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Monthly Editorial Consolidation

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Content

Empowering Women in Indian Policing

This editorial is based on the Article Push for more women, this time in the police which was published in The Hindu on 30/09/2023. It talks about the inclusion of women in police forces and the enhancement of their representation through the implementation of reservation policies.

Tag: Social Justice, GS Paper-2, Issues Related to Women,

In a few years from now, women lawmakers will form at least 33% of all lawmakers in India. **The Constitution (106th Amendment) Act 2023** has recently got the President's Assent. This **Act provides for one-third of total seats in the House of the People, the Legislative Assembly of every State and the Legislative Assembly of the National Capital Territory of Delhi to be reserved for women for 15 years.** The purpose of this amendment is to increase women's participation in policymaking. While there is no direct link between the number of legislators and the strength of law enforcement agencies, the number of women in these gives a fair idea about how representative these institutions are of the society they represent.

While providing women a crucial role in Law Making, we should not underestimate their significance in Law Enforcement as well. The Women reservation Act, 2023 can serve as an inspiration for policymakers and authorities to take concrete steps in this direction.

What is the Status of Women in Police?

➢ As per the response provided by the Minister of State for Home Affairs (MHA) in the **Rajya Sabha** in February 2023, the **representation of women in the police force (as of January 1, 2022) remained at 11.7%** of the total State police force.

○ While many **States have mandated 10% to 33% reservation for women in the police**, not one of these States has met its goal.

○ The share of women among the higher ranks was even lower at 8.7%.

What is the Significance and Need of Women in Police?

➢ **Legal Mandates and Specialized Roles:** Women in the police force are essential due to legal mandates that require certain procedures, such as recording reports and conducting arrests, to be handled by women officers in cases involving women.

○ Additionally, specialized legislation like the **Protection of Children from Sexual Offences (POCSO) Act** necessitates the presence of women

officers. This ensures that sensitive cases are handled with the required empathy and professionalism.

➢ **Addressing Crimes Against Women:** Statistics from the **National Crime Records Bureau** reveal that a significant portion of crimes defined under the Indian Penal Code is committed against women. Having women police officers is crucial for effectively addressing these crimes, providing support to victims, and ensuring that justice is served. Their presence can lead to increased reporting of such crimes and a more empathetic response to survivors.

➢ **Insufficient Female Police Force:** The **NCRB data also highlights that the existing women police force is insufficient, even for cases related to women. Increasing the number of women officers is necessary to bridge this gap** and provide adequate coverage for all types of incidents, including day-to-day law enforcement activities.

➢ **Proven Competence:** Women in the police force have **demonstrated their competence in various roles and responsibilities**. They are fully capable of handling any assignment within a police institution, proving that gender should not be a barrier to their involvement in law enforcement.

➢ **Representation and Trust:** In a democratic country like India, **it is essential for every institution, including the police, to be representative of the populace they serve**. Increasing the number of women in the police force is a step towards building trust and confidence in the community. It sends a message that the police are accessible and responsive to the needs of all citizens.

What are the Issues in Recruiting Women in Police?

In Recruitments: Women often face several challenges at the entry level itself.

➢ **Recruitment Just to fill the Gap:** Most States have a policy to fill up 30% or 33% of the vacant posts (of direct recruitment) with women in their police forces through horizontal reservation — i.e., **if the minimum reserved vacant posts are not filled up in each category of the SC, ST, OBCs and un-reserved with women on merit, women candidates are pushed up in the list to make up for the gap.**

○ Women are generally recruited against notified vacancies after permission is granted by the government to fill up vacancies.

➢ **Non establishment of a Permanent Board:** According to the Ministry of Home Affairs (MHA), many states do not have a permanent police recruitment board and do not have the freedom to recruit at regular intervals.

- ➤ **Inconsistent Reservation Policies:** According to the details published by the **Bureau of Police Research & Development - BPR&D** (as on January 1, 2021), a **few States such as Kerala, Mizoram and Goa do not have a policy of reservation for women** in the police force, and women's representation in these States is between 6% and 11%.
  - ○ The reservation for women in the State armed police forces is restricted to 10% in some States.
- ➤ **Poor Implementation of Reservation:** Though many states have reserved a good number of seats for women but they have failed miserably to implement the policy in letter and spirit.
  - ○ For instance, Bihar provides for 35% reservation for women and 3% for backward caste women, but the actual number of women in the force is about 17.4%.
- ➤ **Low Rate of Filling Vacancies:** On average, only about 4% to 5% of the total police positions are filled each year through recruitment, and the attrition rate (people leaving the force) is around 2.5% to 3%.
  - ○ So, **If we want to increase the number of women in the police force from 10% to 30%, it would take at least 20 years**.

After Recruitment: Women not only face challenges in getting into the service but also they face several challenges after getting into the service. These challenges further discourage women from joining the police services.

- ➤ **Poor Support:** Many women in the force expressed discontent due to **poor infrastructure** such as the non-availability of separate toilets and lack of venues to report workplace harassment.
- ➤ **Socio-cultural perceptions**: Many people still have the **stereotype that police work is a masculine profession that requires physical strength, aggression, and authority - Macho Culture**. This discourages women from pursuing a career in policing or makes them face discrimination and harassment from their male colleagues, supervisors, and the public.
- ➤ **Impact of family and childcare:** Balancing personal responsibilities, particularly childcare roles, remains a major barrier for women's career advancement in policing. Women may face a 'child-tax' as they navigate work-life balance, as their access to senior rank is dependent on engaging in traditional behaviours and long-hours culture.

What Steps can be taken to Improve the Number of Women in Police?

- ➤ **Create a Conducive Environment:** Creating a work environment that is supportive and inclusive is essential. This includes policies and practices that address issues like sexual harassment, equal pay, and opportunities for career advancement. Training programs should also focus on gender sensitization to ensure that male and female officers can work together respectfully and effectively.
- ➤ **Prevent sexual harassment:** Police departments must also ensure safe working spaces for women and adopt a zero-tolerance policy towards discrimination and harassment, in order to make policing a viable career option for women. Departments are legally bound to set up **Internal Complaints Committees to prevent sexual harassment at the workplace**.
  - ○ Departments must operationalise the **Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act** of 2013.
- ➤ **Provide Basic Infrastructure:** Adequate infrastructure is necessary to accommodate the needs of women in the police force. This includes safe and separate living quarters, changing facilities, and childcare facilities for female officers who are mothers. Accessible and safe transportation options should also be available for female officers working late shifts.
- ➤ **Uniform Police Act:** A **uniform Police Act** for the entire country could standardize policies and regulations related to the recruitment, training, and working conditions of police officers, including women. This would ensure that female officers receive equal treatment and opportunities regardless of the state they serve in.
- ➤ **Recruitment Boards:** State-level recruitment boards can streamline the recruitment process, making it more efficient and transparent. These boards should actively encourage the recruitment of women, ensuring that the selection process is fair and unbiased.
- ➤ **Special Recruitment Drive:** Launching special recruitment drives aimed at increasing the representation of women in the police force is an excellent idea. This can involve targeted outreach campaigns, awareness programs, and mentorship initiatives to attract and retain more female candidates.

Conclusion

It's essential to address societal perceptions and stereotypes that may discourage women from considering a career in law enforcement. Education and awareness campaigns should be launched to challenge these stereotypes and showcase the diverse roles and opportunities available within the police force. Steps like the Providing reservation to women in legislatures can set a precedent for increasing women's representation in various fields, including the police force. It can serve as an inspiration for policymakers and authorities to take concrete steps in this direction.

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Biofuels and Global Biofuels Alliance

This editorial is based on the Article 'Are biofuels a viable energy source?' which was published in The Hindu Businessline on 29/09/2023. It talks about Biofuels and analyzes the potential of Global Biofuels Alliance.

Tag: Indian Economy, GS Paper-3, Growth & Development, Conservation, Environmental Pollution & Degradation

As the world looks towards renewable energy sources to combat climate change, biofuels have emerged as a potential solution.Recently concluded **G20 summit at New Delhi** saw formation of **Global Biofuels Alliance** which is an India-led initiative. It aims to develop an alliance of governments, international organizations, and industry to promote the adoption of biofuels.

What are Biofuels?

- Any hydrocarbon fuel that is produced from an organic matter (living or once living material) in a short period of time (days, weeks, or even months) is considered a **biofuel**.
- They can be used to power vehicles, heat homes, and generate electricity. Biofuels are considered renewable because they are made from plants that can be grown again and again.
- Biofuels can be solid, liquid, or gaseous.
  - Solid biofuels include wood, dried plant material, and manure.
  - Liquid biofuels include bioethanol and biodiesel.
  - Gaseous biofuels include biogas.
- Biofuels can replace or be used in addition to fossil fuels for various applications such as generating heat and electricity.
- Reasons for shifting to biofuels include rising oil prices, greenhouse gas emissions from fossil fuels, and interest in obtaining fuel from agricultural crops for the benefit of farmers.

What are the Pros of Biofuels?

- **Renewable:** Biofuels can be produced by growing biomass and thus are renewable.
- **Energy Security:** Biofuels will help reduce dependence on foreign oil, which will also help in reducing import bills.
- **Cleaner Energy:** They emit less **greenhouse gases** than fossil fuels, making them a cleaner alternative.
- **Increase in Farmer's Income:** Biofuels contribute to additional income of farmers and have potential to contribute to the goal of doubling farmer's income.

- **Abundant Availability of Biofuels:** Biofuels can be produced from a variety of sources, including crops, waste, and algae.

What are the Concerns about Viability of Biofuels?

- One major concern is the **amount of land and water resources** required to produce them. In countries like India, where there is a lack of agricultural surplus, it may not be feasible to divert arable land to grow the crops needed for biofuel production.
- Additionally, the **competition between biofuel production and food production for land and resources** is a significant concern. If biofuels are produced at the expense of food production, it could lead to higher food prices and food insecurity.
- The production of some biofuels can actually result in **higher greenhouse gas emissions** than fossil fuels, particularly if they are produced from crops grown on land that was previously forested.

What is the Global Biofuel Alliance?

- **Global Biofuel Alliance (GBA)** was recently launched by world leaders to expedite the global uptake of biofuels, under **India's G20 presidency**. The alliance brings together major biofuel producers and consumers, such as the US, Brazil, and India.
- Nineteen countries and 12 international organizations have already agreed to join or support the GBA.
- The GBA aims to strengthen global biofuels trade for a greener sustainable future.

What is the Significance of Global Biofuels Alliance for India:

- **Learning from Best Practices:**
  - GBA will facilitate **transfer of technologies** and mobilization of international climate funds.
  - It will accelerate progress in the compressed biogas sector and third generation ethanol plant capacities
- **E-20 Target:**
  - Having achieved the E10 target, India aims to achieve **E20 by 2025-26.**
  - Learning from **Brazil's success in achieving E-85** through the Global Biofuels Alliance.
- **Adoption of Flex Fuel Vehicles in India:**
  - It may accelerate adoption of **Flex Fuel Vehicles**.
  - It will contribute to reduction in emissions and India's crude oil import bill.

➤ **Climate Action:**

   ○ Establishment of GBA reinforces the fight against climate change as it will help countries cooperate to reduce the usage of fossil fuels.

➤ **Promotion of Biofuel Exports:**

   ○ It presents an opportunity for India to increase its share in biofuel production leading to greater energy independence for India.

   ○ India has potential to become a major exporting nation alongside Brazil and the US.

➤ **Increase in Employment Opportunities:**

   ○ Investments in the biofuel sector create employment opportunities

   ○ It will contribute to the improvement of financial status of farmers and will assist in **doubling farmers' income.**

What are the Concerns about Viability of Global Biofuels Alliance?

➤ **Transfer of Technology:**

   ○ Reluctance from the developed countries including US to share technology with other countries. Technological secrecy may hinder the objectives of the alliance.

➤ **Geopolitical Contestation:**

   ○ **Opposition from China and Russia** to platforms led by western countries.

   ○ **Saudi Arabia and Russia** may be concerned that the alliance could promote **biofuels as a competitor to oil.**

   ○ **India and China are major producers of coal** as well as major consumers. They are unlikely to give up on using this resource any time soon despite its harmful impact on the environment.

➤ **Funding Limitations:**

   ○ Structuring **sustainable financing mechanisms** for projects is crucial.

   ○ Global institutions like WB and IMF do not have sufficient resources to invest in financing such groups.

➤ **Import Restrictions on Biofuels:**

   ○ India's policies restrict import of biofuels, impacting global biofuels market development

➤ **Environmental Implications:**

   ○ Growing demand for biofuels can have environmental implications

   ○ **Water and land requirements** may **deter water-scarce countries** from joining the alliance

What are the Different Generations of Biofuels?

➤ **First Generation Biofuels:**

   ○ Made from food sources such as sugar, starch, vegetable oil, or animal fats using conventional technology.

     ● Examples include Bioalcohols, Biodiesel, Vegetable oil, Bioethers, Biogas.

   ○ But, use of food sources in production creates an imbalance in the food economy, leading to increased food prices and hunger.

➤ **Second Generation Biofuels:**

   ○ Produced from non-food crops or portions of food crops that are not edible and considered as wastes.

     ● Examples include cellulose ethanol, biodiesel.

   ○ Thermochemical reactions or biochemical conversion processes are used for producing such fuels.

   ○ These fuels emit less greenhouse gases when compared to first generation biofuels.

➤ **Third Generation Biofuels:**

   ○ Produced from micro-organisms like algae. Example: Butanol

   ○ Micro-organisms like algae can be grown using land and water unsuitable for food production, reducing the strain on already depleted water sources.

   ○ But, the fertilizers used in production may lead to environmental pollution.

➤ **Fourth Generation Biofuels:**

   ○ Crops genetically engineered to take in high amounts of carbon are grown and harvested as biomass.

   ○ The crops are then converted into fuel using second generation techniques.

   ○ The fuel is pre-combusted, and the carbon is captured.Then the carbon is geo-sequestered, meaning that it is stored in depleted oil or gas fields or in unmineable coal seams.

   ○ Some of these fuels are considered carbon negative as their production pulls carbon out of the environment.

What are the Recent Steps taken for Biofuels?

➤ **Indian Initiatives:**

   ○ **Pradhan Mantri JI-VAN Yojana, 2019:** The objective of the scheme is to create an ecosystem for setting up commercial projects and to boost Research and Development in 2G Ethanol sector.

○ **Ethanol blending:** The 2018 Biofuel Policy has the objective of reaching 20% ethanol-blending and 5% biodiesel-blending by the year 2030.

  ● Recently, instead of 2030, the Centre plans to move ahead with its **ethanol blending** target of 20% of petrol containing ethanol by 2025-26.

○ **GOBAR (Galvanizing Organic Bio-Agro Resources) DHAN scheme, 2018:** It focuses on managing and converting cattle dung and solid waste in farms to useful compost, biogas and bio-CNG, thus keeping villages clean and increasing the income of rural households. It was launched under Swachh Bharat Mission (Gramin).

○ **Repurpose Used Cooking Oil (RUCO):** It was launched by Food Safety and Standards Authority of India (FSSAI) and aims for an ecosystem that will enable the collection and conversion of used cooking oil to biodiesel.

○ **National Policy on Biofuels, 2018:** The Policy categorises biofuels as "Basic Biofuels" viz. First Generation (1G) bioethanol & biodiesel and "Advanced Biofuels" - Second Generation (2G) ethanol, Municipal Solid Waste (MSW) to drop-in fuels, Third Generation (3G) biofuels, bio-CNG etc. to enable extension of appropriate financial and fiscal incentives under each category.

➢ **Global Initiatives:**

○ **Roundtable on Sustainable Biomaterials (RSB):**

  ● It is an international initiative that brings together farmers, companies, governments, non-governmental organisations, and scientists who are interested in the sustainability of biofuel production and distribution.

  ● In April 2011, it launched a set of comprehensive sustainability criteria - the "RSB Certification System." Biofuels producers that meet these criteria are able to show buyers and regulators that their product has been obtained without harming the environment or violating human rights.

○ **Sustainable Biofuels Consensus:**

  ● It is an international initiative which calls upon governments, the private sector, and other stakeholders to take decisive action to ensure the sustainable trade, production, and use of biofuels.

○ **Bonsucro:**

  ● It is an international not for-profit, multi-stakeholder organization established in 2008 to promote sustainable sugar cane.

What can be the Way Forward?

➢ The GBA should be utilized to enhance and fortify biomass supply chains.

➢ GBA should prioritize the efficient technology transfer for the production of second-generation ethanol from agricultural residue.

➢ GBA should promote sustainable financial support for bioenergy projects and showcase pilot-scale production facilities for Sustainable Aviation Fuel (SAF). It has the potential to emulate the success of the **International Solar Alliance (ISA)** in the renewable energy sector, with India leading the way.

Conclusion

While biofuels have the potential to be a major energy source in the fight against climate change, their viability remains a concern. The Global Biofuel Alliance holds promise for a greener future, but it remains to be seen how effective it will be in practice. Biofuels may not be a viable major energy source in countries like India due to the lack of agricultural surplus, but they can still play a role in achieving a greener future through sustainable production and consumption practices.

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Caste Census
The Need and the Concern

*This editorial is based on the Article '*Bihar caste survey data released: A look at the complicated history of caste census*' which was published in Indian Express on 04/10/2023. It analyzes the need of caste census.*

Tag: Governance, GS Paper - 1, Population and Associated Issues, GS Paper - 2, Government Policies & Interventions.

The recently released caste survey data by the Bihar government has once again brought the issue of caste census to the forefront. While the Census of India has been publishing data on **Scheduled Castes** and **Scheduled Tribes**, there has been no estimate for the population of **Other Backward Classes** (OBCs) and other groups.

What are Census and
Socio Economic and Caste census (SECC)?

➢ **Census in India:**

○ The **origin of the Census in** India dates back to the colonial exercise of **1881.**

○ Census is used by the government, policymakers, academics, and others to capture the Indian population, access resources, map social change, and conduct **delimitation** exercises.

- However, it has been criticized as a blunt instrument unsuited for specialized inquiry.

➢ **SECC (Socio-Economic and Caste Census):**

  ○ **SECC** was **first conducted in 1931** which aimed to collect information on the economic status of Indian families, both in rural and urban areas, to identify indicators of deprivation.

  ○ It also collects **data on specific caste names to evaluate the economic conditions** of different caste groups.

➢ **Difference Between Census & SECC:**

  ○ Census provides a general portrait of the Indian population, while **SECC is used to identify beneficiaries of state support**.

  ○ Census data is confidential under the **Census Act of 1948**, while personal information in SECC is open for use by government departments to grant or restrict benefits to households.

➢ **The History of Caste-based Data Collection in India:**

  ○ Caste-based data collection has a long history in India, with information on castes being included upto 1931.

  ○ **Post 1951, the decision to stop collecting caste data was made** to move away from a divisive approach and promote national unity.

  ○ However, with changing socio-political dynamics and the need for accurate information, there has been a renewed call for a caste census.

What is the Significance of Caste Census?

➢ **To Address Social Inequality:**

  ○ Caste-based discrimination is still prevalent in many parts of India. A caste census can help identify the disadvantaged groups and bring them to the forefront of policy making.

  ○ By understanding the distribution of different caste groups, targeted policies can be implemented to **address social inequality and uplift marginalized communities.**

➢ **To Ensure Equitable Distribution of Resources:**

  ○ Without accurate data on the population of OBCs and other groups, it is difficult to ensure equitable distribution of resources.

  ○ A caste census can help in this regard by providing **insights into the socio-economic conditions and needs of different caste groups.**

  ○ It can guide policymakers in formulating policies that cater to the specific requirements of each group, thereby promoting inclusive development.

➢ **To Monitor the Effectiveness of Affirmative Action Policies:**

  ○ Affirmative action policies such as reservations for OBCs and other groups are aimed at promoting social justice. However, without proper data on the population, it becomes challenging to evaluate the impact and effectiveness of these policies.

  ○ A caste census can help **monitor the implementation and outcomes of such policies**, enabling policymakers to make informed decisions regarding their continuation and modification.

➢ **To Provide a Comprehensive Picture of Indian Society:**

  ○ Caste is an integral part of Indian society, influencing social relationships, economic opportunities, and political dynamics.

  ○ A caste census can provide a comprehensive **picture of the diversity of Indian society,** shedding light on the social fabric and interplay between different caste groups.

    - This data can contribute to a better understanding of social dynamics.

➢ **Constitutional Mandate:**

  ○ Our Constitution too favours conducting a caste census. **Article 340** mandates the appointment of a commission **to investigate the conditions of socially and educationally backward classes and make recommendations** as to the steps that should be taken by governments.

What are the Arguments against Caste Census?

➢ **Reinforces the Caste System:**

  ○ Opponents of a caste census argue that **caste-based discrimination is illegal** and that a caste census would only reinforce the caste system.

  ○ They believe that focusing on individual rights and equal opportunities for all citizens should be prioritized over categorizing people based on their caste identities.

➢ **Difficult to Define Castes:**

  ○ Defining castes is a complex issue, as there are thousands of castes and sub-castes in India. A caste census would **require a clear definition of castes,** which is not an easy task.

  ○ Critics argue that this could lead to confusion, disputes, and further divisions within society.

➢ **Leads to Further Social Divisions:**

  ○ Some argue that a caste census could lead to further social divisions and that it is better to focus on promoting social harmony instead.

❍ They believe that emphasizing commonalities among people rather than highlighting differences would be more beneficial for national integration.

What is the Government's Stand on a Caste Census?

➢ The Government of India in 2021 had stated in **Lok Sabha** that it has decided as a **matter of policy not to enumerate caste-wise population** other than SCs and STs in Census.

What is the Role of the Socio-Economic and Caste Census (SECC)?

➢ The SECC **conducted in 2011** was an attempt to collect comprehensive data on socio-economic indicators along with caste information.

➢ However, due to concerns over data quality and classification challenges, the **raw caste data collected in the SECC has not yet been released** or utilized effectively.

➢ An **Expert Group was formed to classify and categorize the raw data**, but its recommendations are still pending implementation.

What can be the Way Forward?

➢ **Independent studies at district and state level** can be conducted to acquire the data of castes and subcastes at those levels.

➢ The data must not become a weapon for deepening faultlines and increasing polarisation to win elections. It should not lead to the splintering and shrinking of the very notion of representation in a large and diverse democracy.

➢ Use of technologies such as **Artificial intelligence and machine learning** can help in analyzing data.

➢ **Subcategorization of OBCs** to provide representation to underrepresented subcastes of OBCs for which **Justice Rohini commission** had recently submitted the report.

Conclusion:

While there are arguments for and against a caste census, accurate data on the population of OBCs and other groups is necessary for promoting social justice and ensuring equitable distribution of resources. A caste census can also **help monitor the effectiveness of affirmative action policies and provide a comprehensive picture of Indian society.** It is crucial for policymakers to carefully consider the arguments of both the sides to provide for a more **equitable and just society**.

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Tackling the Climate Polycrisis

This editorial is based on the Article Keeping tabs on carbon with an accounting system which was published in The Hindu on 05/10/2023. It talks about the concept of a "Climate Polycrisis," and how to tackle this Climate Polycrisis effectively.

Tag: Biodiversity & Environment, GS Paper-3, Conservation, Environmental Pollution & Degradation

We are facing a **Climate Polycrisis, a complex and multidimensional problem** that requires urgent action. According to the **2021 WHO Health and Climate Change Survey Report**, climate change poses a serious threat to human health and well-being, especially for the most vulnerable populations. The WHO estimates that **between 2030 and 2050, climate change will cause approximately 250,000 additional deaths per year** from: Malnutrition, Malaria, Diarrhea and Heat stress.

To tackle this intertwined crisis effectively, we need to **develop a holistic strategy that takes into account the diverse perspectives and goals of different stakeholders**. This strategy should also emphasize resilience, equity, and justice principles.

What do We understand by the term Climate Polycrisis?

➢ The climate 'polycrisis' — a term made popular by Adam Tooze — **refers to the interconnected and compounding crises related to climate change** that are affecting the planet not just in a few sectors but across several sectors and domains.

➢ It encompasses the physical impacts of **climate change** (rising temperatures, **sea-level rise**, and extreme weather events) and the social, economic, and political challenges that arise from these impacts.

❍ In India, one can see the interconnections between seemingly different sectors such as energy, infrastructure, health, migration and food production that are being impacted by climate change.

What are the Causes of Climate Polycrisis?

➢ **Greenhouse Gas Emissions:** Human activities, particularly the burning of fossil fuels (such as coal, oil, and natural gas), **deforestation**, agricultural practices, and industrial processes, release **greenhouse gasses (GHGs)** like CO_2, **methane**, and **nitrous oxide** into the atmosphere. These **GHGs trap heat from the sun, leading to global warming and alterations in the Earth's climate system**.

➢ **Unsustainable Consumption and Production:** Unsustainable consumption patterns involve using natural resources at a rate that exceeds their regeneration, which depletes these resources. Additionally, unsustainable production practices generate waste and pollution, further damaging the environment. **Unsustainable practices can reduce the Earth's capacity to provide essential services like clean water, fertile soil, and biodiversity.**

➢ **Lack of Political Will and Collective Action:** Addressing the climate crisis and environmental challenges requires coordinated efforts at local, national, and global levels. A **lack of political will and inadequate collective action can hinder the implementation of effective policies and measures** to reduce emissions, adapt to climate change, and support vulnerable communities.

○ For instance, even after 8 years of signing the **Paris Agreement**, it has significantly failed to address climate change.

● After signing of the Agreement, the **last eight years (2015-2022) have consecutively been the warmest years** on record globally.

■ Globally updated **NDCs to limit global warming to 1.5°C have failed even to achieve the 2°C target**.

■ It has **not been able to equitably phase out fossil fuels** predominantly responsible for the climate crisis.

What could be the Effects of Climate Polycrisis?

➢ **Extreme Weather Events:** India is already experiencing an increase in the frequency and intensity of extreme weather events such as **cyclones**, **floods**, **droughts**, and **heatwaves**. A climate polycrisis **could lead to more frequent and severe events, causing widespread damage to infrastructure**, agriculture, and human settlements.

○ According to a RBI report, Extreme heat and humidity may adversely affect labor hours and up to 4.5% of India's GDP could be at risk by 2030.

➢ **Agriculture:** India's agriculture sector is **highly dependent on monsoon rains. A climate polycrisis with erratic rainfall patterns, prolonged droughts, and flooding can disrupt crop cycles**, leading to reduced yields and food insecurity. This could result in **higher food prices and economic challenges for farmers**.

○ According to Sri Sri Institute of Agricultural Sciences & Technology Trust (SSIAST), as agriculture contributes 15% to India's GDP, climate change presumably causes about 1.5% loss in GDP. **By 2030, rice and wheat are likely to see about 6-10% decrease in yields.**

➢ **Water Scarcity:** Climate change can **exacerbate water scarcity issues in India. Rising temperatures and changing precipitation patterns can reduce the availability of freshwater for drinking, agriculture, and industrial use**. This can lead to conflicts over water resources and impact public health.

➢ **Sea-Level Rise:** India has a long coastline, and many major cities are located near the coast. **Sea-level rise, coupled with increased storm surges, can lead to coastal erosion and inundation of low-lying areas, displacing communities** and causing economic losses.

➢ **Health Impact:** Climate polycrisis can **increase the risk of health problems, including heat-related illnesses, vector-borne diseases** (such as **malaria** and **dengue**), and **respiratory issues** due to air pollution and wildfires. Vulnerable populations, including children and the elderly, are particularly at risk.

➢ **Economic Disruptions:** The interconnectedness of various sectors means that disruptions in one area, such as agriculture or infrastructure, can have **cascading effects on the overall economy**. Reduced agricultural productivity, damage to infrastructure, and increased healthcare costs can strain the country's economy.

➢ **Increased Energy Demands:** Increased temperatures may lead to **higher energy demands for cooling**, which can strain the electricity grid and contribute to greenhouse gas emissions if **fossil fuels** are used for power generation.

➢ **Climate Feedback Loops:** Climate polycrises can trigger feedback loops, where one crisis exacerbates another. For example, **wildfires can release stored carbon, contributing to further climate change**.

➢ **Political Instability:** Resource scarcity, displacement, and economic hardships can contribute to political instability, conflict, and social unrest in affected regions.

➢ **National Security:** Climate-related challenges can exacerbate **tensions and conflicts over resources such as water and arable land**, potentially impacting national security.

How to Tackle Climate Polycrisis?

➢ **Implement National Carbon Accounting (NCA):** Establish a comprehensive NCA system that **measures and tracks carbon emissions** from individuals to the entire nation, including businesses and households.

➢ **Promote Carbon Awareness:** Educate the public about the importance of carbon emissions and the impact on climate change. Make carbon emissions and their effects more visible to the general population.

➢ **Introduce Carbon Taxation:** Implement a **progressive carbon tax system** based on NCA data. **Penalize large emitters** more than average consumers to incentivize carbon reduction efforts.

➢ **Set Realistic Reduction Targets:** Use the NCA system to set specific, science-based carbon reduction targets for the nation. These targets should align with global climate goals, such as achieving **net-zero emissions**.

➢ **Predict and Track Progress:** Utilize NCA data to make predictions about future emission reductions and continuously track progress toward meeting carbon reduction targets. Adjust policies and strategies as needed.

➢ **Innovate for Carbon Reduction:** Encourage the development and adoption of new technologies and practices that reduce carbon emissions. Support research and development in sustainable technologies.

➢ **Carbon GDP as a Parallel Goal:** Alongside traditional economic **GDP**, introduce "carbon GDP" as a parallel goal. Encourage countries to work towards reducing their carbon GDP to promote ecological sustainability.

➢ **Public Discourse and Engagement:** Foster a new form of public discourse around carbon emissions and sustainability. **Engage citizens in discussions** about the environment and the economy's role in it.

➢ **Align Development and Sustainability:** Ensure that economic development and sustainability goals are aligned. Use NCA data to make informed decisions that balance economic growth with environmental protection.

➢ **Global Adoption:** Promote the adoption of NCA systems globally, **encouraging other nations to implement similar frameworks** for tracking and managing carbon emissions.

➢ **Create New Livelihoods:** Explore opportunities for creating new livelihoods and economic activities related to carbon reduction, such as **renewable energy** industries and carbon offset projects.

➢ **Policy Integration:** Integrate carbon accounting and reduction measures into various policy areas, including energy, transportation, agriculture, and industry.

➢ **International Cooperation:** Collaborate with other countries to address the global nature of the climate polycrisis. **Share best practices, technologies, and resources** for a collective effort.

What are India's Climate Change Mitigation Initiatives?

➢ **National Action Plan on Climate Change (NAPCC):**
  ○ Launched in 2008 to **address climate change challenges** in India.
  ○ Aims to **achieve low-carbon and climate-resilient development for India.**
  ○ There are **8 national missions** forming the core of the NAPCC which represent multi-pronged, long term and integrated strategies for achieving key goals in climate change. These are-

- **National Solar Mission**
- **National Mission for Enhanced Energy Efficiency**
- **National Mission on Sustainable Habitat**
- **National Water Mission**
- **National Mission for Sustaining the Himalayan Ecosystem**
- **National Mission for A Green India**
- **National Mission for Sustainable Agriculture**
- **National Mission on Strategic Knowledge for Climate Change**
- **Nationally Determined Contributions (NDC)**
- **National Adaptation Fund on Climate Change (NAFCC)**
- **State Action Plan on Climate Change (SAPCC)**

➢ **Nationally Determined Contributions (NDC):**
  ○ India's commitments to reduce greenhouse gas emissions and adapt to climate change.
  ○ Pledged to **reduce the emissions intensity of GDP by 45%** by 2030 from 2005 levels and generate **50% of electricity from non-fossil fuel sources by 2030.**
  ○ Pledged to create additional carbon sink and **achieve net zero emissions by 2070.**

➢ **National Adaptation Fund on Climate Change (NAFCC):**
  ○ Established in 2015 **to provide financial assistance to state governments for implementing adaptation projects** in various sectors

➢ **State Action Plan on Climate Change (SAPCC):**
  ○ Encourages all states and union territories to prepare their own SAPCCs based on their specific needs and priorities
  ○ SAPCCs outline strategies and actions for addressing climate change at the sub-national level
  ○ Aligned with the objectives of the NAPCC and the NDC

Conclusion

Tackling the climate polycrisis requires a comprehensive and integrated approach that encompasses various sectors of society, from individuals and businesses to governments and international organizations. The implementation of a national carbon accounting system is a crucial step in this endeavor, as it provides the data and framework needed to make informed decisions and track progress towards a more sustainable future.

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Internet Shutdowns and Their Ramifications

This editorial is based on "In Manipur, another internet shutdown, a conflict intensified" which was published in The Indian Express on 06/10/2023. It talks about the internet shutdowns in India and argues that these shutdowns are harmful to the economy, democracy, and human rights.

Tag: Governance, GS Paper-2, Fundamental Rights, Right to Information

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.

On September 23, 2023, the Manipur government announced the restoration of full internet access, attributing it to "improved" law and order. This ended **India's second-longest internet blackout**, which had stretched for over 143 days since May 3. The news was greeted with relief by citizens — from students planning their return to Manipur to aid workers scrambling for essential supplies.

What are the Provisions Related to Internet Shutdown?

- **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 tranquility.
  - Such orders can include the suspension of internet services in a particular area for a specified period.

What are the Impacts of Internet Shutdowns?

- **Violation of Fundamental Rights:** Internet shutdowns violate Fundamental Rights under **Article 19(1)(a) and Article 19(1)(g).**
  - The **freedom of speech and expression and freedom to practice any profession over the medium of the internet enjoys constitutional protection under Article 19(1)(a) and Article 19(1)(g)** - the Supreme Court in **Anuradha Bhasin vs Union of India case (2020)**.
  - Internet Shutdown also violates **Right to Information** which has been declared as a Fundamental Right under **Article 19** by the Supreme Court in **Raj Narain vs State of UP (1975)** case.
  - Internet Shutdowns also violate the **Right to Internet** which was declared a Fundamental Right under **Article 21** by the Kerala High Court in **Faheema Shirin v. State of Kerala** case.
- **Economic Consequences:** Internet shutdowns can have severe economic consequences. **Businesses that rely on the internet for operations, sales, and communication can suffer financial losses**. Startups and small businesses may be particularly vulnerable.
  - According to Top10VPN, India lost Rs 2,091 crore ($255.2 million) in the first half of 2023 because of internet shutdowns.
- **Disruption of Education:** Many educational institutions use online platforms for teaching and learning. Internet shutdowns disrupt access to educational resources, making it difficult for students to continue their studies.
- **Trust and Censorship Concerns:** Internet shutdowns **can erode trust in government and authorities**. They can also lead to concerns about censorship and a lack of transparency.
- **Impediment to Disaster Response:** They affect the communication and coordination of people, especially during emergencies and crises. A UN-backed report has highlighted that shutting down the internet affects people's safety and well-being, hampering information flow and humanitarian assistance.
- **Disruption in Health Care:** Studies have shown the significant impacts of shutdowns on health systems, including on **mobilizing urgent medical care, disrupting the delivery of essential medicines and maintenance of equipment, limiting the exchange of health information** between medical personnel and disrupting essential mental health assistance.
- **International Repercussions:** Internet shutdowns can attract international attention and condemnation, potentially damaging a country's reputation and relationships with other nations.

- India has the most internet shutdowns in the world. **In the first half of 2023, India was second in the world** for internet shutdowns.
- According to a report by the US digital rights advocacy group Access Now, **India accounted for 58% of all documented shutdowns globally.**

➢ **Impact on Journalism and Reporting:** Journalists rely on the internet to report on events and share news with the public. Shutdowns can obstruct their ability to gather and disseminate information, compromising the public's right to know.

- **Right to Freedom of Press** is a Fundamental Right declared by the Supreme Court in **Indian Express vs Union of India (1986)** and **Bennett Coleman vs Union of India (1972)** cases.

What are the Arguments Regarding Internet Shutdowns?

➢ **Arguments in Favor:**

- Internet shutdowns **can help to prevent the spread of hate speech and fake news** that could incite violence and riots. For example, the government announced the **internet shutdown in Delhi NCR following the farmers' protest** on **Republic Day** to combat misinformation and maintain law and order.
- Internet shutdowns **can help to curb the organization and mobilization of protests that could disrupt public order and security.** For example, the government imposed **internet shutdowns in Kashmir** and other parts of the country after the abrogation of **Article 370** to prevent any anti-national activities and separatist movements.
- Internet shutdowns **can help to protect national security and sovereignty from external threats and cyberattacks.** For example, the government suspended internet services in some border areas during the **standoff with China** to prevent any espionage or sabotage.
- Internet shutdowns **can help to control the distribution and consumption of content that could be harmful or offensive to certain groups or individuals.** For example, the government blocked internet access in some regions to prevent the circulation of objectionable images or videos.

➢ **Arguments Against:**

- Internet shutdowns **undermine democracy and accountability,** as they prevent citizens from accessing information, expressing opinions, participating in public debates, and holding authorities responsible for their actions.

- Internet shutdowns can also **enable authoritarian governments to silence critics** and create distorted information echo chambers.

- Many critics have argued that **internet shutdowns are ineffective and counterproductive, as they do not address the root causes of the problems** that they are supposed to solve.
  - For example, internet shutdowns do not stop violence or terrorism, but rather fuel anger and resentment among the affected populations.
  - Internet shutdowns also **do not prevent misinformation or hate speech, but rather create information vacuums** that can be exploited by malicious actors.

- Internet shutdowns **are arbitrary and prone to abuse, as they are often imposed without following due process, transparency, or judicial oversight.** Many internet shutdowns are ordered by local authorities who do not have the legal power to do so.
  - Internet shutdowns also lack clear and objective criteria, duration, and scope, making them susceptible to political interference and human rights violations.

What Steps can be Taken to deal with Internet Shutdowns?

➢ **Strengthening the Existing Framework:** Strengthening the legal and regulatory framework that governs internet shutdowns, and **ensuring that they are only used as a last resort,** in accordance with international human rights standards.

- The government **should amend the Telegraph Act and its rules,** which are **outdated and vague, and do not comply with the constitutional and human rights standards.**

➢ **Ensuring Accountability of the Authorities:** Increasing transparency and accountability of the **authorities that order and implement internet shutdowns,** and providing effective remedies for those affected by them.

➢ **Look for Alternate options:** 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.

➢ **Adhere to Supreme Court's Guidelines:** The authorities should follow the directions of the Supreme Court in the Anuradha Bhasin case (2020). The Supreme Court issued following guidelines:

○ Suspension can be utilized for a **temporary duration only**.

○ Any order suspending the internet issued under the Suspension Rules **must adhere to the principle of proportionality and must not extend beyond the necessary duration.**

○ Any order suspending the internet under the Suspension Rules is **subject to judicial review.**

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India's Digital Future: The Digital India Act 2023

This editorial analysis is based on "*How the Digital India Act will shape the future of the country's cyber landscape*" *which was published in The Hindu on 09/10/2023. It talks about the proposed Digital India Act, 2023 which includes essential clauses that align with the ever-changing digital landscape, aiming to tackle its diverse challenges and capitalise on its opportunities.*

Tag: Governance, GS Paper 2, Government Policies & Interventions, GS Paper 3, E-Governance, IT & Computers

The recent announcement of the **Digital India Act, 2023 (DIA)** represents a significant step towards establishing a future-ready legal framework for the country's burgeoning digital ecosystem.

It comes at a crucial juncture when India's digital transformation is in full swing.

This proactive move by the **Ministry of Electronics and Information Technology (MeitY)**

aligns with India's ambitious **'Digital India'** initiative.

What is the Digital India Act, 2023?

➢ **Objective:**

○ To formulate evolvable rules that are consistent with the changing trends in technologies and can be updated according to the needs of the country's digital infrastructure.

○ To offer an easily accessible adjudicatory mechanism for online civil and criminal offenses.

○ To deliver timely remedies to citizens, resolve cyber disputes, and enforce the rule of law on the internet.

○ To provide a legislative framework keeping overarching governing principles in mind to ensure compliance.

➢ **Key Components :**

○ **Open Internet:** According to the Indian government, open internet should have — choice, competition,

online diversity, fair market access, ease of doing business as well as ease of compliance for startups. These characteristics prevent the concentration of power and gatekeeping.

○ **Online Safety and Trust:** The Act will focus on safeguarding users against **cyber threats**— like revenge porn, defamation, and cyberbullying—on the internet as well as the dark web.

● It aims to push for digital rights like the **Right to be Forgotten** and the **Right to Digital Inheritance** (*passing down of digital assets to designated beneficiaries*), protect minors and their data from addictive technology, and moderate fake news on social media platforms.

○ **Accountable Internet**: The Act aims to make internet users and activities more accountable by introducing legal mechanisms for redressal of complaints, upholding constitutional rights in cyber spaces, algorithmic transparency and periodic risk assessments, and disclosure norms for data collected by intermediaries

➢ **Salient Features:**

○ The DIA will replace the two-decade-old **Information Technology Act of 2000** (IT Act), which no longer adequately addresses the challenges and opportunities presented by the dynamic growth of the internet and emerging technologies.

○ The DIA's framework will focus on key elements such as online safety, trust, and accountability, ensuring an open internet, and regulating new-age technologies like artificial intelligence and blockchain.

○ The DIA will work in conjunction with other related laws and policies, including the **Digital Personal Data Protection Act**, **Digital India Act Rules**, **National Data Governance Policy**, and amendments to the **Indian Penal Code for Cyber Crimes.**

○ DIA will review the **'safe harbor'** principle, which shields online platforms like Twitter and Facebook from accountability for user-generated content.

○ DIA mandates stringent **Know Your Customer (KYC)** requirements for wearable devices used in retail sales, with associated criminal law sanctions and penalties.

○ DIA aligns with **Digital India Goals** for 2026, which aim to establish a USD 1 trillion digital economy and shape the future of global technologies.

What is the Need for Digital India Act?

➢ **Outdated Regulations:** The existing IT Act of 2000 was crafted in an era when the internet had only 5.5 million users, and is ill-equipped to handle the internet's current state.

○ Today, with 850 million users, various intermediaries, and new forms of user harms like cyberstalking and doxing, the IT Act falls short of addressing these complexities.

➢ **Inadequacy of Current Regulations:** Despite the existence of regulatory elements like **Intermediary Guidelines**, **Digital Media Ethics Code**, and **data protection rules**, they are insufficient when it comes to governing new-age technologies.

➢ **Need for Legal Adaptation:** With technological advancements like AI, Blockchain, and IoT, the legal framework must evolve to address their unique challenges. This includes enhancing cybersecurity measures, data protection, and regulating emerging tech sectors.

➢ **Addressing E-commerce and Online Content:** The growth of **e-commerce,** digital transactions, and online content sharing requires updated regulations. The Digital India Act will tackle issues related to consumer protection, electronic contracts, and content moderation on social media platforms.

➢ **Global Alignment and Best Practices:** To engage effectively in the global digital landscape, India's regulations must align with international standards and practices.

What are the Challenges Ahead in the Implementation of DIA, 2023?

➢ **Burdensome Compliance Requirements:** The act's regulations may place a significant burden on businesses, particularly small and medium-sized enterprises (SMEs).

➢ **Freedom of Expression:** The review of the "**safe harbor**" principle for online platforms could potentially impact freedom of expression. Ensuring that the act doesn't curb this fundamental right is a delicate task.

➢ **Resource and Infrastructure Requirements:** Effective enforcement of the DIA will require substantial resources, expertise, and infrastructure. Investing in these areas will be crucial.

➢ **Stakeholder Interests:** Balancing the interests of various stakeholders, including tech giants and citizens' rights, poses a significant challenge. Ensuring that all voices are heard and considered in the implementation process is essential.

➢ **Surveillance and Privacy Concerns**: Critics argue that certain provisions of the act may grant excessive surveillance powers to the government, potentially compromising privacy rights. Robust safeguards should be incorporated to protect against abuse of power and violations of privacy.

➢ **Data Localization and Cross-Border Data Flows:** The act's approach to data localization is a point of contention. While localization can enhance data protection and security, it may also disrupt cross-border data flows, impacting global businesses that rely on efficient data transfers.

What is the Way Forward for Effective Implementation of DIA, 2023?

➢ **Stakeholder Engagement:** All relevant stakeholders, including government bodies, technology companies, legal experts, and civil society, should be involved in the drafting and implementation process. This will help create a balanced and comprehensive legal framework.

➢ **Balancing Regulation and Innovation:** Stricter regulations, particularly in emerging technologies, could inadvertently stifle entrepreneurial initiatives and deter foreign investments. Striking the right balance between regulation and innovation is critical.

➢ **Collaboration and Capacity Building:** Invest in building the capacity of law enforcement agencies, judiciary, and regulatory bodies to effectively enforce the DIA.

○ Collaborate with other countries and international organizations to align the DIA with global best practices and standards in the digital space.

➢ **Public Awareness:** Conduct public awareness campaigns to educate citizens about their rights and responsibilities in the digital realm, fostering a culture of **digital literacy**.

Conclusion

The impact of the Digital India Act, 2023 will depend on how well it will be put into practice, making sure it is not too hard to follow, respecting privacy of the citizens, and encouraging new ideas and businesses. If these concerns are addressed thoughtfully, this act has the potential to shape a digital landscape that benefits not only individuals and businesses but the entire nation.

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The Israel-Palestine Saga

This editorial is based on "ISRAEL'S MOMENT OF RECKONING" which was published in The Indian Express on 09/10/2023. It talks about the implications of the recent attacks by Hamas on Israel. The article argues that the attacks have exposed the fragility of Israel's security.

Tag: International Relations, GS Paper - 2, Bilateral Groupings & Agreements, Groupings & Agreements Involving India and/or Affecting India's Interests, Effect of Policies & Politics of Countries on India's Interests

October 7, 2023 was different. At dawn, thousands of rockets were fired into Israel by Hamas from the Gaza strip and hundreds of militants broke through several points in the barrier that separates the strip from Israel to attack, kill and kidnap Israelis, mostly in the communities based along the border. The barrage of rockets was intense enough for some to break through the famed Iron Dome and strikes were reported as far inland as Jerusalem.

Historically, October 7 morning will be recorded as a "failure" in every aspect. The Israeli concept – that Palestinian groups would not mount a war they could not win – (again) collapsed.

What is the History of the Conflict?

➢ **Creation of Israel:**
- ❍ The conflict's origins can be traced back to the **late 19th and early 20th centuries when Jewish immigration to Palestine increased**, leading to tensions between Jewish settlers and the Arab population.
- ❍ In 1917, during **World War I**, the British government issued the **Balfour Declaration**, expressing support for the **establishment of a "national home for the Jewish people"** in Palestine.
- ❍ After **World War II**, In 1947, the **United Nations proposed a partition plan that would divide Palestine into separate Jewish and Arab states**, with Jerusalem as an international city. The **plan was accepted by Jewish leaders but rejected by Arab leaders**, leading to violence.
- ❍ **In 1948, Israel declared its independence**, leading to a war with neighboring Arab states. This conflict resulted in the displacement of hundreds of thousands of Palestinians, laying the groundwork for future tensions.

➢ **Early Relations and Rise of Hamas:**
- ❍ The **Israel-Hamas conflict**, in its current form, **can be traced back to the late 1980s when the First Intifada (Palestinian uprising) erupted.**
- ❍ Hamas, an Islamist organization, emerged during this period. It gained popularity as a resistance movement against Israeli occupation and Fatah, the Palestinian political faction.
- ❍ Israel initially tolerated Hamas as a counterbalance to Fatah, but this changed as Hamas' influence grew.

➢ **Oslo Accords and Second Intifada:**
- ❍ In the early 1990s, the **Oslo Accords** led to the establishment of the **Palestinian Authority (PA)** and partial Israeli withdrawal from certain areas in the **West Bank** and **Gaza Strip**.
- ❍ However, the peace process stalled, leading to frustration and violence, culminating in the Second Intifada (2000-2005).
- ❍ During this period, Hamas intensified its suicide bombings and rocket attacks against Israeli civilians.

➢ **Gaza Takeover and Blockade**:
- ❍ In 2006, Hamas won Palestinian legislative elections, leading to tensions with the Fatah-dominated PA.
- ❍ In 2007, Hamas forcibly took control of the Gaza Strip, while Fatah retained control of the West Bank.
- ❍ Israel imposed a blockade on Gaza to prevent arms smuggling and attacks. The blockade has led to humanitarian concerns and economic hardship for Gaza's residents.

➢ **Repeated Conflicts and Ceasefires:**
- ❍ There have been several **major conflicts between Israel and Hamas, including Operation Cast Lead (2008-2009), Operation Pillar of Defense (2012), and Operation Protective Edge (2014)**. These conflicts resulted in significant casualties on both sides.
- ❍ In 2021, tensions rose over Israeli policies in Jerusalem, including the planned eviction of Palestinian families from **Sheikh Jarrah** and the restrictions on access to the **Al-Aqsa Mosque** compound.
  - ● Hamas fired rockets at Jerusalem and other Israeli cities, while Israel carried out airstrikes on Gaza. More than 250 Palestinians and 12 Israelis were killed. A ceasefire was brokered by Egypt, with the support of the US and other international actors.

➢ **The Ongoing Israel-Hamas conflict:**
- ❍ The ongoing Israel-Hamas conflict is a continuation of the long-standing and complex dispute between the two sides over land, sovereignty, and security.
- ❍ The **current escalation began on Saturday, October 7, 2023, when Hamas launched a surprise attack on Israel**, firing thousands of rockets and infiltrating its border with armed militants.
- ❍ Israel responded with intense airstrikes on Gaza and mobilized its troops for a possible ground invasion.
- ❍ The fighting has resulted in hundreds of casualties on both sides and widespread destruction in Gaza.

Important Places Linked to Israel Palestine Conflict

➢ **Al Aqsa Mosque**:

○ It is one of the **holiest structures in the Islamic faith known by Muslims as Haram al-Sharif**, or the Noble Sanctuary, and by Jews as the Temple Mount.

○ The site is part of the Old City of Jerusalem, sacred to Christians, Jews and Muslims.

➢ **Sheikh Jarrah:**

○ Sheikh Jarrah is a neighborhood located north of the **Old City in East Jerusalem.**

● Hundreds of thousands of **Palestinians were forced out of their homes** when the **State of Israel was created** in historical Palestine in 1948.

○ Twenty-eight of those Palestinian families moved to Sheikh Jarrah in East Jerusalem to settle there.

➢ **West Bank:**

○ West Bank is a **landlocked territory in West Asia.** It also contains a significant section of the **western Dead Sea.**

○ It was captured by Jordan after the **Arab-Israeli War (1948)** but Israel snatched it back **during the Six-Day War of 1967** and has occupied it ever since.

● The West Bank is sandwiched between Israel and Jordan.

➢ **Gaza Strip**:

○ The Gaza Strip is located **between Israel and Egypt**. Israel occupied the strip after 1967, but **relinquished control of Gaza City** and day-to-day administration in most of the territory during the **Oslo peace process.**

○ In 2005, Israel unilaterally removed **Jewish settlements from the territory,** though it continues to control international access to it.

➢ **Golan Heights**:

○ The Golan Heights is a **strategic plateau that Israel captured from Syria** in the 1967 war. Israel effectively **annexed the territory in 1981.**

○ In 2017, the USA officially recognized Jerusalem and Golan Heights as a part of Israel.

What are the Demands of Israel and Palestine?

Israel	Palestine
➢ Israel **wants to maintain its Jewish identity and security as a state**, while also expanding its settlements and control over the occupied territories. ➢ Israel **wants the Palestinians to recognize its right to exist** and renounce violence. ➢ Israel **wants to keep Jerusalem as its undivided capital** and have access to its holy sites.	➢ Palestine wants to **establish an independent and sovereign state in the West Bank, Gaza Strip, and East Jerusalem,** which have been occupied by Israel since 1967. ➢ Palestine **wants the Israelis to end their military occupation** and blockade, and withdraw from the settlements. ➢ Palestine also **wants to have Jerusalem as its capital** and have access to its holy sites.

What could be the Repercussions of Israel-Palestine Conflict on India?

➢ **Trade Relations:** An escalation in the conflict **could impact India's trade with Israel, particularly in critical areas like defense equipment**. Israel is a significant supplier of defense technology to India, and any disruption in this trade relationship could affect India's defense preparedness.

➤ **Diplomatic Challenges:** India has traditionally maintained a balanced approach in its foreign policy towards Israel and Arab countries. **If the conflict escalates and draws in other Arab nations, it could pose diplomatic challenges for India**. Balancing its ties with Israel and maintaining good relations with Arab nations may become more complex.

➤ **Economic and Strategic Ties with the Middle East:** India's economic and strategic ties with the Middle East have grown in importance, particularly in the context of initiatives like the **India-Middle East-Europe economic corridor**. **If the conflict intensifies and involves other regional actors like Hezbollah and Iran, it could destabilize the West Asian region.**

   ❍ **Energy Supply:** The West Asian region is a crucial source of energy imports for India. Any disruption in the stability of the region could potentially impact India's energy supply, leading to economic challenges.

➤ **Welfare of Indian Expatriates:** India has a significant expatriate population working in various Middle Eastern countries. The welfare and **safety of these Indian nationals could be at risk** if the conflict escalates, and it becomes essential for India to ensure their protection.

What is India's Stand?

➤ India was one of the few countries to **oppose the UN's partition plan in November 1947, echoing its own experience during independence** a few months earlier. In the decades that followed, the **Indian political leadership actively supported the Palestinian cause and withheld full diplomatic relations with Israel**.

➤ India **recognised Israel in 1950 but it is also the first non-Arab country to recognise Palestine Liberation Organisation (PLO)** as the sole representative of the Palestinian. India is also one of the first countries to recognise the statehood of Palestine in 1988.

➤ In 2014, **India favored UNHRC's resolution to probe Israel's human rights violations in Gaza**. Despite supporting the probe, India abstained from voting against Israel in **UNHRC** IN 2015.

➤ As a part of Link West Policy, India has **de-hyphenated its relationship with Israel and Palestine in 2018** to treat both the countries mutually independent and exclusive.

➤ In June 2019, India voted in favor of a decision introduced by Israel in the **UN Economic and Social Council (ECOSOC)** that objected to granting consultative status to a Palestinian non-governmental organization.

➤ So far India has tried to maintain the image of its historical **moral supporter for Palestinian self-**determination, and at the same time to engage in the military, economic, and other **strategic relations with Israel**.

   ❍ India **advocates dialogue and diplomacy** as the only viable means to resolve the conflict. India supports the role of the Quartet (the US, Russia, the EU, and the UN) and other regional and international actors in facilitating the peace talks between Israel and Palestine.

What could be the Solution to the Israel-Palestine conflict?

➤ **The Two-State Solution:** The **two-state solution** is one of the most widely supported proposals, which **envisages the creation of an independent and sovereign Palestinian state alongside Israel**, within mutually agreed and internationally recognized borders.

   ❍ The two-state solution also aims to address the core issues of the conflict, such as Jerusalem, refugees, settlements, security, and water.

      ● It has also been **supported by many world leaders** including India, US, China etc.

   ❍ However, the two-state solution faces many challenges and obstacles, such as:

      ● The l**ack of political will and trust between Israel and Palestine**, as well as among their domestic constituencies, to make the necessary compromises and concessions for peace.

      ● The **division and fragmentation of the Palestinian leadership and territory**, between the West Bank and Gaza Strip, and between Fatah and Hamas.

      ● The **influence and interference of external actors, such as Iran, Turkey, Egypt, and the US**, who have their own interests and agendas in the region.

      ● The **escalation of violence and extremism on both sides, which fuel hatred and resentment among the populations** and erode the prospects for dialogue and coexistence.

➤ **Other Solutions:** The two-state solution is not the only possible solution to the Israel-Palestine conflict. There are other alternatives that have been proposed or advocated by different groups or individuals, such as:

   ❍ **The One-State Solution:** This approach envisions **a single, bi-national state where both Israelis and Palestinians** have equal rights and representation.

      ● The challenge with this solution lies in addressing the concerns of both communities and ensuring that neither side feels marginalized.

   ❍ **The Confederation Model:** Some propose **a confederation of two separate states with shared**

institutions and cooperation in areas like security, **economy, and resources**. This model allows for some level of autonomy while maintaining cooperation.

○ **International Trusteeship:** Under this option, **an international body or coalition could oversee and govern the region until a more stable and mutually agreeable solution can be reached.** This approach would require the cooperation of the international community.

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Press Freedom in India

This editorial analysis is based on "*The silence around the state's seizure of India's press*" *which was published in The Hindu on 10/10/2023. It talks about how India is passing through a transitory emergency as well as a marked phase of digital authoritarianism. In this context, it appears that the higher judiciary is displaying reluctance to take decisive action.*

> **P Tag:** Indian Polity, GS Paper 2, Fundamental Rights, Indian Constitution, Right to Information, Transparency & Accountability, Government Policies & Interventions, E-Governance

A free press plays a crucial role in safeguarding democracy and fostering a transparent and accountable government. However, recent actions against journalists associated with the online portal *NewsClick*, including raids, seizures, and arrests, have intensified concerns about the protection of digital data and press freedom in India.

In the midst of the digital revolution, India confronts a threat from digital authoritarianism. At this critical juncture, India needs both political action and judicial determination to safeguard press freedom in the country.

What does the term "Press Freedom" mean?

Press freedom is a fundamental principle that allows journalists and media organizations to operate without censorship or government interference. It is a core component of **freedom of expression** and is essential for a democratic society.

> **Press freedom encompasses the following key aspects:**

○ **Freedom from Censorship**: Journalists and media outlets should be able to publish or broadcast news and information without government-imposed censorship.

○ **Access to Information**: A free press should have access to information and sources to investigate and report on matters of public interest.

○ **Independence**: Editorial independence ensures that news reporting is based on facts and not influenced by outside interests.

○ **Protection of Sources**: Journalists should be able to protect their sources to encourage whistleblowers and informants to come forward with information without fear of exposure or reprisal.

○ **Pluralism and Diversity**: A free press should encompass a diverse range of viewpoints and opinions, allowing for open debate and discussion in society.

○ **Accountability**: The media should hold those in power accountable by investigating and reporting on their actions and decisions.

> **Constitutional Background:**

○ Freedom of the Press is nowhere mentioned in the Constitution. However, **Freedom of press** or media refers to the rights given by the Constitution of India under the **freedom and expression of speech in Article 19(1)(a)**. It encourages independent journalism and promotes democracy by letting the people voice their opinions for or against the government's actions.

○ Article 19 of **Universal Declaration of Human Rights** enshrined that everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.

○ However, there are certain restrictions in Article 19(2) to protect the nation and its integrity.

> **Status of Press Freedom in India :**

> **World Press Freedom Index** ranks countries and regions according to the level of freedom available to journalists.

> It has been published every year since 2002 by **Reporters Without Borders**.

OVERALL RANKING

161/180 Where India stands now

India's position in '22 **150/180**

HOW NEIGHBOURS FARE
Bhutan — **90**
Sri Lanka — **135**
Pakistan — **150**
Afghanistan — **152**
Bangladesh — **163**

IN SECURITY INDICATOR

172/180
Only **China, Mexico, Iran, Pakistan, Syria, Yemen, Ukraine & Myanmar** below India

> ➢ Each country or territory's score is evaluated using **five** contextual **indicators**: political context, legal framework, economic context, sociocultural context and safety.
>
> ➢ In **2023**, India ranked **161st** among the **180** countries with a score of **36.62** out of **100.** In **2022**, India's rank was **150.**

What is the Importance of a Free Press for India?

➢ **Democracy and Accountability**: Journalists investigate and report on government actions, policies, and decisions, holding officials accountable for their actions.

➢ **Information Dissemination**: It helps citizens stay informed about current events, government activities, and societal issues, enabling them to make informed decisions and participate actively in the democratic process.

➢ **Check on Power:** A free press acts as a check on the abuse of power by the government and other powerful entities. It helps uncover corruption, human rights abuses, and other wrongdoing, making it difficult for those in authority to act with impunity.

➢ **Transparency and Accountability**: A free press promotes transparency in government operations and decision-making processes. It helps uncover hidden agendas, conflicts of interest, and other factors that may influence government actions.

➢ **Diverse Voices**: India is a diverse country with a multitude of languages, cultures, and perspectives. A free press provides a platform for diverse voices and viewpoints, ensuring that the concerns of various communities are heard.

➢ **Protection of Fundamental Rights**: A free press is a guardian of fundamental rights, including the right to freedom of expression and the right to know. It helps protect these rights by advocating for the rights of individuals and groups.

➢ **International Standing**: India's reputation on the global stage is influenced by its commitment to press freedom. Upholding press freedom demonstrates a commitment to democratic values and human rights, enhancing India's standing in the international community.

Which Institutions are Responsible for Protecting Press Freedom in India?

➢ **Press Council of India (PCI)**: The **Press Council of India** is a statutory body established under the Press Council Act, 1978. It acts as a watchdog to safeguard and promote press freedom and the ethical standards of journalism.

➢ **Ministry of Information and Broadcasting**: The **Ministry of Information and Broadcasting** is a government body responsible for formulating policies and guidelines related to the media sector in India.

➢ **News Broadcasters Association (NBA)**: **NBA** is a self-regulatory body representing the private television news and current affairs broadcasters in India. It formulates and enforces a **code of ethics** and standards for television news channels.

➢ **Editors Guild of India**: This is a voluntary association of editors of leading newspapers and news magazines in India. It plays a crucial role in defending press freedom and addressing issues related to the rights and responsibilities of journalists.

➢ **Legal System**: India's legal system, including the judiciary, plays a significant role in upholding press freedom. Courts have the authority to address violations of press freedom, protect journalists, and interpret laws related to media.

  ○ In 1950, the **Supreme Court** in **Romesh Thappar v. The State of Madras** observed that freedom of the press lay at the foundation of all democratic organizations.

➢ **International Organizations**: International organizations such as **Reporters Without Borders (RSF)** and the **Committee to Protect Journalists (CPJ)** monitor press freedom in India and raise awareness about violations on the global stage.

What are the Challenges associated with Press Freedom in India?

➢ **Legal and Regulatory Constraints**: India has laws that can be used to restrict press freedom, such as defamation laws, sedition laws, and laws related to national security. These laws are sometimes used to intimidate journalists and media organizations.

➢ **Government Interference**: There have been instances of government interference in the editorial independence of media outlets. **Governments may**

use advertising budgets as a tool to reward or punish media organizations, which can influence their reporting.

➢ **Threats and Violence**: Journalists in India often face physical threats and violence, especially when reporting on sensitive issues like corruption, organized crime, or communal tensions. Some journalists have been attacked or even killed in the line of duty.

➢ **Self-Censorship**: Due to fear of reprisals or pressure from various sources, journalists and media outlets may engage in self-censorship, avoiding certain topics or taking a cautious approach to reporting.

➢ **Ownership and Control**: Media ownership in India is often concentrated in the hands of a few powerful entities, which can influence editorial decisions and limit the diversity of voices in the media landscape.

➢ **Defamation Lawsuits**: Journalists and media organizations in India are frequently targeted with defamation lawsuits, which can be time-consuming and financially burdensome.

NUMBER OF JOURNALISTS KILLED IN INDIA 1991-2021
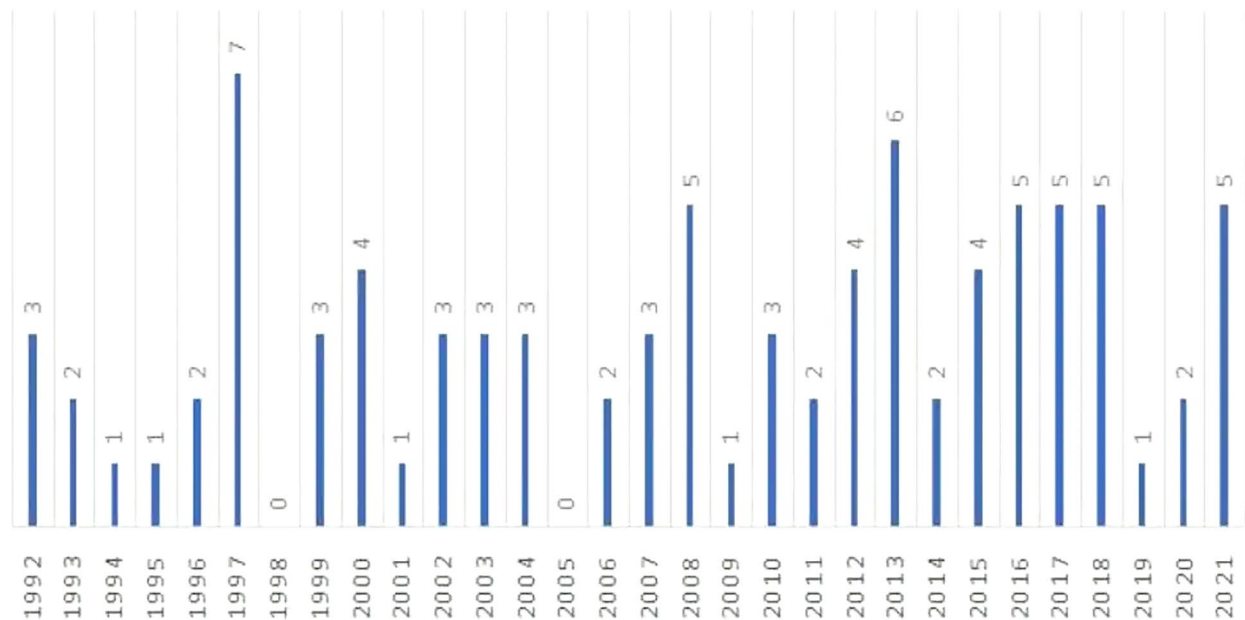
What Measures can be Taken to Ensure a Free and Impartial Press in India?

➢ **Strengthen Legal Protections**:
 ○ Reform laws that can be misused to restrict press freedom, such as defamation and sedition laws.
 ○ Ensure swift and fair legal processes in cases involving press freedom violations.

➢ Independent Regulatory Framework:
 ○ Establish independent media regulatory bodies with members representing a cross-section of society, ensuring that they are free from government control and political influence.

➢ **Protect Journalists and Whistleblowers**:
 ○ Enact and enforce laws that protect journalists from harassment, violence, and threats, both online and offline.
 ○ Establish mechanisms to protect whistleblowers who provide information to the media in the public interest.

➢ **Promote Transparency:**
 ○ Enact robust freedom of information or access to information laws to promote transparency and enable journalists to access government information.
 ○ Promote transparency in media ownership to prevent media concentration and conflicts of interest..

➢ **Public Broadcasting Independence:**
 ○ Ensure the independence of public broadcasting institutions from government control and influence.
 ○ Appoint qualified and impartial boards to oversee public broadcasters, and ensure their funding is secure and nonpartisan.

➢ **Promote Journalistic Ethics**:
 ○ Encourage media organizations to adhere to a code of ethics that emphasizes accuracy, fairness, and balanced reporting.

○ Support professional development and training for journalists to maintain high ethical standards.

○ Raise public awareness about the importance of a free and impartial press in a democratic society.

➤ **International Cooperation**:

○ Collaborate with international organizations, such as **UNESCO** and international press freedom groups, to promote press freedom and share best practices.

○ The UN Plan of Action on the Safety of Journalists aims to create a free and safe environment for journalists and media workers.

Conclusion:

Addressing the issue of press freedom in India will require a concerted effort from various stakeholders, with a shared commitment to upholding the principles of a free press in a democratic society. It is a complex challenge that needs continuous attention and action to ensure a vibrant and independent media environment in the country.

■■■

Mental Health: The Hidden Toll of Informal Labor in India

This editorial is based on "Mental health and the floundering informal worker" which was published in The Hindu on 09/10/2023. It talks about the mental health issues faced by the informal workers in India and the possible solutions to address them.

Tag: Social Justice, GS Paper - 2, Issues Related to Disability, Health, Human Resource

The theme of **World Mental Health Day** (October 10) 2023 is '**mental health as a universal human right**'. A segment often overlooked when it concerns mental health is the informal worker. A study by the **International Labour Organization (ILO)** says that **15% of working-age adults, globally, live with a mental disorder.**

On one hand, **decent work influences mental health in a positive way while on the other, unemployment, or unstable or precarious employment, workplace discrimination, or poor and particularly unsafe working environments, can all pose a risk to a worker's mental health.** Workers in low-paid, unrewarding or insecure jobs, or working in isolation, are more likely to be exposed to psychosocial risks, thus compromising their mental health.

According to the National Mental Health Survey 2019, about 14% of all adults in India have or will have a mental condition of some kind. Nearly 56 million people in the country are thought to suffer from depression, with another 38 million suffering from anxiety disorders.

What is Mental Health and its Significance?

➤ **Definition:** According to **WHO**, mental health is a **state of mental well-being that enables people to cope with the stresses of life, realize their abilities, learn well and work well, and contribute to their community.**

○ It is an integral component of health and well-being that underpins our individual and collective abilities to make decisions, build relationships and shape the world we live in.

➤ **Significance:** Mental health is a basic human right and a crucial aspect of personal and community development. It is also a global issue that requires collective action and awareness.

○ That is why **every year on October 10, the World Federation for Mental Health (WFMH) organizes World Mental Health Day** to promote mental health education, advocacy, and support.

How does Informal Work impact Mental Health?

➤ **Lack of Regulatory Protection:** India's **informal workers, who make up over 90% of the workforce**, often operate without regulatory protection. This means they lack job security, legal rights, and access to benefits, creating a constant sense of vulnerability and stress, which can negatively impact mental health.

➤ **Unsafe Working Environments:** Many informal workers toil in **unsafe working conditions**, which **can lead to physical and psychological health problems**. The fear of workplace accidents and injuries can contribute to anxiety and stress.

➤ **Long Hours and Uncertainty:** Informal workers often endure long working hours and have unpredictable incomes. This instability and uncertainty can lead to chronic stress, anxiety, and depression, as they struggle to make ends meet.

➤ **Limited Access to Social and Financial Protections:** Informal workers have **limited or no access to social safety nets, such as health insurance or pension schemes. This lack of financial protection can increase feelings of insecurity** and contribute to mental health issues.

○ Informal workers **face mental distress due to accumulating debt and rising health-care costs**, which are intertwined and mutually reinforcing.

● In India, the share of Out-of-Pocket Expenditure (OOPE) in total Health Expenditure is 47.1%.

○ India will also **become an aging society in 20 years, with no apparent social security road map for this rapidly growing group that is especially vulnerable to poor mental health.**

  ● The **Census of India 2011** shows that 33 million elderly people are working post-retirement in informal work.

➢ **Gender Discrimination:** Gender disparities are also stark, with **over 95% of India's working women engaged in informal, low-paying, and precarious employment, often without social protection**, in addition to suffering patriarchal structures and practices in their social and familial spaces.

➢ **Youth Unemployment:** High levels of youth **unemployment in India have a significant impact on the mental health of young people**. The stigma associated with unemployment can lead to feelings of inadequacy, anxiety, and depression among the youth.

➢ **Shift to Precarious Work:** Young workers often **accept low-paying and precarious jobs in the informal sector out of desperation, which can negatively impact their mental health**. Poor working conditions and low wages contribute to job dissatisfaction and stress.

What are the Impacts of Poor Mental Health?

➢ **Reduced Quality of Life**: People with mental health conditions may **experience lower levels of well-being, happiness, and satisfaction**. They may also **face difficulties in coping with stress, fulfilling their potential**, and enjoying their relationships.

➢ **Impaired Physical Health:** There is a strong connection between mental and physical health. **Poor mental health can lead to physical health problems such as chronic stress, sleep disturbances**, and increased susceptibility to illness.

➢ **Risk of Self-Harm and Suicide:** Poor mental health is a **significant risk factor for self-harm and suicide**. It's essential to provide appropriate support and intervention for individuals at risk.

  ○ The **National Crime Records Bureau (NCRB)** reported that **26% of the people who died by suicide were daily wage earners**.

➢ **Work and Productivity:** Poor mental health **can lead to decreased productivity, absenteeism, and difficulty concentrating at work or school**. This can result in job loss, academic underachievement, and financial difficulties.

➢ **Economic burden**: People with mental health conditions may incur high costs for treatment, travel, and care. They may also lose income and productivity due to absenteeism, presenteeism, or unemployment. Moreover, **poor mental health can affect the economic development and growth of countries and regions.**

○ As per the **WHO**, the **economic cost of poor mental health in the country will be over $1.03 trillion** between 2012 and 2030.

➢ **Social stigma and discrimination**: People with mental health conditions may **face negative attitudes, stereotypes, and prejudices from others**. They may also encounter barriers and inequalities in accessing education, employment, health care, and social services.

Steps Taken by the Government:

➢ **National Mental Health Program (NMHP):** To address the huge burden of mental disorders and shortage of qualified professionals in the field of mental health, the government has been implementing the **National Mental Health Program (NMHP) since 1982.**

  ○ The Program was **re-strategize in 2003** to include two schemes, viz. Modernization of State Mental Hospitals and Up-gradation of Psychiatric Wings of Medical Colleges/General Hospitals.

➢ **Mental HealthCare Act 2017**: It guarantees **every affected person access to mental healthcare** and treatment from services run or funded by the government.

  ○ It has significantly reduced the scope for the use of **Section 309 IPC** and made the attempt to commit suicide punishable only as an exception.

➢ **Kiran Helpline**: In 2020, the Ministry of Social Justice and Empowerment launched a **24/7 toll-free helpline 'Kiran'** to provide support to people facing anxiety, stress, depression, suicidal thoughts and other mental health concerns.

➢ **MANAS Mobile App:** To **promote mental wellbeing across age groups,** the Government of India launched **MANAS (Mental Health and Normalcy Augmentation System) in 2021.**

What Steps can be taken to Improve Mental Health?

➢ **Universalize Social Security:** Ensure that social security measures are accessible to all, including informal workers. This could involve expanding the coverage of existing schemes or creating new ones specifically tailored to their needs.

  ○ **Reevaluate and amend the Code on Social Security, 2020** to explicitly include universal social security as a goal. Policy reform is essential to address the specific needs of informal workers.

➢ **Increase Funding for Mental Health:** Allocate a higher percentage of the total health budget to mental health services. Given the significant mental health challenges faced by daily wage earners and other

vulnerable groups, investing more in mental health infrastructure is crucial.

- o **India's budgetary allocation for mental health is currently under 1% of the total health budget**. That too is over-focused on the digital mental health programme.

➤ **Diversify Mental Health Programs:** Expand mental health programs beyond just digital initiatives. While digital mental health programs can be valuable, they **should be complemented with community-based care and human rights-oriented approaches, as recommended by the World Mental Health Report 2022.**

➤ **Promote Awareness and Recognition:** Implement proactive policies to improve mental health recognition and awareness, especially among informal workers. This may involve conducting mental health awareness campaigns and training programs to reduce stigma and encourage early intervention.

➤ **Support Economic Stability:** Promote employment guarantee programs like the **Mahatma Gandhi National Rural Employment Guarantee Scheme (MNREGS)** to provide job security and financial stability to daily wage earners. Economic distress is a significant contributor to mental health issues, and stable employment can help alleviate this.

➤ **Ensure Basic Human Rights:** This is critical in upholding the basic human right to good health, including mental health, and in advancing to the **Sustainable Development Goals (SDGs)**, especially **SDG 3 on 'good health and well-being'** and **SDG 8 on 'decent work for all/economic growth'**.

➤ **Collaboration and Partnerships:** Collaborate with **non-governmental organizations (NGOs)**, healthcare providers, and community organizations to expand mental health services and outreach to marginalized communities.

■■■

Fueling the Future: India's Methanol Economy

This editorial is based on "The power of green methanol" which was published in The Hindu Business line on 10/10/2023. It talks about how green methanol can be a potential alternative fuel for India, as it can reduce carbon emissions and dependence on fossil fuels.

Tag: Indian Economy, GS Paper-3, Growth & Development, Environmental Pollution & Degradation

NITI Aayog has prepared a comprehensive plan advocating adoption of methanol as the preferred cooking fuel in households as well as commercially. NITI Aayog believes it can be used to power rail, road and shipping. Besides that, it reckons it can partially replace LPG for cooking. Blending of 15% methanol in gasoline can result in at least 15% reduction in the import of gasoline/crude oil.

What is Methanol?

➤ **Definition:**

- o Methanol is a **low carbon, hydrogen carrier fuel** produced from high ash coal, agricultural residue, CO_2 from thermal power plants and **natural gas**.

- o Methanol, also known as methyl alcohol or wood alcohol, is **a colorless, flammable liquid**.
  - ● It is the **simplest alcohol**.

- o Methanol is commonly used as an industrial solvent, antifreeze, and fuel, but it is perhaps best known for its use as an alcohol fuel in racing cars and as a feedstock for the production of chemicals and plastics.

➤ **Applications:**

- o **Fuel:** Methanol can be used as an alternative fuel or fuel additive. It is often blended with gasoline to improve combustion and reduce emissions. Methanol is also used in the production of biodiesel.
  - ● Methanol **can be produced from renewable sources like biomass and can be used as a potential energy carrier** or fuel in fuel cells and other energy applications.

- o **Solvent:** Methanol is a **versatile solvent used in various industrial processes**, including chemical manufacturing, pharmaceuticals, and the production of paints, varnishes, and coatings.

- o **Antifreeze:** Methanol is used as an **antifreeze in automotive applications**, particularly in windshield washer fluid.

- o **Chemical Feedstock:** Methanol serves as **a crucial feedstock for the production of various chemicals**, including formaldehyde, acetic acid, and methyl tert-butyl ether (MTBE).

Green Methanol: Green methanol is **methanol that is produced renewably and without polluting emissions**, one of its variants being generated from **green hydrogen**. This chemical compound can be used as a low-carbon liquid fuel and is a promising alternative to **fossil fuels** in areas where decarbonisation is a major challenge, such as maritime transport.

What are the Benefits of Methanol?

➢ **Lower Production Costs:** Methanol can be **produced at a lower cost** compared to other alternative fuels, which makes it an economically viable option for various applications.

➢ **Lower Flammability Risk:** Methanol has a **lower risk of flammability compared to gasoline**, which can enhance safety in certain applications.

➢ **Environmental Benefits:** When produced from **green hydrogen** and with carbon capture technologies, **methanol can contribute to a reduction in greenhouse gas** emissions and **air pollutants**. This makes it a more environmentally friendly option, particularly when used as a fuel or energy source.

  ○ **Emission Control:** By adding water to the combustion process, **methanol can help meet stringent emission limits**, such as the Tier III regulation for **nitrogen oxide (NOx)** emissions. This makes it a useful choice in applications where emissions need to be controlled.

➢ **Handling and Transportation:** Methanol is relatively **easy to handle and transport under normal temperatures and pressure conditions**. It is also compatible with existing infrastructure, which simplifies its adoption in various industries.

➢ **High Octane and Horsepower:** Methanol has the **ability to produce high octane ratings and can deliver equivalent horsepower to super high-octane gasoline**. This can make it a suitable option for high-performance engines.

➢ **Versatile Use:** Methanol can be used in various ways as an engine fuel, including in dedicated methanol engines, as part of binary and ternary alcohol blends (such as M15, M85, and M100).

  ○ It is also **suitable for use in shipping, aviation, fuel reforming** using engine waste heat, and industrial electricity generation.

What is NITI Aayog's Methanol Economy Programme?

➢ **The Programme:** The NITI Aayog's '**Methanol Economy**' program is a strategic initiative in India aimed at achieving several important goals related to energy, environment, and the economy.

➢ **Key Objectives and Potential Benefits:**

  ○ **Reducing Oil Import Bill:** One of the primary objectives of the Methanol Economy program is to reduce India's dependence on imported crude oil and petroleum products. **Blending of 15% methanol in gasoline can result in at least 15% reduction in the import** of gasoline/crude oil.

  ○ **Greenhouse Gas Emissions Reduction:** The use of methanol as a fuel has the potential to reduce greenhouse gas emissions. Compared to traditional fuels like gasoline and diesel, **methanol blending would bring down GHG emissions by 20%** in terms of particulate matter, NOx, and SOx, thereby improving the urban air quality.

  ○ **Utilizing Local Resources:** Methanol can be **produced from various feedstocks, including coal reserves and municipal solid waste.** By converting these resources into methanol, India can make more efficient use of its domestic energy resources and waste materials, contributing to sustainability and reducing environmental impacts.

    ● Bharat Heavy Electricals Limited (BHEL) has developed the **fluidized bed gasification technology** suitable for high ash Indian coals to produce syngas and then convert syngas to methanol with 99% purity.

  ○ **Fuel Diversification:** The Methanol Economy program **promotes the use of methanol in various sectors, including road transport, rail, marine, energy production** (e.g., DG sets and boilers), tractors, commercial vehicles, and even retail cooking.

    ● This **diversification can help reduce the country's reliance on a single type of fuel** and enhance energy security.

  ○ **Job Creation:** The Methanol Economy program is **expected to create a significant number of jobs, estimated at close to 5 million**, through methanol production, application, and distribution services.

  ○ **Consumer Savings:** The program also aims to save consumers money by blending 20% **Di-methyl Ether (DME)**, a derivative of methanol, in **LPG (liquefied petroleum gas)**. This could result in **savings of Rs 50-100 per cylinder for consumers**, making clean cooking fuel more affordable.

Methanol Economy

WHAT IS IT?
▸ It is also known as methyl alcohol
▸ Colourless, light, flammable liquid

H–C–OH (H, H)

HOW IT IS MADE
▸ Manufactured industrially
▸ Derived from coal, oil or biomass

WHAT ARE ITS USES
▸ Antifreeze
▸ Solvent
▸ Fuel

KEY BENEFITS
▸ Cheaper to produce compared to other fuels
▸ Safer than others because of low flammability
▸ Wide variety of feed stock can be used to produce methanol

BIG USERS
▸ Methanol demand expected to grow strongly with its use as a fuel
▸ China, Brazil, Mexico and the US significant players

Some Other Initiatives to boost Methanol Economy:

➢ **Methanol Economy Research Programme (MERP):** Launched by the Department of Science and Technology (DST) in 2015, focuses on developing novel technologies for methanol production from different feedstocks, such as high ash coal, carbon dioxide, and biomass. The programme also supports research on methanol utilization in direct methanol fuel cells, methanol engines, and methanol blending with LPG.

➢ **Methanol Cooking Fuel Programme:** Launched by Assam Petrochemicals in 2018, which is the first canister-based methanol cooking fuel programme in Asia. The programme aims to provide a clean, cost-effective, and pollution-free cooking medium to households by replacing LPG, kerosene, and wood charcoal with methanol stoves. The programme has been scaled up to 10 states in India with a target of reaching 1 lakh households.

What are the Challenges Before India's Methanol Economy?

➢ **Lack of Domestic Natural Gas Resources:** India has limited natural gas reserves and **relies heavily on imports to meet its demand**. Natural gas is the most economical and efficient feedstock for methanol production, but **importing natural gas increases the cost and reduces the competitiveness** of methanol.

➢ **High Ash Coal and Low Grade Biomass:** India has abundant coal reserves, but most of them are **high ash coal that requires more processing and generates** more emissions than low ash coal.

○ Similarly, India has a large potential for biomass conversion to methanol, but the quality and availability of biomass varies across regions and seasons.

○ These factors increase the technical and economic challenges of producing methanol from coal and biomass.

➢ **Lack of Infrastructure and Policy Support:** India lacks the necessary infrastructure for methanol production, distribution, storage, and utilization. For example, there are no dedicated pipelines or terminals for methanol transport, no blending facilities or dispensing stations for methanol fuel, and no standards or regulations for methanol vehicles or appliances.

○ Moreover, there is a lack of policy support and incentives for methanol producers and consumers to promote its adoption and use.

➢ **Lack of Awareness and Acceptance:** India has a large and diverse population with different preferences and habits for energy consumption. There is a lack of awareness and acceptance among the public and stakeholders about the benefits and challenges of the methanol economy.

○ There is also a need to address the safety and environmental concerns associated with methanol production and use.

What are the Solutions to Boost India's Methanol Economy?

➢ **Developing Novel Catalysts and Processes:**

○ Research and development efforts should aim to improve the efficiency of methanol production from various feedstocks.

○ Consider partnerships with academic institutions, industry experts, and government agencies to facilitate research and innovation.

○ **Environmental impact assessments** are essential to ensure that the new processes are sustainable and eco-friendly.

➢ **Promoting Methanol as Marine Fuel:**

○ Collaborate with maritime industries to establish guidelines and standards for methanol use.

○ Educate stakeholders on the benefits of using methanol in terms of reduced emissions and compliance with international regulations.

➢ **Introducing Methanol-Based Fuel Cells:**

○ Investment in fuel cell technology and infrastructure will be crucial for implementing this concept.

○ Ensure that methanol fuel cells are reliable, cost-effective, and have a broad range of applications beyond electricity generation.

➢ **Encouraging Methanol-Powered Vehicles:**

○ Engage with automobile manufacturers to develop suitable engines and fuel injection systems for methanol.

○ Promote the advantages of methanol-powered vehicles, such as reduced greenhouse gas emissions and improved air quality.

➢ **Expanding Distribution Network and Infrastructure:**

○ Invest in a comprehensive distribution network with proper storage and dispensing facilities.

○ Ensure safety measures for handling and transporting methanol are in place.

➢ **Creating Awareness and Incentives:**

○ Launch educational campaigns to inform the public about the benefits of methanol-based fuels and appliances.

○ Consider offering incentives such as tax breaks, subsidies, or discounts to encourage consumer adoption.

■■■

A Strategic Roadmap for Nuclear Energy Expansion

This editorial is based on "India needs to go nuclear" which was published in The Hindu on 09/10/2023. It argues that India needs to go nuclear to achieve its developmental aspirations and to address the climate change challenge. It proposes a six-pronged national strategy for a rapid scale-up of nuclear energy in India.

Tag: Science & Technology, GS Paper-1, Mineral & Energy Resources, GS Paper-3, Nuclear Technology
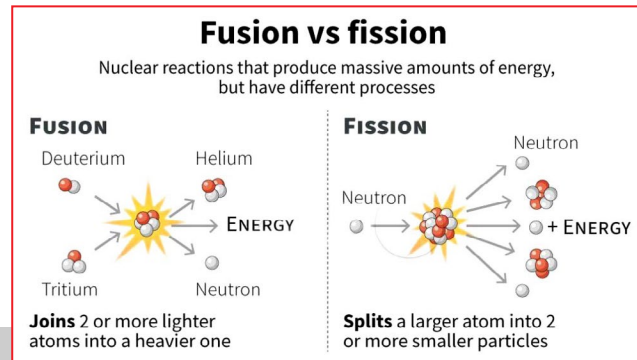
India's economy is growing rapidly. It is expected to surpass Germany and Japan and move up from number five to number three position before the end of this decade. **Economic growth triggers demand for energy**. One would thus expect significant growth in our primary energy consumption which is already the third-highest globally. Most of this is based on fossil energy.

To achieve a **Human Development Index** comparable to advanced countries, India needs at least 2,400 kilogram oil equivalent (kgoe) energy consumption per capita per year, which could improve to around 1,400 kgoe with expected improvements in energy use efficiency. However, **to support a developed India, clean energy requirements would be around 25,000-30,000 terawatt-hours per year (TWh/yr), more than four times the present energy consumption.** Deployment of **renewable energy** alone won't enable India to become an advanced country.

What is Nuclear Energy?

➤ Nuclear energy is a form of **energy that is released from the nucleus, or core**, of atoms.

➤ Nuclear energy is **known for its high energy density**, meaning that a relatively small amount of nuclear fuel can produce a large amount of energy.

➤ There are two primary methods of harnessing nuclear energy:

○ **Nuclear Fission:** This is the process of **splitting the nucleus of an atom into two smaller nuclei**, releasing a large amount of energy in the process.

● Nuclear power plants use this method, primarily using uranium-235 or plutonium-239 as fuel.

● When the nucleus of these heavy isotopes is **bombarded with neutrons, it becomes unstable and splits into two or more smaller nuclei**, along with a few neutrons.

■ This chain reaction can release a significant amount of heat, which is used to generate steam and drive turbines, ultimately producing electricity.

○ **Nuclear Fusion:** This is the **process of combining the nuclei of two light atoms to form a heavier nucleus**.

● This is the process that **powers the sun and other stars**.

● While it holds great **potential for clean and virtually limitless energy**, it is extremely challenging to achieve controlled nuclear fusion on Earth.

Fusion vs fission
Nuclear reactions that produce massive amounts of energy, but have different processes

FUSION — Deuterium, Helium → ENERGY, Tritium, Neutron. **Joins** 2 or more lighter atoms into a heavier one

FISSION — Neutron → Neutron + ENERGY. **Splits** a larger atom into 2 or more smaller particles

What is the Status of Nuclear Energy in India?

➤ Nuclear energy is the **fifth-largest source of electricity in India,** contributing about **2% of the country's total electricity generation.**

➤ India currently has over **22 nuclear reactors in 7 power plants** across the country, which together produce **6,780 MW of nuclear power.**

○ Of these reactors, 18 are **Pressurized Heavy Water Reactors (PHWRs)** and 4 are **Light Water Reactors (LWRs).**

➤ In January 2021, **the Kakrapar Atomic Power Project (KAPP-3), India's first 700 MWe unit** and **the biggest indigenously developed variant of the PHWR**, was connected to the grid.

➤ The Indian government has allowed joint ventures between the **Nuclear Power Corporation of India Limited (NPCIL)** and public sector undertakings (PSUs) to enhance India's nuclear program.

○ NPCIL is now in joint ventures with the **National Thermal Power Corporation Limited (NTPC)** and the **Indian Oil Corporation Limited (IOCL).**

➤ The government is promoting the expansion of nuclear installations to other parts of the country. For example, an **upcoming nuclear power plant in Gorakhpur town in Haryana** will become operational in the near future.

➤ India is also **working on an entirely indigenous thorium-based nuclear plant, "Bhavni,"** which will be the first of its kind using Uranium-233. The **experimental thorium plant "Kamini"** already exists **in Kalpakkam.**

Why does India Need Nuclear Energy?

➢ **Limited Reserves of Fossil Fuels:** India has **limited reserves of fossil fuels, and nuclear energy can help reduce the country's dependence on coal, oil, and gas imports**. This is important for enhancing energy security, as it reduces the vulnerability to supply disruptions and price fluctuations in global fossil fuel markets.

○ Hypothetically, even **if the entire barren uncultivable land in India is used up for setting up solar plants, it would still fall way short of the target**. The potential of wind energy is even smaller.

○ A recent report by BMI Research said **India's power demand would grow by 70% by 2032**. Conventional energy sources won't be able to cater this increasing demand.

➢ **Clean and Carbon-Free:** Nuclear energy is considered a **clean and carbon-free source of energy. It doesn't produce direct greenhouse gas emissions during electricity generation**, making it a viable option for addressing climate change and achieving India's climate goals.

➢ **Cheaper to Operate:** Nuclear power plants are cheaper to operate than coal or gas plants, despite the cost of managing radioactive fuel and disposal. Estimates show that **nuclear plants cost only 33-50% of a coal plant and 20-25% of a gas combined-cycle plant.**

➢ **Reliable and Continuous Power:** Nuclear energy can provide reliable and continuous base load power. **Unlike solar and wind energy, which are intermittent and dependent on weather conditions, nuclear power plants can operate continuously**, which can contribute to a stable and resilient energy supply.

➢ **Achieving Net Zero:** To achieve **Net Zero** by 2070, **India needs to scale up nuclear energy to a couple of thousand GWe** as suggested by a study conducted by Vivekananda International Foundation with analytical support from IIT-Bombay.

➢ **Economic Growth and Job Creation:** Meeting high energy demands is often linked to economic development. India's high per capita energy consumption is a factor for achieving a high human development index. The nuclear energy sector can also create jobs and foster innovation, leading to economic growth.

➢ **Availability of Thorium:** India has **abundant thorium resources, which can be utilized as nuclear fuel. Thorium is considered a safer and more efficient alternative to uranium**, and India has developed indigenous technology for its utilization. This positions India well for future nuclear energy expansion.

○ India has consciously proceeded to explore the possibility of tapping nuclear energy for the purpose of power generation. In this direction a **three-stage nuclear power programme** was formulated by Homi Bhabha in the 1950s.

What are the Challenges before India's Nuclear Energy?

➢ **Capital Intensive:** Nuclear power plants are capital intensive and recent nuclear builds have suffered major cost overruns.

➢ **Insufficient Nuclear Installed Capacity:** In 2008, the Atomic Energy Commission projected that India would have 650GW of installed capacity by 2050; the current installed capacity is only 6.78 GW.

➢ **Nuclear Liability:** India's **Civil Liability for Nuclear Damage Act, 2010**, has been a contentious issue for foreign suppliers, who fear being held liable for accidents beyond their control.

➢ **Nuclear Safety:** Disposal of radioactive material and danger of nuclear accidents makes it further prohibitive. **Risks and costs of nuclear energy are overwhelmingly borne by the poor.** There is always a lot of resistance from local communities against reactors.

➢ **Nuclear Fuel Cycle:** India considers a closed nuclear fuel cycle of crucial importance for implementation of its **three-stage nuclear power programme**, the third stage being the long-term objective of tapping vast energy available in thorium resources in India.

○ However, this requires advanced technologies and expertise that are not readily available.

➢ **International Cooperation:** India's dependence on imported energy resources and the inconsistent reform of the energy sector are challenges to satisfying rising demand. India also faces diplomatic hurdles in securing membership of the **NSG**, which would enable it to access more nuclear technology and fuel.

What is a National strategy for a Rapid Scale-up of Nuclear Energy?

➢ **PHWR Expansion:** The Indigenous 700 MWe **PHWR**, with the first unit already in commercial operation, should be the primary source for adding base load electrical capacity.

○ Fifteen more units are currently under construction in fleet mode.

○ Implementing multiple fleets with the involvement of various PSUs in addition to NPCIL should be considered.

➢ **SMRs and Coal Plant Replacement:** Build indigenous **Small Modular Reactors (SMRs)** at a large number of sites that would be vacated by retiring coal plants in the coming decades.

○ Importing these units would make electricity production unaffordable.

○ NTPC, being the owner of the largest number of coal plants in the country, is a natural partner in this process. More industrial partners could be involved.

➢ **Captive Units for Industries:** The 220 MWe **PHWR** units can be offered as partially owned captive units for electricity and hydrogen for energy-intensive industries such as metals, chemicals, and fertilizers. **The Advanced Heavy Water Reactor (AHWR300-LEU) developed by BARC can also be offered** for this role after demonstrating a prototype.

➢ **High-Temperature Reactor for Hydrogen Production:** Develop a high temperature reactor for **direct hydrogen production without resorting to electrolysis. This would enable cheaper green hydrogen production and reduce pressure on excessive electrification** of the energy system in the country, which otherwise appears inevitable.

➢ **Thorium Energy Development:** Speed up second and third stage nuclear-power programme development to **unleash thorium energy potential in accordance with the pre-existing plans** for long-term sustainable energy supply.

○ Bhabha Atomic Research Centre has the requisite capability.

➢ **International Cooperation:** India's PHWRs are globally competitive in terms of performance and capital cost, making them well-suited to meet these requirements. **The use of Thorium-HALEU fuel in PHWRs can further enhance their attractiveness** in terms of economics, safety, waste management, and proliferation resistance.

○ India should seize this opportunity by piloting major international cooperation to tackle climate change challenges on a3 global scale.

■■■

Rethinking Reservation Policies in India

This editorial is based on "Bihar caste survey is a cynical attempt to expand reservation — India needs a different approach" which was published in The Indian Express on 13/10/2023. It talks about the Bihar caste survey as a cynical attempt to expand reservation and argues that India needs a different approach to achieve social justice, equality and excellence.

Tag: Indian Polity, **Tag:** GS Paper-2, Social Empowerment, Government Policies & Interventions

A good democracy doesn't weigh citizens but counts them. Everybody is equal and judged as individuals, not as a member of groups. The challenge lies in the gap between this ideal and the reality every society tries to bridge through policy. But is discrimination between applicants for jobs and education the most effective policy tool to deliver equality? Is it possible to discriminate in favor of one group without discriminating against another?

It's hardly time to end reservation but expanding it — the Bihar caste survey is a cynical attempt to do so — may be unfair to future generations and divisive.

What are the Issues with Reservation?

➢ **Quality of Education and Employment:** Reservation policies primarily target access to education and government jobs. However, there is a concern that these policies may **compromise the quality of education and workforce in the long run**, as candidates may be selected based on quotas rather than merit.

➢ **Brain Drain:** Some argue that reservation policies **can lead to a "brain drain" where talented individuals from unreserved categories may choose to study or work abroad to escape the reservation system**, potentially causing a loss of talent within the country.

➢ **Resentment and Division:** Reservation can sometimes **create social and economic divisions within society.** This division can lead to resentment among those who do not benefit from the policies, potentially hindering social cohesion and development.

➢ **Inefficiencies and Corruption:** Reservation policies have sometimes been **marred by inefficiencies, corruption, and the manipulation of caste certificates**. These issues can undermine the effectiveness of the system and hinder development.

➢ **Lack of Targeting:** Reservation policies often **rely on broad categories, which may not accurately target the most disadvantaged individuals within those categories**. Some individuals from reserved categories may not be as disadvantaged as others and may still benefit.

➢ **Stigma and Stereotyping:** Reservation can sometimes **lead to the stigmatization and stereotyping of individuals from reserved categories**, which can impact their self-esteem and overall development.

➢ **Economic Development vs. Social Development:** Reservation policies tend to focus on social development, but they **may not directly address economic disparities.** Economic development is also crucial for addressing inequality and promoting overall development.

➢ **Political Exploitation:** Reservation policies are **sometimes used for political gain, which can lead to a focus on short-term political objectives** rather than long-term development goals.

**Constitutional Provisions
that enable State to provide Reservations**

➢ **Article 15** of the Constitution empowers the State for making following provisions:
  ❍ **Article 15(3)** enables the State to make any special provision **for women and children**.
  ❍ **Article 15(4)** enables the State to make any special provision for the **advancement of any socially and educationally backward classes** of citizens or for the SCs and the STs.
  ❍ **Article 15(5)** allows for special provisions to be made for the **advancement of socially and educationally backward classes of citizens, as well as SCs and STs**, particularly in relation to their **admission to educational institutions**, including private ones.
  ❍ **Article 15(6)(a)** allows for making special provisions for the advancement of any **economically weaker sections (EWS)** of citizens other than the classes mentioned in clauses (4) and (5).
  ❍ **Article 15(6)(b)** provides for making special provisions for the advancement of **economically weaker sections (EWS)** of citizens, excluding the classes mentioned in clauses (4) and (5). These provisions specifically pertain to their admission to educational institutions, including private ones.
➢ **Article 16** provides for the grounds of positive discrimination or Reservation in government jobs.
  ❍ Article 16(4) provides that the State can make any provision for the **reservation of appointments or posts** in favor of any backward class of citizens who, in the opinion of the state, are not adequately represented in the services under the State.
  ❍ Article 16(4A) provides that State can make any provision for reservation **in matters of promotion** in favor of the Scheduled Castes and the Scheduled Tribes if they are not adequately represented in the services under the State.
  ❍ Article 16(6) provides that the State can make any **provision for the reservation of appointments or posts in favor of any economically weaker sections.**

What should be the Solution to Reservation?

➢ **Reboot Infrastructure of Opportunity:** Rebooting our infrastructure of opportunity requires accelerating reforms to our **3Es of education, employability, and employment.**
  ❍ **In education**, state governments must **fix government schools** without wasting more energy on small class sizes, teacher qualifications or teacher salaries but focusing on the binding constraints

of performance management, governance, and soft skills.
  ❍ **In employability**, we must **attract massive new financing for skills from employers by redesigning the system** around the five design principles of learning by doing, learning while earning, learning with qualification modularity, learning with multimodal delivery, and learning with signaling value.
    ● This requires **ending regulatory cholesterol** that restricts linking degrees to apprenticeships, confuses apprenticeships with jobs, judges vocational universities like traditional ones and blunts online higher education growth.
  ❍ **In employment**, massive non-farm, high-wage, formal job creation requires **cutting the regulatory cholesterol for employers that breeds litigation**, compliance, filings and criminalisation by passing new labor codes.
    ● There is a lot of work in manufacturing, less anchored to large employers with offices, and mostly without index-linked, defined benefit pensions.
    ● But our current labor laws hate small employers, breed corruption, and encourage substituting people with machines.
      ■ Our labor laws should also be reformed.
➢ **Equal Treatment:** Ensuring that all individuals are treated fairly and without discrimination is a fundamental aspect of promoting equality. This means that **people should not face disadvantages or privileges based on their background**, such as their parents' status.
➢ **Unbiased Competition:** Encouraging competition on a level playing field, where **individuals have equal opportunities to succeed based on their skills, abilities, and efforts, is crucial**. This promotes excellence by motivating individuals to strive for their best.
➢ **Impartially Judged Outcomes:** Outcomes should be determined through a **fair and impartial evaluation of an individual's performance, skills, and contributions**. This ensures that merit and achievement are the primary factors in determining success.
➢ **Judging Based on Effort and Courage:** Emphasizing the importance of hard work, determination, and the courage to pursue one's goals helps foster a culture of personal responsibility and individual effort.
➢ **Use the Resources Judiciously:** A modern state is a welfare state and being a good ancestor **requires a government that uses society's resources to subsidize and deliver quality food, education, healthcare and housing to those who need it.**

❍ But this **safety net should not become a hammock**: Unemployed workers cannot get the same income as those working because people get much more from work than income. And rich people should not get cheap food, gas or diesel.

❍ Policy must **accelerate the Aadhaar-enabled Direct Benefit Transfer** revolution for subsidies.

Conclusion

Gandhiji believed that **Sarvodaya (development of all) would be accomplished through Antyodaya (welfare of the weak).** Philosophers have built on his thinking and concluded that if you were designing the world without knowing your place in it, you would ensure fairness for all. Reservation is a valuable tool for social justice but after years of Poorna Swaraj, **it's time to discard something often subject to political manipulation for something more universal over the next few decades**.

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India-Maldives Ties: The China Concern

This editorial is based on "India and Maldives ties: Despite China, bound by history and geography" which was published in The Indian Express on 14/10/2023. It talks about how Chinese presence in the Indo-Pacific affects India-Maldives relations.

Tag: International Relations, GS Paper - 2, Bilateral Groupings & Agreements, Regional Groupings, Effect of Policies & Politics of Countries on India's Interests, Indian Diaspora

The relationship between India and Maldives has always been deeply rooted in history and geography. As India's closest neighbor, Maldives has relied on India for essential support and assistance throughout the years. However, with China's growing presence in the region, the dynamics of this relationship have become more complex. It is crucial to understand these dynamics to ensure that the long-standing bond between India and Maldives remains strong amidst evolving geopolitical circumstances.

How have India- Maldives Relations Evolved?

➢ **Centuries of Cultural and Historical Ties:**

❍ The historical connections between India and the Maldives date back centuries. **In the 12th century, Islam replaced Buddhism** as the dominant religion in the Maldives, marking a significant cultural shift.

❍ Even during the British protectorate years from 1887 to 1965, the **Maldives relied on India for essential goods and communication** with the outside world.

➢ **Geographical Destiny:**

❍ The Maldives comprises over **1,200 islands scattered across 90,000 square kilometers**, with nearly 99.6% of its territory submerged in the sea.

❍ Experts predict that, by 2050, approximately **80% of the Maldives is expected to vanish due to the phenomenon of "Global Boiling."** Given India's proximity, its role is pivotal in the context of the Maldives' fight against climate change.

➢ **Security Partnership:**

❍ Defense cooperation extends to the areas of **Joint Exercises - "Ekuverin", "Dosti", "Ekatha" and "Operation Shield".**

❍ India provides the largest number of training opportunities for Maldivian National Defence Force (MNDF), meeting around **70% of their defense training requirements.**

❍ **Operation Cactus 1988:** Under Operation Cactus the Indian Armed Forces have helped the government of Maldives in the **neutralization of the coup attempt.**

❍ **Countering Maritime Threats:** India plays a critical role as the **Maldives' first line of defense against maritime threats.** This includes counterterrorism efforts, **combating piracy** on the high seas, **countering drug trafficking**, and addressing narcotics-related issues.

➢ **Rehabilitation Centre:**

❍ Signing of contract for the **Addu reclamation and shore protection project.**

❍ A **drug detoxification and rehabilitation centre** in Addu built with Indian assistance.

❍ The centre is **one of 20 high impact community development projects** being implemented by India in areas such as healthcare, education, fisheries, tourism, sports and culture.

➢ **Economic Cooperation:**

○ Tourism is the mainstay of Maldivian economy. The country is now a **major tourist destination** for some Indians and a **job destination** for others.

○ In August 202, an Indian company, signed a contract for the largest-ever infrastructure project in Maldives which is the **Greater Male Connectivity Project (GMCP).**

○ India emerged as **Maldives' 3rd largest trade partner** in 2021.

○ A **Bilateral USD Currency Swap Agreement between RBI and Maldives Monetary Authority** was signed in 2019.

○ The India-Maldives relationship suffered a setback when Maldives entered into a **Free-Trade Agreement (FTA) with China** in 2017.

➢ **Infrastructure Projects:**

○ **Hanimaadhoo International Airport Development project** under an Indian credit line will add a brand-new terminal to cater to 1.3 million passengers a year.

○ In 2022, the **National College for Policing and Law Enforcement (NCPLE)** was **inaugurated by India's External Affairs Minister.**

● NCPLE is the **largest grant project executed by India** in Maldives.

➢ **Greater Male Connectivity Project:**

○ It will consist of a 6.74 km-long bridge and causeway **link between Male and nearby islands of Villingli, Gulhifalhu and Thilafushi.** It will use **renewable energy.**

○ The project is funded by a **grant of USD 100 million and a Line of Credit (LOC) of USD 400 million from India.**

○ It is not only the biggest project India is doing in the Maldives but also the **biggest infrastructure project in the Maldives overall.**

➢ **Relief Assistance:**

○ **Operation Neer 2014:** Under Operation Neer India supplied **drinking water to Maldives** to deal with the drinking water crisis.

○ **Operation Sanjeevani:** India supplied **6.2 tonnes of essential medicines to Maldives,** under Operation Sanjeevani as assistance in the fight against Covid-19.

What are the Concerns Related to China's role in Maldives?

➢ **China's Expanding Influence:**

○ China's presence in the Maldives is a cause for concern, as it primarily serves its own interests. China's economic engagement, often driven by

debt financing, has led to **concerns about debt traps** and the resulting influence that China wields in the region.

● Maldives have massive Chinese investment and became a participant in China's **Belt and Road Initiative (BRI)**. China funded and built various projects in Maldives, including the development of ports, airports, bridges, and other critical infrastructure as part of the **"String of the Pearls"** initiative.

➢ **China's Hegemonic Ambitions:**

○ China's ambitions to establish hegemony in the **Indian Ocean region** pose a potential threat to the development of a vibrant democracy in the Maldives.

● The **pro-China stance of the new President elect of Maldives** created apprehensions in India about China's growing influence in its immediate neighborhood and the potential strategic implications.

➢ **India's Security Concerns:**

○ India has expressed concerns about **China's growing presence in the Indian Ocean region,** particularly in countries like Sri Lanka, Pakistan, and Maldives. The **development of Chinese-controlled ports and military facilities** in these areas has been seen as a challenge to India's strategic interests and regional security.

➢ **India's Countermeasures:**

○ India has responded by **intensifying its diplomatic and strategic engagement with Maldives and other Indian Ocean nations.** It has provided economic assistance, undertaken infrastructure projects, and expanded defense cooperation to strengthen its influence in the region.

○ India's **"Neighborhood First" policy** aims to counterbalance China's increasing presence.

What is the Perspective of India in Their Relationship with Maldives?

➢ India has consistently demonstrated its **commitment to building strong relations with the Maldives.** Its focus on comprehensive cooperation, security, infrastructure development, and daily essential support reflects its dedication to the partnership.

➢ While **challenges, such as the 'India out campaign'** and the **pro-China policy** have remained, India remains resolute in maintaining its relationship with the Maldives.

➢ India sees Maldives as an important part of it's '**SAGAR Policy'** to ensure security and growth for all in the region.

- For India, Maldives is a **first line of defence against terrorism, piracy on the high seas, drug trafficking, narcotics, and other maritime crime.**
  - On the other hand, China's entry into Maldives is solely to advance its own interests.

What can be the Way Ahead in India-Maldives Relations?

- **Opportunities for India:**
  - India should act wisely in the midst of these changes. The incoming government in the Maldives is likely to prioritize its national interests, and India should emphasize a **development-oriented approach.**
  - The Maldives is grappling with a pressing issue of high youth unemployment, and projects aimed at enhancing youth employability are crucial.
    - **India's High Impact Community Development Project (HICDP)** should focus on **creating employment opportunities** for the youth.

- **Infrastructure Development:**
  - India's significant infrastructure project in the Maldives, **the Greater Male Connectivity Project,** supported by grants and a substantial **Line of Credit**, surpasses China's Sinamale Bridge Connectivity Project. India must **prioritize the project's early completion** to strengthen its influence.

- **Balanced Relations with India and China:**
  - As the Maldives concludes its elections, it is expected to strive for a **balanced relationship between India and China**. This approach is **vital to maximize the Maldives' developmental gains.**
  - Practical governance considerations, coupled with the realization of the **potential repercussions of undermining relations with India,** may guide future actions. It is crucial for both nations to uphold the historical ties and prioritize the larger interests of the Maldivian people.

- **Efforts to Strengthen Indo-Pacific Security Space:**
  - India must play a key role within Indo-Pacific security space **to ensure regional security in South Asia** and surrounding maritime boundaries.
  - The Indo-Pacific security space has been developed as a response to the growth of extra-regional powers (particularly China's) in India's maritime sphere of influence.

Conclusion:

The enduring India-Maldives relationship, shaped by geography, culture, and shared values, offers a model for resilient partnerships in the face of external challenges. The Maldives' security, development, and prosperity are intricately linked to the continued support and collaboration with India. The potential for a bright future lies in recognizing the significance of historical bonds and the need to protect them. As the saying goes, "those that fail to learn from history are doomed to repeat it."

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# Guarding Against Glacial Lake Outburst Floods

This editorial is based on "The message from Sikkim: Heed the water's warning" which was published in The Indian Express on 16/10/2023. It talks about the recent glacial lake outburst flood (GLOF) in Sikkim that caused massive damage and loss of lives. It also discusses the causes and consequences of such events, and the possible solutions to prevent or mitigate them.

> **Tag:** Geography, GS Paper-3, Disaster Management, GS Paper-1, Important Geophysical Phenomena

During the early hours of October 4, the southern bank of South Lhonak Lake in Sikkim breached, releasing a powerful mixture of icy water and debris. The resulting floods devastated the Chungthang Dam, NHPC hydropower projects, and the region's infrastructure. Tragically, more than 35 lives were lost, 14 bridges disappeared, 1,320 houses suffered severe damage, and essential utilities were disrupted. The destruction extended to highways in North Sikkim, Gangtok, Pakyong, and Namchi districts, including sections of National Highway 10, a crucial link to the rest of India.

What is GLOF?

- **Glacial lakes**, like the South Lhonak Lake, are **large bodies of water that sit in front of, on top of, or beneath a melting glacier**.
  - Alternatively, Glacial lakes are **formed near the snout of glaciers** when meltwater accumulates.
- As they **grow larger, they become more dangerous** because glacial lakes are mostly dammed by unstable ice or sediment composed of loose rock and debris.
- In case the boundary around them breaks, huge amounts of water rush down the side of the mountains, which could cause flooding in the downstream areas.
  - This is called glacial lake outburst floods or GLOF.
- GLOF can be triggered by several reasons, including **earthquakes**, extremely heavy rains and ice avalanches.
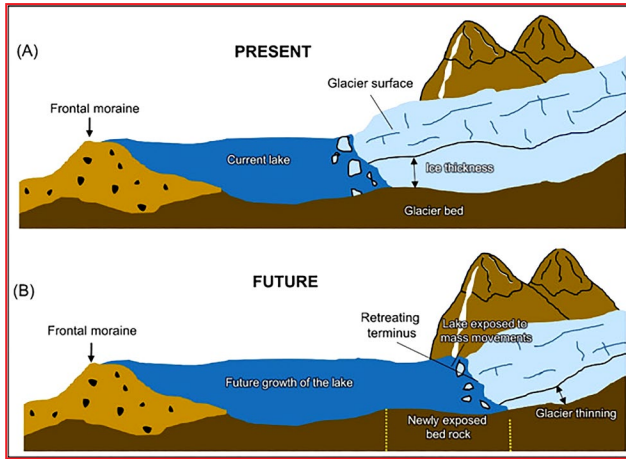
What are the Reasons behind the Glacial Lake Outburst Flood?

➢ **Climate Change and Glacier Melting:** The increased **warming of the troposphere** is a direct consequence of **climate change**. This warming has led to the accelerated melting of glaciers in various parts of the world.
  - ❍ As glaciers melt, they release water, which can accumulate in depressions, forming lakes. These glacial lakes are temporary and can pose significant hazards.

➢ **Glacier Retreat:** As glaciers melt and retreat due to rising temperatures, they leave behind depressions or basins. **These depressions can fill with meltwater and ice, forming glacial lakes. When these lakes become too large, the pressure on the damming material increases**, increasing the risk of a GLOF.

➢ **Glacier Surge:** Some glaciers can experience surges, which are periods of rapid advance and retreat. **During a surge, a glacier can dam up meltwater, creating a temporary glacial lake**. When the surge ends, the dam can breach, causing a GLOF.

➢ **High Vulnerability Quotient:** The **embankments of these lakes consist of loose deposits of glacier moraine, rocks, boulders, soil and ice**. Since these embankments are not properly compacted, they have a high vulnerability quotient.

➢ **Avalanche or Landslide:** Avalanches, rockfalls, or landslides can impact the damming material, causing it to weaken or collapse and allowing the lake's water to escape suddenly.

➢ **Earthquakes:** Seismic activity can **trigger GLOFs by fracturing or weakening the damming material**. In some cases, earthquakes can also dislodge ice and debris into the lake, leading to a rapid rise in water levels and subsequent flooding.

➢ **Volcanic Activity: Volcanic eruptions can lead to the melting of glaciers** and the release of massive amounts of water, which can cause a GLOF.

➢ **Human Activities:** Human activities, such as **mining, construction, or deforestation in the vicinity of glacial lakes**, can destabilize the natural barriers and increase the risk of a GLOF.

➢ **Artificial Lake Formation:** Artificial glacial lakes can **form as a result of construction projects, such as hydropower dams or mining activities**. Poorly designed infrastructure and maintenance can lead to a higher risk of GLOFs.

What are the Impacts of Glacial Lake Outburst Floods?

➢ **Loss of Life and Property:** GLOFs can kill people, destroy houses, bridges, roads, forests, and farmland, as well as livestock and crops.
  - ❍ For example, a GLOF in Sikkim, India, in October 2023 killed at least 18 people and left more than 150 missing. Another GLOF in Uttarakhand, India, in June 2013 killed more than 5,000 people and damaged several hydropower projects.

➢ **Disruption of Livelihoods:** GLOFs can **affect the livelihoods of the local communities for long periods, by reducing their access to resources**, markets, services, and opportunities. GLOFs can also damage the tourism industry, which is a major source of income for many mountain regions.

➢ **Damage to Infrastructure and Environment:** GLOFs can damage or **destroy hydropower plants, which are important for providing electricity** and reducing greenhouse gas emissions. GLOFs can also alter the landscape, erode the soil, increase the sediment load in the rivers, and affect the water quality and availability.

➢ **Trans-boundary Impact:** GLOFs can also **affect the downstream areas far from the glaciated headwaters where the threats originate**.
  - ❍ For example, trans-national GLOFs originating in the upper **Satluj River Basin** (China) are a threat to downstream areas of eastern Himachal Pradesh.

How Vulnerable is India to GLOFs?

➢ **ISRO's Glacial Lake Atlas:** The **ISRO's National Remote Sensing Centre (NRSC)** released a glacial lake atlas for the Himalayan River Basins. This atlas was prepared using images acquired by the **RESOURCESAT-2 satellite** during 2016-17 and identified over 28,000 glacial lakes larger than 0.25 hectares.

➢ **Sikkim:** The Sikkim State Disaster Management Authority has identified more than 300 glacial lakes

in the state. Out of these, 10 have been classified as vulnerable to outburst floods. However, NRSC's assessment has identified a larger number, 733 glacial lakes in Sikkim.

➤ **Uttarakhand:** The Geological Survey of India has found that 13 out of the 486 glacial lakes in Uttarakhand are vulnerable to GLOFs.

➤ **Jammu and Kashmir:** A 2021 study led by Delhi University scientist reported that Jammu and Kashmir has the highest number of vulnerable glacial lakes, followed by Arunachal Pradesh and Sikkim. This indicates that the threat of GLOFs is not limited to a single region but is widespread in the Himalayan region.

NDMA Guidelines for Management of GLOFs

➤ **Identifying Potentially Dangerous Lakes:**
  ○ **Recognizing potentially dangerous lakes involves a multidisciplinary approach**. Field observations, historical records, and analyzing geomorphological and geotechnical characteristics can help identify high-risk areas.
  ○ This information can be used to prioritize monitoring and risk-reduction efforts.

➤ **Use of Technology:**
  ○ The **use of Synthetic-Aperture Radar imagery** can greatly enhance early warning systems.
  ○ This technology can detect changes in water bodies, monitor glacier movements, and identify new lake formations, especially during monsoon seasons.
  ○ **Remote monitoring from space** can provide a broader perspective, helping to track changes in lake conditions over time.

➤ **Channeling Potential Floods:**
  ○ Managing lakes structurally is an important aspect of risk reduction. **Techniques such as controlled breaching, pumping out water, and tunnel construction** can help lower the water volume, reducing the risk of a GLOF.
  ○ These methods should be well-planned and executed to minimize downstream impacts.

➤ **Uniform Codes for Construction Activity:**
  ○ The **development of uniform construction codes** for infrastructure and land use planning in GLOF-prone areas is essential. These **codes should consider the geological and hydrological risks** and incorporate measures to mitigate these risks in construction projects.

➤ **Enhancing Early Warning Systems (EWS):**
  ○ Early warning systems are critical for disaster preparedness. **Implementing sensor- and monitoring-based technical systems for GLOF early warning is vital**, as it can provide timely information to at-risk communities.
  ○ Expanding the coverage of such systems is essential, especially in regions prone to GLOFs.

➤ **Training Local Manpower:**
  ○ Local communities play a crucial role in disaster response and preparedness. **Training local personnel can help in the rapid and effective response to GLOFs**.
  ○ These trained individuals **can perform search and rescue operations, assist in setting up emergency shelters, and distribute relief supplies**, which are often the first line of defense in disaster situations.

➤ **Comprehensive Alarm Systems:**
  ○ **Modern communication technology**, such as cell phones and smartphones, can complement or replace traditional alarming infrastructure.
  ○ Utilizing these technologies for **mass notification systems** can reach a wider audience and provide timely alerts in case of impending disasters.

What Measures can be taken to Mitigate GLOF Disaster?

➤ **Monitoring and Data Collection:** Intense monitoring of meteorological events **near the snout of vulnerable glacier lakes is an urgent necessity**. Data should be gathered at observatories and communicated to a centralized office. It should be processed in real-time to forecast the behavior of glacial lakes and alert people.
  ○ Water levels in rivers downstream of vulnerable lakes should also be monitored continuously.

➤ **Use of Technology:** A nationwide programme to regularly monitor vulnerable glacier lakes by satellites and drones should be initiated. This technology can complement ground-based observatories and enhance the overall understanding and prediction of GLOFs.

➤ **Revised Safety Standards:** Given the increased threats from GLOFs, **safety standards for infrastructure projects in mountainous areas should be revised**. This includes projects like dams, bridges, and highways. Quality control measures should be stringent to ensure the safety of such projects.

➤ **Regulation of Construction:** Infrastructure projects in mountains — **dams, bridges and highways — must be subjected to stringent quality control measures**. GLOFs and other floods in mountainous regions have shown that buildings constructed close to rivers were the first and the worst sufferers.
  ○ Construction close to rivers should, therefore, be carefully regulated.

- ➢ **Scientific Research:** Scientific **studies on glaciers in the country must be scaled up**. Climate projections indicate that glaciers are receding in the Himalayan region. This means that new lakes are likely to form and the existing ones could expand.
  - ○ **Glaciers are among the best indicators of climate change.**
    - ● It is, therefore, **necessary to understand how these ice bodies respond to climate change in the different Himalayan zones** — among the most data-scarce regions in the country.
- ➢ **Comprehensive Risk Assessment:** The Himalayan region requires **a comprehensive risk assessment that accounts for projected temperature rise, changes in precipitation patterns, and land-use/cover changes**. This assessment should inform disaster risk-reduction strategies.
- ➢ **Balancing Hydropower Development:** The Northeast has a key place in the hydel power push of successive governments at the Centre. The Chungthang Dam is a part of the 1,200 MW **Teesta** Stage 3 Hydroelectric Project.
  - ○ The **government claims that such projects are climate-friendly** because of their low emissions intensity.
  - ○ Ecologists, however, **caution against the adverse effects of dam construction** — it increases the volatility of rocks in the **Himalayan region**.
  - ○ The sikkim disaster is a warning to take such caveats seriously and install robust safety mechanisms.

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India's Economic Outlook: Optimism and Growth Potential

This editorial is based on "India's economy, on the upswing" which was published in The Indian Express on 17/10/2023. The article argues that India is likely to grow at a faster-than-expected pace despite the conflict in West Asia, based on four factors: near normal monsoon, government's thrust on capital spending, increase in credible borrowing, and robust new companies' registration.

Tag: Indian Economy, GS Paper - 3, Growth & Development

According to recent reports, the **International Monetary Fund (IMF)** has raised India's **GDP** growth forecast to 6.3% for the year 2023-24, which is 40 basis points higher than its earlier forecast in April. However, the **Reserve Bank of India (RBI)** has kept its forecast unchanged at 6.5%. Despite the recent geopolitical tensions in **West Asia**, it is believed that the Indian economy could still grow at a faster pace than expected. The growth projection for the full year is estimated to be around 6.7%.

What is the Potential for Surpassing RBI's Growth Projections?

- ➢ While the **RBI is projecting growth at 6.5%**, tracking of the latest leading indicators suggests the possibility of the economy growing at a faster pace.
- ➢ The long-term trends suggest that whenever the percentage of leading indicators showing acceleration in a quarter crosses the threshold value of 70%, the GDP growth numbers surprise on the upside.
  - ○ Currently, this is at 80%, increasing the possibility of growth surpassing 6.5% in Q2 FY24.
- ➢ The **nominal GDP** growth could well be in the range of 8-8.5% and given that the **GDP deflator** is currently tracking at 1.5-2%, a 6.5% or higher growth looks eminently achievable.

What are the Compelling Factors Driving Economic Optimism?

- ➢ **Monsoon:** While the overall rainfall was 6% below the expected during the **monsoon** season (due to 36% deficit rains in August), the **spatial distribution is quite even**. Out of 36 states/UTs, 29 received normal/above-normal rains.
  - ○ The **SBI Monsoon Impact Index, which considers the spatial distribution**, has a value of 89.5, faring much better than the full season index value of 60.2 in 2022.
- ➢ **Continuous Thrust on Capital Expenditure:** During the first five months of the current year (2023), the **capital expenditure of the states as a percentage of the budgeted target is at 25%, while the Centre's is at 37%**.
  - ○ Nearly all states are on a spending spree, with Andhra Pradesh leading the pack, spending as much as 51% of the budgeted amount.
- ➢ **New Company Registrations:** The robust new companies' registration depicts strong growth intentions. Around 93,000 companies were registered in the first half of 2023-24 as compared to 59,000 five years back.
  - ○ It is interesting to note that the average daily registration of new companies increased to 622 in 2023-24 (an increase of 58%) from 395 in 2018-19.
- ➢ **Credit Growth:** All **scheduled commercial banks'** (ASCB's) credit growth (year-on-year) has been

accelerating since early 2022. Aggregate deposits grew by 13.2% and credit by 20% till September. In the coming months, we expect credit demand to remain robust due to the festive season.

What are the Reasons behind Growth of Credit in the Banking Sector?

➢ **Significant Growth in Credit:** Over the nine-year period ending in March, there has been **substantial growth in both assets and liabilities of banks** (ASCB) in India, amounting to Rs 186 lakh crore.

   ❍ This growth is significantly higher than the previous decade, which saw an incremental growth of Rs 119 lakh crore.

   ❍ If the t**rends continue in 2023-24, the total growth for the current decade could reach Rs 225 lakh crore**, marking a 1.9-fold increase from the last decade.

➢ **Formalization of the Economy:** The growth in credit is attributed to the formalization of the Indian economy over the past decade. People with no previous credit history are increasingly becoming integrated with the banking system.

   ❍ Approximately **40% of new credit accounts added in the last nine years** are from individuals who had no prior credit history.

      ● This group contributes to at least 10% of the incremental credit growth.

➢ **Government Initiatives:** Programs like the **Pradhan Mantri Street Vendor's AtmaNirbhar Nidhi (PM SVANidhi)** and **Jan Dhan Yojana** have played a role in extending financial access to households that were previously outside the formal banking sector.

   ❍ These initiatives, along with the aspirations of such households, are contributing to sustained credit growth.

What Steps can be Taken to Make this Growth more Robust and Sustainable?

➢ **Reaping the Demographic Dividend**: India has a **large and young population that can provide a huge potential workforce for the economy**. However, this also requires creating enough jobs, improving the quality of education and skills, and increasing the labor force participation, especially of women.

➢ **Boosting Private Investment**: Private investment is a key driver of economic growth, as it increases productivity, innovation and competitiveness. The government has taken several initiatives to improve the ease of doing business, reduce corporate tax, provide credit guarantees, and attract foreign direct investment.

   ❍ However, more reforms are needed in areas such as land, labor and logistics to reduce the cost and risk of doing business in India.

➢ **Increasing Competitiveness**: India needs to **enhance its competitiveness** in the global market by diversifying its exports, improving its infrastructure, promoting innovation and digitalization, and integrating with regional and global value chains.

   ❍ The government has announced several schemes to support manufacturing, such as **Production Linked Incentive (PLI)**, **Phased Manufacturing Programme (PMP)**, and Make in India.

   ❍ However, these schemes need to be c**omplemented by trade liberalization and regulatory simplification** to ensure a level playing field for domestic and foreign firms.

➢ **Promoting Green Growth**: India has **committed to reduce its carbon intensity** and increase its **renewable energy** capacity as part of its **climate change goals**. The government has also introduced green bonds to finance green infrastructure projects.

   ❍ However, more efforts are needed to address the environmental challenges such as air pollution, water scarcity, waste management and biodiversity loss that pose a threat to India's growth and well-being.

➢ **Maintain Stability in the Economy**: India could maintain a **stable and low inflation rate**, which can foster confidence and investment. India could also ensure adequate liquidity and credit availability for productive sectors, especially for small and medium enterprises. India could also develop its financial markets and institutions to facilitate savings and investment.

➢ **Increase Integration with the Global Economy**: India could increase its **integration with the global economy by reducing trade barriers, diversifying its export basket, and enhancing its competitiveness**. India could also pursue regional and bilateral trade agreements that can create new markets and opportunities for its products and services.

➢ **Promote the Key Sectors**: India could promote the **development of key sectors that have high potential for growth, employment, and innovation**, such as manufacturing, services, agriculture, and renewable energy.

Conclusion

India's economic prospects for the fiscal year 2023-24 are characterized by optimism and a promising growth trajectory. Various factors, including favorable monsoon patterns, increased capital expenditure, robust new company registrations, and sustained credit growth,

contribute to this positive outlook. Furthermore, government initiatives have formalized the economy and extended financial access to previously underserved segments. To ensure the continued robust and sustainable growth of the Indian economy, a strategic approach encompassing fiscal, monetary, trade, industrial, and institutional policies is crucial. This comprehensive strategy can further unlock India's immense economic potential and support its journey towards prosperity.

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Centralised Procurement: The Missing Piece in India's Healthcare Puzzle

This editorial is based on "Centralised procurement as a powerful health idea" which was published in The Hindu on 18/10/2023. The article talks about the benefits of centralised procurement of drugs for the health-care system in India. It argues that pooled procurement by the central government can reduce costs, ensure quality, and prevent stockouts of life-saving drugs. It also cites a recent study that provides empirical evidence for this idea.

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

Many countries and international organizations have shown that a pooled buyer model for drug procurement addresses many issues that are related to price efficiency, stockouts and quality concerns. But for reasons that have remained mysterious for decades, the central government chooses to ignore the merits of pooled procurement when it comes to schemes such as the **Central Government Health Scheme (CGHS)**, the **Pradhan Mantri Jan Arogya Yojna (PMJAY)** and the **Employees' State Insurance Scheme (ESI)**. We have lots of successful examples of centralized procurement across why should hospitals be any different when it comes to drug procurement?

What is the Meaning of Pooled Procurement?

➢ **Definition:**
   ○ Pooled procurement, also known as **collective procurement or group purchasing**, refers to a procurement strategy in which **multiple organizations, typically from the public or private sector, come together** to jointly purchase goods or services.

➢ **Benefits:**
   ○ Access to competitive market terms and prices
   ○ Elimination of procurement delays

○ Support for timely grant expenditure
○ Improved quality assurance
○ Reduction or elimination of procurement corruption
○ Rationalized choice through better-informed selection
○ Improvement of procurement efficiency and quality standards by sharing technical capacity and human resources
○ Reduction in unit prices, supply chain costs, and administrative burden

The Vada Pav Example:

Imagine, there is an entrepreneur planning to take on a global fast-food giant like McDonald's in the Indian market. He's convinced that India's beloved street food, vada pav, can outshine the iconic burger. To achieve this, he devises a strategy to establish thousands of vada pav franchises across the country. His vision is to serve millions of clean, hygienic, and delicious vada pavs in the years to come. It's a brilliant concept, and he hopes someone brings it to life.

➢ **However, a crucial question arises:**
   ○ Should each franchise independently buy their own potatoes, or would it be wiser to set up a centralized procurement system?
   ○ This scenario revolves around solving two fundamental challenges: price and quality.
     ● **Price:** When it comes to price, if each franchise negotiates with potato suppliers individually, it can lead to inefficiencies. The combined potato requirement for the entire business is much larger than what each franchise would need. It means a **centralized procurement system will have more bargaining power**. Moreover, procurement through a centralized system will have a **uniformity in price**.
     ● **Quality:** If each franchise manages its own potato procurement, there's a risk that different franchises will have varying ideas of what constitutes acceptable quality. Additionally, each franchise may have different preferences for what makes a good potato. This **divergence in quality and taste could result in inconsistent vada pav offerings, which is a problem when operating under a franchise model where customers expect uniformity**. While a centralized procurement system can ensure **uniformity in potato quality as well**.

What are the Issues with India's Healthcare Procurements?

➢ **Lack of a Comprehensive and Uniform Legislation for Public Procurement**: India **does not have a central law that regulates the procurement of goods and**

services by the government. Instead, there are various administrative rules, guidelines, manuals and state-specific laws that create a complex and fragmented procurement framework.

   ❍ This leads to inconsistencies, inefficiencies, delays and disputes in the procurement process.

➢ **Lack of Centralized and Pooled Procurement Models:** India has not adopted a **centralized or pooled procurement model for purchasing drugs and medical equipment**, unlike many other countries. This means that **each government authority or hospital has to negotiate with suppliers individually**, resulting in higher prices, lower quality and stockouts.

   ❍ On the other hand, corporate hospital chains have leveraged their bargaining power to obtain significant discounts from pharmaceutical companies, but they do not pass on these savings to the patients.

➢ **Lack of Transparency and Accountability:** India's health care procurements are often **marred by corruption, fraud, collusion and favoritism**. There is no effective mechanism to monitor and evaluate the procurement performance, outcomes and impact.

   ❍ There is also no grievance redressal system or independent oversight body to address the complaints and disputes of the suppliers and the beneficiaries.

➢ **Inconsistent Coverage:** Different healthcare schemes, such as the **Central Government Health Scheme (CGHS)**, **Employees' State Insurance (ESI)**, and **Pradhan Mantri Jan Arogya Yojana (PMJAY)**, **may cover different categories of beneficiaries and offer varying levels of coverage**. This results in inconsistencies in access to healthcare services and creates complexities in procurement processes.

➢ **Limited Integration of Public Sector Units (PSUs):** India has several pharma Public Sector Units (PSUs) that can play a significant role in benchmark pricing and ensuring competition. However, the **integration of these PSUs into procurement strategies is not fully realized**, which can result in missed opportunities for cost savings.

Is the Government Unaware of Pooled Procurement?

   It is not that the central government is unaware of the benefits of pooled procurement and price discovery.

   When the government (through the National Aids Control Organization) procures male contraceptives, it invites tenders from private manufacturers and then offers to buy from all those who are willing to match the lowest price.

How does the Government Prevent Suppliers from Colluding to Raise Prices?

   HLL Lifecare Ltd., a public sector unit (PSU), with the highest manufacturing capacity in India, provides a benchmark price. All the bidders know that if they are not competitive on price, the government will just procure all its requirements from HLL and they will be left with unused manufacturing capacity — and as a result, face huge fixed costs and overheads.

How can Pooled Procurement Help India's Health Sector?

➢ **Cost Savings:** Pooled procurement allows **multiple healthcare institutions to come together and negotiate bulk purchases** of pharmaceuticals and medical supplies. This collective bargaining power enables them to secure substantial discounts from suppliers. These cost savings **can then be passed on to patients**, making healthcare more affordable.

➢ **Efficient Resource Utilization:** By centralizing procurement efforts, healthcare organizations can **reduce redundancy and streamline the procurement process. This efficiency in resource allocation ensures that funds are used more effectively** and can be redirected to other critical areas of healthcare, such as infrastructure, staff training, or expanding healthcare services.

➢ **Increased Availability of Medicines:** Cost savings from pooled procurement can contribute to a **more stable supply of medicines and medical supplies**. When healthcare institutions can procure essential drugs at a lower cost, they are more likely to maintain sufficient stock, reducing the risk of drug shortages, which can have life-threatening consequences.

➢ **Better Quality Assurance:** Pooled procurement **allows healthcare organizations to independently test supplies, rather than relying solely on government drug regulators**. This extra layer of quality assurance ensures that patients receive safe and effective medications, enhancing overall healthcare quality.

   ❍ **Standardized Contracts:** Pooled procurement often involves standardized contracts for supplies. **These contracts help eliminate ambiguities and ensure that healthcare institutions receive consistent and high-quality products**, reducing the risk of counterfeit or substandard medicines entering the market.

➢ **Reduced Administrative Burden:** Centralized procurement simplifies the administrative processes associated with procurement. This **reduces the administrative burden on individual healthcare facilities**, allowing them to focus more on patient care and improving healthcare services.

➢ **Equality and Consistency:** Pooled procurement can help **ensure equality and consistency in the availability of healthcare services across different regions and for various beneficiary categories**. This can **address the existing disparities in healthcare coverage** by providing consistent access to essential medicines and supplies.

➢ **Empowering Public Sector Units (PSUs):** By involving public sector units in benchmark pricing and competition, the **government can strengthen these PSUs**, making them more competitive and cost-effective. This approach ensures that private manufacturers face competition, which can result in better pricing for the government.

Conclusion

Centralized procurement, or pooled procurement, is **a simple yet powerful idea that has the power and the potential to reduce costs, ensure better deployment of funds** in other areas related to health care, and ensure availability of life-saving drugs in this country. It is an idea with both theoretical backing, and now empirical validation. It is an idea that India can implement at scale, and as soon as possible.

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Reimagining EIA For Himalayan Region

This editorial is based on "The Indian Himalayan Region needs its own EIA" which was published in The Hindu on 17/10/2023. It talks about the need of reimagining Environmental Impact assessment to ensure sustainable development in the Indian Himalayan Region. It also talks about the ecological challenges facing the region.

Tag: Biodiversity & Environment, GS Paper - 3, Environmental Impact Assessment (EIA),GS Paper - 1, Important Geophysical Phenomena, Water Resources,Physical Geography, Conservation, Environmental Pollution & Degradation, Biodiversity Hotspots.

The recent **Teesta dam breach in Sikkim** and the devastating floods and landslides in Himachal Pradesh serve as a stark reminder of the environmental toll that our development model is exacting on mountain regions. These incidents underscore the urgent need to reassess our approach to development, particularly in ecologically fragile areas like the Himalayas. One of the key tools in this evaluation is the **Environmental Impact Assessment (EIA)**, a process designed to predict, analyze, and mitigate the environmental, social, and economic impacts of projects.

What is the Environmental Impact Assessment?

➢ **About:**
  ○ The EIA, as defined by the **United Nations Environment Programme (UNEP)**, is a crucial tool for assessing the environmental consequences of projects before they are executed. It involves comparing project alternatives, predicting environmental impacts, and formulating mitigation strategies.

➢ **Evolution of EIA in India:**
  ○ In India, the **EIA process began in 1976-77** with a focus on river valley projects. Over the years, it has evolved, with the 2006 notification being a significant milestone. However, it has also been subject to numerous amendments and faced criticism for favoring industry interests over ecological concerns.

➢ **Aim:**
  ○ To **predict environmental impacts at an early stage** in project planning and design, find ways and means **to reduce adverse impacts**, shape projects to suit the local environment and present the predictions and options to decision-makers.

➢ **Process:**
  ○ **Screening:** First stage of EIA, which determines whether the proposed project, requires an EIA and if it does, then the level of assessment required.
  ○ **Scoping:** This stage identifies the key issues and impacts that should be further investigated. This stage also defines the boundary and time limit of the study.
  ○ **Impact analysis:** This stage of EIA identifies and predicts the likely environmental and social impact of the proposed project and evaluates the significance.
  ○ **Mitigation:** This step in EIA recommends the actions to reduce and avoid the potential adverse environmental consequences of development activities.
  ○ **Reporting:** This stage presents the result of EIA in a form of a report to the decision-making body and other interested parties.
  ○ **Public hearing:** On completion of the EIA report, public and environmental groups living close to project site may be informed and consulted.
  ○ **Review of EIA:** It examines the adequacy and effectiveness of the EIA report and provides the information necessary for decision-making.
  ○ **Decision-making:** It decides whether the project is rejected, approved or needs further change.

○ **Post monitoring:** This stage comes into play once the project is commissioned. It checks to ensure that the impacts of the project do not exceed the legal standards and implementation of the mitigation measures are in the manner as described in the EIA report.

What are the Ecological Challenges Facing the Himalayas?

➤ **Ecological Fragility:**

○ 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**.

● Despite the well-established vulnerabilities and fragility of the **Indian Himalayan Region**, the EIA framework treats it on par with other regions, without considering its unique developmental and ecological requirements.

➤ **Extreme Weather and Climate Change:**

○ The Himalayas are prone to extreme weather conditions such as **heavy rains, flash floods, landslides, and seismic activity.** Climate change exacerbates these vulnerabilities. The absence of region-specific standards fails to address these pressing issues.

➤ **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.

➤ **Other Anthropogenic challenges:**

○ **Deforestation, construction activities, unregulated tourism 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.

How does the Faulty EIA affect Himalayan Region?

➤ **Faulty Ecological Assessment:**

○ Assessing the impacts of projects in the Indian Himalayan Region(IHR) requires a **contextual understanding of the region's fragility and vulnerability.** The current system does not provide for this critical perspective.

➤ **Graded Approach and its Flaws:**

○ The Indian regulatory system employs a graded approach, with **environmental conditions varying depending on the type of habitat impacted by a project.** This approach **lacks differentiation for the IHR** , leaving the region without specialized protection.

➤ **Exemptions under EIA:**

○ Projects belonging to certain categories such as **Strategic and Defence Projects, Biomass Based Power Plants, Ports and Harbour dealing in Fish, Toll Plazas** are exempted from EIA based on **certain criteria**.

What can be the Way Ahead for EIA in the Himalayas?

➤ **Need for a National Regulator:**

○ The absence of a national-level regulator, as **suggested by the Supreme Court in 2011,** hinders objective and transparent project appraisal and monitoring. An independent regulator could help ensure a more equitable balance between development and environmental preservation.

➤ **Cumulative Impact Assessment:**

○ The EIA process, as it stands, does not adequately consider cumulative impacts. It **focuses on individual projects rather than assessing the combined effects of multiple projects in a specific area**. For the IHR, a more holistic view is required.

➤ **Strategic Impact Assessment:**

○ Strategic environmental assessment (SEA), is the **assessment of the wider environmental, social and economic impacts of alternative proposals** at the beginning of a project. That is, at the decision stage - the policy, planning or program (PPP) level.

➤ **Proactive Role of EIA Authorities:**

○ It is crucial that EIA authorities anticipate developmental activities rather than reacting to it.

○ It is critical that the preparation of an EIA is completely **independent of the project proponent.**

➤ Complete ban on construction activities in disaster prone areas such as **Joshimath** as suggested by **Mishra Committee,1976**.

What can be the Other Ways for Protection of Himalayan Region?

➤ **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:**
  - ❍ 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.
  - ❍ 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.

- ➤ **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.**

Conclusion:

The current Environment Impact Assessment (EIA) framework in India falls short in recognizing the special requirements of the Indian Himalayan Region (IHR), which is characterized by its fragility and vulnerability. To ensure sustainable development in this ecologically vital region, there is an urgent need to reevaluate the EIA process. Only by adopting a region-specific and holistic approach can we safeguard the fragile ecosystems of the IHR while pursuing responsible development.

It is imperative that India takes the lead in reimagining the EIA for the Himalayas, setting a precedent for environmentally conscious and sustainable development in mountainous regions around the world.

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LGBTQ+ Rights in India: The Supreme Court's Verdict

This editorial is based on "Law and custom: On the Supreme Court's verdict on same-sex marriage" which was published in The Hindu on 18/10/2023. The article discusses the recent judgment of the Supreme Court of India that refused to grant legal recognition to marriages between persons of the same sex.

Tag: Social Justice, GS Paper - 2, Fundamental Rights, Judgements & Cases, Judiciary, Issues Related to Transgenders

The **Supreme Court**'s refusal to accord legal recognition to marriages between persons of the same sex is being seen as a setback to the queer community in the country. Given the progress in law in recent years and the deepening of the meaning of individual rights, there was widespread expectation that the five-judge Constitution Bench would give the **Special Marriage Act (SMA)**, a law that allows any two people to marry, a gender-neutral interpretation to include people belonging to the same sex.

Over the years, the amplitude of **Article 21** of the Constitution has been expanded to cover the rights of privacy, dignity and marital choice, but the highest court has stopped short of the extra step needed to allow marriages or **civil unions** that are not heterosexual. All five judges have chosen to leave it to the legislature to enact such a law.

What are the Observations made by the Supreme Court?

- ➤ **On Legislature to Frame the Laws:** The court held that it **can neither strike down or read words into the Special Marriage Act (SMA) 1954** to include same sex members within the ambit of the **SMA 1954.The top court said it is for Parliament and state Legislature to formulate laws on it.**
  - ❍ In the absence of any central law, the judgment read that State legislatures can enact laws recognising and regulating **same-sex marriages**; the Constitution under **Articles 245** and **246** empowers both the **Parliament** and the State to enact marriage regulations.
    - The **State may choose from a number of policy outcomes**; they may make all marriage and family-related laws gender neutral, or they may create a separate SMA-like statute in gender-neutral terms to give the queer community an avenue for marriage, they may pass an Act creating **civil unions**, or a domestic partnership legislation, among many other alternatives.

- ○ Tamil Nadu has already amended the **Hindu Marriage Act** in 1968 to allow self-respect or 'Suyamariyathai' marriages.

➤ **On the Right to form Civil Unions:** The minority opinion batted for the state to recognise queer unions, even if not in the form of marriage. The **right to enter a union cannot be restricted on the basis of sexual orientation** (which violates **Article 15**); moreover, marriage is significant because of a bouquet of rights, and for same-sex couples to enjoy these entitlements, it is necessary that the state accord recognition to such relationships.

- ○ However, the majority opinion said the **government is not obligated to recognise the bouquet of rights** flowing from such a Union.

➤ **On Trans persons' Rights:** The majority opinion of the Bench affirmed that **transgender individuals have the right to marry within the existing legal framework**. The judgment emphasized that gender identity is distinct from sexual orientation, highlighting that transgender individuals can be in heterosexual relationships similar to cisgender individuals. Therefore, **such marriages can be legally registered under marriage laws**. Additionally, the judgment recognized that intersex individuals who identify as either male or female also have this right.

- ○ The Court affirmed the Madras High Court decision in *Arun Kumar v. Inspector General of Registration (2019)*, which declared marriage between a Hindu male and a transwoman a valid union.

➤ **On Adoption Rights:** The majority opinion refused to strike down the **Central Adoption Resource Authority (CARA)** regulations that restrict queer couples from joining in adopting a child. While it noted that these regulations are discriminatory and violative of **Article 14**, the **majority opinion did not support adoption rights for same-sex couples,** citing the need to explore all areas for the benefit of children in need of stable homes.

➤ **On Entitlements:** The court **acknowledges the need for equal rights for queer couples** in areas like **ration cards, joint bank accounts, pensions, and gratuity.** However, there is a disagreement on whether the judiciary or the legislative and executive branches should address these issues..

➤ **On Natal family Violence and Protection:** Many queer persons face violence from natal families and are reportedly kidnapped in an attempt to end relationships. The judgment identified that families of LGBTQ persons as well as the police are the primary actors in such violence, and has **issued directions to the police department to not force queer persons to return to their family.**

- ○ Previous High Court orders have recognised the legitimacy of queer couples in live-in relationships and afforded them protection from violence.

- ○ The petitions, *Amburi Roy v Union of India* and *Rituparna Borah v Union of India*, argued for the right to choose a family.

➤ **On Sex, Gender, and Discrimination:** The verdict rejected the government's argument that same-sex unions are unnatural or non-Indian. It **acknowledged that queer love has existed in India for a long time and that the constitutional legitimacy of same-sex relations** is not undermined by societal acceptability.

What are the Issues related to the Judgement?

➤ **Violation of Fundamental Rights:** The verdict goes a**gainst the fundamental rights of LGBTQIA+ individuals as recognized by the Supreme Court** in previous judgments. These rights include equality, dignity, and autonomy, which have been affirmed as fundamental in the past.

- ○ The Supreme Court in various judgements such as *Lata Singh vs State of UP (2006), Safin Jahan vs Ashokan (2018), Shakti Vahini vs Union of India (2018) and Laxmibai Chandarangi vs State of Karnataka (2021)* has held that **choosing a life partner is a Fundamental Right under Article 21.**

➤ **Ignoring Lived Realities:** The verdict fails to take into account the real-life experiences of LGBTQIA+ individuals who often face discrimination, violence, and stigma in society due to their sexual orientation and gender identity.

➤ **Undermining Constitutional Morality:** The critics argue that the verdict undermines the principle of constitutional morality. They say that the **state should respect the diversity and plurality of its citizens**, rather than imposing the views of the majority on minority groups.

➤ **Denial of Legal Benefits:** The verdict denies LGBTQIA+ couples the **social and legal benefits of marriage, such as inheritance, adoption, insurance, pension, etc**. The lack of legal recognition for **same-sex marriage** results in these couples being deprived of the rights and privileges enjoyed by heterosexual couples.

➤ **Contradiction with International Human Rights Standards:** The verdict **contradicts international human rights standards and norms**. It claims that international standards uphold the right to marry and establish a family for all individuals, irrespective of their sexual orientation and gender identity. The verdict, in this view, is not in alignment with these global norms.

What are the Options left for the LGBT People Now?

➢ **Legal Avenues:** One possible path is to continue pursuing legal avenues. This may involve waiting for the committee's report and potentially filing new cases if the findings align with the petitioners' arguments.

○ The Central government has said that it would constitute a committee, chaired by the Cabinet Secretary, to set out the benefits and entitlements for same-sex couples.

➢ **Individual Rights:** Another approach is for individuals in queer relationships to wage **solitary battles for specific rights** associated with marriage, such as joint bank accounts or pension rights, by challenging discrimination.

➢ **Political Activism:** The LGBTQ+ community needs to make queerness an integral part of political conversations and demands upon elected representatives, particularly in the lead-up to the 2024 Lok Sabha elections. This political activism may involve building solidarity among different LGBTQ+ groups to amplify their concerns.

➢ **Exploring Alternatives:** The LGBTQ+ community should explore alternative ways to expand their rights. The courts, while important, are not the only means of securing progress. This implies that **community-building, education, and public awareness campaigns** may play a crucial role in advancing LGBTQ+ rights in India.

Conclusion

The Court denied the right to marry for same-sex couples, going against expectations of non-discrimination in marriage and passed on this responsibility to the legislature. While there are legal requirements for marriage, the personal choice to seek validation through it is protected by the Constitution, with some statutory limits. The majority opinion of the SC bench opposed the adoption for queer couples but supports trans persons in heterosexual marriages.

All judges agree on the right of same-sex couples to cohabit without coercion. The Legislature may feel hesitant in legalizing same-sex marriages due to opposition based on religious and cultural reasons. The LGBTQIA+ community can find hope in the Court's call for a government committee on queer couples' rights, but the path to legal equality remains challenging.

■■■

Fueling India's Marine Economy

This editorial is based on "Sustaining the marine economy with blue bonds" which was published in The Hindu Business Line on 18/10/2023. It discusses how India can benefit from blue bonds, as the country has a long coastline and a vast marine economy.

Tag: Indian Economy, GS Paper-2, Government Policies & Interventions, GS Paper-3, Environmental Pollution & Degradation, Growth & Development

The **Indian Ocean** is home to a vast array of marine life but is also under increasing pressure from pollution, overfishing, and climate change. A new set of guidelines released by the **United Nations Environment Programme** Finance Initiative (UNEP FI) could help unlock the financing needed to protect and restore the Indian Ocean. **Blue bonds** have the potential to make a significant contribution to the sustainable development of the Indian Ocean.

SEBI is developing guidelines for blue bonds in India. Once the policies are in place, blue bonds can finance many projects that benefit the Indian marine environment and economy.

What is the Significance of the Marine Economy in India?

➢ **Food Security and Livelihood:** It can contribute to **food security**, **poverty alleviation**, and **employment generation** for millions of people who depend on ocean resources for their livelihoods.

➢ **Energy Security and Environmental Sustainability:** It can help India achieve **energy security** and **reduce carbon emissions** by harnessing the potential of renewable energy sources such as wind, wave, tidal, and **ocean thermal energy**.

○ India has set a target of installing 175 GW of renewable energy capacity by 2022, of which 5 GW is expected to come from offshore wind projects.

➢ **Trade and Connectivity:** It can enhance India's **trade and investment** opportunities with other countries, especially in the Indo-Pacific region, by improving its maritime connectivity and infrastructure.

○ India has launched several initiatives such as the **Sagarmala Project**, the **International North-South Transport Corridor**, and the **Chabahar Port** to boost its maritime trade and connectivity.

➢ **Ecological Resilience and Climate Adaptation:** It can help India build **ecological resilience** and **adapt to climate change** by conserving and restoring its marine ecosystems and biodiversity.

○ India is a signatory to various international conventions and agreements such as the Convention on Biological Diversity, the **United Nations Convention on the Law of the Sea**, and the **Paris Agreement** to protect its marine environment.

➢ **National Security and Strategic Interests:** It can also strengthen India's **national security** and **strategic interests** by safeguarding its maritime boundaries and assets from external threats and challenges.

○ India has a strong naval presence in the **Indian Ocean Region (IOR)** and participates in various multilateral forums and exercises such as the **Indian Ocean Rim Association (IORA)**, the **Indian Ocean Naval Symposium (IONS)**, and the **Malabar Exercise** to enhance its maritime cooperation and security.

➢ **Mineral Resources: Polymetallic nodules** (small-ball-sized nodules; contain nickel, cobalt, iron, and manganese) that grow over millions of years on the seafloor, are often discovered at 4-5 Kms in water depth.

○ In 1987, India was granted exclusive rights to explore polymetallic nodules in the Central Indian Ocean Basin, which was extended for 5 years in 2017.

● It has explored four million square miles and established two mine locations since then.

What are the Prospects of the Marine Economy in India?

➢ India's Marine Economy **encompasses the ocean resources, marine infrastructure, and coastal zones** within its legal jurisdiction.

○ India has a **long maritime coastline of 7,500 km** with nine coastal states and 1,382 islands.

○ India's **Exclusive Economic Zone (EEZ)** spans over 2 million square km, holding valuable resources like oil and gas.

➢ The coastal economy **supports 4 million fishermen** and coastal communities, making India the world's second-largest fish-producing nation with 250,000 fishing boats.

➢ **Nine Indian states have coastline access**, and the country has 200 ports, including 12 major ones that handled 541.76 million tonnes of cargo in FY21, with Mormugao Port in Goa as the leader.

➢ According to the Observer Research Foundation, the Indian Ocean is the **third largest** among the world's oceanic divisions. It spans an **area of over 70 million sq km** and is known for its abundant oil and mineral resources.

What are the Challenges faced by India's Marine Economy?

➢ **Lack of Infrastructure:** India needs to i**nvest more in ports, airports, roads, railways, and other infrastructure** in its coastal areas to improve connectivity and efficiency.

○ According to a report by the **Economic Advisory Council to the Prime Minister (EAC-PM)**, India's port capacity is only 1.5 billion tonnes per annum, while its port traffic is expected to reach 2.5 billion tonnes by 2025.

➢ **Marine Pollution:** India's coastal waters are **polluted by various sources, such as industrial effluents, sewage, agricultural runoff, plastic waste, and oil spills**. Marine pollution affects the health of marine ecosystems and biodiversity, as well as the quality of fish and seafood products.

○ According to **United Nations Environment Programme (UNEP),** more than **15,000 MT of waste (a lot of it is plastic) per day are dumped in the South Asian seas**, generated from 60 major Indian cities.

➢ **Overexploitation of Resources:** India's marine resources are under pressure from **overfishing, illegal fishing, and unregulated aquaculture**. Overfishing can lead to the depletion of fish stocks, loss of income and livelihoods for fishers, and reduced food security for millions of people. Illegal fishing can also undermine the sovereignty and security of India's maritime domain.

➢ **Climate Change:** Climate change poses a serious threat to India's Marine Economy, as **it can cause sea-level rise, coastal erosion, storm surges, flooding, salinization, coral bleaching, ocean acidification, and changes in ocean currents and temperature**. Climate change can also affect the distribution and abundance of marine species, as well as their migration patterns and breeding cycles.

○ According to a report by the **Intergovernmental Panel on Climate Change (IPCC)**, the global mean sea level rose by about 15 cm during the 20th century and is projected to rise by another 26 to 82 cm by 2100.

What Measures can be taken to Strengthen India's Marine Economy?

➢ **Developing a National Accounting Framework:** It will measure the **contribution of the Marine Economy to GDP, employment, trade, and other indicators**. This will help in assessing the value and impact of the Marine Economy and designing appropriate policies and interventions.

➢ **Coastal and Marine Spatial Planning:** Implementing coastal and **marine spatial planning that allocates space and resources for different activities and sectors in a coordinated manner.** This will help in avoiding conflicts, optimizing resource use, and ensuring environmental sustainability.

➢ **Strengthening the Legal and Institutional Framework for Ocean Governance:** It will ensure **compliance with national and international laws and regulations**. This will help in protecting India's sovereignty and security, preventing illegal activities, and resolving disputes.

➢ **Enhancing the capacity and technology for marine research and innovation:** It will **support evidence-based decision making and foster new opportunities for growth**. This will help in exploring the potential of emerging sectors such as offshore energy, deep-sea mining, biotechnology, and aquaculture.

➢ **Promoting Cooperation and Partnerships:** Promoting Cooperation with other countries and regional organizations that share common interests and challenges in the Indian Ocean region. This will help in enhancing mutual trust, sharing best practices, leveraging synergies, and addressing common threats.

➢ **Blue Bonds:** Blue bonds can provide funding for sustainable ocean projects in India, such as clean energy initiatives, offshore wind farms, marine conservation efforts, and pollution prevention and cleanup. These projects can create jobs, boost the economy, and contribute to environmental conservation.

What are Blue Bonds?

➢ **Blue bonds** are a type of sustainable bond specifically **designed to finance projects that protect and restore the ocean** and its resources.

➢ Blue bonds are **similar to other sustainable bonds**, such as **green bonds** and social bonds.
  ❍ However, they are specifically **focused on ocean conservation** and sustainable development.

➢ They can be **issued by governments, development banks or other organizations and purchased by individual investors, institutional investors** and other financial institutions.

How can Blue Bonds be helpful for India?

➢ **Funding for Sustainable Projects:** Blue bonds can provide the much-needed funding for sustainable ocean projects in India. This i**ncludes clean energy initiatives, offshore wind farms, wave energy converters, marine protected areas**, and sustainable fisheries and aquaculture.
  ❍ These projects **can create jobs, boost the economy**, and contribute to environmental conservation.

➢ **Support for Marine Renewable Energy:** India has been actively investing in renewable energy, and its coastline offers significant potential for offshore wind and wave energy.
  ❍ Blue bonds can **finance these projects, helping India reduce its reliance on fossil fuels** and mitigate climate change.

➢ **Marine Conservation:** Blue bonds can be **directed towards marine conservation efforts**, protecting coral reefs, marine wildlife, and overall ecosystem health.
  ❍ These projects are **crucial for maintaining biodiversity and supporting tourism**, which is a significant contributor to India's economy.

➢ **Pollution Prevention and Cleanup:** Blue bonds can **fund initiatives to combat marine pollution** and clean up coastlines.
  ❍ This is **essential for maintaining the health of India's oceans and beaches**, which are vital for tourism and fisheries.

➢ **Awareness and Education:** Blue bonds can **increase awareness about ocean conservation and the importance of sustainable practices**. This can lead to more responsible behavior and encourage environmental stewardship among the population.

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Ensuring Nutritional Security: A Three-Pronged Approach

This editorial is based on "An opportunity to recast India's food system" which was published in The Hindu Business Line on 20/10/2023. It talks about the challenges and opportunities of India's food system, emphasizing the need for a triad approach involving consumers, producers, and middlemen. The goal is to promote healthy and sustainable diets, enhance farm incomes, and conserve natural resources.

Tag: Agriculture, GS Paper-3, Agricultural Resources, GS Paper-2, Poverty

Recently, on 16th October, **World Food Day** was celebrated, but we rarely look at food as a system. No country can better understand the challenges of a food system than India, which feeds the largest population in the world. While the primary goal of a food system is to ensure **nutrition security** for all, it can only be achieved sustainably if the producers producing the food make reasonable economic returns that are resilient over time.

This resilience, in turn, is intricately linked with the resilience of our natural ecosystem because the largest inputs to agriculture — soil, water and climatic conditions — are all but natural resources. Appreciating this interconnectedness of nutrition security with livelihood and environmental security is essential to making our food system truly sustainable.

What is the Significance of Nutritional Security?

➤ **Health and Nutrition: Nutritional security** improves the health and well-being of individuals by preventing malnutrition and its associated health problems, such as stunting, cognitive impairment, and disease susceptibility.

  ○ Around 45% of deaths among children under 5 years of age are linked to undernutrition.

➤ **Economic Stability**: **Nutritional security** enhances the economic stability of individuals and nations by enabling them to be more productive, generate income, and participate in trade.

  ○ A study by the **World Bank estimated that the global cost of undernutrition in terms of lost productivity and human capital was USD 3.5 trillion per year.**

➤ **Public Health and Healthcare Cost Reduction:** Nutritional security can lead to reduced healthcare costs by preventing diet-related diseases, such as diabetes and heart disease. This, in turn, reduces the burden on healthcare systems.

  ○ The share of **Out-of-Pocket Expenditure (OOPE)** in total Health Expenditure (THE) is around 47%.

➤ **Poverty Alleviation:** Ensuring that people have access to nutritious food is a means of poverty alleviation. Lack of **nutritional security can perpetuate a cycle of poverty**, as malnutrition can hinder educational attainment and reduce income-earning potential.

➤ **Sustainable Agriculture and Environmental Protection:** Promoting nutritional security often i**nvolves sustainable agricultural practices, which are essential for preserving the environment** and ensuring that future generations can also meet their nutritional needs.

➤ **Realizing Demographic Dividend:** Nutritional security plays a vital role in realizing the demographic dividend, which occurs when a large proportion of a country's population is in the working-age group. **Well-nourished individuals are more likely to be productive and contribute to economic growth**, harnessing the full potential of this demographic advantage.

➤ **Resilience to Shocks:** Nutritional security helps communities and individuals become more resilient to economic, environmental, and health shocks.

Having a diverse and nutritious diet can help people withstand and recover from various crises, such as natural disasters or health emergencies.

  ○ The **Covid-19** pandemic has exposed the fragility of food systems and the vulnerability of populations to malnutrition and hunger. Therefore, **ensuring access to healthy food and promoting dietary diversity are essential for building resilience** against such pandemics and its impacts.

➤ **Human Dignity and Equity:** Nutritional security **respects human dignity and equity by recognizing food as a basic human right that should be accessible to all people** regardless of their socioeconomic status or geographical location.

  ○ The **right to food is a legal right that is recognized in the Universal Declaration on Human Rights and the International Covenant on Economic, Social and Cultural Rights (ICESCR).**

What is the Status of Nutritional Security in India?

➤ On the nutrition front, India faces a **double burden of malnutrition**.

  ○ At one end, despite making great progress over the years, a sizable proportion of Indians exhibit nutrient deficiencies.

  ○ As in the **National Family Health Survey, 2019-21**, 35% of children are **stunted**, and 57% of women and 25% of men are anaemic.

    • At the other end, due to imbalanced diets and sedentary lifestyles, 24% of adult women and 23% of adult men are now obese.

What are the Challenges faced by Nutritional Security?

➤ **Less Productive Agriculture:**

  ○ On the production side, farm incomes are insufficient to meet the ends of marginal and small farmers.

    • According to a report by the **Transforming Rural India Foundation**, more than 68% of marginal farmers supplement their incomes with non-farm activities.

  ○ The **Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)** and other forms of casual labor are picking up the slack, indicating a lack of skills or opportunities for income diversification.

➤ **Depleting Natural Resources:**

  ○ Depleting natural resources and changing climate are making India's food production highly vulnerable.

  ○ As in the 2023 soil health survey, **almost half the cultivable land in India has become deficient in organic carbon**, which is an essential indicator of soil health.

○ Groundwater, the largest source of irrigation, is rapidly declining.

- In States such as Punjab, **more than 75% of the groundwater assessment locations are over-exploited**, threatening the resilience of farm incomes.

➢ **Faulty Food Distribution System:**

○ Inadequate food distribution through the Public Distribution System (PDS) contributes to growing food insecurity. **The Targeted PDS (TPDS) excludes deserving candidates** due to faulty criteria, leading to inaccurate categorization as APL or BPL. This results in decreased food grain uptake, worsened by low-quality grains and poor PDS shop service.

➢ **Unmonitored Nutrition Programmes:**

○ Although a number of programmes with improving nutrition as their main component are planned in the country but these are not properly implemented.

○ For instance, a number of states have failed to effectively implement the **Mid Day Meal Scheme (MDMS)**.

➢ **Lack of Intersectoral Coordination:**

○ Lack of coherent food and nutrition policies along with the **absence of intersectoral coordination between various ministries** of government such as Ministry of Women and Child Health, Ministry of Health and Family Welfare, Ministry of Agriculture, Ministry of Finance etc have added to the problem.

What can be the Approach to Address Nutritional Security?

➢ **Consumer Engagement and Demand Shifting:**

○ Consumer demand needs to be shifted towards healthy and sustainable diets. We need to **shift to a food plate that is healthier** for people and the planet.

○ We can make **locally-grown millets popular in India** just like imported oats or quinoa by following the same approach used by corporations.

○ Civil society and the health community could **partner with social media influencers** who can shape healthier and sustainable consumption for millions.

○ The public sector, through the **Public Distribution System**, **mid-day meals**, railways catering, urban canteens, and public and institutional procurement, can help improve what at least 70% of Indians are consuming.

○ Religious institutions can also contribute by influencing food choices, as demonstrated by the Tirumala Tirupati Devasthanam.

- Tirumala Tirupati Devasthanam, which serves nearly 70,000 people daily, has started procuring naturally-farmed produce.

➢ **Supporting Farmers and Sustainable Agriculture:**

○ To ensure resilient incomes, we must support farmers' transition towards remunerative and regenerative agricultural practices.

- The **National Mission on Natural Farming** is a step in this direction, but the **overall funding for sustainable agriculture is less than 1%** of the agricultural budget.

- We need to broaden and scale up such initiatives to various agro-ecological practices such as agroforestry, conservation agriculture, precision farming, and much more.

○ Agriculture support should **move from input subsidies to direct cash support** to farmers per hectare of cultivation.

- It would **promote efficient use of inputs, while enabling a level playing field** for agroecological practices to thrive.

○ Agricultural research and extension services should allocate a portion of their budgets to focus on sustainable agricultural practices, which can provide farmers with the knowledge and tools they need for sustainable farming.

➢ **Building Sustainable Farm-to-Fork Value Chains:**

○ Creating **more sustainable and inclusive value chains** is vital for enhancing rural incomes and ensuring that farmers receive a fair share of the value created.

○ Encouraging **middlemen and corporations to procure directly from farmers**, especially those who follow sustainable and ethical practices, is crucial.

- Incentives like **fair trade principles** can be implemented to promote responsible sourcing.

- Various young agri-tech enterprises such as DeHaat and Ninjacart are enabling such farm-to-buyer linkages.

○ Allowing **farmer producer organizations (FPOs)** to trade their produce with other FPOs can help farmers get more value, because farmer families in a FPO also buy farming products.

- Some FPOs in Odisha have already demonstrated this approach.

  - The Odisha Organic Farmers' Association (OOFA) is a federation of FPOs that produce organic products. The **OOFA trades organic products with other FPOs in Odisha, as well as with FPOs in other states in India.** This has helped the OOFA to **get a better price for its members' products**, and to reach a wider customer base.

Conclusion

Shifting an entire food system, however, is no mean feat. But the scale of the challenge must not deter our ambitions. If we act fast, India has a unique opportunity to showcase to the rest of the world how to get its food system right.

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EU's Carbon Border Tax: Impact on India's Exports

This editorial is based on "India must strategise against EU carbon tax" which was published in The Hindu Business Line on 22/10/2023. It talks about the implications of the European Union's proposed Carbon Border Adjustment Mechanism (CBAM) for India's exports and climate policy.

Tag: Indian Economy, GS Paper-3, Conservation, GS Paper-2, Government Policies & Interventions

The EU's plan to collect a carbon border tax with effect from January 1, 2026, could raise the cost of India's exports, according to experts seized on the matter. Beginning October, 2023, Indian exporters are supposed to submit documents on their processes roughly every two months. The EU will soon have 'verifiers' to check submissions from Indian exporters on their processes. Currently, this applies to steel, aluminum, cement, fertilizer, hydrogen and electricity, but it will be expanded to all imports into the EU in the future.

What is the EU's Carbon Border Tax?

➢ The **EU's Carbon Border Tax** (Carbon Border Adjustment Mechanism (CBAM)) is a policy measure that aims to put a fair price on the carbon emissions generated during the production of certain goods imported into the EU.

➢ It is part of the **"Fit for 55 in 2030 package"**, which is the EU's plan to reduce **greenhouse gas emissions by at least 55% by 2030** compared to 1990 levels in line with the **European Climate Law.**

➢ The CBAM will **apply to imports of cement, iron and steel, aluminium, fertilizers, electricity and hydrogen** from countries that have less stringent climate policies than the EU.

○ Importers of these goods will have to buy carbon certificates that reflect the amount of carbon emissions embedded in their products.

○ The price of these certificates will be equivalent to the price of carbon in the **EU Emissions Trading System (ETS)**, which is a market-based system that regulates the emissions of industries within the EU.

➢ It is intended to encourage cleaner industrial production in non-EU countries and prevent carbon leakage, which is the relocation of carbon-intensive activities to countries with lower environmental standards.

What are India's Concerns regarding CBAM?

➢ **Increased Costs and Reduced Competitiveness:** The CBAM could increase the costs and reduce the competitiveness of Indian exports to the EU, especially in sectors like steel and aluminum, which account for a large share of India's trade with the EU.

○ According to a report, the **CBAM will translate into a 20-35% tax on select imports** into the EU starting January 1, 2026.

● India's **26.6% of exports** of iron ore pellets, iron, steel, and aluminum products go to the EU.

● These products will be hit by CBAM. India exports these goods worth around USD8 billion annually to the EU.

➢ **Compliance Issues:** The CBAM is also a huge compliance headache. It could also **create administrative and technical challenges for Indian producers and importers**, who will have to monitor, calculate, report and verify their emissions according to the EU standards.

○ India's smaller firms will lose out, as they did when the EU imposed a strict regime in 2006 (EU REACH) to regulate chemical imports.

➢ **Against FTA Norms:** CBAM is criticized as a **non-tariff barrier that undermines zero duty FTAs**. India pays the levy while allowing duty-free entry for supposedly 'green' products, which is seen as contradictory.

RISING TENSION

The proposed tax has raised concerns among Indian metal producers, who fear it will create a new trade barrier for exports to Europe.

Share (%) of CBAM products in India's exports

To world	To EU
6.9	11.2
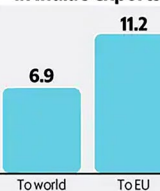
India's total exports of CBAM products to EU: $8.22 bn

Impact on sectors covered under CBAM	Number of tariff lines affected	EU's share (%) in India's exports of CBAM products
↑ HIGH		
Iron ore, concentrates	16	19.9
Steel products	163	20
Iron and steel	473	31.4
Aluminium and products	85	27.7
↓ LOW		
Cement	14	6.1
Fertilizer	24	0.7
Hydrogen	1	0
Electrical energy	1	0

CBAM: Carbon Border Adjustment Mechanism

> **Contradicts EU and Developed Nations' Commitment to Green Transition:** The imposition of a carbon tax on imports, determined by documented carbon emissions, contradicts the commitment of the EU and developed nations to support the green transition of other countries. Instead, it will result in a flow of funds in the opposite direction.

How should India respond to the EU's CBAM?

> **Resisting CBAM in Multilateral Forums:** India should oppose the CBAM in international forums as this mechanism undermines the principle of '**common but differentiated responsibility**' by restricting the developing world's ability to industrialize.

> **Working Around CBAM:** India is considering collecting a similar tax on their exports to the EU. While this might result in the same tax burden for producers, the funds collected could be reinvested to make production processes more environmentally friendly, potentially reducing future taxes.

  o However, there are uncertainties about whether the EU would accept such a move and whether it could be implemented without raising legal questions domestically and internationally.

> **Diversify Export Markets:** India should reduce dependence on the EU market by exploring new opportunities in regions like Asia, Africa, and Latin America is a strategic response. This diversification can help the country reduce its vulnerability to the impacts of the CBAM and other economic changes.

> **Incentivizing Greener Production:**

  o India can **begin preparations** and in fact, seize the opportunity to make production greener and sustainable **by incentivizing cleaner production which will benefit India** in both remaining competitive in a more carbon-conscious future.

  o International economic system and achieving its **2070 Net Zero Targets** without compromising on its developmental goals and economic aspirations.

Conclusion

The EU's Carbon Border Tax (CBAM) presents challenges for India's exports, especially in sectors like steel and aluminum. India needs a multifaceted approach: engaging in international forums to oppose CBAM, seeking bilateral agreements, diversifying export markets, and promoting greener production. Balancing environmental responsibility and economic prosperity is essential for India's position in a carbon-conscious global market.

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Bhutan's China Connection: Implications for India

This editorial is based on "Warming ties: On Bhutan-China relations and India's concerns" which was published in The Hindu on 25/10/2023. It discusses the implications of the recent visit of Bhutanese Foreign Minister to China.

Tag: International Relations, GS Paper - 2, India and its Neighbourhood, Effect of Policies and Politics of Countries on India's interest, Groupings & Agreements Involving India and/or Affecting India's Interests.
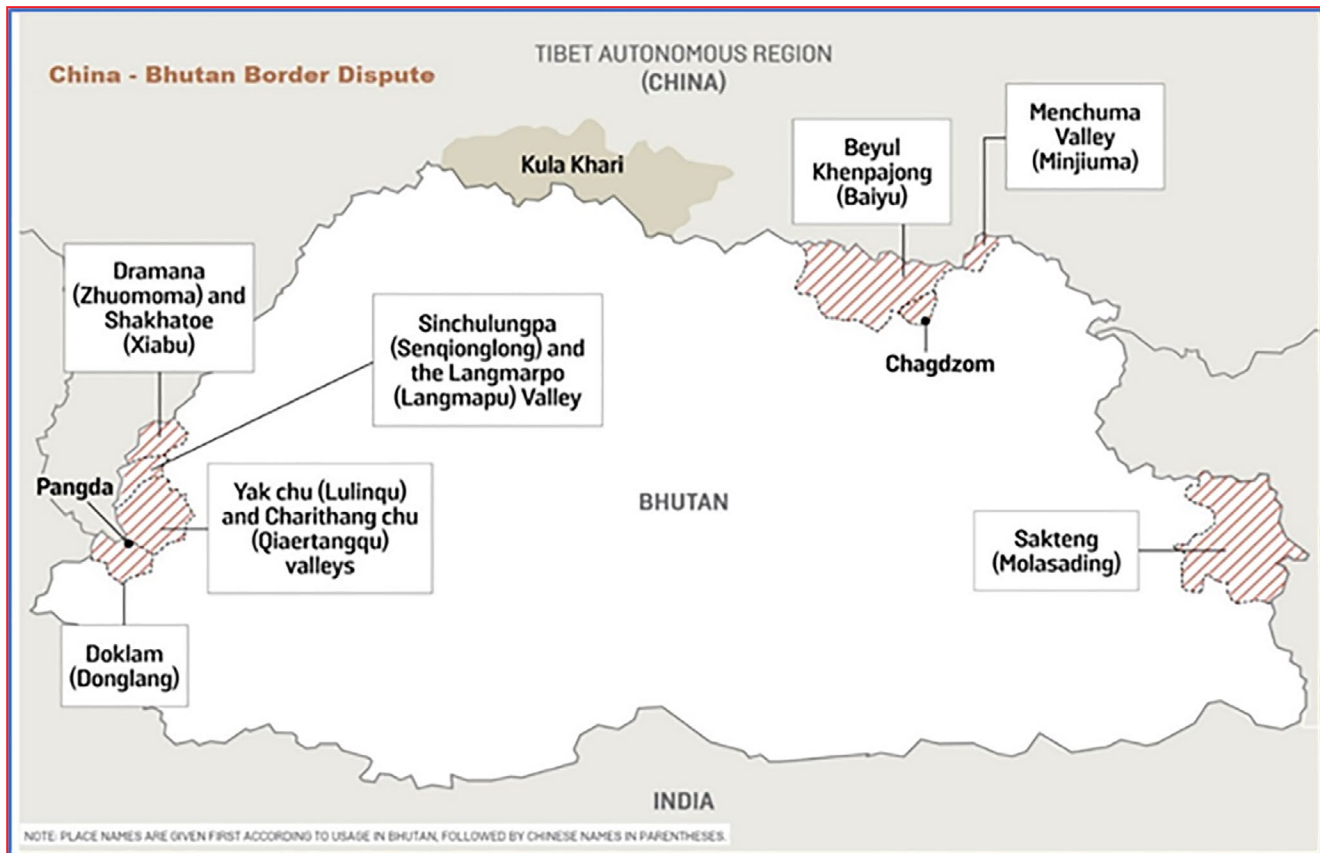
Recently, the Bhutanese Foreign Minister paid a visit to China, which is being seen as unprecedented on various levels as **Bhutan and China do not maintain diplomatic relations and this visit is the first ever by a Bhutanese Foreign ministe**r.

China and Bhutan held their 25th round of boundary talks in Beijing and signed a Cooperation Agreement on the "Responsibilities and Functions of the Joint Technical Team (JTT) on the Delimitation and Demarcation of the Bhutan-China Boundary." This advances their **3-Step Roadmap initiated in 2021 for border resolution**, building on the positive momentum since their last talks in 2016.

> The 3-Step Roadmap involves first, agreeing to the border "on the table"; then visiting the sites on the ground; and then formally demarcating the boundary.

What are India's Concerns regarding this Visit?

> India's unique relationship with Bhutan has made it cautious about establishing diplomatic ties and **signing a boundary agreement**.

> Despite India's concerns, it seems that establishing diplomatic relations and signing a boundary agreement between Bhutan and China is becoming more likely.

  o However, The Bhutanese Prime Minister recently **reassured India that any agreement with China would not harm India's interests.**

> Considering Bhutan's unique dependence on India, **there is little doubt that it will have taken India on board in its efforts to normalize relations with China**, in return guaranteeing India's security interests and red lines (a boundary or limit which should not be crossed).

  o One such red line involves **keeping China away from southern Doklam's ridges that overlook India's** "**Siliguri corridor**", even as Bhutan and China consider a "swap" between territories in the valleys of the north and on the Doklam plateau in the west.

  o A second line involves **Bhutan going slow on normalizing ties and opening itself up to a permanent Chinese diplomatic presence**, while continuing with border talks.

China - Bhutan Border Dispute

TIBET AUTONOMOUS REGION (CHINA)

Kula Khari

Beyul Khenpajong (Baiyu)

Menchuma Valley (Minjiuma)

Dramana (Zhuomoma) and Shakhatoe (Xiabu)

Sinchulungpa (Senqionglong) and the Langmarpo (Langmapu) Valley

Chagdzom

Pangda

Yak chu (Lulinqu) and Charithang chu (Qiaertangqu) valleys

BHUTAN

Sakteng (Molasading)

Doklam (Donglang)

INDIA

NOTE: PLACE NAMES ARE GIVEN FIRST ACCORDING TO USAGE IN BHUTAN, FOLLOWED BY CHINESE NAMES IN PARENTHESES.

What could be the Impacts on India of growing Bhutan-China relations?

➢ **Security implications**:

○ China's increasing presence and influence in Bhutan could **pose a threat to India's security interests, especially in the Doklam plateau**, which is a strategic area near the tri-junction of India, Bhutan and China.

● China and India had a tense **standoff over Doklam in 2017**, when Indian troops intervened to stop Chinese road construction in the disputed territory claimed by Bhutan.

○ If China and Bhutan reach a border deal that involves Doklam, it could **compromise India's access to its northeastern states** through the **Siliguri Corridor**, also known as the Chicken's Neck.

○ India would also **lose its leverage over Bhutan as a buffer state** and have to deal with a potential two-front war scenario with China and Pakistan.

➢ **Economic implications**:

○ Bhutan and India have a strong economic partnership, mainly based on **hydropower** cooperation.

● India is **Bhutan's largest trading partner** and the biggest source of foreign direct investment, aid and loans.

● India also imports most of **Bhutan's surplus electricity**, which accounts for about 40% of Bhutan's revenue.

○ If Bhutan diversifies its economic ties with China, it could **reduce its dependence on India** and **affect India's energy security**.

➢ **Diplomatic implications**:

○ Bhutan and India have a special relationship based on historical, cultural and political ties.

● India has been Bhutan's closest ally and protector since 1949, when they signed a treaty (**Indo-Bhutan Treaty of Peace and Friendship, 1949**) that gave India significant control over Bhutan's foreign policy and defense.

○ Although the treaty was revised in 2007 to give Bhutan more autonomy, India still plays a significant role in Bhutan's external affairs.

○ If Bhutan establishes formal diplomatic relations with China, it could affect its traditional pro-India foreign policy and challenge India's influence in the region.

➢ **Infrastructure and Connectivity:**

○ If Bhutan participates in China's **Belt and Road Initiative (BRI)**, it might have implications for regional infrastructure development and connectivity. India has concerns over the BRI's strategic and security implications.

> **Influence in Regional Organizations:**
> ○ Bhutan's alignment with China could impact India's influence in regional organizations like the **South Asian Association for Regional Cooperation (SAARC)** and the **Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)**.

How should India act amid growing relations between Bhutan and China?

> **Engage in Diplomacy:** India should continue diplomatic engagement with Bhutan to understand its evolving relationship with China. Open and transparent communication is crucial to maintain trust and address any concerns Bhutan may have.

> **Collaborate on Border Negotiations:** India should work closely with Bhutan on border negotiations. A mutually acceptable border deal that addresses Bhutan's concerns in the north while preserving India's interests in the west can be a win-win situation. This collaborative approach will strengthen the long-standing friendship between the two nations.

> **Understand Bhutan's Perspective:** India should strive to understand Bhutan's reasoning and motivations in its dealings with China. This includes appreciating Bhutan's desire for economic development and security, and recognizing that it may engage with China for its own interests.

> **Build Confidence:** India should have confidence that Bhutan, as a trusted neighbor, will consider India's interests along with its own when making decisions regarding its relationship with China. Building this mutual trust is essential to ensure stability in the region.
> ○ Bhutan's Prime Minister has already assured India that any agreement with China would not harm India's interests.

> **Maintain a Strong Bilateral Relationship:** India should continue to strengthen its bilateral ties with Bhutan through development assistance, cultural exchanges, and security cooperation. These bonds of friendship will further align the interests of the two nations.

> **Regional Cooperation:** India should explore avenues for trilateral or multilateral cooperation involving Bhutan, India, and China to address common regional challenges such as environmental conservation, disaster management, and trade.

Conclusion

Bhutan's burgeoning relationship with China has complex implications for India's strategic interests, economy, and regional influence. India's response requires a delicate balance, prioritizing security, economic diversification, and regional diplomacy. By maintaining strong ties with Bhutan, engaging in open dialogue, and fostering regional cooperation, India can navigate these evolving dynamics effectively while preserving its interests in its strategic neighborhood.

■■■

Battling the Winter Smog: Delhi's Pollution Predicament

This editorial is based on "Delhi's battle against pollution" which was published in The Hindustan Times on 24/10/2023. It talks about the deteriorating air quality and the factors that contribute to the pollution crisis.

Tag: Biodiversity & Conservation, GS Paper - 2, Health, Government Policies & Interventions, Gs Paper - 2, Environmental Pollution & Degradation

Recently, Delhi got a trailer of the inevitable environmental misery that awaits it in the coming months: Air pollution. On Some day, the **air quality index** surpassed 300 on a scale topping out at 500, as a blanket of haze shrouded the skies and a distinct smell of dust and smoke pervaded the outdoors. Luckily, winds picked up the following day and the skies cleared up.

For the 20 million residents of the city (and millions more in neighboring states), it was a relief for the air to improve — from "very poor" to just "poor".
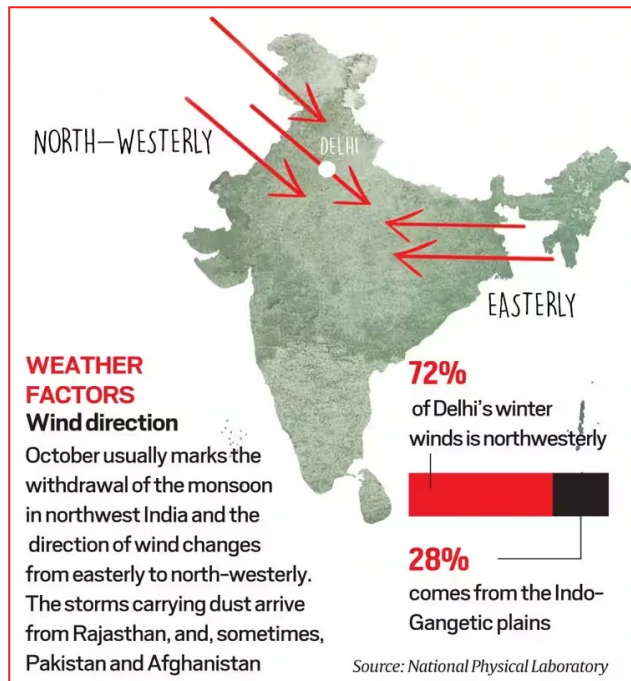
Delhi's pollution is a serious health hazard that affects millions of people every year. According to a study by the **Indian Council of Medical Research**, **air pollution was responsible for 1.67 million deaths in India in 2019**, and Delhi had the highest per capita mortality rate due to air pollution among all states.

What are the Reasons behind Rising Pollution levels in Delhi during Winters?

> **Stubble Burning**: Farmers in Punjab and Haryana **burn crop residues** to clear their fields for the next season. This produces a lot of smoke and particulate matter that gets carried by the wind to Delhi and other parts of north India.
> ○ According to **SAFAR**, in 2021, **stubble burning**'s contribution to Delhi pollution was 25%.
> ○ Stubble burning emits toxic pollutants in the atmosphere containing harmful gasses like Carbon Monoxide (CO), methane (CH_4), carcinogenic polycyclic aromatic hydrocarbons, **volatile organic compounds (VOC)**.

> **Wind Direction**: Wind direction plays a significant role in Delhi's air pollution, especially during the winter months. The **predominant direction of winds in Delhi is north westerly post-monsoon**. These winds bring dust and smoke to the city when stubble is being burnt in Haryana and Punjab.

- ❍ According to a study conducted by National Physical Laboratory, **72% of Delhi's wind in winters comes from the northwest.**
- ❍ A change in wind direction means these pollutants are not carried into the city.
  - • For example, on October 25, 2023, the air quality improved marginally when the wind changed direction from north to northeast.
- ➢ Temperature Inversion: Temperature inversion is a phenomenon that occurs when the air temperature increases with altitude, instead of decreasing as usual. This creates a layer of warm air above a layer of cold air, trapping the pollutants near the ground.

WEATHER FACTORS
Wind direction
October usually marks the withdrawal of the monsoon in northwest India and the direction of wind changes from easterly to north-westerly. The storms carrying dust arrive from Rajasthan, and, sometimes, Pakistan and Afghanistan

72% of Delhi's winter winds is northwesterly

28% comes from the Indo-Gangetic plains

Source: National Physical Laboratory

- ❍ Temperature inversion affects Delhi's pollution in winter, when the weather is cold and calm. The **pollutants from stubble burning, vehicle emissions, industrial emissions, and other sources accumulate in the lower atmosphere** and form a thick layer of **smog**.
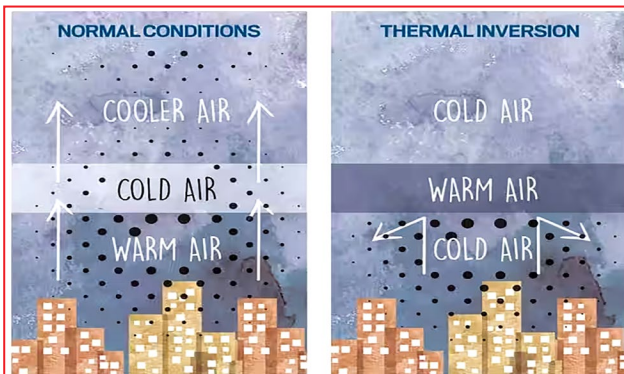

Dip in temperature
When the temperature dips, it lowers the inversion height, which is the layer beyond which pollutants cannot disperse into the upper layer of the atmosphere. The concentration of pollutants in the air increases when this happens

- ➢ Dry and Still Air: In winters, there is less rainfall and wind speed, which means that the pollutants do not get washed away or diluted by fresh air. The pollutants remain suspended in the air for longer periods of time.

Wind speed
High-speed winds are very effective at dispersing pollutants, but winters bring a dip in wind speed as compared to summers
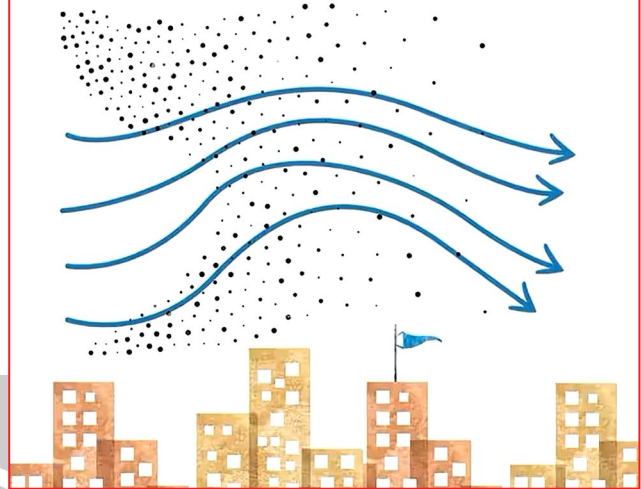
- ➢ **Vehicular and Industrial Emissions**: Delhi has a large population and a large number of vehicles, which emit harmful gases and particles. The industries in and around Delhi also contribute to the pollution by burning fossil fuels and releasing chemicals into the air.
  - ❍ A study by IIT Delhi noted that vehicular emissions contribute around 25% to Delhi's **PM2.5** levels.
- ➢ **Dust storms, Firecrackers, and Domestic Biomass Burning**: These are some of the other sources of pollution that increase during winters. Dust storms bring dust particles from arid regions, firecrackers produce smoke and metals during Diwali and other occasions, and domestic biomass burning for heating adds to the carbon monoxide and particulate matter in the air.
  - ❍ A 2015 study conducted by IIT-Kanpur states that **17-26% of all particulate matter in Delhi in winters is because of biomass burning**.

Government Initiatives to Control Delhi's Pollution
- ➢ **Green War Room**: A nine-member team that monitors the actions taken by 20 government agencies against pollution on a real-time and daily basis.
- ➢ **Anti-Pollution Campaign**: Delhi Government has recently launched a major anti-pollution campaign, Yuddh Pradushan Ke Viruddh, which includes a tree transplantation and other such initiatives.
- ➢ **Green Delhi App**: A mobile app that allows citizens to report any instances of pollution such as garbage burning, industrial emissions, or traffic congestion.

➤ **Bio-Decomposer**: A solution developed by PUSA institute that helps farmers decompose the crop residue in their fields without burning it. The government provides free spraying of bio-decomposer in Delhi's farmlands.

➤ **Water Sprinklers**: The use of water sprinklers, mechanized road sweeping machines, anti-smog guns, and sprinkling facilities on high-rise buildings to reduce dust and particulate matter in the air.

➤ **Industry Pollution**: The monitoring of industrial sites and ensuring that they use clean and authorized fuel. The government has also extended piped natural gas (PNG) to industries and set up the country's first e-waste eco-park in Delhi.

➤ **PUC Certificates**: The enforcement of pollution under control (PUC) certificates for vehicles and banning trucks that carry non-essential goods from entering the city. The government has also hired 1,000 private CNG vehicles to augment the public transport system.

➤ **Smog Towers**: The installation of smog towers that use large fans and filters to purify the air. The first smog tower has been set up at Connaught Place and has shown positive effects.

➤ **Pollution Hotspots**: The identification of 21 pollution hotspots in Delhi and deploying special teams to monitor and mitigate the sources of pollution in these areas.

What Measures should be taken to Control Delhi's Pollution?

➤ **Congestion Charge:** Implementing a congestion charge for private vehicles during peak hours is an effective way to reduce traffic congestion and encourage the use of public transport or carpooling. The revenue generated from this charge can be reinvested in green projects or used to subsidize electric vehicles, further incentivizing environmentally friendly choices.

   ○ A congestion charge is a fee that drivers have to pay to enter or use certain areas or roads that are prone to traffic congestion.

➤ **Cap-and-Trade for Industrial Emissions:** A **cap-and-trade system sets a limit on industrial emissions and promotes a market-driven approach to reducing pollution**. This system creates financial incentives for industries to reduce their emissions and invest in cleaner technologies, ultimately leading to a decrease in overall pollution.

➤ **Drones for Pollution Control:** The use of drones **to identify and disperse pollution hotspots** is a proactive approach to managing air quality. This technology can help mitigate the immediate impact of pollutants on the environment and public health while also monitoring and identifying sources of pollution for targeted intervention.

   ○ For instance, the New Engineering Education Transformation (NEET) cohort's **drone system is designed to provide real-time air quality data with a 15-meter resolution** that is publicly accessible through a user-friendly interface.

➤ **Vertical Gardens:** Vertical gardens are an aesthetically pleasing and environmentally beneficial addition to urban areas. They not only enhance the visual appeal of the city but also **help purify the air by absorbing carbon dioxide and releasing oxygen.** Additionally, they can provide habitats for birds and insects, contributing to urban biodiversity.

➤ **Rewards for Low-Carbon Lifestyles:** Encouraging citizens to adopt low-carbon lifestyles through a rewards system is an innovative approach. By **providing incentives like points or vouchers or tax benefits for eco-friendly behaviors such as using public transport or carpooling**, people are more likely to make environmentally conscious choices, reducing their carbon footprint.

■■■

Agriculture Export Policy in India

This editorial is based on "How we tame food inflation, and at whose cost" which was published in The Indian Express on 30 /10/2023. It talks about the drawbacks of a restrictive agricultural policy and offers suggestions for establishing a resilient and competitive agricultural export strategy.

Tag: Agriculture, GS Paper-3, Agricultural Marketing, Direct & Indirect Farm Subsidies, Buffer Stocks & Food Security, Health, Government Policies & Interventions, Gs Paper - 2, Issues Relating to Poverty & Hunger, Effect of Policies and Politics of Countries on India's interest.

In an effort **to control food inflation, the government has recently set the Minimum Export Price (MEP)** for basmati rice at USD 1,200. Consequently, traders in the Punjab-Haryana region are now hesitant to purchase basmati rice, **resulting in lower prices for farmers compared to when exports were not restricted**.

This high MEP may hand over India's export markets to Pakistan, its primary competitor in the basmati rice export sector. Therefore, India's **agricultural export policy must shift from being restrictive to becoming stable and competitive**.

What is Agricultural Export Policy?

➢ **About:**

   ○ **Agricultural export policy**, often referred to as an agri export policy, is a set of government **regulations**, **measures**, and **incentives** designed to govern and promote the export of agricultural products from a particular country.

   ○ The **policy** may include measures such as **export subsidies**, **tariff reductions**, **quality standards**, **market access agreements**, **financial incentives**, and t**rade promotion initiatives** to help agricultural producers and exporters access international markets, increase their competitiveness, and expand their export opportunities.

➢ **Vision:** The **Government** introduced a comprehensive **Agriculture Export Policy in December 2018** with a vision to harness export potential of Indian agriculture, through suitable policy instruments, to make India a global power in agriculture and raise Farmer's income.

➢ **Objective:**

PUTTING FARMERS FIRST

Agriculture Export Policy 2018

- Double agricultural exports from present $ 30+ billion to over $60 billion by 2022
- Farmers to get benefit of export opportunities in overseas market
- Promote ethnic, organic & traditional and non-traditional Agri products exports
- Establish Monitoring Framework to oversee implementation of Agricultural Exports Policy

As on 1st February 2019

➢ **Elements:**

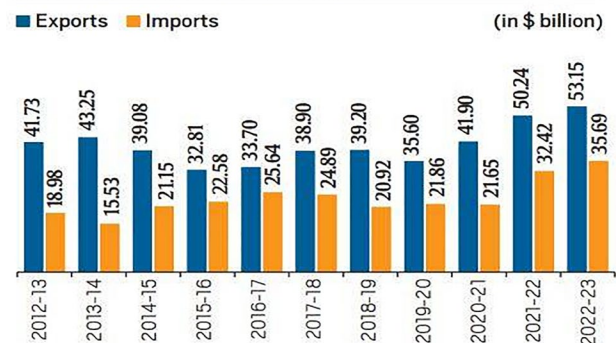| Strategic	Policy Measures
	Infrastructure and Logistics Support
	Holistic Approach to boost exports
	Greater involvement of State Governments in Agri Exports

Operational	Focus on Clusters
	Promoting Value added exports
	Marketing and promotion of "Brand India"
	Attract private investments into production and processing
	Establishment of Strong Quality Regimen
	Research & Development
	Miscellaneous

What is the Need for an Agri-Export Policy?

➢ **Economic Impact:** In recent years, the agricultural export sector has accounted for a substantial portion of India's total exports. For example, in the fiscal year 2022-2023, India's agricultural and processed food products export reached approximately USD 53 billion.

   ○ However, India's share in global exports of agriculture products was merely 2.2% in 2016.

➢ **Food Security**: India supports a substantial 17.84% of the world's population but has limited resources, with only 2.4% of the world's land and 4% of its water resources. A well-planned export policy can generate additional revenue that can be reinvested in enhancing food security and increasing the income of farmers.

➢ **Controlling Food Inflation:** Agricultural exports can help stabilize domestic prices, especially during years of bumper harvests. This price stability can benefit both consumers and producers.

➢ **Employment Generation:** As per the NSSO's **Periodic Labour Force Survey** for 2021-22,the agricultural sector is the largest employer in India, with around 45% of the workforce engaged in agriculture. Promoting agricultural exports can help create more job opportunities, especially in rural areas, where livelihoods are closely tied to farming.

➢ **Balance of Payments (BOP):** In recent years, agricultural exports have contributed significantly to India's **foreign exchange reserves**. It helps to offset the **trade deficit** and maintain a stable currency.

➢ **Crop Diversity:** India is one of the world's largest producers of various agricultural commodities, including **rice** , **wheat**, **spices**, and **horticultural** products. These commodities have substantial export potential, and a well-structured export policy can harness this potential.

➢ **Trade Relationships:** India's agricultural exports are important for building and strengthening trade relationships with various countries. For instance, India's export of agricultural products to countries like the United States, Saudi Arabia, and the United Arab Emirates has steadily increased.

➢ **Structural Challenges:** The policy can address challenges in exporting agricultural products from India, such as low farm productivity, poor infrastructure, global price volatility, and market access.

INDIA'S AGRICULTURAL TRADE

■ Exports ■ Imports   (in $ billion)

Year	Exports	Imports
2012-13	41.73	18.98
2013-14	43.25	15.53
2014-15	39.08	21.15
2015-16	32.81	22.58
2016-17	33.70	25.64
2017-18	38.90	24.89
2018-19	39.20	20.92
2019-20	35.60	21.86
2020-21	41.90	21.65
2021-22	50.24	32.42
2022-23	53.15	35.69

What are the Challenges in Agri Export Policy of India?

➢ **Restrictive Export Policy:** The restrictive export policies, favoring domestic consumers at the expense

of farmers, are considered a major reason for the failure to meet export targets.

- The **MEP** of USD 1,200 restricts **basmati rice exports**, causing a potential sharp decline in exports.

➢ **Subsidy Centric Schemes:** Populist measures, especially during election seasons, result in increased subsidies such as food subsidies for consumers and **fertilizer subsidies** for farmers. Many states announce loan waivers and provide free power to farmers, which, while politically popular, can negatively impact fiscal discipline and the financial health of the agricultural sector.

➢ Inadequate R&D Investment**:** India's investment in agriculture Research & Developemnt (Research and development (R&D) is limited, at around 0.5% of the agricultural **Gross Domestic Product (GDP)**, which is insufficient to drive significant growth. This investment needs to be doubled or even tripled for India to become a powerhouse of agricultural production and exports.

➢ **Quality and Standards:** Maintaining consistent quality and meeting international standards for agricultural products is a significant challenge. Variability in quality and compliance issues can hinder exports. Meeting **Sanitary and Phytosanitary (SPS) Measures** of importing countries can be challenging due to the presence of pests and diseases in Indian agriculture

➢ **Infrastructure:** Inadequate infrastructure for storage, transportation, and processing can lead to post-harvest losses, reducing the competitiveness of Indian agricultural exports.

➢ **Competitiveness:** India faces competition from other countries in the global agricultural market, and being competitive in terms of pricing and quality is essential. Exchange rate fluctuations can impact the competitiveness of Indian agricultural exports.

➢ **Environmental and Sustainability Concerns:** Balancing increased agricultural exports with environmental sustainability is a challenge, as over-exploitation of resources can have long-term consequences.

What are the Government Schemes to Promote Agri-Export in India?

➢ **Operation Greens: Operation Greens** is an initiative to stabilize the supply and prices of essential agricultural commodities, including fruits and vegetables. It aims to reduce price volatility, ensure farmers receive remunerative prices, and promote sustainable agri exports.

➢ **Market Access Initiative (MAI)**: MAI is a program that supports export promotion activities, including participation in international trade fairs, capacity building, and market research. It helps Indian agricultural exporters explore new markets and gain market access.

➢ **Scheme for Agro-Marine Processing and Development of Agro-Processing Clusters (SAMPADA): SAMPADA** aims to modernise infrastructure for agro-processing clusters, which helps reduce post-harvest losses, increase the shelf life of agricultural products, and enhance the export competitiveness of Indian agri-products.

➢ **National Horticulture Mission (NHM): NHM** focuses on promoting sustainable horticulture practices, including organic farming, precision farming, and water-use efficiency. It supports the production of high-value horticultural products for export.

➢ **E-NAM (National Agriculture Market): E-NAM** is a pan-India electronic trading portal for agricultural commodities. It enables farmers to sell their produce directly to buyers, reducing intermediaries, ensuring fair prices, and enhancing sustainability.

➢ **APEDA (Agricultural and Processed Food Products Export Development Authority)**: **APEDA** is responsible for promoting the export of scheduled products and provides guidelines for sustainability, quality, and certification requirements for exporters.

➢ **Setting up of Agri Export Zones (AEZs):** AEZs are established in different parts of the country to promote the export of specific agricultural commodities. These zones provide a conducive environment for sustainable agri exports through infrastructure development and technology adoption.

➢ **Promotion of Organic Farming**: The government has initiated programs to promote **organic farming**, which contributes to environmental sustainability and increases the export potential of organic products.

What are the Steps Ahead for a Stable Agri-Export Policy in India?

➢ **Farmer's Welfare**: Prioritize the welfare of farmers and ensure that they receive fair prices for their produce. The success of agricultural exports should directly benefit the farming community.

➢ **Support for Domestic Consumers:** To ensure food security, policy support is needed for domestic consumers, it should be through a domestic income policy targeted specifically at vulnerable sections of society.

➢ **Productivity Enhancement:** Increasing agricultural productivity is essential for competitiveness. It will require investments in R&D, seeds, irrigation, fertilizers, and better farming practices.

➢ **Diversify Export Basket:** Diversify the basket of agricultural exports, emphasize value-added products, lessen reliance on a select few commodities, and target a wide array of international markets.

➢ **Quality Assurance**: Implement strict quality standards and certification mechanisms to ensure that exported agricultural products meet international norms. There is a need to establish uniform quality and standardization protocols to ensure consistency in the quality of agricultural products, particularly for horticultural items.

➢ **Infrastructure Development**: Invest in modern infrastructure, including cold storage, processing facilities, transportation, and logistics to reduce post-harvest losses and enhance export competitiveness. Offer financial incentives, subsidies, and credit facilities to encourage investments in agriculture, infrastructure, and processing facilities.

➢ **Technology Adoption**: Promote the use of advanced agricultural technologies, precision farming, and efficient irrigation techniques to enhance productivity. Encourage the growth of agri-startups and innovative solutions to enhance agricultural production and export efficiency.

➢ **Environmentally Sustainable Practices:** Encourage sustainable farming practices, including organic farming, to ensure environmental sustainability in agriculture

➢ **International Best Practices:** Learn from successful agricultural export policies and best practices in other countries. Strengthen diplomatic efforts to negotiate favorable trade agreements and reduce trade barriers to gain better access to international markets.

Conclusion

A stable agricultural export policy should be dynamic, responsive, and adaptive to ensure India's sustained growth in the global agricultural trade market. It should prioritize the long-term sustainability of agriculture, environmental responsibility, and the welfare of farmers while promoting India's role as a significant player in world agricultural trade.
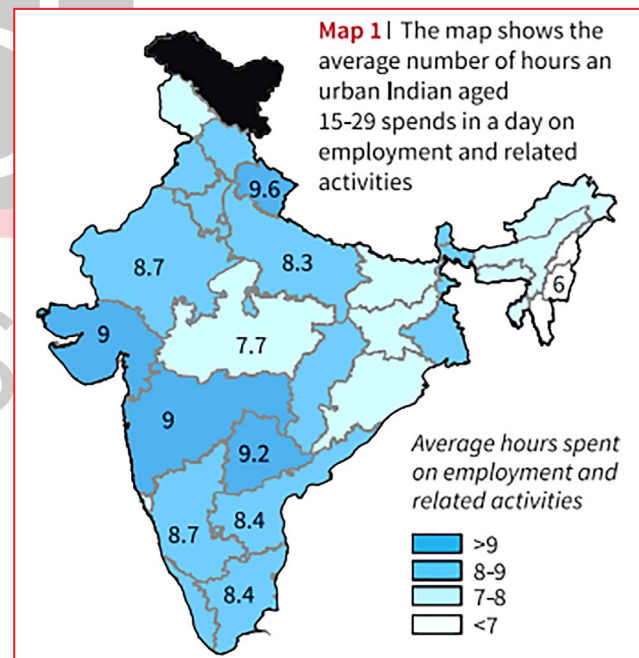
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The '70 Hour Work Week' Idea

This editorial is based on "Putting the '70hour work week' idea into perspective" which was published in The Hindu on 31 /10/2023. It talks about the Infosys founder Narayana Murthy's proposal that young Indians should commit to working 70 hours per week as a means to enhance the nation's productivity.

Tag: Governance, Gs Paper-2, Issues Relating to Development, Government Policies & Interventions, GS Paper-3, Industrial Policy, Inclusive Growth.

Infosys founder **Narayana Murthy** suggested that Indian youth should work **70 hours** a week to improve the country's productivity. He emphasizes the need to improve India's work productivity, citing **Germany** and **Japan** as examples. A **70-hour work week**, translating to nearly 12 hours of work for six days, raises both support and criticism.

How Many Hours Does an Average Young Indian Work at Present?

➢ According to the 2019 **Time Use Survey,** young Indians aged **15-29** spend over **7.2 hours** a day on employment and related activities in **rural areas** and **8.5 hours** a day in **urban areas**.

➢ When examining different states, it becomes evident that in urban **Uttarakhand**, young individuals put in an average of **9.6 hours** of **work per day**, which is notably high, but it still falls short of meeting Murthy's proposed 70-hour workweek.

Map 1 | The map shows the average number of hours an urban Indian aged 15-29 spends in a day on employment and related activities

Average hours spent on employment and related activities

- >9
- 8-9
- 7-8
- <7

What are Arguments in Favor of the Long Working Hours?

➢ **Leverage the Demographic Dividend :**
  ○ Share of India's working age population to total population will reach its highest level at 68.9% by 2030.
  ○ With a relatively young population (median age of 28.4 years), India gets a competitive advantage in terms of workforce.
  ○ India really needs a dedicated labor force where young individuals are willing to put in 70 hours of work per week, all in the service of nation-building.

➢ **Disciplined Work Culture** :

○ India's work culture must undergo a significant shift towards becoming highly determined, exceptionally disciplined, and diligent.

○ Instead of reducing our efforts and focusing on unproductive habbits, this is the moment to wholeheartedly commit to the task of accomplishing in one generation what other nations have achieved over many years.

➢ **Lessons from Germany and Japan:**

○ The average annual working hours of Germans and the Japanese peaked after the world war at about 2,200 hours to 2,400 hours a year — about 8.3 to 9 hours a day during a five day work week without holidays.

○ In a swiftly progressing nation of our magnitude, the conventional 5-day workweek structure falls short. This generation is destined to propel India into the position of the world's largest economy, and it should be committed to this endeavor.

➢ **Improve Labor Productivity** :

○ India's work productivity is one of the lowest in the world. Unless we improve our work productivity, we will not be able to compete with those countries that have made tremendous progress.

➢ **Opportunity for Skill Development :**

○ It's not essential to dedicate the full 70 hours exclusively to your company; instead, one can assign 40 hours to his/her professional responsibilities and set aside 30 hours for personal skill enhancement.

○ The key is to invest those additional hours required to achieve mastery in one's chosen field of expertise.

What are Arguments Against the Long Working Hours?

➢ **Declining Productivity with Long Working Hours :**

○ Research consistently shows that productivity declines significantly after 50 hours of work per week and drops further after 55 hours.

○ The absence of at least one full day off each week can negatively impact overall hourly output.

○ Germany and Japan increased productivity while reducing working hours, with average annual working hours dropping to 1,400-1,600 hours a year.

➢ **Imbalance in Work-life Equilibrium** :

○ Long work hours can lead to burnout, reduced job satisfaction, and an imbalance in work-life equilibrium.

○ Longer work hours mean less time for sports and leisure, as Indians spend less time on these activities compared to Germany and Japan.

○ Extended working hours can result in physical and mental fatigue, reduced family time, and hinder the body's natural recovery process.

➢ **Health Implications:**

○ Sleep disturbances

○ Increased risk of cardiovascular diseases.

○ Obesity due to fast food and irregular meal timings.

○ Mental health issues, including elevated stress levels, anxiety, and depression.

➢ **Extra Burden on Working Women :**

○ Excessive working hours are challenging to manage childcare responsibilities for working mothers.

○ Juggling long hours at work and family responsibilities can hinder career progression for working women.

What are the Government Schemes to Improve Productivity and Efficiency in India?

➢ **Skill Development Initiatives:** The government has launched various skill development programs like **Pradhan Mantri Kaushal Vikas Yojana (PMKVY),National Skills Qualifications Framework (NSQF)** and **Recognition of Prior Learning(RPL)** to enhance the employability of the workforce.

➢ **Digital India:** The **Digital India** initiative aims to boost efficiency through digitalization and increased access to online services, reducing bureaucracy and enhancing productivity.

➢ **Make in India**: **Make in India** campaign encourages investment in manufacturing and promotes economic growth, creating job opportunities and enhancing productivity.

➢ **Startup India:** **Startup India** fosters entrepreneurship, the government introduced Startup India, offering support and incentives to startups and small businesses.

➢ **Ease of Doing Business Reforms**: **EoDB** reforms aim to simplify regulations, streamline business processes, and make it easier for businesses to operate, thereby increasing productivity.

➢ **National Industrial Corridor Development**: Developing **Industrial Corridors** across the country helps attract investment, create jobs, and stimulate economic growth.

➢ **Incentives for Research and Innovation**: Programs like **Atal Innovation Mission** and **Biotechnology Industry Research Assistance Council (BIRAC)** provide support and incentives for research and innovation.

➢ **Tax Reforms:** Implementation of the **Goods and Services Tax (GST)** simplifies taxation and boosts efficiency for businesses.

How to Strike the Balance between Work and Life?

➢ **Enhance Productivity through Technology :**

   o Adopt digital technologies and **artificial intelligence** to streamline processes, reduce manual work, and improve efficiency.

   o Invest in **technical education** to equip the workforce with the skills needed to leverage advanced tools and systems.

➢ **Focus on Output:**

   o Time spent at the workplace does not necessarily correlate with higher output or productivity.

   o Productivity depends on both time and capital, making it essential to invest in the correct tools and resources.

➢ **Promote Growth and promising Future** :

   o To motivate our youth, we must place them in roles that challenge and promote growth.

   o When hard work leads to a promising future, individuals naturally give their best.

   o Organizations should foster a culture of transparency, trust, and meritocracy.

➢ **Prioritize Self-Care**:

   o Make sure to set aside time for activities that help to relax and recharge, such as exercise, hobbies, and spending time with loved ones.

   o Aim for at least 7-8 hours of quality sleep each night to ensure the body and mind have time to rest and recover.

Conclusion:

Certainly, hard work is the foundation of success, but it's not just about the hours put in; it's the dedication and enthusiasm that matter. The goal is to make work fulfilling, allowing a seamless integration of work and personal life. When young professionals are passionate and purpose-driven, achieving work-life harmony becomes a natural outcome.

■■■

Drishti Mains Questions

1. In light of the persistently low representation of women in India's police force, discuss the key challenges in recruitment of female officers. Analyze the significance of increasing women's participation in policing and suggest policy measures to bridge the gender gap within the police force.

2. Discuss the potential of biofuels as a renewable energy source and evaluate the viability of the Global Biofuels Alliance (GBA) in promoting sustainable bioenergy.

3. Discuss the significance and the challenges associated with conducting a caste census in India. Also suggest measures to ensure social justice.

4. Discuss the concept of the Climate Polycrisis and elaborate on a comprehensive strategy that governments and international organizations can adopt to address this complex crisis effectively.

5. Discuss the arguments both in favor and against these measures, and suggest policy reforms that could strike a balance between maintaining public order and safeguarding individual liberties.

6. Q. Digital India Act, 2023 is a crucial step towards ensuring a secure, accountable, and innovative digital future for India .Discuss.

7. Discuss the impact of the Israel-Palestine conflict on India's foreign policy, particularly in its relations with Israel and Arab nations.

8. Discuss about the key challenges to press freedom in India.Suggest measures for the protection and promotion of a free and independent press in the country?

9. Discuss the impact of informal work on mental healthcare and the steps taken by the government in this regard. Propose additional policy measures to address the mental health needs of informal workers in the country.

10. India's Methanol Economy Program is a strategic initiative with various objectives and potential benefits. Discuss the key objectives and potential benefits of the program.

11. Examine the potential of nuclear energy as a cornerstone for India's energy security, economic growth, and climate objectives. Discuss the challenges faced and propose a comprehensive strategy to accelerate the expansion of nuclear energy in the country.

12. Analyze the impact of reservation policies on societal development, economic growth, and equality. What alternative measures can be taken to ensure a fair and just society?

13. The India-Maldives relationship has historical and geographical roots, but China's growing presence in the Indo-Pacific region raises concerns. Analyze the strategic importance of Maldives for India and discuss the impact of China on India-Maldives relations.

14. Discuss the factors contributing to the vulnerability of the Himalayan region to Glacial Lake Outburst Floods (GLOFs) and the measures that can be taken to mitigate the risks associated with GLOFs.

15. Discuss the key factors contributing to India's optimistic economic outlook for the fiscal year 2023-24. How can the government's policies and initiatives further enhance the country's economic growth and sustainability?

Drishti Mains Questions

16. India's healthcare procurement system faces several challenges. In this context, discuss the advantages of a centralized procurement system and how it can address the existing issues in the healthcare procurement landscape.

17. Discuss the role of the Environment Impact Assessment (EIA) in addressing the environmental challenges faced by the Himalayan region. Suggest measures for improving the EIA process to ensure sustainable development in the Himalayan region and protect its fragile ecosystems.

18. Recently, the Supreme Court has denied legal status to same sex marriages in India. Discuss the issues with the Court's judgment and options available to the LGBT community now.

19. Discuss the significance of the Marine Economy in India and the challenges it faces. How can the introduction of blue bonds contribute to strengthening India's marine economy.

20. Examine the status of nutritional security in India, highlighting the challenges it faces, and propose a comprehensive approach to address these challenges.

21. Analyze the implications of EU's Carbon Border Tax on India, and discuss the strategic responses that India can undertake to address these challenges.

22. Discuss the potential implications of Bhutan's growing relations with China on India's security, economy, and regional influence. How should India strategically respond to these evolving dynamics in its neighborhood?

23. Analyze the key factors contributing to Delhi's pollution and suggest measures that could be taken to address the persistent problem of air pollution in Delhi.

24. Discuss the key challenges faced by India in promoting agricultural exports. What measures can be taken to enhance the competitiveness and sustainability of its agricultural export sector.

25. Critically examine the need for extended working hours as a means to enhance productivity and drive economic growth in India.