



# Monthly Editorial Consolidation



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## Fossil Fuel And Policy Dilemma

This article is based on **The agenda for Petroleum Minister Hardeep Singh Puri** which was published in *The Indian Express* on 30/08/2021. It talks about the policy challenges faced by India with respect to crude oil import and utilisation.

**Tags:** Indian Economy, Gs Paper-3, Growth & Development, Mineral & Energy Resources, Conservation of Resources, Government Policies & Interventions, GS Paper - 2

The spread and speed of the destruction caused by climate change presents the **Ministry of Petroleum and Natural Gas** a policy dilemma, if not a moral one.

Dilemma is how to redefine the supply-side priorities in the face of the imperatives of **Atma Nirbharta (self Sufficiency)** when about 85% fossil fuels are still imported.

Thus, there is a need to look into various measures that can be taken by the ministry of Petroleum and Natural Gas in order to bridge the demand supply gap.

### Issues Related to Crude Oil Management

- **Balancing Environment With Extraction:** Indian oil and gas industry leaders are faced with the twin challenge of responding to the **changing environment, while sticking to the commitment** of reduction of fossil fuel consumption.
- **Import Dependent:** The Indian economy is dependent on fossil fuels and there is no discernible end in sight to this dependence.
  - India imports approximately 85% of its crude oil requirements and is exposed to the volatility of the international oil market.
  - Moreover, a major chunk comes from the Middle East, predominantly **Saudi Arabia, Iraq and Iran**, which faces deep political and social fault lines and there is no knowing when our supply lines might get ruptured.
- **Issues With Exploration:** There have been few substantive commercial discoveries in recent years, in large part because the bulk of the reserves are

in **complex geological structures and harsh terrain** (Himalayan foothills or deep waters offshore).

- They are difficult to find but even when found, the costs incurred are often so high that except in market conditions of high prices, the discovery is not commercially viable.
- **Structural Challenges:** In 2021 structural changes are brought by the **Covid-19 pandemic**. Some are mentioned in the Graph1.

### Way Forward

- **Rationalise Domestic Exploration:** India should scale up the harnessing of its indigenous petroleum resources by intensifying exploration, but resources indulged in it should be properly managed.
  - As the exploration has its own challenges, after rationalisation the resources earmarked for exploration can be deployed more productively elsewhere.
- **Improving The Productivity And Efficiency:** Companies such as ONGC should allocate increasing resources to improving the productivity of its producing fields. The average oil recovery rate in India is around 28%. That is, for every 100 molecules discovered, only 28 are monetised.
  - The global average is around 45% for fields of comparable geology.
  - The recovery rate may be better today but if there is still a wide gap, the application of **Enhanced Oil Recovery (EOR) technology** offers a relatively low-risk avenue for increasing domestic production.
- **Need For a Contingency Plan:** India currently has strategic reserves equivalent to 12 days of imports. The government has approved plans to increase this buffer to 25 days.
  - By comparison, China, the EU, South Korea and Japan hold between 70-100 days of reserves.
  - This should be done by constructing a cavern in Jamnagar, the entrepot that receives approximately

### Structural challenges in 2021

Graph 1

Refining operation & inventory management

Dual shock from both demand and supply

Uncertain customer behavior – new normal

Micro marketing may be a choice or the norm?

Pressure on margin shareholders' different expectation

Price sensitivity and societal pressure

Limited crude price stability

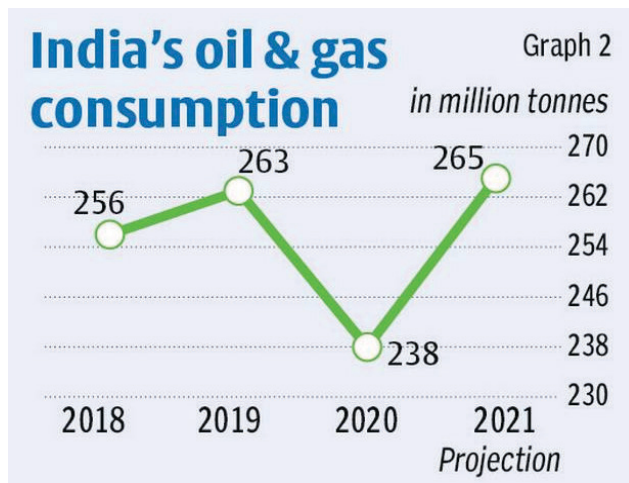
Geo-politics, cut in E&P investment, US sanctions...?

Talent and people health management

Mental health of people, keeping them energised...

60% of our crude oil imports and is well connected through tanks and pipelines to the hinterland refineries.

- **Restructure And Reorganise Public Sector Petroleum Companies:** The upstream assets should be consolidated under ONGC (the upstream assets of BPCL, IOC, HPCL, and GAIL should pass onto ONGC) and GAIL should be changed into a public utility gas pipeline company.
  - This restructuring will help **cut back the “avoidable” costs** of intra-public sector competition, **reduce the inefficiencies of “sub scale” operations** and provide a focused platform for balancing the shorter-term need to provide secure and affordable hydrocarbons with the medium and longer-term imperative of developing clean energy.
- **Search For Alternatives:** These companies should be encouraged to look beyond hydrocarbons to build an **“Green energy” enterprise**.
  - Looking for other alternatives such as **methanol based economy and biomass**.



### Conclusion

Thus, all stakeholders should not work through the siloed prism of oil and natural gas. They should broaden the aperture and become the progenitor of the energy transition.

The dilemma referred to in the opening sentence will be easier to resolve if priorities are developed within the framework of clean energy.



## Parliamentary Disruption

This article is based on **More days is a solution for disruption of Parliament** which was published in *The Indian Express* on 03/08/2021. It talks about the issues of frequent disruptions in the Parliament and suggests solutions.

**Tags:** Indian Polity, GS Paper - 2, Parliament, State Legislature, Transparency & Accountability

Disruption is replacing discussion as the foundation of our legislative functioning. The passionate debate is taking place everywhere other than in Parliament.

Moreover, the government is considering curtailing the monsoon session of Parliament, if this happens, then all four sessions since last year would have been cut short. The first two because of **Covid-19**, 2021 budget session because of **campaigning in state elections**, and the **ongoing session on account of disruptions**.

Parliament's job is to conduct discussions, but in recent years Parliament proceedings are marred by frequent disruptions.

### Parliamentary Disruptions - Data

- A PRS (PRS Legislative Research) report says during the 15<sup>th</sup> Lok Sabha (2009-14), frequent disruptions of Parliamentary proceedings have resulted in the Lok Sabha working for 61% and Rajya Sabha for 66% of its scheduled time.
- Another PRS report said, the 16<sup>th</sup> Lok Sabha (2014-19) lost 16% of its scheduled time to disruptions, better than the 15<sup>th</sup> Lok Sabha (37%), but worse than the 14<sup>th</sup> Lok Sabha (13%).
- The Rajya Sabha lost 36% of its scheduled time. In the 15<sup>th</sup> and 14<sup>th</sup> Lok Sabhas, it had lost 32% and 14% of its scheduled time respectively.

### Reasons for Disruption

- **Discussion on Matters of Controversy and Public Importance:** It appears that a number of disruptions in Parliament stem from discussions on either **listed topics that are controversial**, or **unlisted matters that are of public importance**.
  - The matters such as the **Pegasus Project, Citizenship Amendment Act, 2019** are such examples of causing disruptions.
- **Disruptions May Help Ruling Party Evade Responsibility:** The maximum number of disruptions have been found to take place in the **Question Hour** and the **Zero Hour**.
  - While these disruptions are largely attributable to the behaviour of members of the opposition, they may also be a consequence of executive action.
- **Lack of Dedicated Time For Unlisted Discussion:** Disruptions also get triggered due to lack of adequate time for raising questions and objections in respect of matters that are not listed for discussion in a particular, or during a particular session.
- **Scarce Resort to Disciplinary Powers:** Another systemic reason why disruptions are not effectively prevented relates to the scarce resort to disciplinary powers by

the Speaker of the Lok Sabha and the Chairman of the Rajya Sabha.

- As a result, most members engaging in disorderly conduct are neither deterred nor restrained from engaging in such conduct.
- **Other Reasons:** In 2001, a conference was held in the Central Hall of Parliament to discuss discipline and decorum in legislatures. It identified four reasons behind the disorderly conduct by MPs.
  - Dissatisfaction in MPs because of inadequate time for airing their grievances.
  - An unresponsive attitude of the government and the retaliatory posture of the treasury benches.
  - Political parties not adhering to parliamentary norms and disciplining their members.
  - The absence of prompt action against disrupting MPs under the legislature's rules.
- **Party Politics:** When a contentious issue crops up, the government dithers on debating it, leading to Opposition MPs violating the conduct rules and disrupting the proceedings of Parliament.
  - Since they have the support of their parties in breaking the rules, the threat of suspension from the House does not deter them.

### Issues

- **Infringement of Constitutional Right:** The right to ask questions flows from **Article 75** of Indian constitution which says that the council of ministers shall be collectively responsible to the House of the people and people of the country in general.
  - Thus, the curtailment of question hour and zero hour undermines the principle of parliamentary oversight over executive.
- **A Hindrance To Representative Democracy:** Parliamentary discussion is a manifestation of a representative kind of democracy in operation, in the sense that representation of the people directly questions the government on matters of governance.

### Way Forward

- **Code of Conduct:** To curb disorder in Parliament there is a need for strict enforcement of code of conduct for MPs and MLAs.
  - These ideas are not new. For example, the Lok Sabha has had a simple code of conduct for its MPs since 1952. Newer forms of protest led to the updating of these rules in 1989.
  - The Lok Sabha Speaker should suspend MPs not following such codes and obstructing the Houses' business.

- **Increasing Number of Working Days:** Recommended by the 2001 conference, there should be an increase in the working days of Parliament. It resolved that Parliament should meet for 110 days every year and state legislative assemblies for 90 days.
  - In the United Kingdom, where Parliament meets over 100 days a year, opposition parties get 20 days on which they decide the agenda for discussion in Parliament. Canada also has a similar concept of opposition days.
- **Democratic Participation:** Not all disruptions in the Parliament are necessarily counter-productive. Thus, the government of the day needs to be more democratic and allow the opposition to put their ideas in free manner.
- **Proposals in Individual Capacity:**
  - In 2019, Rajya Sabha Deputy Chairperson mooted an idea of evolving a '**Parliament Disruption Index**' to monitor disruptions in Parliament and state legislature.
  - In the Lok Sabha, some members proposed **automatic suspension of members who cause disruption** and rush to the Well of the House.
  - But the proposals are still in a nascent stage.
- **Productivity Meter:** The overall productivity of the session also can be studied and disseminated to the public on a weekly basis.
  - For this, a "Productivity Meter" could be created which would take into consideration the number of hours that were wasted on disruptions and adjournments, and monitor the productivity of the day-to-day working of both Houses of Parliament.

### Conclusion

Democracy is judged by the debate it encourages and sustains. More strengthening of the Parliament is the solution to prevent disruption of its proceedings. There should be a deepening of its role as the forum for deliberation on critical national issues.



## Agenda For The Ministry of Cooperation

*This article is based on **An agenda for the ministry of cooperation** which was published in the Hindustan Times on 04/08/2021. It talks about the challenges and work ahead for the newly framed ministry of Cooperation.*

**Tags:** Indian Polity, GS Paper - 2, GS Paper - 3, Government Policies & Interventions

**Cooperatives**, as an organic idea and an organisational platform, are relevant, if re-imagined and implemented skilfully.

Carving out a **ministry for cooperation** must be understood in the context of the cooperative sector's immense transformative power that has not been optimally realised so far.

The objective of the new ministry is to **strive towards creating a legal, administrative and policy framework**, facilitating the "**ease of doing business**" for cooperatives and helping the emergence of "**multi state cooperative societies**".

The emphasis is on transforming cooperatives from small entities to big enterprises, facilitated and sustained by enabling businesses to address the problem of entry and growth barriers.

However, the ministry of cooperation will have to take various measures to bring the most benefits of the cooperative societies.

### **Significance of Cooperatives**

- **Protect Vulnerable From Market Distortion:** Co-operation is essential because the market cannot take care of the needs of the vulnerable. Wherever cooperatives have succeeded, they have addressed the issue of market distortions.
  - They have also compressed the supply chain by removing intermediaries, ensuring better prices for producers and competitive rates for consumers.
- **Prevent Distress Sales:** Cooperative societies, equipped with basic infrastructure and financial resources, prevent distress sales and ensure bargaining power.
- **Decentralised Development:** They have the potential to realise the paradigm of decentralised development.
  - Just as **panchayati raj institutions(PRI)** carry forward decentralised rural development, cooperative societies can become the medium to cater to business requirements.
- **Successful Business Models:** Exist in at least two sectors — **dairy and fertilisers**.
  - Organic leadership, the involvement of members, techno-managerial efficiency, economies of scale, product diversification, culture of innovation, commitment to customers and sustained brand promotion are factors that account for their success.
  - These practices can be replicated for other sectors as well.

### **Challenges With Cooperative Society**

- **Mismanagement and Manipulation:**

- A hugely large membership turns out to be mismanaged unless some secure methods are employed to manage such co-operatives.
- In the elections to the governing bodies, money became such a powerful tool that the top posts of chairman and vice-chairman usually went to the richest farmers who manipulated the organization for their benefits.

- **Lack of Awareness:**

- People are not well informed about the objectives of the Movement, rules and regulations of co-operative institutions.

- **Restricted Coverage:**

- Most of these societies are confined to a few members and their operations extended to only one or two villages.

- **Functional Weakness:**

- The Co-operative Movement has suffered from inadequacy of trained personnel.

### **Way Forward**

- **Caters Local As Well As National Need:** At the local level, cooperative societies should continue to cater to the needs of their members across segments of the primary sector.
  - At the national level, they must emerge as organisations capable of competing with the behemoths of the private sector.
- **Scale of Economy:** Segments of the primary sector can be successfully scaled up and turned into cooperatives, followed by segments of secondary and tertiary sectors.
- **Promote Brand of Cooperative:** There will also be a need to promote the brand of cooperatives through upgradation and value addition to the quality of products and services delivered by them.
  - This will entail expanding production, operation, distribution and scale of the economy.
- **Flexibility to Keep Abreast With Business Environment:** The Act, rules and by-laws will be required to provide flexibility to keep abreast with the business environment.
  - Further, the management of multi state cooperative societies will have to be vested in the hands of market-driven managers capable of ensuring efficiency.
  - The board of directors of multi state cooperative societies will have the responsibility to oversee business decisions to ensure they don't lose sight of ethics and social responsibility.
- **Avoiding Overregulation:** The equation between the government and cooperatives, **between control and autonomy**, is fraught with dilemma.

- With over-regulation, cooperatives will end up losing their autonomous character.
- With the government leaving cooperative societies to fend for themselves, these societies can flounder. It is difficult but desirable that this dichotomy is resolved.
- **Transparency:** The government will have to ensure that processes are transparent. The integrity of the managing committees and their operational autonomy is necessary.
- **Training And Capacity Building:** Cooperative departments will have to evaluate the training needs of cooperatives, along with designing and imparting training interventions to ensure that they are at par with the current business environment.

### Conclusion

All stakeholders including the government, institutions for cooperative development and the entire cooperative movement will need to collaborate to achieve the aim of community- and people-centric development involving modern business practices at the local and national level.

It is hoped that the new ministry will create the necessary synergy in the system and will act as a force multiplier.



## Thawing Permafrost

*This article is based on **Will the next killer disease originate in the Arctic?** which was published in the Hindustan Times on 05/08/2021. It talks about the concerns emerging from thawing permafrost and the way forward.*

**Tags:** Biodiversity & Environment, GS Paper - 3, Climate Change, International Treaties & Agreements

The Earth faces a looming crisis. Globally, temperatures are rising. **Heatwaves, droughts, ocean acidification,** and **rising sea levels** are on the horizon.

Around 90% of the world lives in the northern hemisphere with major population centres in the **tropical and subtropical regions**. These regions will be severely affected.

Scientists are also concerned about the unforeseen problems that can emerge from thawing of **permafrost** and glacial ice.

### Associated Issues With The Thawing of Permafrost

- **Accentuate Climate Change:** In the Arctic, temperatures are rising twice as fast in other parts of the world.

As a result, the permafrost that has remained frozen throughout the year is thawing.

- The thawing of permafrost will worsen the effects of the climate crisis, because **stored carbon is released** in the process.
- Likewise, the loss of sea ice and ice sheets covering land will accelerate the rise in temperatures (**As Ice has more albedo than Water**).

#### Permafrost

- Permafrost is any ground that remains completely frozen — 32°F (0°C) or colder—for at least two years straight.
- These permanently frozen grounds are most common in regions with high mountains and in Earth's higher latitudes—near the North and South Poles.
- Permafrost covers large regions of the Earth. Almost a quarter of the land area in the Northern Hemisphere has permafrost underneath. Although the ground is frozen, permafrost regions are not always covered in snow.

- **Tropical Challenges Spreading Up Into Higher Latitudes:** The diseases that have typically afflicted the equatorial belt are spreading up into higher latitudes. Mosquitoes, ticks, and other insects spread many of these diseases.

- The **West Nile virus** causes hundreds of deaths every year in the United States, where it was first reported in 1999.

- With rising temperatures, West Nile will become **more prevalent in Canada**, including parts of the Arctic.

- **Prevalence of Zoonotic Diseases:** Warming temperatures are also causing changes in the habitats of wild birds such as ducks and geese that can carry avian flu.

- Earlier, Russia has reported the first case of the **H5N8 avian flu** passing from birds to humans.

- Changes in habitats of other wild animals such as foxes might also increase the geographic distribution of rabies.

- **Rise of Viruses And Bacteria:** Scientists are also concerned about the rise of viruses and bacteria from thawing permafrost and ice. In the summer of 2016, there was an outbreak of anthrax in a remote part of Siberia.

- Dozens of people were infected, and a young boy was killed. Around 2,300 reindeer perished in the outbreak.

- **Spread:**

- Anthrax is a serious infectious disease **caused by bacteria** that can remain dormant as spores.

- Spores of anthrax can remain **viable for at least a few decades** in frozen soil and ice.
  - As carcasses of infected animals (including those of extinct mammoths) thaw, there can be more disease outbreaks.
- **Epidemic And Pandemic:** Another concern is the emergence of viruses and bacteria with the potential to cause epidemics. These disease-causing microbes might be dormant for hundreds or even thousands of years.
- Genetic material from the H1N1 influenza virus that caused the **Spanish Flu pandemic** of 1918, as well as that of smallpox have been recovered from permafrost.
  - The reemergence of a virus like smallpox (which have been eradicated) would be disturbing since humans are no longer routinely vaccinated.
- **Virus Samples From Tibetan Plateau:** These conditions are not restricted to the Arctic alone. Glacial ice that has persisted for thousands of years is melting.
- Recently, **15,000-year-old-viruses** (including **28 different kinds identified** for the first time) were found in **glacial ice from the Tibetan Plateau**.

### Way Forward

- **Stop Rapid Climate Change:** In order to curtail climate change and save the permafrost, it is indispensable that global CO<sub>2</sub> emissions be reduced by 45% over the next decade, and that they fall to zero after 2050.
- To mitigate climate change, there is a need to take a global collective action. If one country cuts its emissions, that is going to be of little use if the others do not follow suit.
- **Slow Down Erosion:** The scientific journal Nature suggested building a 100-metre-long dam in front of the Jakobshavn glacier (Greenland), the worst affected by Arctic melting, to contain its erosion.
- **Combine Artificial Icebergs:** Indonesian architect has won an award for his project **Refreeze the Arctic**, which consists of collecting water from melted glaciers, desalinating it and refreezing it to create large hexagonal ice blocks.
- Thanks to their shape, these icebergs could then be combined to create frozen masses.
- **Increase Their Thickness:** Some researchers propose a solution to **manufacture more ice**. Their proposal consists of collecting ice from below the glacier through pumps driven by wind power to spread it over the upper ice caps, so that it will freeze, thus strengthening the consistency.

- **People's Awareness:** The tundra and the permafrost beneath it may seem far away, but no matter where we live, the everyday choices we make contribute to climate change.
- By reducing our **carbon footprint**, investing in **energy-efficient products**, and **supporting climate-friendly businesses, legislation, and policies**, we can help preserve the world's permafrost and avert a vicious cycle of an ever-warming planet.

### Conclusion

Every country needs to move climate change, global warming to the top of our foreign policy agenda. This is a critical move we need to make and the sooner we do it, the greater is the benefit that we will draw from our own climate actions.



## India and Food Insecurity

*This article is based upon "State of Food Insecurity" which was published in the Indian Express on 06/08/2021. It addresses the issue of unavailability of food to the people of India despite no lack in availability of food resources and the impact of Covid-19 that further deteriorated the status of food security in India.*

**Tags:** Social Justice, GS Paper 1, Population and Associated Issues, GS Paper 2, Health, GS Paper 3, Public Distribution System (PDS), Buffer Stocks & Food Security, Growth & Development

India was home to the largest number of undernourished people in the world even before the **Covid-19 pandemic**. However, the irony is that the government had an unprecedented 100 million tonnes of food grains in its godowns — larger than the food stocks of any country.

The **latest edition of the State of Food Security and Nutrition in the World (SOFI) report (2021)**, released jointly by five UN organisations, reveals that the pandemic and failure on the part of the state to combat its effects, has led to a significant increase in the prevalence of hunger and food insecurity in the country.

India, as a country with the largest food stock in the world (as of July, 2021), there is no need for the government to ensure additional food stocks but an effective implementation of the already existing policies that facilitate food distribution among the needy ones.

### India's Food Insecurity as per SOFI

- **SOFI Report 2021:** According to the data presented in the report, the prevalence of **moderate to severe food insecurity in India rose by about 6.8 percentage points** in 2018-20.



- **Increase in Food Security:** In absolute terms, the number of persons facing moderate to severe food insecurity has increased by about 9.7 crore since the outbreak of Covid.
- **Parameters of Estimation:** Estimates on food insecurity presented in the SOFI report are based on two globally-accepted indicators of food insecurity:
  - **Prevalence of Undernourishment (PoU)**
  - **Prevalence of Moderate and Severe Food Insecurity (PMSFI)**
- **India and Food Insecurity:** India, the country with the largest stock of grain in the world; 120 million tonnes (as of July 1, 2021) **accounts for a quarter of the world's food-insecure population.**
  - Estimates show that, in 2020, over 237 crore people were grappling with food insecurity globally, an increase of about 32 crore from 2019.
  - South Asia alone accounts for 36% of global food insecurity.

### **Food Insecurity and Associated Issues**

- **Prevalence of Undernourishment (PoU):** The Prevalence of Undernourishment (PoU) estimates are based on national consumption surveys of the countries showing per-capita supply of food.
  - However, these consumption surveys are not available every year and updated only once in a few years.
  - Hence, PoU is not sensitive enough to adequately capture recent disruptions such as those caused by the pandemic.
- **No Recent Consumption Surveys by India** The overall food supply was resilient despite the pandemic, hence, consumption surveys were not conducted by most countries.
  - Since the outbreak of the pandemic, the Indian government has not undertaken any official assessment of food insecurity in the country.
  - The increase in prevalence of hunger captured by PoU from 14% in 2019 to 15.3% in 2020 for India is likely to be an underestimate.
  - In this situation, the PMFSI estimates are the only national-level valid and reliable estimates available on the impact of the pandemic on food insecurity in India.
- **Denial of Situation by the Government:** The Government of India has not only avoided its own assessment of consumption/ food security surveys, but also it does not approve the publication of results based on the Gallup World Poll.

- **Socio-Economic Distress:** Despite being self-sufficient in the production of major food commodities, problems of hunger and food insecurity are grave in India because of widespread economic distress, high unemployment and high levels of inequality.
  - A large proportion of the poor is dependent on the informal economy in which incomes are too low and uncertain.
    - Unemployment rates have also risen sharply over the last few years.
  - High (and fluctuating) food prices, shrinking public investment and the economic slowdown have compounded the distress among working classes and the peasantry.
    - With low and uncertain incomes, families dependent on the informal economy do not have assured access to adequate and nutritious food.
- **Impact of Pandemic:** PMSFI estimates thus derived show that there were about 43 crore of moderate to severe food-insecure people in India in 2019 which increase to 52 crore by 2020 as a result of the pandemic-related disruptions
  - In terms of prevalence rates, this food insecurity increased from about 31.6% in 2019 to 38.4% in 2021.
  - The long standing problems of unemployment, inflation, informal sector employment and economic slowdown were aggravated in 2020 due to lack of preparation to deal with the pandemic.
- **Inadequate Distribution of Food through PDS:** Deserving beneficiaries of the subsidy are excluded on the basis of non-ownership of below poverty line (BPL) status, as the criterion for identifying a household as BPL is arbitrary and varies from state to state.

### **Way Forward**

- **Regular Monitoring of Food Security:** The sharp increase in food insecurity points to an urgent need for the government to establish systems for regular monitoring of the food security situation in the country.
- **Enlarging the Scope of Food Security Schemes:** Universalising the access to the **Public Distribution System** and **One Nation One Ration Card scheme (ONORC)**, at least during the pandemic.
  - The PDS should be strengthened and the food basket can be enlarged to include millets, pulses and oil.
    - This may certainly help in addressing the issue of hidden hunger.
  - Everyone, irrespective of whether they have a ration card or not, should be allowed to take subsidised grain from ration shops.

- With almost 120 million tonnes of grain currently lying with the government, it requires almost no additional resources but better implementation of schemes.
- **Bringing Development and Humanitarian Policies Together:** Integrating humanitarian, development and peacebuilding policies in required areas to prevent families from selling meagre assets in exchange for food.
- **Lowering the Cost of Nutritious Food:** Intervening along supply chains to lower the cost of nutritious foods such as by encouraging the production of **biofortified crops** or making it easier for fruit and vegetable growers to access markets.

### Conclusion

- Right to food is not only a statutory right but also a human right. As a state party to the **Universal Declaration of Human Rights**, India has the obligation to ensure the right to be free from hunger and the right to adequate food for all of its citizens.
- Due to the disruption caused by Covid-19, there is a need to incorporate a broader definition of food security.
  - The resources to end or at least minimise food insecurity, exist with the government already. All that is needed is to utilise them up to their maximum advantage.



## Digital Transformation in South Asia

*This article is based on **South Asia's emerging digital transformation** which was published in *The Hindu* on 07/08/2021. It talks about the issues prevalent in South Asia and how digital transformation can help tackle such issues.*

**Tags:** Science & Technology, GS Paper - 2, Government Policies & Interventions, GS Paper - 3, IT & Computers, India and its Neighbourhood

**Covid-19 pandemic** has forced South Asia to take a quantum leap in digitalisation. The shift to remote work and education has propelled an unprecedented spike in Internet penetration, with even smaller nations such as Nepal recording almost an 11% increase in broadband Internet users.

For a region with old and weak public health infrastructure, the digitisation of health-care services was a watershed moment, providing novel solutions to the

public health crises. In India, Covid-19 accelerated the launch of the **National Digital Health Mission**, enhancing the accessibility and the efficiency of health-care services by creating a unique health ID for every citizen.

The pandemic-induced suspension of bricks-and-mortar businesses led to slowdown of the economic growth. In this context, it is imperative for the South Asian region to adapt to technological advancement in order to collectively fight against the main enemy (poverty) of the region.

### Technological Challenges In South Asia

- The region shares many common challenges – **climate change, natural disasters, poverty, illiteracy, and social and gender imbalances**.
- **Digital Divide:** As one of the **world's poorest regions**, a wide digital divide persists in access and affordability, between and within the countries of South Asia.
  - Despite having the **world's second largest online market**, 50% of India's population are without Internet with 59% for Bangladesh and 65% for Pakistan.
- **Exclusion of Women And Child:** With monetary and health assistance schemes distributed online, **51% of South Asian women were excluded from social protection** measures during the pandemic.
  - Children too were at the receiving end, with 88% lacking access to Internet powered home schooling.
  - This disruption could permanently put children out of school, place girls at risk of early marriage, and push poor children into child labour costing economies billions of dollars in future earnings.
- **Businesses Suffered Due to Gap in Digital Solutions:** Many South Asian firms failed to embrace e-commerce or other cloud-based technologies to survive the financial chaos of the novel coronavirus pandemic.
  - The region recorded a **64% decline in sales**, with small and women-led firms faring the worst.
  - With Covid-19 transforming work life, the acute skills gap among youth will continue, creating unemployment.

### Role of Digital Transformation in the Development of the Region

- **Drive Development Agenda:** Digital transformation is a global imperative with adoption of advanced technologies such as **cloud computing, artificial intelligence, the Internet of things, Big Data**, etc., key to success.
  - From banking to manufacturing and retails, the role of digital technology is too important to

be overlooked as countries embrace the digital revolution to drive their development agenda.

- **E-commerce** could drive the post-pandemic growth in South Asia, providing new business opportunities and access to larger markets.
  - In India, e-commerce could create a million jobs by 2030 and be worth USD 200 billion by 2026.
  - **Fintech** could drive significant growth and reduce poverty by building **financial inclusion**.
  - A timely, inclusive, and sustainable digital transformation can not only bolster productivity and growth but also serve as a panacea for some of the region's socio-economic divides.
- **Example of Asian Economies:** At the forefront of Asian digitalisation are countries such as Singapore, Japan, and South Korea recognised as global technological hubs.
  - Increased smartphone and Internet penetration and availability of trusted digital payment platforms, China's e-commerce industry is said to reach USD 3 trillion in 2024.
  - The digital boom in the **Association of Southeast Asian Nations (ASEAN)** economies is pushing a **"common market"** initiative, fostering regional economic integration and enhancing global competitiveness.

### Way Forward

- **Need For a Robust Digital Infrastructure:** To reap the dividends of digital transformation, South Asia needs to address legal, regulatory and policy gaps as well as boost digital skills.
  - A robust digital infrastructure is a sine qua non and there exists a huge financing gap.
  - **India alone** needs an **annual investment of USD 35 billion** to be in the top five global digital economy and public-private partnership needs to be leveraged for the region's digital infrastructure financing.
- **Need For Proper Regulations:** Regulatory roadblocks need to be addressed as e-commerce regulations are weak in South Asia.
  - For the sector to drive growth, issues such as **customer protection, digital and market access regulation**, etc. need to be addressed.
- **Universal Digital Literacy:** There would be no digital revolution without **universal digital literacy**.
  - Governments and businesses need to come together to revamp the education system to meet the demand for digital skills and online platforms.
- **Need For Cyber Security:** The crossflow of data and personal information calls for stringent **cybersecurity** measures.

- **Increase Inter-regional Trade:** In South Asia, only a third of the inter-regional trade potential has been exploited, losing out on USD 23 billion in revenues.
  - By addressing issues such as regulatory barriers on currency flows inhibiting online payment to transport-related constraints for cross-border e-commerce activities, South Asia can emulate the European Union's Digital Single Market Proposal.
- **Collaboration needed:** Concerted collaboration at all levels is needed to push South Asia out of stagnancy and towards a digital future of shared prosperity.
  - The right blend of regulatory and physical infrastructure, skill sets and regional cooperation can lead toward a digital utopia whereas, the lack of which can breed a dystopian tomorrow.
  - Adequate support is needed for those who risk falling through the net of digital progress.
  - A shared **"digital vision"** could place the region on the right track towards the Fourth Industrial Revolution.

### Conclusion

During the pandemic, South Asian nations joined hands to collectively battle the crises by contributing towards a **Covid-19 emergency fund**, exchanging data and information on health surveillance, sharing research findings, and developing an online learning platform for health workers.

If the South Asian nations can start walking the talk, partnership for a successful digital revolution is plausible. It will need vision, wisdom, and commitment at the highest level of the region's political leadership.



## Aging Thermal Power Plants: Way Forward

*This article is based on **Revisit the idea of 'aging out' India's coal plants**, which was published in The Hindu on 09/08/2021. It talks about the idea of retiring old coal based power plants and the future implications.*

**Tags:** Indian Economy, GS Paper - 3, Solar Energy, Renewable Energy, Infrastructure, Government Policies & Interventions

As part of the Union Budget address for 2020-21, the Union Finance Minister said that the **shutting down of old coal power plants**, which are major contributors to emissions, will aid the achievement of India's **Nationally Determined Contributions**.

Since plants older than 25 years make up around 20% of the total installed thermal capacity in the country and play a significant role in the country's power supply, decisions regarding their retirement merit finer scrutiny to see if the claimed benefits really accrue.

### Advantages of Shutting Down

- **Economic Advantage:** It is argued that the availability of under-utilised newer (and presumably more efficient) coal-based capacity means that shutting down older inefficient plants would lead to **improved efficiencies, reduced coal usage, and hence, cost savings.**
- **Difficulty in Pollution Control mechanism:** It would be uneconomical for old plants to install **pollution control** equipment required to meet the emission standards announced by the Ministry of Environment, Climate change and Forest and hence it would be better to retire them.
- **Decline in Land Degradation:** Untreated air and water pollutants from coal power plants, especially older ones affect the water and the flora and fauna of adjoining areas making them unfit for living or livelihood activities.
- **Shutting down old coal-based power plants** and freezing those under construction can save over Rs. 1.45 lakh crore at a time when electricity demand has been hit due to **Covid-19.**
  - The savings will **accrue from avoiding retrofitting old plants** to reduce the toxicity from their emissions.
- Replacing electricity from older coal plants with **cheaper renewable sources** will reduce the gap between cost of supply and revenue generation for discoms.

### Risks Associated with Shutting Down

- **Not Much Saving:** Analysis suggests that the total savings in generation cost from shutting down plants older than 25 years would be less than Rs. 5,000 crore annually, which is just 2% of the total power generation cost.
  - These savings may not be sufficient to even pay for the fixed costs (such as debt repayment) that would have to be paid anyway, even if the plants are prematurely retired.
  - Similarly, savings in coal consumption by replacing generation from plants older than 25 years with newer coal plants are also likely to be only in the 1%-2% range.
- **Environmental Benefits of Some Old Plants:** There are some old plants that may continue to be economically viable even if they install pollution control equipment, as their current fixed costs (which would increase with pollution control equipment installation) are very low.

- Moreover, about half the coal capacity older than 25 years has already issued tenders for pollution control equipment installation.
- **Need of Power Sector:** There is lack of power availability in India, and the limited savings associated with early retirement of coal plants may not be worth the risks.
  - To support the growing intermittent renewable generation in the sector, there is an increasing need for capacity that can provide **flexibility, balancing, and ancillary services.**
  - Old thermal capacity, with lower fixed costs, is a prime candidate to play this role until other technologies (such as storage) can replace them at scale.
  - Further, the capacity value of the old capacity is critical to meet instantaneous peak load, and to meet load when renewable energy is unavailable.
- **Political Economic Risk:** Aggressive early retirement of coal-based capacity, without detailed analyses, could result in real or perceived electricity shortage in some States, leading to calls for investments in coal-based base-load capacity by State-owned entities.
  - About 65 gigawatts (GW) of thermal capacity is already in the pipeline, of which about 35 GW is in various stages of construction.
  - This is likely in excess of what the country needs, and further addition to it, driven by State political economy considerations, will lead to stranded assets and locked-in resources.
- **More Analysis And Research Required Before Final Decision:** Using age as the only lever to drive these decisions is too blunt an instrument, and can prove counterproductive.
  - Instead, a more disaggregated and nuanced analysis, considering the various technical, economic and operating characteristics of individual plants and units, while also accounting for aspects such as intermittency of renewables, growing demand, and need to meet emission norms, would be appropriate to make retirement-related decisions.
  - **E.g.**
    - For instance, plants such as **Rihand, Singrauli** (both Uttar Pradesh), and **Vindhyanchal** (Madhya Pradesh), are all over 30 years old and have very low generation costs of around ₹1.7/kWh, which is lower than the national average.
    - This may be due to **locational advantage rather than efficiency**, as older plants are likely to be located closer to the coal source, reducing coal transport costs. However, this just highlights the

complexity of the issue, since efficiency does not naturally translate to savings.

### Way Forward

- **Strategic Decommissioning of Old and Inefficient Power Plants:** It may be prudent to let old capacity fade away in due course and saving some of them as they are efficient, while focusing on such detailed analysis and weeding out the needless capacity in the pipeline, to derive long-term economic and environmental benefits.
- **Cost Effective Solar Plants:** The average cost of coal-fired projects is Rs.4 per unit and generally sees an upward escalation, whereas new solar power plants are being bid out at less than Rs.3 per unit.
- **Encourage Private Sector:** New private competition can bring new capital and more innovation.
  - New coal-fired power plants are still being financed so that the private sector is not building any coal-based power plants at all; only the public sector power companies are doing so. These PSU thermal plants are financed by public sector banks and largely on taxpayers' money.
- **UDAY 2.0:** Government's announcement of the launch of UDAY 2.0 which seeks installation of smart prepaid meters, prompt payment by discoms, making coal available for short term and reviving gas-based plants is a step in the right direction.
- **Flexible Contracts:** Long-term supply contracts need flexibility for public utilities to adapt to unforeseen situations such as a Covid collapse in demand.

### Conclusion

We need an **energy transformation** through which we would realise the co-benefits of local and global emission reduction. We also need the right to energy for all, as energy poverty and inequity is not acceptable.

Diversified energy mix is what India needs to focus on, no doubt solar and wind have a lot of potential, Hydrogen would also be a game changer in Indian energy transition space.



## Diplomacy And Strong Counter-measures

*This article is based on **To take on China, rely on diplomacy and strong counter-measures** which was published in the Hindustan Times on 10/08/2021. It talks about the need for diplomacy as well as strong counter measures in resolving crises across the LAC.*

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

The agreement for mutual disengagement of troops by China and India at the friction point of Gogra in eastern Ladakh is a step forward for restoring the status quo ante of April 2020 (**Galwan Clash**), when Chinese forces made a series of preplanned intrusions across the **Line of Actual Control (LAC)**.

Including Gogra, Galwan and Pangong Tso, the two sides have now stepped back at three contested points, while the standoff continues at other strategic locations and warrants speedy resolution. There are lessons to be learnt from the three areas where China and India have disengaged.



### Negotiations: Lesson Learnt

- **Sustained Diplomacy Yields Dividends:** Due to several rounds of talks, the two Asian giants have avoided an intensified conflict that seemed a possibility after the **Galwan clash**.
  - The interaction of two militaries at **LAC** have conveyed in direct terms what each side wants and prefers.
  - Moreover, the involvement of the US in favour of India vis-à-vis China also helped lower the heat.
- **Diplomatic Parleys are Necessary But Not Sufficient:** Without a demonstration of military deterrence and resolve, an aggressive and expansive China cannot be sweet-talked into dismantling its bunkers and semi-permanent structures or driving back its tanks and armoured vehicles to pre-April 2020 positions.
  - China has withdrawn from three encroached portions only after witnessing India's willingness to use countervailing force, do mirror deployment or outnumber the Chinese military at some points, and mount counter-offensives across what China claims to be its side of LAC.
- **Offensive Defence:** The concept of "offensive defence" has guided India's strategic infrastructure-building and force projection at LAC throughout the crisis, and this has compelled China to recalculate the costs and benefits of its expansionism.

- **Peace Through Strength:** Since diplomatic resolution of the crisis is dependent on military operations and shows strategic determination, India must persist on the path of peace through strength.
  - This may include activating and operationalising **Quad** to apply multilateral counterbalancing pressure in the **Indo-Pacific**; imposing **greater barriers to Chinese goods**, technology and investments; and **reopening the sensitive issues** of the status of Tibet and Taiwan.

### Challenges

- **Suspicious of Each Other's Intentions:** While India and China have long-term suspicions of each other's intentions, goals and international alignments, the LAC crisis deepens.
  - With approximately 50,000 troops on each side remaining at LAC, the potential for fresh violence cannot be ruled out.
- **Contest For Power:** The two neighbours will not stop competing for power and influence in Asia and beyond, but they can manage the disputed border situation from sliding into war.
- **Deepening India-US relations:** A difficult path lies ahead in India-China relations, especially as the India-United States (US) strategic partnership is maturing and US-China ties are plumbing the depths.
- **Challenges of Military Proactiveness:** While Indian military proactiveness is an imperative to deal with the crisis, this kind of equilibrium is unstable and risks **unwarranted escalation**.

### Way Forward

- **Keep Up the consultation Momentum:** It is imperative for the two sides to cherish the hard-won relaxation, and work together to consolidate the progress, keep up the consultation momentum, further ease the situation, and improve the border management and control mechanisms.
- Both nations need to master the four keys of:
  - **Leading:** It means to reach consensus and guide the direction of the development of bilateral relations under the guidance of leaders from both nations.
  - **Transmitting:** It means to transmit the **leaders' consensus to all levels** and translate it into tangible cooperation and outcomes.
  - **Shaping:** It means to go beyond the mode of managing differences, shape bilateral relations actively and accumulate positive momentum.
  - **Integrating:** It means to strengthen **exchanges and cooperation**, promote **convergence** of interests and achieve common development.

- **Mutual Development:** As two big emerging economies, China and India need to pursue development alongside each other, move forward in partnership instead of hindrance, and work together for shared progress rather than erecting walls against each other.

### Conclusion

India does not have the option of shying away from Chinese policy toward it. Only a combination of bravery and wisdom can succeed in this long-drawn-out crisis.



## Resiliency of Global Trade

*This article is based on **Unpacking the resiliency of global trade, yet again** which was published in *The Hindu* on 11/08/2021. It talks about the global supply chain which has suffered due to the pandemic and ways forward to strengthen it.*

**Tags:** Indian Economy, GS Paper - 3, GS Paper - 2, Growth & Development, Liberalization, Effect of Policies & Politics of Countries on India's Interests, Regional Groupings, Deglobalisation & Protectionism

The devastating impact of **Covid-19 pandemic** has shrunk the world economy by 4.4% and global trade by 5.3%; job losses have been estimated to be to the tune of 75 million.

Around the world, countries have responded to pandemic-induced shortages with protectionist reactions and nationalist aspirations with the potential to disrupt complex cross-border supply chains.

There are unavoidable declines in trade and output will have painful consequences for households and businesses, on top of the human suffering caused by the disease itself.

Going by experiences, historic ruptures often generate and accelerate new global links that lay foundations for institutional changes, seeking enduring cooperation among nations.

### Building Back Better Global Economy

- The **Second World War** created sustaining multilateral institutions; besides the **United Nations**, the **Bretton Woods Institutions** such as **World Bank** and **International Monetary Fund (IMF)** and **International Trade Organisation (ITO)** were created to help rebuild the shattered post-war economy.
- The **General Agreement on Tariffs and Trade (GATT)** was negotiated in 1947 as a means to reduce barriers to international trade.

- The **oil shocks** of the 1970s led to the establishment of the **International Energy Agency (IEA)** in 1974 to manage oil supply disruptions and went on to create awareness on the need for global energy security.
- The **financial crisis of 2008** led to the **G20 Leaders Summit**, an elevation from the G20 Finance Ministers forum in 1999, in a bid to take cooperation beyond the G7 in a global quest to control inflation due to fiscal expansion.
- These developments had a consequential impact on global trade, with dramatic surges in volumes; from a mere USD 60.80 billion in 1950 to USD 19,014 billion in 2019.
- The patterns above leave much hope for optimism for global trade in the post **Covid-19** crisis in the collective belief that international trade is vital for development and prosperity, while competition is central to generating competence.

#### India's Outlook

- India's challenges during the Covid-19 pandemic have been no different from those faced by other countries: its GDP contracted by 7.3% according to the **National Statistical Office**; and about 10 million jobs were lost according to the Centre for Monitoring Indian Economy Pvt. Ltd.
- Trade remained subdued at USD 493 billion (goods at USD 290 billion and services at USD 203 billion).
- The projections of the IMF for India's economic growth ahead are positive and in line with the general trends world-wide, assuming that the widespread vaccination might limit the Covid-19 agony.
- India would need to remain focussed on value added products, beyond the traditional exports basket comprising refined petroleum products, pharma, gems and jewelry, textiles and garments, engineering items, rice, oil meals and marine products.

#### Issues With Global Trade Supply Chain

- **Disruption of Global Value Chain:** Covid-19 crisis is having devastating repercussions for corporations and businesses that have benefited from economic interdependence supported by cross-border supply chains.
  - China is the world's largest production base, and lies at the heart of many supply chains. Since the outbreak of this coronavirus, many companies that had come to depend on China were hard hit.
- **Halting of WTO talks:** This may indicate worse days ahead for the WTO, as trade rules have worked best when the global economy is booming and isn't facing a crisis.

- **Problem Faced by Emerging and Developing Economies:** The **United Nations Conference on Trade and Development** held that emerging and developing economies, which rely on export-led growth, will now be severely impacted as the global economy contracts and the world opts protectionism policies.
  - The **least developed countries** whose economies are driven by the sale of raw materials will also face hard consequences.

#### Way Forward

- **Stimulus Packages in Countries:** Global supply chains that have remained dormant for long can be made resilient by stimulus packages and forced savings. Such interventions are expected to help revive manufacturing with lower production costs, induce investments and promote technology transfers.
- **Start Negotiations Under WTO:** In a post Covid-19 world, members of the World Trade Organization should promote trade facilitating rules.
  - Mutually beneficial trade arrangements that seek deeper economic integration should be entered into at the bilateral and regional levels to create win-win situations for all stakeholders, including consumers, who tend to benefit from lowered barriers and harmonised standards.
- **Harness Technology:** Countries that harness technology are expected to dominate international trade in future with a transformational impact on the global economy.
  - Just as the steam engine in the 19<sup>th</sup> century and computing power in the 20<sup>th</sup> century, **data will be the main driver** of economic growth in the 21<sup>st</sup> century.
  - Rapid growth in **e-commerce** and the virtual world will demand entirely new skills from the workforce. Therefore, economic policies should focus on stronger safety nets for workers; income protection, skill training, health care and educational support for families.
- **Focus on Restarting Manufacturing:** Building an ecosystem that incentivises value-added manufacturing and technology-induced finished products should form a part of long-term strategy for emerging economies like India.
- **Inclusive Approach:** Addressing the needs of the most vulnerable countries – measures, for example in relation to export restrictions and creation of regional stockpiles, could include specific exemptions or assistance to address the needs of the poorest countries.
- **Favourable Business Environment:** Keeping markets open and predictable, as well as fostering a more

generally favourable business environment, will be critical to spur the renewed investment. And if countries work together, much faster recovery is possible than if each country acts alone.

### Conclusion

The immediate goal is to bring the pandemic under control and mitigate the economic damage to people, companies and countries. But policymakers must start planning for the aftermath of the pandemic.

But a rapid, vigorous rebound is possible. Decisions taken now will determine the future shape of the recovery and global growth prospects.

We need to lay the foundations for a strong, sustained and socially inclusive recovery. Trade will be an important ingredient along with fiscal and monetary policy.



## Need For Urban Social Safety

*This article is based on **Comment An urban jobs safety net** which was published in *The Hindu* on 11/08/2021. It talks about the challenges faced by the Indian Urban during the Covid-19 pandemic and the way forward.*

**Tags:** Social Justice, GS Paper - 2, Poverty, Poverty and Developmental Issues, Issues Relating to Poverty & Hunger, Inclusive Growth

During the pandemic, governments all over the world faced the difficult choice of **saving lives versus protecting livelihoods**. According to the **World Economic Outlook** report of April, 2021 of the International Monetary Fund (IMF), almost all countries, except China, experienced economic contraction last year. The global GDP shrunk by 3.3%.

India's GDP fell by 8%. As per the **Centre for Monitoring Indian Economy's** estimates, the unemployment rate in India peaked at 23.5% in April 2020 before falling to 6.9% in February 2021.

In the wake of economic deceleration, the challenge is to minimise livelihood losses. Traditionally, governments have addressed this issue from a sectoral viewpoint given the contemporary realities, the need is to **approach this from a rural-urban perspective**.

### Social Security Issues Faced By Urban India

- **Spread of Infection:** In the **Covid-19** outbreak in India, big cities such as— Delhi, Mumbai, Bengaluru and Chennai – were the main urban epicentres of the disease.
- **Rural-Urban Livelihood Security Divide:** Though the Indian government operates the **National Urban**

**Livelihoods Mission(NULM)**, which is focused on self-employment through skill up-gradation and credit linkages through banks, the scheme does not have guaranteed wage employment provisions akin to what **MGNREGA** provides.

- During the lockdown last year, the migrant labourers moved in large numbers from the urban to rural areas, which is symptomatic of the rural-urban livelihood security divide.
- This **migration tragedy and the economic slowdown** have highlighted the need for a similar livelihood safety net in urban India.
- **Economic Effect:** The economic crisis in urban areas is deepening as people who lost their jobs are yet to find replacements and little has been accomplished after the lockdown for the revival of livelihoods in the informal sector in the Indian urban area.
- **Public Distribution System & Social Sector Scheme Coverage:** A larger proportion of households in urban areas did not have access to ration cards.
  - The social security schemes also had relatively better coverage among the rural poor as rural areas had better access to PDS rations.
- **Nutrition and Hunger:** A decline in nutritional quality and quantity was more among the urban residents, as was the need to borrow money for buying food.

### The Need to Focus on Urban Areas

- **Major Contributor to Economy:** Urban areas are an integral part of the development process of the country. As in most countries, India's urban areas make a major contribution to the country's economy.
  - Indian cities contribute to about **two-third of the economic output**, host a growing share of the population and are the main recipients of **FDI** and the originators of innovation and technology.
- **Magnet For Businesses:** The cities are a collective magnet for a great diversity of economic activities.
  - The cities attract business and people, as a result of scale and agglomeration advantages (supply of educational facilities, presence of suppliers, etc).
- **Hotbed of Social Capital:** The cities are a hotbed of social capital or as a 'melting pot' of culturally or socially diversified groups.
- **Cities are Power Centres:** The city is an ever-expanding power-block, which reinforces its position to the detriment of towns and villages in its hinterland.

### Way Forward

- **Provision of Social Security:** There is a need to provide livelihood safety access to urban areas.



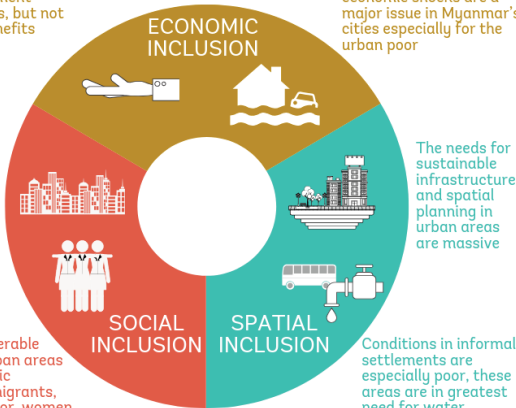
## India's Urbanization

### KEY CHALLENGES

Urbanization is creating new employment opportunities, but not everyone benefits

Risks from disasters and economic shocks are a major issue in Myanmar's cities especially for the urban poor

Inequality in cities is evident and can create social tension given the density



Several vulnerable groups in urban areas such as ethnic minorities, migrants, the urban poor, women, and the disabled are marginalized

### POLICY RECOMMENDATIONS

Implementation will be reliant on a strong commitment from the government to a bold reform agenda



Invest in sustainable urban infrastructure and urban upgrading



Build resilience to mitigate the impact of shocks on people's livelihoods and health



Facilitate access to legal documentation for migrants and specific subgroups, and targeted social programs for those particularly vulnerable to exclusion



Invest in capacity building and new financing for urban development



- The livelihood safety net must have comprehensive coverage. Such a net, provided by the **Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)**, exists only in rural areas
- **Promote Cooperation:** An urban livelihood scheme can be launched within the existing fiscal space.
  - If not, the Union and States can provide resources together and empower the urban local bodies.
  - **State Interventions:**
    - Himachal Pradesh has launched the **Mukhya Mantri Shahri Ajeevika Guarantee Yojana (MMSAGY)** with the objective of enhancing livelihood security in urban areas by providing 120 days of guaranteed wage employment to every household at minimum wages in FY 2020-21.
- **Minimum Wages For Urban Workers:** Setting a separate minimum wage for rural and urban areas does not cause migration to urban areas since the higher cost of living in urban areas has an offsetting effect.

- **Focus on Service Delivery:** The focus must shift from **asset creation to service delivery**. Restricting it to asset creation or wage-material ratios may be suboptimal in urban settings.

- The focus should be on enhancing the **quality of municipal services**.

### Conclusion

India's future urban strategy should improve urban governance, livelihood security of the urban poor, delivery of public services, inter-government transfers and capacity building.



## Digital Governance Through AI

This article is based on **Digital governance through AI** which was published in *The Hindu BusinessLine* on 12/08/2021. It talks about the potential of artificial intelligence (AI) and what more can be done to enable the AI ecosystem in India.

**Tags:** Science & Technology, GS Paper - 3, IT & Computers, GS Paper - 2, Government Policies & Interventions, E-Governance

In recent years there has been the proliferation of digital adoption across India, facilitated by the government's focus on the **JAM Trinity (Jan Dhan-Aadhaar-Mobile)** to create a digital identity for each citizen.

From an internet penetration of just 4% in 2007, India currently covers nearly 55% of the population, and is slated to reach one billion users by 2025.

While successfully narrowing down the **digital divide**, India now has an exceptional opportunity to harness the data being created to benefit citizens through adoption of **frontier technologies**.

As **artificial intelligence (AI)** becomes ubiquitous, India has the potential to leverage these massive datasets to build frameworks to empower people, create equity and race towards its goal of USD 1 trillion of economic value using digital technologies by 2025.

### Potential of AI in India

- **National Strategy For AI:** A recent PwC report indicated that AI can provide a global economic value addition of up to USD 15.7 trillion by 2030.
  - Recognising this potential, the government released the **National Strategy for Artificial Intelligence (NSAI)** in June 2018.
  - The strategy serves as a roadmap for the government to adopt artificial intelligence to increase efficiency

in delivery of services, collaborate with the private sector to enhance public sector potential, and develop capacities to embrace and deploy innovation.

- **Deregulation of Geospatial Sector:** Recently, the government has deregulated the geospatial sector allowing private players to bring state-of-the-art solutions to the sector, and spur innovation in AI-enabled hotspot mapping and analytics.
  - In India this can lead to transformation of various sectors such as infrastructure, health, and help in designing climate change resilient cities

**Geospatial:** In simple terms, geospatial information is geography and mapping. It is “place based” or “locational” information. It is **data tied to and portrayed on a map.**

- **Reducing Energy Losses:** Energy is another key sector which can benefit from the wide scale adoption of AI.
  - By using AI in the energy sector, **renewable energy** generators and **Discoms** can cut losses and increase efficiencies by better predicting grid load management, and ultimately making the adoption of renewables cost-effective.
  - Currently, Delhi and Kolkata alone account for USD 36 million of annual loss in revenue from **renewable energy** losses; across the country, the number is significantly higher — in the billions of dollars.
- **Increased Governance:** With the use of AI, the Power Ministry’s **Renewable Energy Management Centres (REMCs)** will be able to provide enhanced renewable energy forecasting, scheduling, and monitoring capabilities by processing large datasets of past weather, generation output history, and electricity requirement in a region.
- **AI solutions to Emerging Trends:** Digital transformation through AI can help governments in being more responsive to emerging trends and act accordingly.
  - Within the government machinery, policymakers are moving forward with incorporating AI solutions for effective tax monitoring, data compliance etc.

### Challenges With Wide Use of AI

- **Comprising Privacy:** AI systems learn by analyzing huge volumes of data and they keep adapting through continuous modelling of interaction data and user-feedback.
  - Thus, with the increasing use of AI, the **right to privacy** can be under threat due to unauthorized access to one’s activity data.
- **Disproportionate Power and Control:** Technology giants are investing heavily in regard to artificial

intelligence, both at the scientific/engineering and also at the commercial and product development level.

- These big players have an unmatched advantage when compared to any ambitious competitor out there which is a symptom of **data-oligarchic society.**
- **Technological Unemployment:** AI companies are building intelligent machines that perform tasks typically carried out by low-income workers.
  - For example self-service kiosks to replace cashiers, fruit-picking robots to replace field workers, etc.
  - Moreover, many desk jobs will also be edged out by AI, such as accountants, financial traders, and middle managers.
- **Exacerbating Inequalities:** Using artificial intelligence, a company can drastically cut down on relying on the human workforce, and this means that **revenues will go to fewer people.**
  - Consequently, individuals who have ownership in AI-driven companies will make all the money. Also, **AI could compound digital exclusion.**

### Way Forward

- **Need For Sensitisation and Capacity-building:** In the scope of public sector adoption of AI, the critical need for sensitisation and capacity-building within the government cannot be discounted.
  - Initiatives like **RAISE 2020, Digital India Dialogue** and **AI Pe Charcha** have commenced a much-needed discourse on ‘**AI for good**’, covering aspects of evolving technologies and their policy implications.
- **Create Enabling Ecosystem:** we must create enabling environments in schools through multidisciplinary approaches with AI at their core to empower the next generation to play an essential role in designing practical AI solutions for India and in India.
  - **MeitY’s ‘Responsible AI for Youth’** has incentivised youth participation through a platform for exposure on a tech mind-set, and digital readiness.
- **Public-Private Partnership (PPPs):** Recently, an initiative, **Future Skills Prime**, has exhibited the strength of public-private partnership by aggregating digital-ready courses for consumers across citizens, government employees and businesses.
  - Thus, such initiatives hold immense promise for the role of civil society and private sector in pursuing responsible AI through collaboration.
- **Uniform Standard Rules:** Standardising the rules of the game will help expand markets for positive AI-driven goods and services.
- The upcoming **National Programme for AI** is a step in this direction building upon existing partner-

ships and increasing governmental capacity in supporting AI innovations and research for public sector adoption.

- **Collaborate Every Stakeholder:** As AI continues to impact every facet of our daily lives, it is essential for all the stakeholders — innovators, policymakers, academicians, industry experts, philanthropic foundations, multilaterals and civil society — to collaborate to help steer AI's future towards benevolent purposes.
- **Need Ethics in AI:** Need for multi-stakeholder efforts on global cooperation so AI is used in a manner that is “**trustworthy, human rights-based, safe and sustainable, and promotes peace**”.
  - UNESCO has developed a global, comprehensive standard-setting draft Recommendation on the **Ethics of Artificial Intelligence** to the Member States for deliberation and adoption.

### Conclusion

The various stakeholders must join hands to ensure that AI is used for benevolent purposes.

Through its technological prowess and abundance of data, India can lead the way in thriving through Artificial Intelligence solutions, contributing to inclusive development and social empowerment.



## Human Development Product (HDP)

*This article is based on **We need a way to measure true human progress** which was published in the Indian Express on 14/08/2021. It talks about the shortcomings in the economic indicators of development and suggests alternative development indicators.*

**Tags:** Indian Economy, Gs paper - 2, Gs paper - 3, Growth & Development, Issues Relating to Development

**Gross Domestic Product (GDP)** is a measure of economic activity in a country. It is the total value of a country's annual output of goods and services. It gives the economic output from the consumers' side.

However, GDP has its own demerits as it only indicates economic growth and does not identify inequalities and injustices.

Thus, we need alternative metrics to complement GDP in order to get a more comprehensive view of development and ensure informed policy making that doesn't exclusively prioritize economic growth.

### Issues With GDP As An Indicator of Development

- **Measures Everything But Not Their Impacts:** GDP takes a positive count of the cars produced but does not account for the emissions they generate; it adds the value of the sugar-laced beverages sold but fails to subtract the health problems they cause; it includes the value of building new cities but does not account for the vital forests they replace.
  - As Robert Kennedy put it - GDP measures everything in short, except that which makes life worthwhile.
- **Fails to Capture Inequality:** In today's world, rising inequality levels in the developed and developing world are alike. GDP cannot differentiate between an unequal and an egalitarian society.
  - As rising inequality is resulting in a rise in societal discontentment and increased polarization, policymakers will need to account for these issues when assessing development.
- **Does Not Account For Environmental Degradation:** Environmental degradation is a significant externality that the measure of GDP has failed to reflect.
  - The production of more goods adds to an economy's GDP irrespective of the environmental damage suffered because of it.
  - So, according to GDP, a country like India is considered to be on the growth path, even though Delhi's winters are increasingly filled with smog and Bengaluru's lakes are more prone to fires.
- **Not in Sync With Modern Service Based Economy:** Today's societies are increasingly driven by the growing service economy – from the grocery shopping on Amazon to the cabs booked on Uber.
  - As the quality of experience is superseding relentless production, the notion of GDP is quickly falling out of place.
  - We live in a world where social media delivers information and entertainment at no price at all, the value for which cannot be encapsulated by simplistic figures.
  - Our measure of economic growth and development also needs to adapt to these changes in order to give a more accurate picture of the modern economy.
- GDP does not capture stark inequalities in **education gaps, health care access and injustices across gender, caste, regions**, and more.

### Human Development Product (HDP) As an Alternative to GDP

- HDP can consist of the following parameters:
- **The female labour force participation rate:** It is shockingly low in India. However, the empowerment

of women through their economic independence is central to human development.

- **Gender income parity:** Need to bridge the gap which exists in income earned by male and female for the same work.
  - There is no point in more women participating in the labour force if we continue to give them insecure and lower-paying jobs than men.
- **Stunting:** Stunting is not only one of the cruellest things that society accepts but is also reflective of widespread conditions of public health, nutrition and public education.
- **Water quality and availability:** We can measure the quality and flow of 10 key rivers at specified geographical points and periodicity, as well as measure groundwater levels and quality in some of the most stressed areas.
  - All this could give us an aggregate water health index.
- **The quality of polity:** It can be measured by the percentage of members of all our legislatures — state legislatures and Parliament — against whom criminal cases are pending or have convictions.
- **Other Parameters:** These are some “vital few” which can measure the progress of the most fundamental things in the country and reflect human progress. Other parameters (such as **CO<sub>2</sub> emission, internet access**) can also be added when needed.
  - Eg. today internet availability has become essential for human development.

### Way Forward

- **Alternative Ways to Measure Development:** Along with HDP, other indicators can also be adopted.
  - Eg. Bhutan’s **Gross National Happiness**, which considers factors like equitable socio-economic development and good governance
  - UNDP’s **Human Development Index (HDI)**, which encapsulates health and knowledge apart from economic prosperity.
- **Capability Approach:** The center of Amartya Sen’s vision is ‘capability approach’, where the basic concern of human development is ‘**our capability to lead the kind of lives we have reason to value**’, rather than the usual concentration on rising GDP, technical progress, or industrialization.
  - Raising human capability is good because it improves: **the choices, wellbeing, and freedom of people**; their role in influencing social change; and their role in influencing economic production.

- **Climate change:** Climate change is affecting livelihoods, health and everything. We must tackle climate change and its effects on multiple fronts.
- **Need Holistic Not Only Economic Factor:** The Human Development Product is a product of innumerable important factors — education, health, livelihoods, societal norms, political climate, environmental conditions, and more.
  - Improvement in HDP will reflect and happen only with improvement on all these factors.
- **Striving For Sustainable Development Goals:** Modern economies need a better measure of welfare that takes environment degradation into account to obtain a truer reflection of development.
  - Thus need comprehensive and sustainable development.

### Conclusion

The end goal is to have a more just and equitable society that is economically thriving and offering citizens a meaningful quality of life.

In an economy with well-being at its heart, economic growth will simply be another tool and GDP will cease to take the center stage. The focus would instead shift towards more desirable and actual determinants of welfare.

Today, India must commit to itself that the HDP growth rate become higher than the GDP growth rate.



## Agriculture Through Agri-tech: GM Crops

*This article is based on **Driving a 2nd green revolution via agri-biotech** which was published in *The Hindu Business Line* on 15/08/2021. It talks about the issues related to the use of GM crops and the way forward.*

**Tags:** Agriculture, Biotechnology, GS Paper - 3, Food Security

Indian agriculture has come a long way since the country saw the **Green Revolution** in the late Sixties, which saved the country from food shortages and severe farming distress. The science behind the revolution is what made all the difference.

Today, India is once again at the cross-roads, though it’s in a much stronger position than it was five decades ago. Today India is a leading producer of a variety of crops. They include rice, wheat, cotton, sugarcane and an impressive list of fruits and vegetables.

But, in terms of yield or output per unit of land, India lag behind countries that are major cultivators of food

crops. A variety of reasons affect crop yields include climate conditions, access to high-quality farm inputs, mechanisation, access to capital and a good knowledge of the latest farming techniques.

However, none of these will mean much if the seeds that go into our lands are not of the best quality or do not have resistance to many of the pests and diseases.

### Benefits of GM Tech

- **India Became Importer to Net-Exporter:** In India the benefits of **GM technology** were almost immediate and very impressive.
  - Ever since the farm sector has been opened to the **genetically-modified cotton (Bt Cotton)**, the country has emerged as one of the major producers of Cotton cash crop and in less than four or five years, became a net exporter.
- **Add Various Attributes:** Transgenic or GM seeds are nothing but seeds which have some attributes added by introducing genes extracted from another species.
  - There are a number of attributes that can be added to a seed to **improve its taste, colour, quality, nutrition value** and make them resistant to common diseases or ward off pests such as the bollworm that attack the cotton plants.
- **Climate Resilient Crops:** Another critical need for the future – climate resilient crops – could also be attempted through GM technology.
- The **other possible benefits** of genetic engineering food include:
  - Disease- and drought-resistant plants that require fewer environmental resources (such as water and fertilizer)
  - Less use of pesticides
  - Increased supply of food with reduced cost and longer shelf life
  - Faster growing plants and animals
  - Food with more desirable traits, such as potatoes that produce less of a cancer-causing substance when fried
  - Medicinal foods that could be used as vaccines or other medicines.

### Challenges With GM Crops

- **Need For Other GM Crops:** The benefits enjoyed by the cotton farmers have not spread to other crops.
  - A major part of China's maize imports come from the North and South American countries.
  - Meanwhile, as China's next-door neighbour, India is unable to profit from these opportunities or have a competitive price because of the current levels of productivity.

- **Did not Keep Pace With Tech Advancement:** Indian agriculture is not averse to science but has not kept pace with the adoption of science in agriculture.
  - For instance, gene edited crops have shown great promise and are being cultivated in other parts of the world for benefits like quality of produce.
- **Unknown Consequences:** There may be unknown consequences to altering the natural state of an organism through foreign gene expression.
  - Such alterations can change the organism's metabolism, growth rate, and/or response to external environmental factors.
- **Health Risks:** Potential health risks to humans include the possibility of exposure to new allergens in genetically modified foods, as well as the transfer of antibiotic-resistant genes to gut flora.
- **Ecological Imbalance:** The consequences influence not only the GMO itself, but also the natural environment in which that organism is allowed to proliferate.
  - Gene transfer of pesticide, herbicide, or antibiotic resistance to other organisms would not only put humans at risk, but it may also cause ecological imbalances, allowing previously innocuous plants to grow uncontrolled, thus promoting the spread of disease among both plants and animals.

### Way Forward

- **Keeping Pace With Agri-biotech:** Other GMO crops, such as **Bt brinjal, DMH-11 mustard**, can be granted permission after the exhaustive **Environmental impact assessment**.
  - The government should go for commercialization of GM seeds only after the core and deep research on the long term prospects and benefits of commercialization of GM seeds in India.
- **Indigenous Technology:** Encouraging home-grown technologies and supporting them with the necessary regulatory steps without any compromise on the science and safety is vital for **'Doubling farmers' income'**.
  - Promoting investment will motivate all technology developers to take interest in crops that are relevant to India and using technologies for which there is a clear regulatory framework.
- **Faith in the Good Science:** GM crop technologies undergo several years of testing for their trait efficacy, safety and overall performance enhancement of the crop.
  - We should have faith in all the good science in place for evaluating these technologies and what emerges as safe and good for the crop should be made available to the farming community.

### ➤ Other Measures:

- In order to curb the illegal cultivation of GM seeds, the **Genetic Engineering Appraisal Committee** (GEAC) should:
  - Collaborate with state governments and launch a nation-wide investigation drive.
  - Take action on threats of deliberate GM crop cultivation.
  - Investigate and prosecute those involved in the illegal supply of GM Seeds.
- Encourage **organic farming** along with the GMO crops.

### Conclusion

Unless the farmers stand to gain in the long run, nobody wins. This is undoubtedly one objective that can bring all stakeholders, including regulators, farmers' lobby, activists and investors closer to create an atmosphere of trust.



## India's Taliban Challenge

*This article is based on **Taliban has taken Kabul. Delhi must watch, not pronounce doom** which was published in the Indian Express on 16/08/2021. It talks about the Taliban capturing Afghanistan and challenges emerging for India.*

**Tags:** International Relations, GS Paper - 2, India and its Neighbourhood, Effect of Policies & Politics of Countries on India's Interests

Afghanistan has been plunged into chaos after the **Taliban took over** in the wake of the pullout of American forces from the country. It not only ensured a swift Taliban advance across Afghanistan but also a peaceful surrender of Kabul.

Reports from the provinces point to gross human rights abuses by the Taliban. If the new Taliban dispensation demonstrates a better record in Kabul, it might encourage the world to respond positively.

Nevertheless, the Taliban's entry into Kabul marks the beginning of a new phase in the relationship between Afghanistan and India.

### Challenges For India

- **Issue of Indian Security:** The restoration of Taliban rule in Afghanistan presents some very serious potential challenges for Indian security.
  - The challenges range from securing its development infrastructures to safely evacuating Indians stranded in troubled Afghanistan.

- **Spread of International Terrorism:** For India, a bigger challenge will be about the Taliban's renewed support for international terrorism and Pakistan's re-direction of jihadi groups that have allegedly fought with the Taliban towards India.
- **Religious Fundamentalism:** Like all radical groups, the Taliban will have trouble balancing its religious ideology with the imperatives of state interests.
  - India faces a challenge to deradicalise the region for long lasting peace and stability.
- **New Regional Geopolitical Developments:** There can be new regional geopolitical alignments (such as China-Pakistan-Taliban) which may go against the interests of India.
  - Meanwhile, the US withdrawal compels the creation of a new balance of power system in and around Afghanistan.
  - Moreover, the US and the West will try to shape the international attitudes towards the new regime.
- **No Contiguity With Taliban:** Unlike Pakistan, China and Iran, India has no contiguity with Afghanistan.
  - Russia has a security treaty with Tajikistan, for instance, and has deployed more troops there to prevent a destabilising spill over from the turmoil in Afghanistan into Central Asia.
  - India has no such security responsibilities and no direct access to Central Asia.
  - This may give reasons to the Taliban to hit back at India through Pakistan in J&K, given that LeT and Jaish are operating in Afghanistan alongside the Taliban.

### India's Options

- **Broader Diplomatic Engagement:** India should consider appointing a special envoy dedicated to Afghanistan. The envoy can ensure that Indian views are expressed at every meeting, and broaden engagement with the Taliban.
- **Decoupling of Taliban-Pakistan:** Although Pakistan's leverage over the Taliban is real, it may not be absolute.
  - The Taliban is bound to seek a measure of autonomy from Pakistan. India will have to wait a while before the current issues between India and the Taliban can be overcome.
- **Balancing the Opportunities in Afghanistan:** Structuring the internal balance of power within Afghanistan has always been hard. A deeper Sino-Pak partnership in Afghanistan will inevitably produce countervailing trends.
  - However, for a patient, open-minded and active India, there will be no dearth of balancing opportunities in Afghanistan.

- **Leverage Indian Infrastructural Developments:** Indian USD 3 billion assistance to Afghanistan is in concrete projects that serve its population and have earned it their goodwill that will endure.
  - The need today is to not stop the development work in Afghanistan and continue the good work.
- **Global Cooperation:** There is a lot less global acceptance of terrorism today than in it was in the 1990s.
  - No major power would like to see Afghanistan re-emerge as a global sanctuary of terror.
  - The world has also imposed significant new constraints on Pakistan's support for terror through mechanisms like the **Financial Action Task Force**.

### Conclusion

India, as would be impacted by the consequences of American withdrawal, has to work with Taliban and other regional powers to protect its interests and stabilise Afghanistan. If India remains active and patient too, many opportunities could open up in the new Afghan phase.



## MSMEs For Resilient National Economy

*This article is based on **MSMEs are hit by risk-averse banks** which was published in *The Hindu Business Line* on 17/08/2021. It talks about the issues related to the MSME sector and the way forward.*

**Tags:** Indian Economy, GS Paper - 3, Growth & Development, Mobilization of Resources, Industrial Policy

The Prime Minister's dream of a **USD 5-trillion Indian economy by 2025** along with effective **financial inclusion** and sustainable economic outcomes is premised on investment from both domestic and foreign investors. Government expenditure can only provide a stimulus, but cannot alone take India to PM's goal.

For domestic private investments to happen, the role of timely, adequate and quality (low cost) credit cannot be overstated, particularly during the current times when Covid-19 induced stress is maximum on almost all industries.

With the recent change in the definition, more than 95 per cent of Indian companies are bought under the definition of MSMEs. However, the need of the hour is to identify the issues MSMEs face today and rectify urgently.

### Issues With MSMEs

- **Issues of Access to Credit:** Most of the MSMEs are in rural and semi-urban areas where access to credit is extremely limited.

- They are vulnerable to predatory moneylenders and often fall into a cycle of debt.
- Lack of access to finance and timely credit support in business has been a long-standing issue for these MSMEs.
- **Under Severe Debt:** Due to difficulties faced in seeking loans and working capital from banks and delay in receiving government payments and tax refunds, most of the MSMEs are under severe debt.
- **Dependence on Informal Sources:** According to a study, there is an overall debt demand of Rs. 69.3 trillion of which 84% is financed by informal sources such as moneylenders, family, friends, chit funds.
  - Formal sources such as commercial banks, NBFCs and government institutions cater to a mere 16%.
- **Majority of Firms are Small:** More than 80% of these MSMEs are in the micro and small category.
  - The benefits of the government's emergency line credit, stressed asset relief, equity participation and fund of funds operation are not able to reach them.
- **Issue of Credit Assessment:** Banks employ various methods to limit risk by better assessment of the creditworthiness of individuals or firms, MSMEs included.
  - While determining creditworthiness, there are two errors that are common — **False Acceptance of a bad applicant** and **False Rejection of a good applicant**.
    - The former error is detrimental for banks and increases risk while the latter impacts financial inclusion and economic growth itself.
  - To keep **NPAs** down, many credit worthy individuals are denied loans by banks.
- **Lack of Paperwork or Digital Footprint** for small MSMEs, a factor which holds them back from being integrated into the formal economy and deprives the MSMEs to take advantage of the formal credit system.
- **Technological Disruption:** India's MSME sector is based on obsolete technology, which hampers its production efficiency.
  - The emergence of new technologies like Artificial Intelligence, Data Analytics, Robotics and related technologies (collectively called as Industry Revolution 4.0) is a bigger challenge for MSMEs than for organized large-scale manufacturing.

### Way Forward

- **Focused Regulatory And Structural Changes:** It will improve access, ease the transition to the formal sector and increase consumer education and protection.

- In the long term, once these regulatory issues are addressed, sanctioned loans will be disbursed more easily and private investment will be boosted, creating a **virtuous cycle for MSMEs** in the country.
- **Minimise the False Rejections of Good Applicants:** Routine audits of all loan applications on random sampling basis must be undertaken by **RBI** and administrative action taken against malafide omissions resulting in unethical denial of loans to deserving MSMEs.
- **Creation of Independent Regulator:** Given the growing importance of the data economy, it is paramount that the government creates an independent body which can advise and provide consultancy to MSMEs and enable them to grow in this new, digital world.
- **Use of Technology:** The traditional bank lending system by banks is based on financial statements and collateral of the borrower. With increased availability of data from several sources, including GSTN, income tax, credit bureaus, etc., it is now possible to appraise the MSME loan proposals expeditiously by doing due diligence online.
- **Upgrade Infrastructure Utilities:** There is an urgent need to upgrade infrastructure utilities (like water, power supply, road/rail) for any enterprise to run its operations successfully.
  - Moreover, entrepreneurs need to develop quality conscious mindsets embedded in the organisational culture.
  - Sensitisation and handholding of MSMEs at different and upgraded levels of certification is the need of the hour.

### Conclusion

- MSMEs are the backbone of a resilient national economy. Prioritising their development is critical to the future of the country. The government has come out with a variety of enabling mechanisms over the last few years.
- India needs more such measures, especially in the current environment. The next decade will be the metamorphosis of India from an emerging power to an established economic powerhouse and MSMEs will be an important cog in the wheel on this journey.



## Impartial Speaker For Thriving Democracy

*This article is based on **How can we guarantee the Speaker's impartiality?** Which was published in The Indian*

*Express on 19/08/2021. It talks about the roles and responsibilities of the speaker and associated issues.*

**Tags:** Indian Polity, GS Paper - 2, Parliament, Indian Constitution

The **Office of the Speaker** occupies a pivotal position in our parliamentary democracy. It has been said of the Office of the Speaker that while the members of Parliament represent the individual constituencies, the Speaker represents the full authority of the House itself.

He/She symbolises the dignity and power of the House over which he/she is presiding. Therefore, it is expected that the holder of this Office of high dignity has to be one who can represent the House in all its manifestations.

However, over the last two decades, paralysing Parliament has become the standard operating procedure of every Opposition party. The misuse of the post of speaker in the functioning of India's Parliament — and state assemblies as well — is one among many reasons for falling levels and productivity of the legislatures.

### Importance of Speaker's Independence

- **Supreme Authority:** In the Lok Sabha the Speaker is the supreme authority. He has vast powers, and it is his primary duty to ensure the orderly conduct of the business of the House.
- **Symbol of Nation's Freedom:** Jawaharlal Nehru referred to the Speaker as "the symbol of the nation's freedom and liberty" and emphasised that Speakers should be men of "outstanding ability and impartiality".
- **Guardian of the House:** MN Kaul and SL Shakhder referred to the speaker as the **conscience and guardian of the House**.
  - As the principal spokesperson of the Lok Sabha, the Speaker represents its **collective voice**.

### Roles and Responsibility of Speaker

- It is the Speaker's duty to decide what issues will be taken up for discussion.
- **Interpretation:** He/She is the final interpreter of the provisions of the Constitution of India, the Rules of Procedure and Conduct of Business of Lok Sabha and the parliamentary precedents, within the House.
- **Joint Sitting of Both Houses:** He/She presides over a **joint sitting** of the two Houses of Parliament.
- **Adjournment Motion:** He has the sole discretion to permit an adjournment motion to be tabled or to admit a calling attention notice, if the issue is of urgent public importance.
- **Money Bill:** He/She decides whether a bill is a **money bill** or not, and his/her decision on this question is final.



- **Disqualifying Members:** It is the speaker who decides the questions of disqualification of a member of the Lok Sabha, arising on the ground of defection under the provisions of the **Tenth Schedule**.
- **Constitution of Committees:** The Committees of the House are constituted by the speaker and function under the speaker's overall direction.
  - The Chairmen of all Parliamentary Committees are nominated by him/her.

### **Issues with the Post of Speaker in Lok Sabha**

- **Favour Ruling Party:** Several judgments on the **anti-defection law** have been rendered by the Supreme Court. A common factor that shows up in these rulings is the **blatant, partisan conduct of speakers** in various state assemblies.
  - Over the last decade and more, an impartial and independent Speaker is difficult to find.
- **Party Interest Over National Interest:** The present practice of the Speaker continuing to be an active member of the ruling party has the inevitable result of his refusing to allow any debate or discussion that may be essential in national interest but may embarrass the ruling party.
- **Increased Disruption in Parliament:** Partisan conduct of the speaker and his apathy towards opposition parties' demands many times leads to constant disruption of Parliament by the Opposition.
  - Indeed, a Speaker who continues to be a member of the ruling party is like an umpire being appointed by the batting side.
  - The persistent disruption of Parliament causes extensive damage not only to the prestige of the House, but also frustrates the primary function of any legislature: The responsibility to make laws for the good governance of the country after careful debate and deliberation.
- **Bills are Not Referred to Committees:** The stalling of parliamentary proceedings has led to the passing of important bills in several sessions without any discussion.
  - In the 2021 monsoon session, not a single bill was referred to any select committee.

### **Way Forward**

- There must be two essential qualities in a Speaker: **Independence and impartiality**.
- **Independence of Speaker:** The separation of powers is part of the **basic structure** of our Constitution. If Parliament ceases to be relevant, the foundation of our democracy will progressively get weaker.

- It is imperative that the Speaker of every legislature resigns from his party to honour his constitutional obligation of independence and impartiality.
- For example, in 1967, late N Sanjiva Reddy resigned from his party when he became the Speaker.
- **Choose the Best Option:** Indeed, the option is a binary: Either allow Parliament and state legislatures to descend into terminal decline or make the Speaker truly independent and let every legislature perform its constitutional function of deliberating on matters of public importance and passing laws after proper debate.
- **Responsibility of Speaker to Ensure Continuation of Debates:** In 1951, a nine-judge bench of the Supreme Court (In Re Delhi Laws Act Case) held that essential legislative functions cannot be delegated to the bureaucracy; law-making must remain the domain of the legislature.
  - The speaker must ensure that the legislature meets continuously and debate the bills.
- As per **GV Mavalankar**, the first Speaker, once a person is elected Speaker, he should rise above parties, above politics. He should belong to all the members or belong to none.
  - He should hold the scales of justice evenly, irrespective of party or person.

### **Conclusion**

The Office of the Speaker in India is a living and dynamic institution which deals with the actual needs and problems of Parliament in the performance of its functions.

The founding fathers of our Constitution had recognised the importance of this Office in our democratic set-up, and it was this recognition that guided them in establishing this Office as one of the prominent and dignified ones in the scheme of governance of the country.



## **Localising SDGs**

*This article is based on **Localising SDGs will pay off** which was published in The Hindu Business Line on /08/2021. It talks about the achieving SDGs in a bottom-up approach and involvement of women collectives.*

**Tags:** Social Justice, GS Paper - 2, Gs Paper - 3, Self Help Groups (SHGs), Inclusive Growth, Human Resource

**Sustainable Development Goals (SDGs)** are a global effort that has one major objective — achieving a better future for all. To achieve these global and national targets, localisation is a crucial lever.

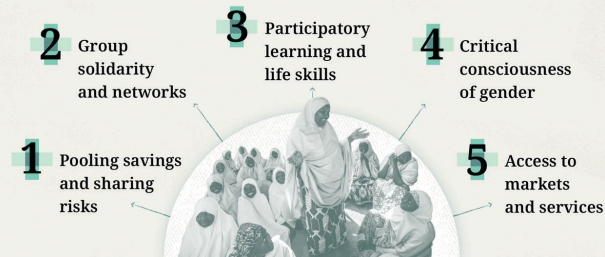
It correlates how local and State governments can support the accomplishments of the SDGs through bottom-up action, and how the SDGs can provide a framework for local policy.

If India is to achieve its goals by 2030, it must build a mechanism for effectively localising the SDGs — one that leverages and integrates the **social capital** that exists in **women's collectives and with the local self-governance of the Panchayati Raj system**.

### Women Collectives

- By the simplest definition, a women's collective is a group of women who meet regularly to achieve a shared purpose. But these groups take many forms across the world, with women coming together for different economic, legal, health, and cultural reasons.
- In India's rural areas, SHGs are an example of women collectives.

### The five key elements of women's collectives



### Significance of Women Collectives

- **Overcome Social Inequalities:** Women collectives have successfully overcome the deep-rooted bias of caste, patriarchy, and wealth by challenging norms and unequal social relations.
  - They encourage collective efforts for combating practices like dowry, alcoholism etc.
- **Paving Way For Gram Swaraj:** Women collectives have created conditions for **social equality** and ultimately, paving the way for Gram Swaraj.
  - The women of **Kudumbashree** in Kerala exemplify this.
  - By articulating the aspirations of the local community, the women were able to engage elected representatives in a two-way process — complementing their efforts while also holding them accountable.
- **Gender Equity:** Women collectives empower women and inculcates leadership skills among them. Empowered women participate more actively in developmental processes, gram sabha and elections.
  - There is evidence that formation of Self-Help Groups has a multiplier effect in improving women's

status in society as well as in the family leading to improvement in their socio-economic condition and also enhances their self-esteem.

- **Financial Inclusion:** Women collectives reach to the poorest of the poor section of society further financial inclusion.
  - The financial inclusion attained leads to reduced **child mortality**, improved maternal health and the ability of the poor to combat disease through better nutrition, housing and health — especially among women and children.

### Challenges

- **Challenges of Limited Resources:** Undoubtedly, there are inherent challenges associated with involving community institutions like SHGs in developing the **Gram Panchayat Development Plan**, including **human resources, capacities**, and disaggregating department **budgets**.
- **Lack of knowledge** and proper orientation among SHG-members to take up suitable and profitable livelihood options.
- **Patriarchal Mindset:** Primitive thinking and social obligations discourage women from participating in women collectives (SHGs) thus limiting their economic avenues.
- **Lack of Rural Banking Facilities:** Many public sector banks and **micro-finance institutions** are unwilling to provide financial services to the poor as the cost of servicing remains high.
- **Sustainability and the quality of operations** of the SHGs have been a matter of considerable debate.

### Way Forward

- **Leverage the Strength of Women Collectives:** Today, 76 million women have been mobilised into SHGs under the **National Rural Livelihoods Mission** and there are 3.1 million elected **panchayat representatives**.
  - For localisation of SDGs to truly work, there is a need to leverage the strength of both (PRIs & SHGs) these institutions through a partnership.
- **Reinforcing the Panchayat:** To truly localise the SDGs, the route ought to be taken within the framework of the Constitution.
  - Any action should not form a parallel track, but become a way of **reinforcing the institutional capacity of panchayats**.
- **Learning From the Experience:** The five southern States — Tamil Nadu, Kerala, Karnataka, Andhra Pradesh, Telangana — have done better than the others when it comes to poverty reduction.

- There are five things that these States did that seem to have played a significant role in curbing poverty.
  - The participation of adolescent **girls in secondary, higher secondary**, and higher education.
  - The **decline in fertility** has a far greater correlation to the participation of adolescent girls in secondary, higher secondary education than any healthcare and family welfare services.
  - **The formation of collectives:** when women came together to form SHGs it created an identity outside of the house.
  - Since these women over time had had basic secondary level education, their collectives or SHGs could leverage skills and diverse livelihood opportunities better than others.
  - The decision that permitted lending of up to Rs. 10 lakh without collateral for women SHGs, has recently been raised by the RBI to ₹20 lakh.
- **More Responsibility For PRIs:** The 73rd Constitution Amendment transferred 29 subjects to PRIs. For successful localisation of development, PRIs need not only emphasise their governance role but also focus on their **developmental role**.
  - The entire discourse should focus on how to enable PRIs to focus on their leadership role in achieving the SDGs.
  - This would need work on many leadership traits — visioning, mobilising and seeking partnerships, among others.
- **Leveraging Social Capital:** There are not many conversations about social capital being a strong foundation for economic activity. Ultimately, localisation efforts should lead to transformation not in social relationships alone, but also the level of economic activity in villages.

### Conclusion

Localising the SDGs at the rural level will not only challenge existing unequal relations but also provide an institutional framework that is in sync with national and global priorities.

Not enough time is spent on understanding how a poor household can leverage systems or institutions to move up faster. There's a need to look at these small collectives as the root of more shared growth.



## Future of South Asian Geopolitics

*This article is based on **The fall of Kabul, the future of regional geopolitics** which was published in *The Hindu**

*on 21/08/2021. It talks about the fall of Afghanistan to Taliban forces and future implications on the geopolitics of the region.*

**Tags:** International Relations, GS Paper - 2, India and its Neighbourhood, Effect of Policies & Politics of Countries on India's Interests

The fall of Kabul in the wake of the American withdrawal from Afghanistan will prove to be a defining moment for the region and the future shape of its geopolitics; it would be as defining, if not more, as the Soviet intervention in 1979 and the American one in 2001.

While a lot depends on the Taliban's actual conduct both domestically as well as on the southern and western Asian geopolitical chessboard in the months ahead, the Taliban are likely to continue as a **'useful villain'** in the unfolding great power competition.

For India and the whole region, the fall of Afghanistan is a moment of reckoning and it must rethink its regional strategies and options.

### Reasons For Fall of Afghanistan to Taliban

- **US' Unconditional Exit:** The US decision to pull out its troops unconditionally without waiting for a negotiated political settlement regardless of consequences that were almost entirely predictable other than the speed with which it occurred.
- **Afghan's Psychological Denial:** Afghan's psychological denial that the US would indeed leave as they warned, a lack of military strategy, poor supplies and logistics, indefensible and thinly manned posts, unpaid salaries, phantom rolls, and a sense of betrayal, abandonment and demoralisation, all played a role in the capitulation.
  - The Afghan had technical dependence on the US for air support, weapon systems, intelligence etc.
- **Lack of Preparation:** The Afghan Army was unprepared and caught by surprise by the Taliban offensive.
- **Lack of Training of Afghan Forces:** The Afghan National Army (ANA) was never really trained and equipped with the normal attributes of a national army capable of defending territory with adequate mobility, artillery, armour, engineering, logistics, intelligence, air support etc for rugged terrain; and infantry battalions and doctrines designed for it.

### Future of Regional Geopolitics

- **Regional Power Vacuum Created:** An axis of regional powers such as China, Pakistan, Russia, and the Taliban, have already started filling this power vacuum, shaping, thereby, the contours of the region's geopolitics based on their individual and common interests.

- Iran might also jump on this opportunistic bandwagon under the Chinese leadership.
  - **Anti-American Axis:** Most of the countries in the region harbor deep anti-American feelings in varying degrees which will further shrink the American influence in the Eurasian heartland.
  - **Advantage China:** The post-American power vacuum in the region will be primarily advantageous to China and its grand strategic plans for the region.
    - China will further strengthen its efforts to bring every country in the region, except India, on the **Chinese Belt and Road Initiative(BRI)** bandwagon, thereby altering the geopolitical and geoeconomic foundations of the region.
    - **Challenges of Chinese Advantage:**
      - The much-feared **Chinese encirclement of India** will become ever more pronounced.
      - China is likely to become **less accommodative towards India** including on the **Line of Actual Control(LAC)**.
      - Even in **trade India needs trade with China more** than the other way round. Unless India can find ways of ensuring a rapprochement with China, China would keep on challenging India on occasion.
  - **Hub of Terrorism:** The bigger challenge for the region would be a near-certain increase in terrorism and extremism.
    - The USA's presence in Afghanistan, international pressure on the Taliban and **Financial Action Task Force** worries in Pakistan had a relatively moderating effect on the region's terror ecosystem. With the Taliban now back in Afghanistan, things are bound to change.
    - Moreover, the international community may have no choice but to recognise the Taliban regime. **UN Security Council members** such as China and Russia have already indicated their intent to do so.
      - It would also mean that the Taliban would hold more power in a bargain on the terror question.
  - **Impact on Regional Interests:** The return of the Taliban to Afghanistan has effectively laid India's '**mission(Connect) Central Asia**' to rest.
    - India's diplomatic and civilian presence as well as its civilian investments will now be at the mercy of the Taliban, and to some extent Pakistan.
    - If there is a concerted effort by China, Pakistan and the Taliban to erase the Indian presence from Afghanistan, there would be many challenges for India.
  - **India-Pakistan Ties:** The developments in Afghanistan could force India to seek stability, if not peace, with Pakistan. While there is little desire in India today to reopen a broad-based dialogue process with Pakistan, even a 'cold peace' would be in India's interest.
    - For Pakistan too, such a 'cold peace' will help it to focus its energies on consolidating its interests and gains in Afghanistan.
    - As a result, both sides might refrain from indulging in competitive risk-taking unless something dramatic happens which is always a possibility between the two rivals.
    - Stability between India and Pakistan depends a great deal on how politics in Kashmir plays out, and whether India is able to pacify the aggrieved sections in the Valley.
  - **Use of Terrorism For Tactical Purpose:** It is unlikely that the Taliban will proactively export terror to other countries unless of course for tactical purposes by, say for instance, Pakistan against India.
    - The real worry, however, is the inspiration that disgruntled elements in the region will draw from the Taliban's victory against the world's sole superpower.
  - **Challenges For Pakistan:** The celebration in Pakistan over the Taliban's victory in Afghanistan could eventually become counterproductive for Pakistan itself.
    - Whether Pakistan Prime Minister Imran Khan refers to them as a force that has 'unshackled the chains of slavery' or the country's deep state considers them as a strategic asset, the reality is that many anti-Pakistan terror organisations would be emboldened as well.
- ### Way Forward
- **US's New Role:** While it is too early to determine whether the anti-American axis countries have on their hands is **an opportunity or a ticking bomb**.
    - The USA, as a direct consequence of the formation of this axis, can decide to explore **new ways of working with them to stabilise the region**, if it desires to do so, and remain relevant there.
  - **Regional solution:** There is a convergence of interests (Infrastructural development and trade) between India and three key regional players — China, Russia and Iran — in seeing a stable settlement in Afghanistan.
    - Thus, there is a need for cooperation from like minded countries on this front.
  - **Global Cooperation:** There is a lot less global acceptance of terrorism today than in it was in the 1990s.
    - No major power would like to see Afghanistan re-emerge as a global sanctuary of terror.

- The world has also imposed significant new constraints on Pakistan's support for terror through mechanisms like the **Financial Action Task Force**.
- **Talking with the Taliban:** Taliban now should be taken under confidence for any kind of development (political or economic) in the region.
- For India, talking to the Taliban would allow it to seek security guarantees from the insurgents in return for continued development assistance or other pledges as well as explore the possibility of the Taliban's autonomy from Pakistan.

### Conclusion

The lesson for India in the wake of these developments is clear: It will have to fight its own battles. So it must make enemies wisely, choose friends carefully, rekindle flickering friendships, and make peace while it can.



## Climate Change and Big Businesses

This article is based on **Getting businesses to act on climate change** which was published in *The Hindu Business Line* on 23/08/2021. It talks about the role of businesses in climate change and the way forward.

**Tags:** Biodiversity & Environment, Paper-2, Paper-3, Environmental Pollution & Degradation, Important International Institutions

The latest **IPCC report** released last week has issued **“a code red warning to humanity”**. Its main message is that the Earth is rapidly deteriorating, there is no getting away from climate change and this is happening because of human “influence.”

While it warns about extreme weather events like heat waves, heavy rainfall, floods, droughts, and cyclones — many of which are already being witnessed across the world and in India — it also says we could limit global warming to 1.5 degrees by 2040. If we do that, the changes taking place in the world could be slowed down and even stopped from getting worse.

This warning should make India take a relook at its climate mitigation efforts and accelerate them many folds if it wants to achieve the **NDC (Nationally Determined Contributions)** targets it has made a commitment to.

Though the IPCC report is purely science based and silent on the role businesses can play. Businesses whether big or small can play a stellar role in the process. By striving towards emission reduction and net zero goals, they could come closer to achieving their own goals and participate in those of the nation

### Businesses Responsible For the Carbon Emission

- 20 fossil fuel companies whose relentless exploitation of the world's oil, gas and coal reserves can be directly linked to more than one-third of all greenhouse gas emissions in the modern era.
- According to another study, 100 companies have been the source of more than two-third of the world's greenhouse gas emissions since 1988.

#### India's Commitment

- **International Commitments:** In order to achieve its **Paris commitment**, India needs to ensure that it has a few things in place by 2030.
  - Increasing its cumulative electricity generation installed capacity from non-fossil energy sources to 40%.
  - Lowering emissions intensity of its GDP by 33-35 per cent compared to 2005 levels.
  - Creating an additional carbon sink of 2.5- 3 billion tonnes through additional forest and tree cover.
- Besides these international commitments, the government has also set ambitious domestic targets for renewable energy, air quality and others.

### Impact of Climate Change on Businesses

- Climate change is affecting society, the economy and communities across the globe.
- Businesses are facing a number of risks, including physical: the impact of extreme weather events, or supply shortages from water scarcity,
- Transition risks from society's response such as changes in technologies, markets and regulation,
- Potential liabilities for emitting greenhouse gases caused by business activities,
- Climate change has created new material risks and has increased reputational risks for businesses.
  - Moreover, access to finance is becoming increasingly linked to companies' climate-related risks.

### Way Forward

- **Sector-wise emission Reduction:** If India has to involve industry in a systematic way, the best route would be to go in for sector-wise emission reduction.
  - If this could be implemented diligently, more than half the battle would have been won.
  - But for this both government and industry would have to work actively and with an altruistic passion.

- However, the profits from this approach should be far, wide, and for the long term.
- **Environment clearances** must be handed out more judiciously and only to those projects that are of extreme importance in the national context.
  - No compromises or shortcuts should be allowed while determining the impact on the environment and the indigenous people who are today the guardians of our forests.
  - Displacing them, cutting down forests for commercial considerations and compensating for it through synthetic reforestation efforts, which look good only on paper, would be drastically missing the woods for the trees.
- **Managing the Labour Force:** Though the transitioning from coal fired power plants to renewable energy has to take place in the long term and doing so will involve displacement of over 200 lakh workforce.
  - The same labour could be deployed towards renewable energy and environment regeneration projects.
  - If livelihoods are not protected while reducing coal mining activity, it would precipitate a socio-economic crisis.
- **Global Cooperation:** A MOUs signed between **The Energy and Resources Institute (TERI)** and the Global Cement and Concrete Association (GCCA) to accelerate sustainable development of the cement and concrete sectors is a step in the right direction.
  - Similarly, sectors like real estate, power, automobiles, aviation, oil, gas, steel, and IT could be studied closely and given sufficient incentives to bring down their emissions sector-wise.
  - This will help us in meeting national targets and also bringing the world closer to its net zero ambition.
- **State governments and municipalities** too will have to be nudged and incentivised to think global and act local on both emission reduction and biodiversity enhancement.
  - All government policy and actions have to be directed towards reaching these goals.

### Conclusion

Though coal, gas and oil companies have begun to explore and consider investing in renewable energy, hydrogen and other clean technologies, the pace of transition is slow as they are still working towards meeting demand-growth projections. A fresh approach, therefore, is needed on all fronts.



## Cyclone Resilient Planning

*This article is based on **Tauktae, Yaas and planning for the next** which was published in The Hindu on 24/08/2021. It talks about the challenges of increasing frequency of the cyclones in India and measures to be taken to deal with the issues.*

**Tags:** Biodiversity & Environment, GS Paper - 2, GS Paper - 3, Physical Geography, Disaster Management, Environmental Pollution & Degradation

The severe cyclones, **Tauktae** and **Yaas**, which battered India earlier this year, made landfall on the country's western coast, Gujarat, and the eastern coast, Odisha, respectively.

Both storms caused massive damage to infrastructure, the agricultural sector, and houses. Around 2.5 million people were evacuated to cyclone shelters and relief camps in these two States. The large-scale uprooting of trees in the urban areas affected already depleting green cover.

Thus, during the **Covid-19 pandemic**, these cyclones caused additional financial responsibility for State governments. The health costs are also an issue.

### Cyclone Challenge in India

- Every year, around five to six tropical cyclones are formed in the **Bay of Bengal** and the **Arabian Sea**; of these, two to three turn severe.
- The Indian coastline is around 7,500 km; there are 96 coastal districts (which touch the coast or are close to it), with 262 million people exposed to cyclones and tsunamis.
- **Increasing sea surface temperatures** in the northern Indian Ocean and the **geo-climatic conditions** in India have led to a rise in the frequency of devastating cyclones in the coastal States accounting for **7% of the global tropical cyclones**, according to India Meteorological Department (IMD), 2013 data.
- Between 1891 and 2020, out of the 313 cyclones crossing India's eastern and western coasts, 130 were classified as severe cyclonic storms.
  - The west coast experienced 31 cyclones, while 282 cyclones crossed the east coast.
  - The Odisha coast witnessed 97 cyclones, followed by Andhra Pradesh (79), Tamil Nadu (58), West Bengal (48), Gujarat (22), Maharashtra/Goa (7), and Kerala (2).
- The **World Bank** and the **United Nations** (2010) estimate that around 200 million city residents would be exposed to storms and earthquakes by 2050 in India.

### **Economic Cost of Cyclone Disasters**

- **Second Most Expensive:** Among the natural disasters, cyclones constituted the **second most frequent phenomena** that occurred in 15% of India's total natural disasters over 1999-2020.
  - During the same period, 12,388 people were killed, and the damage was estimated at USD 32,615 million.
  - Cyclones are the second most expensive in terms of the costs incurred in damage, accounting for 29% of the total disaster-related damages after floods (62%).
- **Third Most Lethal Disaster:** In addition, they are the third most lethal disaster in India after earthquakes (42%) and floods (33%).
  - However, fatalities due to cyclones declined from 10,378 in 1999 to 110 in 2020.
  - The significant drop was on account of improved **early warning systems, cyclone forecasting, and better disaster management** activities such as timely evacuation, rehabilitation and relief distributions.
    - But these measures are not adequate to achieve a zero-fatality approach and minimise economic losses from cyclones.
- Between 1999 and 2020, cyclones inflicted substantial damage to public and private properties, amounting to **an increase in losses from USD 2,990 million to USD 14,920 million** in the absence of long-term mitigation measures.
  - In addition, damages caused due to cyclones increased nine times during the same period.
- **Precautionary Expenditure:** Cyclones also led to an increase in the fiscal burden of governments through increased spending to **implement effective cyclone preparation** measures.
- India lost around **2% of GDP and 15% of total revenue over 1999-2020**. According to the **Global Climate Risk Index report 2021**, India ranks the seventh worst-hit country globally in 2019 due to the frequent occurrence of extreme weather-related events.
  - Moreover, the report showed that India lost around 2,267 human lives, while damages stood at USD 68,812 million in **Purchasing Power Parity (PPP)** terms in 2019.
  - In the same year, India ranked first concerning human deaths and economic losses due to extreme weather-related events.
  - The **Asian Development Bank's** report in 2014 estimated that India would suffer a loss of around 1.8% of GDP annually by 2050 from climate-related events.

### **Way Forward**

- **Take Precautionary Measures:** It is imperative to improve the cyclone warning system and revamp disaster preparedness measures.
- **Structural Measures:** The Government must widen the cover under shelterbelt plantations and help regenerate mangroves in coastal regions to lessen the impact of cyclones.
  - In addition, adopting cost-effective, long-term mitigation measures, including building **cyclone-resilient infrastructure** such as constructing storm surge-resilient embankments, canals and improving river connectivity to prevent waterlogging in low-lying areas are important.
  - Installing **disaster-resilient power infrastructure** in the coastal districts, providing concrete houses to poor and vulnerable households, and creating massive community awareness campaigns are essential.
- **Collective Efforts:** Healthy coordination between the Centre and the States concerned is essential to collectively design disaster mitigation measures.
  - It is only such a collective mitigation effort by the Centre and States that can help reduce the fiscal burden of States and also be effective in minimising disaster deaths.
- **Case Study - State Level Interventions:**
  - In the aftermath of the **1999 super cyclone**, the Government of Odisha took up various cyclone mitigation measures which included installing a disaster warning system in the coastal districts, and construction of evacuation shelters in cyclone-prone districts.
  - Other steps were the setting up of the **Odisha State Disaster Management Authority (OSDMA)**, conducting regular cabinet meetings for disaster preparedness, and building the **Odisha Disaster Rapid Action Force (ODRAF)**.
  - All these activities have helped to minimise the toll from cyclonic storms such as **Hudhud, Fani, Amphan, and Yaas**. However, still Odisha's disaster management model is inadequate to minimise the economic losses that result from cyclones.



### **Need For Caste Census**

*This article is based on **To ensure justice, a caste census is essential** which was published in the Hindustan Times on 23/08/2021. It evaluates the need for the caste census in India.*

**Tags:** Indian Society, GS Paper - 1, GS Paper - 2, Government Policies & Interventions, Social Empowerment

The caste system is India's nemesis and has severely restricted the country's ability to realise its immense potential and become a great nation in science, technology, knowledge, art, sport and economic prosperity.

Studies suggest that **94% of marriages are endogamous; 90% of menial jobs are performed by the deprived castes**, whereas this figure is reversed in white-collar jobs. This abysmal lack of caste diversity, especially at the decision-making levels in various sectors — the media, the judiciary, higher education, bureaucracy or the corporate sector — is weakening these institutions and their performance.

It is indeed strange that while caste plays such a dominant role in our social, economic and political life, no credible and comprehensive caste data exists for more than half the population of our country.

### Need For Caste Census

- **Benefit in Policy Making:** The purpose of a caste census is not merely geared to the reservation issue; a caste census would actually bring to the fore the large number of issues that any democratic country needs to attend to, particularly the number of people who are at the margins, or who are deprived, or the kind of occupations they pursue.
  - A caste census, which will generate exhaustive data will **allow policymakers to develop better policies, implementation strategies**, and will also enable a more rational debate on sensitive issues.
- **Also Reveal Privileged Section of Society:** Caste is not only a source of disadvantage; it is also a very important source of privilege and advantage in our society.
  - We have to stop thinking of caste as being applicable to only disadvantaged people, poor people, people who are somehow lacking.
  - The opposite is even more true: caste has produced advantages for certain communities, and these also need to be recorded.
- **Caste Has Important Position in Indian Society:** While census data has been captured for **Scheduled Castes, Scheduled Tribes**, religions and linguistic profiles, there has been no profiling of all castes in India since 1931.
  - Since then, caste has assumed an increasingly important position in our lives, and our reliance on inadequate data has also increased.
- **To Address Prevalent Inequalities:** Unequal distribution of wealth, resources and education has meant an

acute shortage of purchasing power among the majority of Indians.

- As a democratic nation, **we cannot forcibly overthrow the system**, but we need to address it in a democratic, scientific and objective manner.
- **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.
- **To Burst the Myths:** There are a lot of myths which actually deprive a large number of people, particularly on the margins.
  - Let's take the case of Karnataka. For a long time, there were claims that among the castes, the Lingayats are the most numerous.
  - But a lot of other studies have brought out that this may not be true, and these kinds of myths lead to the argument that given that this is a caste which is numerous, it has to be constantly placated. These myths can be debunked through a caste census.
- **Reduce Inclusion and Exclusion Errors:** With accurate data of castes, most backward castes can be identified.
  - Some have benefited so much across the years, while there are people in this country who have not benefited at all.
- The **Supreme court has time and again asked governments** to provide the data related to castes; however, this has not been possible due to the non-availability of such data.
  - As a result, our national life suffers from mutual mistrust and misconceptions among different castes.
  - All such commissions have had to rely on data from the last caste census (1931).

### Associated Challenges With Caste Census

- **Repercussions of a Caste Census:** Caste has an emotive element and thus there exist the political and social repercussions of a caste census.
  - There have been concerns that counting caste may help solidify or harden identities.
  - Due to these repercussions, nearly a decade after the SECC, a sizable amount of its data remains unreleased or released only in parts.
- **Caste Is Context-specific:** Caste has never been a proxy for class or deprivation in India; it constitutes a distinct kind of embedded discrimination that often transcends class. For example:
  - People with Dalit last names are less likely to be called for job interviews even when their



qualifications are better than that of an upper-caste candidate.

- They are also less likely to be accepted as tenants by landlords. Thus difficult to measure.
- Marriage to a well- educated, well-off Dalit man still sparks violent reprisals among the families of upper-caste women every day across the country.

### Way Forward

- India needs to be **bold and decisive** in tackling caste questions through data and statistics in the **way the United States (US) does to tackle race issues**, by collecting data around race, class, language, inter-race marriages, among other metrics.
  - This data provides a mirror to the State and society of the US in which they can see themselves and take decisions to do course corrections.
- **Creation of National Data Bank:** The **Sachar Committee Report** recommended setting up a national data bank.
  - The **Justice Rohini committee** was appointed in 2017 to look into the **sub-categorisation of the OBC communities**; however, in the absence of data, there can be no data-bank or any proper sub-categorisation.

### Conclusion

With every passing day and increasing social awareness, the urgency to do away with the caste system is being sharply felt. Dr. BR Ambedkar stated that if India had to attain a place of pride among the comity of nations, caste would have to be annihilated first.

The 21<sup>st</sup> century is the right time to solve India's caste question, which would otherwise extract a heavy price, not just sociologically, but also politically and economically, and make us fall behind in the development index.



## Use of Technology In Judiciary

*This article is based on **Helping and hindering justice** which was published in the Hindu on 26/08/2021. It talks about the challenges of using technology in the judicial system.*

**Tags:** Governance, GS Paper - 2, Judiciary, E-Governance

Recently, while dealing with issues arising in connection with the **CoWIN portal**, the Supreme Court pointed out some of the major impediments in the delivery of vaccines to the people at large.

Major Impediments are: **inadequate digital literacy** across the country, **inadequate digital penetration**, and

serious **issues of bandwidth and connectivity**, particularly in remote and inaccessible regions.

Despite the ambition of bringing the benefits of vaccination to every human being in the country, the policy was falling short of its goal because of the inherent difficulties pointed out.

The premise in the observations of the court was that relying solely on digital transformation may not be a sound idea. It could result in exclusion of a large section of the population on account of the enumerated shortfalls.

The similar challenges are faced by the judicial system while using technology in the dispensation of justice.

### Judiciary's Efforts During Pandemic

- In the wake of the pandemic, courts began using facilities like e-filing in true earnest.
- In May 2020, the Supreme Court also introduced another innovation: **a new system of e-filing and artificial intelligence-enabled referencing**.
  - This was meant to herald efficiency, transparency and access to court delivery services for every user.
- The judiciary's effort is not merely a one-off action to overcome the pandemic-created emergency. It also seeks to harness technology in overcoming and resolving the intractable ills that have for long dogged the judiciary.
  - These include the **massive backlog of cases** and unacceptable levels of **judicial vacancies** across the country at all levels.
- The latest Vision Document for Phase III of the **e-Courts Project** seeks to address the **judiciary's digital deprivation**.
  - It envisages an infrastructure for the judicial system that is '**natively digital**' and reflects the effect that the pandemic has had on India's judicial timeline and thinking.

### Issues Associated With Digital Solution to Judiciary

- **Not a Panacea:** Deployed with adequate data-based planning and safeguards, technological tools can be a game changer.
  - However, **technology is not per se value-neutral** — that is, it is not immune to biases — and therefore, it must be properly evaluated to see whether it works to increase the power imbalance between citizens and the state or whether it affirms and furthers citizens' rights.
- **Maintaining e-courts Record:** The paralegal staff is not well equipped and trained to effectively handle document or record evidence, and make them readily

accessible to the litigant, to the council as well as to the court.

- **Hacking and Cybersecurity:** On the top of technology, cyber-security will be a huge concern too. The government has initiated remedial steps to address this problem and formulated the Cyber Security Strategy. However, the practical and actual implementation of the same remains a challenge.
- **Lawyers** in semi-urban and rural districts find online hearings challenging, mostly due to connectivity issues and an **unfamiliarity** with this way of working.
- **Other issues** might involve the **litigant's lack of confidence in the process** due to lack of proximity.
  - It is must to keep in mind that there will always be an inherent resistance to change to all stakeholders, whether for good or bad.

### Way Forward

- **Frequent Performance Audits:** It would be imperative to resort to performance audits and sandboxing measures (isolated test environment) to carefully understand and gauge the potential and risks.
- **Deep house cleaning** is required in each court and there also needs to be an outreach to all litigants in a cost-effective, convenient and efficient manner.
- **Evidence Based Rational Approach:** The next course of action should be based on an evidence-based rational approach.
  - For instance, we need to study and understand why video conferencing in criminal cases has neither shortened trials nor reduced the number of people awaiting trial.
- **Address Uneven Digital Access:** While mobile phones are widely owned and used, access to the Internet remains limited to urban users.
- **Filling Up Vacancies:** Just as doctors cannot be replaced by chatbots, technology, no matter how advanced, cannot be a substitute for judges of whom there remains a big shortfall.
  - The **India Justice Report 2020** pegs vacancies in the High Court at 38% (2018-19) and in lower courts at 22% for the same period.
  - More than four out of every 10 posts of High Court judges remain vacant as of August 2021.
- **Infrastructure Deficit:** Open court is a cardinal principle in the delivery of justice. The question of public access cannot be pushed to the sidelines but must be a central consideration.
  - The shortage of technical infrastructure has too often meant that **access to online hearings is curtailed**.

### Conclusion

Perhaps, this could be the opportune time for making lasting changes that could transform the creaking justice delivery system in India.

But an over-reliance on technology is not a panacea to all the ills plaguing the courts and if done without forethought, could become counterproductive.



## Higher Education and Regional Languages

*This article is based upon "Is it practical to conduct higher education in regional languages?" which was published in Livemint on 27/08/2021. It talks about the introduction of India's regional languages in higher education and the pros and cons associated with it.*

**Tags:** Governance, GS Paper 1, Population and Associated Issues, GS Paper 2, Government Policies & Interventions, Education

In India, teaching and learning have largely been in foreign languages whereas Indian languages have never got the much deserving importance in the field.

However, the **National Education Policy, 2020 (NEP, 2020)** has emphasized the use of regional languages for instruction at the primary and higher education levels.

With regard to this, the **All India Council for Technical Education (AICTE)** has granted permission to 14 colleges across the country to offer select engineering courses in 11 regional languages including Hindi, Marathi, Bengali, Tamil, Telugu, Kannada, Gujarati, Malayalam, Assamese, Punjabi and Oriya.

The unavoidable question here is whether it is practical to precipitate a regional-medium shift in higher education, especially in the face of a largely dysfunctional public education system.

### Positive Aspects of Higher Education in Regional Language

- **Subject-Specific Improvement:** Several studies in India and other Asian countries suggest a positive impact on learning outcomes for students using a regional medium rather than the English medium.
  - **Performance in science and math**, in particular, **has been found to be better among students studying in their native language** compared to English.
- **Higher Rates of Participation:** Studying in the native language results in **higher attendance, motivation and increased confidence for speaking up among students** and **improved parental involvement** and support in studies due to familiarity with the mother tongue.

- Poor grasp of English has been tied by many educationists to dropout rates at the premier engineering education institutions as well as poor performance of some students.
- **Additional Benefits for the Less-Advantaged:** This is especially **relevant for students who are first-generation learners** (the first one in their entire generation to go to school and receive an education) or the ones **coming from rural areas**, who may feel intimidated by unfamiliar concepts in an alien language.
- **Increase in Gross-Enrollment Ratio (GER):** This will help provide quality teaching to more students and thus **increase Gross Enrolment Ratio (GER)** in higher education.
- **Promotes Linguistic Diversity:** It will also **promote the strength, usage, and vibrancy of all Indian languages**.
  - This way, private institutions too will be motivated to use Indian languages as a medium of instruction and/or offer bilingual programmes.
  - It would also help **prevent language-based discrimination**.

### Challenges Associated

- **Shift in Hiring Paradigm:** The decision to promote regional language in tertiary education will interfere with the hiring decisions of the premier institutions as they will be **forced to consider language proficiency as a primary criteria** as opposed to subject matter expertise.
  - They will also have to **give up on looking from the global talent pool** for teaching.
- **Insignificant for Institutions with Pan-India Admissions:** A regional language focus is not **meaningful in a scenario where the institutes see entrants from across the country** such as IITs.
- **Availability of Quality Material in Regional Languages:** Another challenge is the availability of study material such as textbooks and scholarly literature.
  - Also, **quality control of these translations** will be of utmost importance to keep semantic irregularities at bay.
- **Placement Associated Challenge:** Many public sector units accept Graduate Aptitude Test in Engineering (**GATE**) **scores for entry-level positions**, which is conducted in English medium.
  - Given the already lamentable employability of college-educated individuals, studying in a regional language could further **inhibit job opportunities**.
- **Availability of Faculty:** Given the English-medium legacy of higher education in India, **attracting and retaining quality teachers** who are willing and able to teach in regional languages will be a challenge.

- **Maintaining Pace with Global Standards:** Delivering technical courses in regional languages may **prevent students from competing in global labour and education markets**, where fluency in English yields a distinct edge.
  - A lack of opportunities for Indian students at the international level may prove counterproductive to the NEP, 2020's aim of bridging the gap between elites and the rest.
  - It also goes **against the vision of promoting the internationalization of education**.

### Way Forward

- **Building Foundation:** Promoting regional languages by the kind of fiat that the government has adopted is problematic.
  - A foundation needs to be built first, for instance, through grants to **popularise science and technological education in the regional language**, etc.
- **Bringing IITI into Play:** High-quality learning and print material in Indian languages, shall be first developed by creating quality programmes in translation and interpretation.
  - In this regard, the Indian Institute of Translation and Interpretation (IITI) will be established which will employ scholars in Indian languages, subject experts and experts in translation and interpretation.
- **Fair and Equitable System for Education:** The Government shall work to develop an equitable system based on the principles of fairness and inclusion.
  - It must **ensure that the personal and social circumstances of students should in no way be obstacles** to realising their full academic potential.
  - At the same time, ensuring inclusion through the use of the mother tongue/ regional language, it should also **set up a basic minimum standard of education which eliminates all disparity**.
- **Adopting the "Regional Language Plus English" Notion:** While it is necessary to strengthen Indian languages as a medium of education, it is equally **imperative for students to have a good command over the English language** since they are global natives in the 21<sup>st</sup> century.
  - Indian languages must be supplemented by English.
- **Bridging the Digital Divide:** AICTE has recently developed a tool which translates English content online into 11 Indian regional languages.
  - To provide such a facility to all of its students, the institutions **prioritise providing electronic devices and internet facilities to school and college students** from socially and economically weaker sections.

## Conclusion

- Indian languages are a *sine qua non* for educational and cultural development since they strengthen equity in education and will prepare students to live in a local, national and global society utilising a harmonious blend of Indian languages and English.
- A holistic approach is required for the implication of native-language instruction in an increasingly globalized world.
  - A shift from “mother tongue versus English” towards the “mother tongue plus English” is required.



## Keeping Girls In School

This article is based on **Making sure that girls don't drop out of school** which was published in *The Indian Express* on 28/08/2021. It talks about the issue of girls dropping out and ways to ensure their stay in higher education.

**Tags:** Social Justice, GS Paper - 2, Women's Issues, Issues Related to Women, Gender, Education, Employment

For the past few decades, Indian women have taken a great stride in all fields of activity. Yet, a lot remains to be achieved. Indian women excelled in the Olympic Games for India. There is no reason for it to be otherwise in any other field, especially education, given the right support.

As a nation, we can not afford to ignore half the potential workforce if we aspire to be an economic powerhouse. As a society, women can be the pivot to bring about critical and lasting social transformation. As individuals, they deserve a shot at being the very best they can.

In this context there is a need to relook into various issues related to women's education especially higher education.

### State of Girls Dropping Out

- **Reasons For Girls Dropping Out:** The reasons for girls dropping out in India are varied. The primary ones are obvious: Girls drop out of school because,
  - Engaged in domestic activities (31.9%)
  - Have financial constraints (18.4%),
  - Not interested in education (15.3%), and
  - Get married (12.4%).
- **Gender Biases and Social Norms:** The problem is not only rooted in poverty and poor quality of school education, but also gender biases and outdated social norms.

- The states having the highest rate of secondary school drop-outs among girls are also the ones where a significant percentage of girls get married before the age of 18 years.
- **Low Expenditure on Girls Education:** Deep-rooted gender biases are also reflected in the choice of schools, access to private tuitions and the choice of discipline in higher education.
  - The average annual household expenditure on girls at this level is Rs 2,860 less than that on boys.
  - In India, the average annual cost for professional courses is much higher compared to that of simple graduation programmes (Rs 50,000 vs Rs 8,000).
  - Of the girls who do manage to enrol in a tertiary degree, a smaller proportion go on to pursue professional courses such as engineering (28.5%), while many more take courses such as **pharmacy (58.7%)** or opt for “normal graduation” (52%) as per **AISHE 2019-20**.
  - Their representation is lowest in institutions of national importance, followed by deemed and private universities.

### Girls Drop Out-Data

- It is estimated that over 2.4 crore girls globally are on the verge of dropping out of schools due to the **Covid-19 pandemic**.
  - Pandemic-induced **school closures and economic hardships** have significantly exacerbated many vectors that influence the problem of women in education.
- In the Indian context before the pandemic, there was a welcome trend in the gradual increase in the **Gross Enrolment Ratio (GER)** for women in higher education – from 19.8% in 2012-13 to 27.3% in 2019-20.
  - That said, a more nuanced picture of the problem of women and higher education can be seen. Lately, it has been affected badly by the pandemic induced lockdowns.
  - It is estimated that **over one crore girls** are on the verge of dropping out of schools due to the pandemic alone.

### Importance of Education:

#### Social Development of the Women

- **Higher Social Return:** The global average for the private rate of return (the increase in an individual's earnings) with just one extra year of schooling is about 9%, while the social returns of an extra year of school are even higher — above 10% at the secondary and

higher education levels as per a decennial **World Bank** review.

- **Positive Impact of Higher Education:** Interestingly, the private returns for women in higher education are much higher than for men — 11 to 17% as per different estimates.
  - This has clear policy implications. For their own empowerment, as well as for society at large, we must bring more and more women within the ambit of higher education.
- **Women Can Play Leadership Roles:** Healthy, educated girls with equal access to opportunities can grow into strong, smart women who can take on leadership roles in their countries. This will help in having a better view of women's perspective in the government policies.
- **Poverty Alleviation:** Women constitute almost half of the country's population, therefore improving their condition in the country can immensely contribute to poverty alleviation.
  - Women's empowerment plays a catalytic role towards the achievement of transformational economic, political and social changes required for sustainable development.

### Way Forward

- To overcome these systemic challenges, the government has taken a number of initiatives in the past such as the **National Scheme of Incentives to Girls for Secondary Education (NSIGSE)**, supernumerary seats in all IITs and the **PRAGATI Scholarship scheme** for girls in technical education.
  - However, in these unprecedented times, we need unprecedented measures to address the issue of girl child school drop-outs and bring more girls in professionally and monetarily rewarding fields of higher education.
- **Community Learning Programme:** As an immediate step, in every locality, a mohalla school or a community learning programme should be started with appropriate Covid norms.
  - **NITI Aayog**, with the help of civil society organisations, had started a community programme led by volunteers called "**Saksham Bitiya**" in 28 aspirational districts where more than 1.87 lakh girl students were trained in socio-emotional and ethical learning.
  - Such initiatives should be replicated to ensure more girls do not drop out of schools during the pandemic.

- **Gender Atlas/Dropout Mapping:** To predict likely drop-outs, a gender atlas comprising indicators that are mapped to key reasons for school drop-outs should be developed.
  - Teachers should also be trained in all the scholarships and schemes available that provide economic support to girls and their families for continuing their education.
- There is a **need to revise the National Scheme of Incentive to Girls for Secondary Education** in areas or states with high prevalence of drop-outs and early child marriages.
  - The scholarship amount may be increased and tied to the completion of graduation, with yearly scholarships paid to students upon successful completion of each year of their undergraduate degree.
- **Special Education Zones For Backward Districts in Education:** Every panchayat showing a consistent trend in girl child drop-outs should have composite schools till higher secondary (classes I-XII).
  - **The National Education Policy 2020** provides for a **gender inclusion fund**. This fund should be utilised to support **STEM education** in these schools as well as in all Kasturba Gandhi Balika Vidyalayas.
  - State governments need to leverage existing schemes to design interventions to promote women in higher education.
- **Behavioural Nudges in Tackling Social Prejudices:** Social prejudice and orthodox cultural norms prevent girls from achieving their innate potential.
  - **Behavioural Insights Units (BIU)** may be established across states to tackle social issues with the help of ultra-local NGOs/CSOs to reach the last mile.
  - NITI Aayog has taken a leap forward in this direction by establishing a BIU to tackle nutrition and health challenges in aspirational districts.

### Conclusion

The **Covid-19 pandemic** has brought unprecedented challenges for all including educators and students, especially for those on the margins, including girls. However, with recent experiments and learning experience, informed targeting of ample resources and an agile policy environment, this challenge could well prove to be an opportunity. Given the right enabling environment, educational outcomes can be improved.

Addressing gender bias in education requires providing social, financial and emotional support to the girl child.



## Nutritional Security Through Food Fortification

This article is based on **Biofortified food can lead India from food security to nutrition security**, which was published in *The Indian Express* on 30/08/2021. It evaluates the idea of food fortification to deal with nutritional insecurity and suggest the way forward.

**Tags:** Social Justice, GS Paper - 2, GS Paper - 3, Public Distribution System (PDS), Health, Issues Relating to Poverty & Hunger, Food Security, Issues Related to Children

The Prime Minister emphasised the need to ensure “poshan” (nutrition) to the country’s women and children. He announced that, by 2024, rice provided to the poor under any government scheme — **PDS, mid-day-meal, anganwadi** — will be fortified.

Leveraging science to attack the complex challenge of malnutrition, particularly for low-income and vulnerable sections of the society, who cannot afford balanced diversified diets, can be a good intervention. This step can have its own challenges.

### Advantages of Food Fortification

- **Increase in Nutritional Value:** The biofortified crops have 1.5 to 3 times higher levels of protein, vitamins, minerals and amino acids compared to the traditional varieties.
- **Safer Method of Fortification:** It is worth noting that these varieties are not genetically modified — they have been developed through conventional crop breeding techniques by the scientists.
  - Moreover, the addition of micronutrients to food does not pose a health risk to people. The quantity added is so small and so well regulated as per prescribed standards that likelihood of an overdose of nutrients is unlikely.
- **Nutritional Security at Large:** Since the nutrients are added to staple foods that are widely consumed, this is an excellent method to **improve the health of a large section of the population, all at once.**
- **Does Not Require Behaviour Change:** It does not require any changes in food habits and patterns of people. It is a socio-culturally acceptable way to deliver nutrients to people.
- It **does not alter the characteristics of the food**—the taste, the feel, the look.
- **Quick Results:** It can be implemented quickly as well as show results in improvement of health in a relatively short period of time.

- **Cost Effective:** This method is cost-effective especially if advantage is taken of the existing technology and delivery platforms.
  - The **Copenhagen Consensus** estimates that every **1 Rupee spent on fortification results in 9 Rupees** in benefits to the economy.
  - It requires an initial investment to purchase both the equipment and the vitamin and mineral premix, but overall costs of fortification are extremely low. Even when all program costs are passed on to consumers, the price increase is approximately 1-2%, less than normal price variation. Thus it has a high benefit-to-cost ratio.

### Indian Scenario

- Currently, 15.3% of the country’s population is undernourished, and India has the highest proportion of “stunted” (30%) and “wasted” children (17.3%) below five years of age, as per the FAO’s recent report, **‘The State of Food Security and Nutrition in the World, 2021’**.
  - These figures indicate that India is at a critical juncture with respect to nutritional security and will not be able to achieve the UN’s **Sustainable Development Goal (SDG)** of eliminating all forms of malnutrition by 2030 in the business-as-usual scenario.
- **Factors for Nutritional Insecurity:** **Access to nutritious food** is only one of the determinants of nutrition. Other factors like poor access to safe drinking water and sanitation (especially toilets), low levels of immunisation and education, especially of women, contribute equally to this dismal situation.
- As per the **Indian Council of Agricultural Research (ICAR)** website, **21 varieties of biofortified staples** including wheat, rice, maize, millets, mustard, groundnut had been developed by 2019-20.
- A research team at the **National Agri-Food Biotechnology Institute** in Mohali has also developed **biofortified coloured wheat (black, blue, purple)** that is rich in zinc and anthocyanins.
  - Farmers from Punjab and Haryana have been roped in to multiply the production of this wheat variety. This points towards the beginning of a new journey, from food security to nutritional security.

### Adverse Impacts of Food Fortification

- **Not a Substitute of Good Nutrition:** While fortified foods contain increased amounts of selected micronutrients, they are not a substitute for a good quality diet that supplies adequate amounts of energy,

protein, essential fats and other food constituents required for optimal health.

- **Fails to Cater to the Poorest Segment of the Population:** Poorest segments of the general population have restricted access to fortified foods in the open markets due to low purchasing power and an underdeveloped distribution channel.
- **Inconclusive Evidence:**
  - Evidence supporting fortification is inconclusive and certainly not adequate before major national policies are rolled out.
  - Many of the studies which FSSAI relies on to promote fortification are sponsored by food companies who would benefit from it, leading to conflicts of interest.
- **Can Have Detrimental Effects:** Adding one or two synthetic chemical vitamins and minerals will not solve the larger problem, and in undernourished populations can lead to many detrimental effects like toxicity.
  - A study showed **iron fortification causing gut inflammation** and pathogenic gut microbiota profile in undernourished children.
- **Decrease Value of Natural Food:** Once iron-fortified rice is sold as the remedy to anaemia, the value and the choice of naturally iron-rich foods like millets, varieties of green leafy vegetables, flesh foods, liver, to name a few, will have been suppressed by a policy of silence.

### Way Forward

- **Increasing Women's Nutritional Literacy:** There is a direct correlation between mothers' education and the wellbeing of children. Children with mothers who have no education have the least diversified diets and suffer from stunting and wasting and are anaemic.
  - Hence, programmes for improving the educational status of girls and reducing the school dropout rates, particularly at the secondary and higher educational levels, need to be promoted.
  - The **Global Nutrition Report (2014)** estimates that **every dollar invested** in a proven nutrition programme offers **benefits worth 16 dollars**.
- **Increasing Expenditure on Agri-R&D:** Innovations in biofortified food can alleviate malnutrition only when they are scaled up with supporting policies.
  - This would require increasing expenditure on agri-R&D and incentivising farmers by linking their produce to lucrative markets through sustainable value chains and distribution channels.
- **Private Investment:** The government can also rope in the private sector to create a market segment for

premium-quality biofortified foods to cater to high-end consumers.

- For instance, trusts run by the **TATA group are supporting different states** to initiate fortification of milk with Vitamin A and D.
- Other private dairies should also be encouraged to scale up milk fortification across the country.
- **National Level Programme:** A national awareness drive on the lines of the "**Salt Iodisation Programme**" launched by the government in 1962 to replace ordinary salt with iodised salt, can play an important role at the individual and community levels to achieve the desired goals of poshan for all.
- **Branding, awareness campaigns, social and behavioural change** initiatives, such as community-level counselling, dialogue, media engagement and advocacy, especially amongst marginalised communities, can promote consumption of locally-available, nutrient-dense affordable foods among the poor and children.
- **Need For Multi-pronged Approach:** It must be recognised that in the long run, India needs a multi-pronged approach [access to basic infrastructure (electricity, drinking water and sanitation)] to eliminate the root cause of this complex problem. That approach should include the following initiatives.



## Marital Rape: An Indignity to Women

*This article is based on **Marital rape: an indignity to women**, which was published in The Hindu on 31/08/2021. It talks about the issues related to non criminalisation of marital rape and suggest a way forward.*

**Tags:** Indian Society, GS Paper - 1, Salient Features of Indian Society, Role of Women, Issues Related to Women

A recent case in Chhattisgarh High Court has reignited the debate about non-criminalisation of marital rape. Even though many legal amendments have been done in criminal law for the protection of the women, the non-criminalization of marital rape in India undermines the dignity and human rights of women.

Not with standing this, the discrepancies and failings of Indian criminal law, highlighted by the judgment, deserve scrutiny.

### Issues With Marital Rape Exception

- **Inconsistent Provision:** A husband may be tried for offences such as sexual harassment, molestation,

voyeurism, and forcible disrobing in the same way as any other man.

- Moreover, husband separated from his wife may even be tried for rape (**Section 376B**).
- However, the marital rape exception is inconsistent with other sexual offences.

#### Recent Case

- The High Court of Chhattisgarh recently decided on a criminal revision petition challenging the charges framed against the applicant husband.
- Based on the allegations of his wife, charges were framed by a trial court under Section 376 (rape), Section 377 (carnal intercourse against the order of nature) and Section 498A (cruelty towards wife by husband or his relatives) of the Indian Penal Code (IPC).
- The High Court upheld charges under Sections 498A and 377 but **discharged the husband** under Section 376 on the ground that **by virtue of Exception 2 to Section 375 (the definition of rape), sexual intercourse by a man with his own wife (provided she is over the age of 18) would not amount to the offence of rape.**
- Since the High Court was bound by the law, which exempts husbands from being tried or punished for raping their wives by creating the legal fiction that all sex within marriage is consensual, no other conclusion was open to the Court.

- **Patriarchal Beliefs:** The marital rape exception is an **insult to the constitutional goals** of individual autonomy, dignity and of gender equality enshrined in fundamental rights such as **Article 21 (the right to life)** and **Article 14 (the right to equality)**.
  - In **Joseph Shine v. Union of India (2018)**, the Supreme Court held that the offence of adultery was unconstitutional because it was founded on the principle that a woman is her husband's property after marriage.
  - The marital rape exception betrays a similar patriarchal belief: that upon marriage, a wife's right to personal and sexual autonomy, bodily integrity and human dignity are surrendered.
- **Destroy the Institution of Marriage:** A commonly cited rationale even by the government for preserving the marital rape exemption is that recognising marital rape as a criminal offence would **'destroy the institution of marriage'**.
- **Doctrine of Coverture:** Non-Criminalised nature of Marital rape emanates from the British era. The Marital rape is largely influenced by and derived from this doctrine of merging the woman's identity with that of her husband.

- At the time the IPC was drafted in the 1860s, a married woman was not considered an independent legal entity.
- The marital exception to the IPC's definition of rape was drafted on the basis of Victorian patriarchal norms that did not recognize men and women as equals, did not allow married women to own property, and merged the identities of husband and wife under the **"Doctrine of Coverture."**
- **Against International Obligation:** Antithetical to the liberal and progressive values of our Constitution, and violative of India's international obligations under instruments such as the Convention on the **Elimination of All Forms of Discrimination against Women**, the provision underlines women's subordination to men, especially within marriage.
  - In 2017, the Supreme Court had read down the exception so that husbands who raped their minor wives could no longer hide behind it.
  - It is high time adult women are afforded the same protection and dignity in marriage.

#### Impacts of Marital Rape on Women

- **Mental health impacts** associated with marital rape and other forms of abuse by partners include **depression, anxiety, emotional distress and suicidal thoughts.**
- Marital rape and violence also **undermine children's health and well-being**, both through the **psychological impacts** of witnessing violence and because it can undermine the ability of mothers to care for themselves and their children.
- Marital rape victims are more likely than stranger and acquaintance rape victims to experience multiple rape incidents. Marital rape victims suffer long-lasting physical injuries that are as severe or more severe than victims of stranger rape experience.
- Victims of marital rape may remain in the marriage for a variety of reasons. These include: fear of more violence, loss of financial security, a low sense of self-worth, and false hope that their partner will change.

#### Way Forward

- **Not Against Institution of Marriage:** The government defended exception to marital rape in **Independent Thought v. Union of India (2017)** saying it against the institution of marriage.
  - However, rejecting this claim, the Supreme Court observed, **"Marriage is not institutional but personal – nothing can destroy the 'institution' of marriage except a statute that makes marriage illegal and punishable."**



- In this context, marital rape can be taken out of the exception.
- **Criminalise the Marital Rape:** The **United Nations Declaration on the Elimination of Violence against Women** defines violence against women as “any act of gender-based violence that results in, or is likely to result in, physical, sexual, or mental harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or private life.”
- In 2013, the UN Committee on Elimination of Discrimination Against Women (CEDAW) recommended that the Indian government should criminalize marital rape.
- **Justice Verma Committee Report:** The **JS Verma committee** set up in the aftermath of nationwide protests over the December 16, 2012 gang rape case had also recommended the criminalisation of the marital rape.
  - By removing this law, women will be safer from abusive spouses, can receive the help needed to recover from marital rape and can save themselves from domestic violence and sexual abuse.
- **Women’s Rights Awareness Programme:** Awareness campaign based in Kenya can provide shelter, counselling, practical and legal advice and other services to survivors of gender-based violence.
  - Educational and prevention programs on local, state, and national levels can be initiated for spreading awareness.

## When rape is allowed by law



**More than two-thirds of married women in India, aged 15 to 49, have been beaten, or forced to provide sex, regardless of their socio-economic positions. (As per the UN Population Fund)**

**1 in 5 men has forced his wife or partner to have sex. (As per the International Men and Gender Equality Survey 2011)**

**Over 104 countries across the world have criminalised marital rape.**

**India, Saudi Arabia, Pakistan and China have not.**

### Conclusion

Indian law now affords husbands and wives separate and independent legal identities, and much jurisprudence in the modern era is explicitly concerned with the protection of women.

Therefore, it is high time that the legislature should take cognisance of this legal infirmity and bring marital rape within the purview of rape laws by eliminating Section 375 (Exception 2) of IPC.



## Drishti Mains Questions

1. There is an urgent need to look into various measures that can be taken by India in order to bridge the demand supply gap. Comment.
2. Legislative body's role must be strengthened and deepened so that disruption of proceedings ceases to be an option. Comment.
3. Cooperative society, as an organic idea and an organisational platform, are relevant, if re-imagined and implemented skilfully. Comment.
4. 'Unforeseen problems can emerge from thawing of permafrost and glacial ice.' Discuss.
5. "A number of welfare schemes and availability of numerous resources have no significance if they are not brought into effective implementation and proper utilisation. The condition is completely satisfied in the case of Food Security in India." Discuss.
6. The South Asian region's post-pandemic adoption to digital life can shape its future prosperity. Discuss.
7. Critically analyse the government's steps of shutting down old coal power plants in order to achieve India's Nationally Determined Contributions.
8. Without a demonstration of military deterrence and resolve, an aggressive and expansive China cannot be persuaded into dismantling its bunkers and semi-permanent structures across LAC. Discuss.
9. The devastating impact of Covid-19 pandemic has shrunk the world economy and global trade. In this context policy decisions taken at the international level will determine the shape of global growth and trade prospects. Discuss.
10. 'Urban areas are growth engines of the country.' In the light of the statement discuss the need for livelihood security to the people in the urban areas.
11. India has the potential to leverage artificial intelligence technology to build frameworks to empower people, create equity and achieve economic development. Discuss.
12. The end goal is to have a just and equitable society that is economically thriving and offering citizens a meaningful quality of life. Discuss the statement in relation to current development indicators such as GDP/GNP.
13. Encouraging GM crops is a sure shot to doubling farmers' incomes and relieving rural distress. Critically discuss.
14. For a patient, open-minded and active India, there will be no dearth of balancing opportunities in Afghanistan. Discuss.
15. MSMEs are the backbone of a resilient national economy. In the light of the given statement discuss the issues faced by the MSMEs.
16. Speaker becomes a symbol of the nation's freedom and liberty. Therefore, the post should always be occupied by persons of outstanding ability and impartiality. Discuss.
17. Leverage women's collectives and the Panchayati Raj system is an effective way to achieve Sustainable Development Goals (SDGs). Comment.
18. The post-American power vacuum in Afghanistan will aid China and shape India's strategic choices and behaviour. Comment.
19. Though the IPCC report is purely science based and silent on the role businesses can play, it is a sector that can greatly help to achieve objectives of the Paris Agreement. Discuss.

20. With a rise in the frequency of devastating cyclones, India needs to look at long-term mitigation measures. Discuss.
21. Caste plays a dominant role in our social, economic and political life, still no credible and comprehensive caste data exists. Comment.
22. Technology can be a game changer, but it is not a panacea for the ills plaguing courts. Discuss.
23. “While education in regional language in the initial years of students may facilitate better learning and understanding, it is equally important for them to have good command over the English language in order to keep pace with the Global standards of education”. Discuss.
24. India’s women who are enrolled in education are far less than their counterparts. Examine the reasons and probable solutions for this gap in India.
25. Food fortification is an excellent method to improve the nutritional health of a large section of the population, all at once. Critically discuss.
26. The marital rape exception to the definition of rape is antithetical to women’s dignity, equality and autonomy. Discuss.

