the central government or the state governments, how the revenues should be raised and shared among them, and how the transfers or grants should be allocated to ensure efficiency and equity.

### What are Some

### Tools to Achieve Fiscal Federalism?

- **Constitutional Assignment of Taxation and Expenditure Powers:** The Constitution of India defines the powers and functions of taxation and expenditure for different levels of government, with clear demarcation between the central government and the state governments.
- **Finance Commission:** The **Finance Commission** is a constitutional body (Art 280) responsible for recommending the distribution of tax revenues between the central government and the state governments. It also suggests ways to augment the financial resources of states, promote fiscal discipline, and ensure stability in fiscal matters.
- **Goods and Services Tax (GST):** The **GST** is a comprehensive indirect tax that replaces multiple central and state taxes on goods and services. It's administered by a GST Council consisting of representatives from the central and state governments.
- **Grants-in-Aid System:** The **grants-in-aid system** (Art 275) involves the discretionary transfer of funds from the central government to state governments



for specific purposes or schemes. These grants aim to supplement the resources of states and address regional disparities and developmental gaps.

### **Why India's Fiscal**

#### **Federalism needs a Rethinking?**

- **Shift from Planned Economy to Market-Mediated System:** The transition from a planned economy to a market-mediated economic system **marked a shift from centralized decision-making to a more decentralized approach** where market forces play a more significant role. This change has had implications on resource allocation, investment, and overall economic growth. It has also led to greater autonomy for states in economic decision-making.
- **73<sup>rd</sup> and 74<sup>th</sup> Constitutional Amendments:** The 73<sup>rd</sup> and 74<sup>th</sup> Constitutional Amendments in India led to the establishment of Panchayats and Municipalities as local self-governing bodies. This decentralization aimed to enhance local governance, empower grassroots institutions, and ensure more effective implementation of development policies.
  - The amendments have not ensured adequate and predictable transfers of funds from the state governments to the local bodies.
    - The state governments have often used their discretion to withhold or delay the grants-in-aid to the local bodies, thereby affecting their financial autonomy and accountability.
- **Abolition of Planning Commission and Introduction of NITI Aayog:** The Planning Commission was replaced by the National Institution for Transforming India (NITI Aayog) in 2015. This change represented a shift from a top-down planning approach to a more collaborative and flexible policy-making process. NITI Aayog's role is to provide strategic and technical advice to the central and state governments, promoting cooperative federalism.
  - Unlike the Planning Commission, NITI Aayog has no say in centre-state transfers, which could motivate states to reform with plan grants.
- **Fiscal Responsibility and Budget Management (FRBM) Act, 2003:** The FRBM Act was introduced to ensure fiscal discipline by reducing fiscal deficits and managing public debt. The Act applied to both the central and state governments, fostering a more responsible fiscal approach. However, its implementation has sometimes led to challenges in balancing growth-oriented spending with fiscal prudence.
- **Goods and Services Tax (GST) Act and GST Council:** The introduction of the GST Act in 2017 marked a significant tax reform. It replaced a complex web of

indirect taxes with a unified tax structure, promoting ease of doing business and reducing tax cascading. The introduction of GST reduced the tax collection powers of the states.

- Some state finance ministers have alleged that the **GST Council's** decisions are influenced by political considerations and not by economic rationality.
  - They have also complained that their views are not given due weightage and that they are often outvoted by the majority.
- **Use of Cess and Surcharges:** The use of cess and surcharges has become a common practice for raising revenue for specific purposes. However, it can affect the size of the divisible pool, impacting the funds available for distribution to states. This can lead to imbalances in resource allocation and fiscal autonomy.
  - For instance, **GST compensation cess** has often attracted controversy for inadequate and untimely payments.
- **Central Legislations:** Several pieces of central legislation such as the **Mahatma Gandhi National Rural Employment Guarantee Act 2005**, the **Right of Children to Free and Compulsory Education Act 2009**, the **National Food Security Act 2013** and many others impose an extra burden on the States.
- **Evolved Political Discourse:** India is no longer the one-party governance of post-Independence times. It has become a truly multi-party system. The nature of polity, society, technology, demographic structure and the development paradigm itself have significantly changed. As a result of these changes, India's political arena has become more competitive and dynamic which has opened new fiscal dimensions.

### **How India could**

#### **Strengthen its Fiscal Federalism?**

- **Equity-Oriented Intergovernmental Transfers:** Intergovernmental transfers, like the funds allocated from the central government to states, should be designed to promote equity.
  - **Horizontal and Vertical Fiscal Imbalances:** Addressing both horizontal imbalances (disparities among states) and vertical imbalances (between the central and state governments) is crucial. The devolution formula should be designed to account for both sets of imbalances to ensure that resources are allocated fairly.
- **Use of Performance-Based Grants:** Introduce performance-based grants that reward states for achieving certain developmental targets, such as

improving health and education indicators. This encourages states to focus on effective governance and results.

- **Constitutional Reforms:** Revisit **Articles 246 and the Seventh Schedule** to redefine the division of powers and responsibilities between the central and state governments. This can help clarify which functions should be carried out at each level, reducing confusion and enhancing efficiency.
- **Empowering Local Governments:** Strengthen the third tier of government by providing them with adequate resources, functions, and autonomy. This can involve creating a clear framework for responsibilities and finances, ensuring that local bodies have the power to make decisions that affect their communities.
- **Uniform Financial Reporting System:** Implement a standardized financial reporting system that encompasses all levels of government. This helps maintain transparency, accountability, and efficient fiscal management.
- **Review Off-Budget Borrowing:** Address the issue of off-budget borrowings by ensuring that all financial transactions are included in the budget. This prevents hidden liabilities and increases transparency in fiscal management.
- **Convergence of Development Indicators:** Use a combination of economic and social indicators, like per capita income and Human Development Index (HDI), to allocate funds. This approach ensures that states are not only economically developed but also focused on improving the overall well-being of their citizens.
- **Fiscal Responsibility and Budget Management (FRBM) Act:** Align the FRBM Act provisions for both central and state governments to maintain fiscal discipline while accommodating their unique fiscal situations.
- **Devolving Tax Powers:** Provide states with more flexibility and control over taxation, enabling them to generate revenue according to their local economic conditions and priorities.
- **Cooperative Federalism:** Foster a spirit of cooperative federalism where the central and state governments collaborate to design and implement policies that benefit the nation as a whole.
- **Regular Review and Dialogue:** Establish mechanisms for regular review and dialogue between the central and state governments to discuss fiscal issues, policy challenges, and potential improvements to the fiscal federalism framework.



## Ecological Challenges in Himalayas

*This editorial is based on “Himalayan blunders that are ravaging the Himalayas” which was published in The Hindu on 28/08/2023. It talks about the significance of the Himalayas, the ecological challenges they have been recently facing and the impact of rampant urbanisation on the region.*

**Tag:** Biodiversity and Environment GS Paper-1, Important Geophysical Phenomena, Water Resources, Physical Geography, GS Paper-3, Conservation, Environmental Pollution and Degradation, Biodiversity Hotspots.

In the heart of Asia, the Himalayan mountain range, often referred to as the “Roof of the World”, has captivated human imagination for centuries with its breathtaking beauty and allure.

However, behind the serene facade lies a tale of **escalating environmental challenges**. In recent times, the Himalayas have borne witness to a series of unprecedented and alarming challenges that threaten their very existence.

From the impacts of climate change leading to **glacial melt and altered weather patterns**, to **rampant urbanisation and unsustainable development practices**, the Himalayas are facing a wave of devastation that demands immediate attention.

Understanding the delicate balance that sustains the Himalayas has become a matter of concern for not just the region, but a global imperative. The **plight of the Himalayas requires urgent attention and collaborative efforts** on a global scale.

### Why are the Himalayas Significant?

- **Cultural and Spiritual Significance:** The Himalayas are regarded as a sacred and spiritual centre by numerous cultures and religions, including **Hinduism, Buddhism, and Jainism**.
  - They are home to several revered pilgrimage sites, monasteries, and temples and are often associated with meditation, enlightenment, self-discovery etc.
- **Biodiversity Hotspot:** The Himalayan region is recognized as one of the **world's biodiversity hotspots** and contributes to **global ecological balance**.
  - Its diverse ecosystems, ranging from lush forests to alpine meadows, harbour a rich variety of plant and animal species, some of which are unique to the region.
- **Water Source:** The Himalayan glaciers and snowfields serve as the **source for major rivers like the Ganges, Indus, Brahmaputra, and Yangtze**, which sustain

the lives and livelihoods of millions of people across South Asia.

- The water from these rivers supports agriculture, hydropower generation, and urban centres downstream.
- **Climate Regulation:** The Himalayas play a crucial role in regulating the climate of the surrounding regions and beyond. They **influence the monsoon patterns** that bring vital rainfall to countries like India, Nepal, and Bangladesh.
- The Himalayan glaciers are also **sensitive indicators of global climate change**.
- **Geological Importance:** The Himalayas are the result of the ongoing collision between the Indian Plate and the Eurasian Plate. This geological process has shaped the landscape and continues to influence seismic activity in the region.
- **Studying the Himalayas provides insights into the Earth's tectonic forces** and helps scientists understand the **dynamics of mountain building**.

### ***How is Rampant***

### ***Urbanisation Affecting Himalayas?***

- **Flawed Development:** Blocked roads after a **landslide at Chamoli, sinking of Joshimath** in Uttarakhand, road caving in Chamba in Himachal epitomise a flawed developmental paradigm institutionalised in the Himalayan region.
- Studies by the National Remote Sensing Center (of ISRO) have revealed that **Rudraprayag and Tehri districts are the most landslide-affected districts** in the country.
- The **Chardham Mahamarg Vikas Pariyojna**, a massive infrastructure project, claimed lakhs of trees, acres of forest land and the fertile topsoil of the fragile Himalayas.
- **Unregulated Tourism:** While tourism can bring economic benefits, unchecked tourism can strain local resources and ecosystems. Mountainous areas are being **burdened beyond their capacity** by tourism and rural-to-urban migration.
- In 2022 alone, **100 million tourists, including pilgrims**, visited Uttarakhand, and experts continue to caution that unregulated tourism that exceeds the region's carrying capacity can have disastrous impacts.
- **Rising Temperatures:** The **Himalayas are warming faster than other mountain ranges**, and the **increased use of reinforced concrete** in building construction, replacing the traditional wood and stone masonry there, is likely to create a **heat-island effect** and thus add to regional warming.

- **Cultural Erosion:** Traditional Himalayan communities have distinct cultural practices and ways of life closely tied to their natural surroundings. Unsustainable urbanisation has been leading to the erosion of traditional knowledge, customs, and cultural identity.

### ***What Ecological***

### ***Challenges the Himalayas have been Facing?***

- **Climate Change and Glacial Melting:** The Himalayas are highly vulnerable to the impacts of climate change. Rising temperatures have led to the **rapid melting of glaciers, affecting water availability for rivers downstream**.
- This poses significant risks to communities that depend on glacial meltwater for agriculture, drinking water, and hydropower.
- **Accumulation of Black Carbon:** One of the biggest factors causing glaciers to melt is the emission of **black carbon aerosols** into the atmosphere.
- Black carbon absorbs more light and emits infra-red radiation that increases the temperature, therefore, an **increase in black carbon in the Himalayas** contributes to the faster melting of glaciers.
- Black carbon deposits are rising on the Gangotri glacier, escalating its melting. **Gangotri is also the fastest receding glacier**.
- **Natural Disasters:** The Himalayas are young, fold mountains which means they are **still rising and are prone to tectonic activities**. This makes the region prone to natural disasters such as landslides, avalanches, and earthquakes.
- Climate change can exacerbate the frequency and severity of these events, leading to loss of lives, property damage, and disruptions to infrastructure.
- **Soil Erosion and Landslides:** **Deforestation, construction activities, and improper land use practices** increase soil erosion and the risk of landslides.
- The loss of vegetative cover **destabilises Himalayan slopes, making them susceptible to erosion during heavy rainfall or seismic events**.
- **Growth of Invasive Species:** As temperatures rise, new habitats become available for invasive species that can **outcompete native the flora and fauna** of the Himalayan region.
- **Invasive species** disrupt the delicate balance of ecosystems and threaten the survival of native species.

### What Government Initiatives are Related to Protecting the Himalayan Region?

#### ➤ **National Mission on Sustaining Himalayan Ecosystem:**

- It was launched in 2010 and covers 11 states (Himachal Pradesh, Uttarakhand, Sikkim, all northeast states and West Bengal) and 2 UTs (J&K and Ladakh).
- It is one of the eight missions under the **National Action Plan on Climate Change (NAPCC)**.

#### ➤ **SECURE Himalaya Project:**

- It is a part of “Global Partnership on Wildlife Conservation and Crime Prevention for Sustainable Development” (**Global Wildlife Program**) funded by the **Global Environment Facility (GEF)**.
- It promotes sustainable management of alpine pastures and forests in the high range Himalayan ecosystems.

#### ➤ **Mishra Committee Report 1976:**

- Named after **MC Mishra** (then Garhwal commissioner in erstwhile UP), the committee gave its **findings about land subsidence in Joshimath**.
- The committee **recommended placing restrictions on heavy construction work**, blasting or digging to remove boulders for road repairs and other construction, and felling of trees in the region.

### What Other Measures can be Taken to Protect the Himalayan Ecosystem?

- **NDMA Guidelines for GLOFs:** To control the problem of unregulated tourism, the **National Disaster Management Authority (NDMA)** recommended a series of regulations that would create a buffer zone and restrict tourism in **Glacial Lake Outburst Floods (GLOFs)**-prone areas and nearby regions in order to reduce the scale of pollution in those areas.
- **Trans-Boundary Collaboration:** Himalayan countries need to build an international network that will monitor risks such as those from glacial lakes, and give early warning of hazards — similar to the tsunami warning systems installed around the Indian Ocean over the past decade.
  - The countries should share and disseminate knowledge about the mountains and preservation of the ecology there.
- **Education and Awareness:** If the people of the Himalayas were **more aware of the geological vulnerability and ecological fragility** of their mountain home, they would surely force more compliance of laws and regulations to protect it.

- India and other affected countries should **include in their school curricula basic knowledge of the geology and ecology of the Himalayas**. If students are taught about their environment, they will feel more connected to the land and be more aware of its pulse.
- **Role of Local Governments:** The municipalities in the Himalayan states need to play a **more proactive role while granting approval to buildings; building bye laws need to be updated** to overcome the emerging challenges of climate change.
  - Disaster management departments need to reorient their approach and focus on flood prevention & preparedness.
- **Other Important Steps:**
  - Having **early warning and better weather forecast systems** in order to forecast the disaster and alert the local population and tourists.
  - Reviewing the **area's latest status** and **drawing up a sustainable plan** that respects the specific requirements of the fragile region and climate impacts.
  - Initiating a dialogue on adverse impacts of commercial tourism and **promoting ecotourism**.
  - Issuing **Detailed Project Reports (DPR)**, **EIAs** and Social Impact Assessment (**SIA**) before implementing any project.
  - **Upgrading existing dams** to improve their structural stability and **prioritising regular monitoring** after flooding events.

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## BRICS and India's Multipolarity Rhetoric

*This editorial is based on “The BRICS test for India's multipolarity rhetoric” which was published in The Hindu on 22/08/2023. It talks about the challenge before India, to choose between a China-centric or a West-centric world order, or balance the two.*

**Tag:** International Relations, India and its Neighbourhood, Bilateral Groupings & Agreements, Groupings & Agreements Involving India and/or Affecting India's Interests, Regional Groupings, Important International Institutions

The 15<sup>th</sup> **BRICS summit**, a meeting of the leaders of Brazil, Russia, India, China, and South Africa, took place in Johannesburg, South Africa, in August 2023. The summit has provided a platform for cooperation and dialogue among the emerging economies that face common challenges and opportunities in the 21<sup>st</sup> century. The



theme of the summit is “BRICS and Africa: Partnership for Mutually Accelerated Growth, Sustainable Development, and Inclusive Multilateralism”.

### What are the Outcomes of the Johannesburg BRICS Summit (BRICS @ 15)?

- **Reaffirming Multilateralism and Reform:** The BRICS leaders issued a joint declaration that reaffirmed their commitment to multilateralism, international law, and

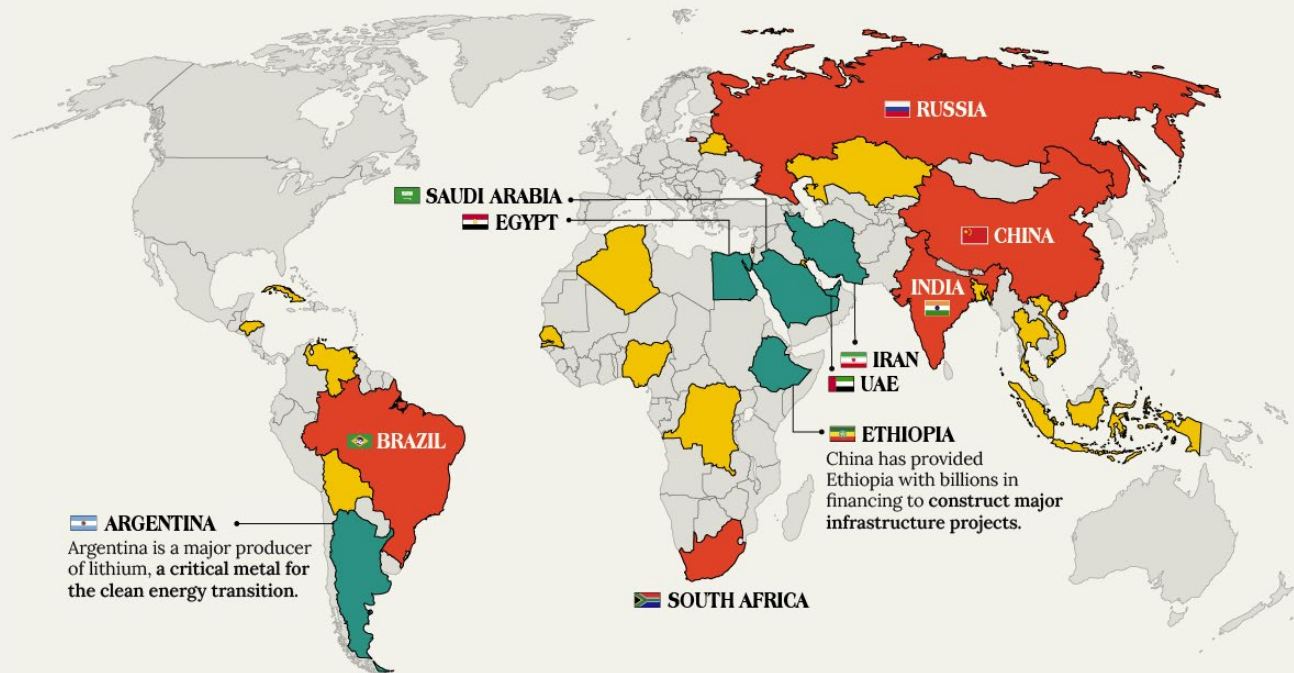
**sustainable development.** They also expressed their support for the reform of the **United Nations** and other global institutions to make them more representative and responsive to the needs of **developing countries.**

- **Expanding Membership and Influence:** The BRICS leaders endorsed the expansion of the membership of the grouping by inviting 15 countries from Africa and the Global South to participate in a Friends of BRICS meeting.

## VISUALIZING THE 2023 BRICS EXPANSION

BRICS, a bloc of developing countries formed in 2010, is set to welcome six new members at the beginning of 2024.

▲ Members    ▲ New Members    ▲ Applied for membership



### SHARE OF GLOBAL

GDP 2023 EoY PROJECTION

BRICS total with new members



29%

Saudi Arabia is the only trillion-dollar economy being added to BRICS.

POPULATION 2023



46%

Adding high-population-growth countries like Ethiopia means BRICS could soon represent over half the world's population.

OIL PRODUCTION 2022



43%

The addition of Saudi Arabia, Iran, and the UAE will more than double BRICS' share of global oil production.

EXPORTS OF GOODS\* 2022



25%

BRICS' share of global exports will increase slightly, continuing to be led by China.

\*Merchandise trade only.

Sources: IMF, World Population Review, EI Statistical Review of World Energy, World Trade Organization

visualcapitalist.com



- **The first phase of expansion:** The countries including **Argentina, Egypt, Ethiopia, Iran, Saudi Arabia, and the UAE** have received invitations to join BRICS. This new membership is set to take effect **from 1st January 2024**.
  - There are over 40 countries that have expressed interest in joining BRICS.
  - **Reasons for the BRICS expansion:**
    - China's strategic move for global influence.
    - Wider engagement among like-minded nations for a common cause.
  - Limited options in other groups.
  - Anti-western sentiment and Global South unity.
- **Common Currency:** The BRICS leaders agreed to explore the possibility of creating a common currency for trade and investment among the BRICS countries.
  - They tasked their finance ministers and central bank governors to study the feasibility and benefits of such a currency, which could reduce their dependence on the US dollar and other major currencies.
- **Regional and Global Issues:** The BRICS leaders discussed various issues of regional and global importance, such as the Covid-19 pandemic, climate change, terrorism, cyber security, energy security, trade, and investment.
  - They called for equitable access to vaccines and medical supplies for all countries and pledged to enhance their cooperation in health research and innovation.

**Note:**

- The principles set forth in the **BRICS Sanya Declaration of 2011** are aimed at increasing **engagement and cooperation with non-BRICS countries**, in particular developing countries, and to enhance the voice of the global south in international affairs.
- The **Beijing Declaration adopted at the 14th BRICS Summit in 2022** paved the way for membership expansion. China had proposed the **"BRICS Plus" expansion plan in 2017**.

### ***What are the Challenges India Faces in its Engagement with the BRICS?***

- **Balancing Rival Interests:** India has to **balance its relations with China and Russia**, which are increasingly seen as **strategic rivals by the West**.
  - **China's rise poses a major challenge and threat to India's security** and interests, especially on issues such as border disputes, maritime security, trade imbalance, technology competition, and human rights.

- **Russia's involvement in the Ukraine war and its alignment with China** have also raised **concerns in India about its traditional partner's reliability and credibility**.
- **Protecting/Practicing and Advocating Democratic Principles:** India has to **deal with Western normative expectations, without compromising its autonomy or sovereignty**.
  - India does not want to alienate or antagonize other countries in the global South, who may see merit in China's or Russia's efforts at expanding the membership or influence of non-western forums such as BRICS or SCO. **India has to pursue a pragmatic and principled foreign policy that serves its national interests and values.**
- **Managing Bilateral Differences:** India has **unresolved border disputes** and strategic rivalry with China and Pakistan, which **affect its relations with the BRICS**. India also has divergent views from Russia on issues such as Afghanistan, Iran, and the Indo-Pacific. India has to manage these **bilateral differences while pursuing multilateral cooperation within the BRICS**.
  - India's persistent **trade deficit with China** has raised concerns about the fairness of economic engagement. This trade imbalance could strain India's economic interests within BRICS and affect its overall economic stability.
- **Balancing China's Dominance:** China is the largest and most influential member of the BRICS, with its economic, military, and diplomatic clout surpassing that of the other four members. India has to balance its interests and values with its need to cooperate with China on common issues within the BRICS framework.
- **Geopolitical Rivalries:** India's **complex geopolitical relationships with some BRICS members**, such as **China and Russia**, pose challenges to maintaining a united front on various global issues. Disagreements on regional conflicts and security matters could hinder effective cooperation.
- **Developmental Disparities:** BRICS includes **both developed economies like China and Russia and emerging economies like India and South Africa**. Bridging the development gap among member countries to ensure equitable benefits from cooperation remains a significant challenge.
- **Coordination on Multilateral Platforms:** While BRICS aims to reform global governance institutions, including the United Nations and the International Monetary Fund, member countries often have different priorities and approaches to these reforms.
- **Varied Security Concerns:** BRICS member countries have diverse security concerns, ranging from terrorism

and regional conflicts to cyber threats. Aligning these concerns and coordinating joint security initiatives requires careful negotiation.

- **Shifting Global Alliances:** As geopolitical dynamics evolve, some BRICS members may seek closer ties with countries or organizations outside the group. This can impact the cohesion and collective bargaining power of BRICS on the global stage.

#### What Do We Need to Know About the BRICS?

##### ➤ About:

- BRICS is an **acronym** for the grouping of the world's leading emerging economies, namely **Brazil, Russia, India, China, and South Africa**.
- In **2001**, the **British Economist Jim O'Neill** coined the term BRIC to describe the four emerging economies of Brazil, Russia, India, and China.
- The grouping was **formalised** during the first meeting of BRIC Foreign Ministers' in **2006**.
- **South Africa was invited to join BRIC in December 2010**, after which the group adopted the acronym BRICS.

##### ➤ Share of BRICS:

- The BRICS brings together five of the largest developing countries of the world, representing 41% of the global population, 24% of the global GDP, and 16% of the global trade.

##### ➤ Chairmanship:

- The **chairmanship of the forum is rotated annually** among the members, in accordance with the acronym B-R-I-C-S.
- **India was the chair for 2021**.

##### ➤ Initiatives of the BRICS:

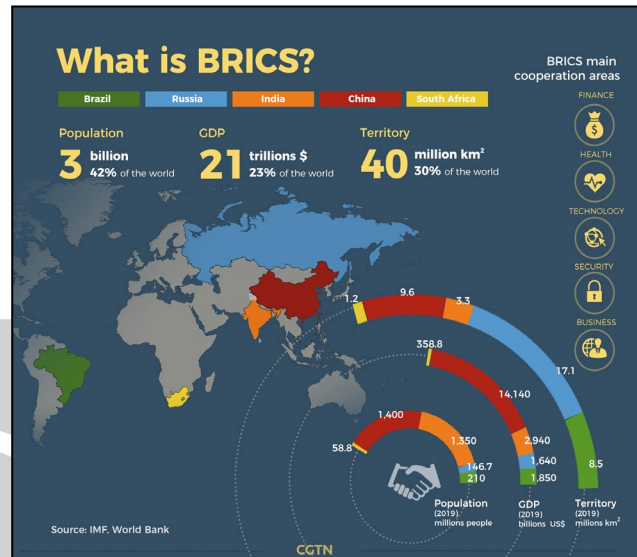
- **New Development Bank:** During the **Sixth BRICS Summit in Fortaleza (Brazil) in 2014**, the leaders signed the Agreement establishing the **New Development Bank (NDB - Shanghai, China)**.
- **Contingent Reserve Arrangement:**
  - In 2014, the **BRICS governments signed a treaty on the setting up** of the contingent reserve arrangement
  - The arrangement is **aimed at forestalling short-term balance of payments pressures**, providing mutual support, and strengthening the financial stability of the BRICS nations.
- **BRICS Payment System:**
  - **BRICS countries are trying to create a payment system as an alternative to the SWIFT** payment system.
  - This has taken on a new urgency as post Ukraine war, Russia has been frozen out of SWIFT.

##### ○ Customs Agreements:

- Customs agreements were signed to **coordinate and ease trade transport** between BRICS countries

##### ○ Launched of Remote Sensing Satellite:

- A **Remote Sensing constellation of satellites** has been launched – with 6 satellites including **2 from India, 2 from China, 1 from Russia, and 1 from Brazil-China collaboration**.

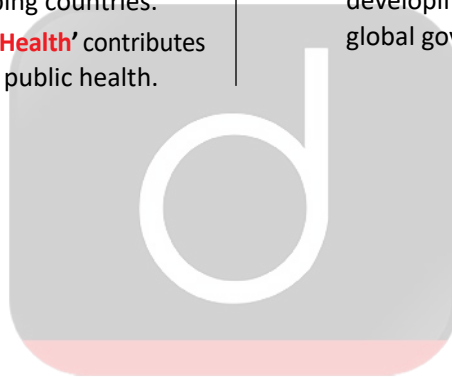


#### What Are the Possible Areas of Cooperation Within BRICS?

- **Cooperation Within the Group:** BRICS needs to **shed the centrality from China** and create a **better internal balance**, reinforced by the urgent need for diversification.
  - For BRICS to remain relevant over the next decades, each of its members must make a **realistic assessment of the opportunities** and inherent limitations.
  - The grouping shall also **explore the 'BRICS plus' cooperation at more levels** and in a wider scope.
    - This will **increase BRICS countries' representation and influence** and make greater contributions to world peace and development.
- **Upholding Universal Security:** BRICS countries should be builders of universal security. Seeking one's own security at the expense of others' will only create new tensions and risks.
  - It is important to **respect and guarantee the security of every country, replace confrontation with dialogue** and partnership, and promote the building of a **balanced, effective, and sustainable regional security** architecture.

- Also, it is equally important to **strengthen political mutual trust and security cooperation**, maintain communication and **coordination on major international and regional issues**, and accommodate each other's core interests and major concerns.
- **Securing Economic Interests:** BRICS countries should be **contributors of common development**.
  - Facing the rising tide of de-globalisation and the increase of unilateral sanctions, BRICS countries should **enhance mutually beneficial cooperation in supply chains**, energy, food, and financial resilience
  - Also, it will be useful for BRICS to **develop an institutional research wing, along the lines of the OECD**, offering solutions which are better suited to the developing world.
- **Public Health Governance:** BRICS countries should fully leverage their respective strengths, and jointly **promote the development of global health governance** in a direction in favour of developing countries.
  - India's vision of '**One Earth, One Health**' contributes to multilateral cooperation on public health.
- The countries should make good use of the **BRICS Vaccine Research and Development Centre**, establish a **BRICS early warning mechanism for preventing large-scale infectious diseases**, and provide high-quality public goods for global health governance cooperation.
- **A Global Governance Philosophy:** Global challenges are emerging one after another. Coping with these challenges requires **coordination among global actions**.
  - Safeguarding the international system is essential while ensuring that **international affairs have participation by all**, international rules are formulated by all, and **development outcomes are shared by all**.
  - BRICS should embrace a global governance philosophy that emphasises **extensive consultation, joint contribution, and shared benefits, enhance unity** and cooperation with emerging markets and developing countries, and increase the voice in global governance.

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## Drishti Mains Questions

1. Analyze the implications of internet shutdowns as a measure to control information flow and exert control over populations, examining their impact on freedom of expression, access to information, economic activities, and democratic principles in the context of India.
2. Discuss the significance and potential benefits of inclusive Digital Public Infrastructures (DPIs) in achieving digital inclusion and fostering socio-economic development in India.
3. Discuss the challenges and prospects of conserving India's big cat species with a special focus on the role and effectiveness of Project Tiger.
4. Discuss the significance of local governance in global governance. Give examples of how local governance can contribute to solving global problems.
5. Discuss the benefits and challenges of multilingualism in education in India. Suggest some policy recommendations and innovative models for promoting multilingual education in India.
6. Discuss the achievements and challenges of development of rural India in the light of the latest Multidimensional Poverty Index (MPI) report of NITI Aayog.
7. Communal violence in India is a recurring event. Comment.
8. Critically analyze the achievements and challenges of Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) in providing universal health coverage to the poor and vulnerable sections of society. Suggest some measures to improve the implementation and impact of the scheme.
9. Discuss the importance and challenges of gender-responsive urban planning in India. Suggest some measures to make Indian cities more inclusive, safe, and sustainable for all genders.
10. Critically examine the constitutional and legal implications of the abrogation of Article 370 and the reorganisation of Jammu and Kashmir into two union territories. How does it affect the federal structure and the special status of the erstwhile state?
11. Technology can play a vital role in boosting Indian agriculture by enhancing the productivity, profitability, and resilience of its farming sector. Critically analyze.
12. Examine existing economic challenges, the opportunities presented by economic reforms, and the trade-offs and risks associated with their implementation.
13. Climate change impacts necessitate collaborative action and gender-responsive policies with regard to women working in the agriculture sector. Discuss.
14. Discuss the proposed overhaul of India's criminal justice system as outlined in the Bharatiya Nyaya Sanhita Bill, Bharatiya Nagarik Suraksha Sanhita Bill, and Bharatiya Sakshya Bill of 2023. Analyze the potential benefits and concerns associated with these proposed changes.
15. How does the Anti NEET protest of Tamil Nadu affect Centre-state relations and equity in medical education?
16. Highlighting the importance of independence of Election Commissioner, discuss the issues with the recently introduced Chief Election Commissioner and other Election Commissioners (Appointment, Conditions of Service and Term of Office) Bill, 2023.

## Drishti Mains Questions

17. China, the world's second-largest economy, is currently grappling with an economic slowdown. In this context, analyze the potential opportunities available for India and elucidate the measures that India has undertaken to leverage these opportunities.
18. Discuss the impact of Generative AI on the Indian Economy, outlining its applications. Suggest policy approaches for maximizing benefits while addressing negative consequences.
19. Discuss the increasing occurrence of landslides in the Himalayan region, focusing on the underlying factors, consequences, and potential measures to alleviate their impact.
20. India's Social Security policies need an overhaul. In this light, discuss the challenges faced by Social Security Schemes and suggest measures to address them.
21. "Programming a computer to be ethical is much more difficult than programming a computer to play world-champion chess". Discuss.
22. The African continent is currently grappling with multiple political turmoils. In this context, discuss the potential impacts of these turmoils on India and elucidate the strategies that India can adopt to contribute to the maintenance of stability in the region.
23. CleanTech is often considered a crucial enabler for sustainable development and addressing environmental challenges. Discuss the benefits and challenges in adapting CleanTech and suggest suitable measures to overcome the challenges.
24. Examine the need to rethink India's fiscal federalism in the light of recent developments. Suggest some measures to improve the principles and practices of fiscal federalism in India.
25. Discuss the major challenges that the Himalayan region has been facing in recent times with reference to rampant and flawed urbanisation.
26. How do BRICS cooperate and compete with other regional and global organizations? What are the implications of BRICS expansion and outreach for Africa and other developing countries?