



# Monthly Editorial Consolidation



**1<sup>st</sup> June to 30<sup>th</sup> June 2022**

# Content

• Towards Green Energy Transition .....	3
• Enhancing The Competitive Spirit of India.....	5
• Acknowledging the Contributions of ASHA .....	7
• Corporate Social Responsibility - A Strategic Endeavour.....	9
• Sustainable Cities through Urban Agriculture .....	10
• Creating An Open Network for e-Commerce .....	12
• Shaping India's Techade .....	14
• Dealing with Indo-Pacific Countries.....	16
• Need for Cooperatives in Tackling Climate Change.....	17
• India and Advanced Computing Technologies .....	19
• Bringing down Oil Import Bills .....	20
• Movement For Raising Voice .....	22
• Against Wasteful Consumption .....	22
• New Great Game in South Pacific.....	24
• Counteracting China's Influence by Improving Self-Capacity .....	25
• Effective Subsidy Delivery Mechanism .....	26
• Protecting the Wetlands.....	27
• Economic Participation of Rural Women.....	29
• Resetting India-Iran Relations.....	31
• A Global Standard of AI Ethics .....	33
• Caste - A Barrier to Economic Transformation .....	35
• Costly Fertilisers: Rethink Consumption .....	38
• Future of Agniveers .....	40
• Women's Choice & Governance .....	42
• Domination of E-Commerce Giants .....	44
• 5G and Optical Fibre .....	47
• Law of Anti-Defection Law.....	50
<b>Drishti Mains Questions .....</b>	<b>48</b>

## Towards Green Energy Transition

*This editorial is based on "Distributed RE is the Future of Green Energy Transition" which was published in Hindustan Times on 31/05/2022. It talks about the challenges pertaining to renewable energy transition and suggests measures to overcome the same.*

**Tags:** Biodiversity & Environment, GS Paper 2, Government Policies & Interventions, GS Paper 3, Environmental Pollution & Degradation, Growth & Development, Conservation

As seen in the climate negotiations in recent times, an appreciation of the need of the hour - the governments and non-governmental entities are making commitments to help countries implement their net-zero pledges. However, despite these commitments, the **global average temperature in 2100 is expected to rise to around 2.1°C** above pre-industrial levels.

This **falls short of the goals stipulated in the Paris Agreement**, which calls for limiting the global temperature to 1.5°C above pre-industrial-era levels by the end of the century.

Therefore, a pivotal move to bend the global emissions curve becomes imperative. Immediate climate action is especially critical for a post-pandemic future. In this context, **renewable energy (RE)** transition is **vital to building a resilient and secure future energy system**.

### India and Renewable Energy

#### Why Renewable Energy

##### Adoption Needs to be Encouraged?

- A **historic rise was seen in CO<sub>2</sub> emissions** in 2021 due to a sudden spike in oil and coal consumption.
  - With **just 2% of pandemic recovery finance spent on clean energy**, emissions are expected to reach an all-time high in 2023.
- Although an energy economy founded on clean pathways is emerging, energy transformation has a long way to go.

#### What Initiatives has India

##### Taken to Facilitate RE Transition?

- In 2019 India announced that it would take up its installed capacity of **renewable energy to 450 GW by 2030**.
  - At **CoP26**, India committed 50% of its total power generation from Renewable Energy.
- The **Production Linked Incentive Scheme (PLI)** scheme is another initiative of the Government of India with respect to enhancing the manufacturing sector for the **production of raw materials** for renewable energy.

- The **PM-KUSUM** (Pradhan Mantri-Kisan Urja Suraksha evam Utthaan Mahabhiyan) aims to provide financial and water security to farmers through **harnessing solar energy capacities of 25,750 MW by 2022**.
  - **Solarisation of water pumps** is a step in distributed power provided at the doorstep of the consumer.
- The Ministry of New and Renewable Energy on its website also hosts **Akshay Urja Portal** and **India Renewable Idea Exchange (IRIX) Portal**.
  - IRIX is a platform that promotes the **exchange of ideas among energy conscious Indians and the Global community**.
- India's decision to achieve **'net zero' by 2070** has been hailed globally as a game changer. The country has made reasonable progress by reaching nearly **110 GW of RE by the end of March 2022**.
  - It has also **committed \$35 billion of the \$122 billion in energy-related funding to renewables**, almost twice the amount allotted to fossil fuels.

#### How will RE be Economically Significant?

- Renewables form a **vital component of green recovery**, especially in a fast-developing country like India.
  - The renewable sector is not just competitive economically, but also holds **immense potential for job creation** since clean energy **technologies such as solar are far more labour intensive** than conventional energy sources.
- It has been estimated that in reaching its goal of 500 GW of non-fossil fuel energy sources by 2030, **India could create as many as 3.4 million new clean energy jobs** providing employment to over a million people.
  - This is expected to **come largely from Distributed RE**, which will create opportunities for local employment.
- Such efforts might also **encourage the start of new ventures**, and help **scale up domestic businesses**.
- India also has the **potential to become a manufacturing hub** for upcoming technologies like green hydrogen and energy storage.
- From the economy point of view, renewable sources **provide the market and revenue assurance** which no other resources can provide.

#### What are the Challenges

##### Pertaining to Renewable Energy?

- **Impact on Environment:** While RE generation is zero-carbon (barring some biofuels), there are **emissions at other points of its lifecycle**, such as during **raw material extraction and equipment manufacturing**. There are also RE's detrimental impacts on biodiversity and ecology.

- **Shortage of Skilled Personnel:** India's power sector has always faced shortage of skilled personnel, **not only in the private sector but also within DISCOMs**, grid management companies, regulators and policymakers and this problem is being compounded further in the current scenario.
  - **Capacity building within India** through skill development is of utmost priority. **Well-developed training programmes** are the need of the hour in India.
- **Installation Cost Issue:** The **high initial cost of installation** is one of the major hurdles in the development of renewable energy. Although the development of a coal plant requires high investment, it is known that **wind and solar power plants also require huge investment**.
  - In addition to this, **storage systems of the generated energy are expensive** and represent a real challenge in terms of megawatt production.
- **Resource Locator:** Most renewable energy plants that share their energy with the grid require large areas of space. In most cases, renewable energy sources are dictated by **location which can be off-putting to users**.
  - Firstly, some **renewable energy sources are simply not available in different regions**.
    - Secondly, the **distance between the renewable energy source and the grid** is a major aspect in terms of cost and efficiency.
  - In addition to this, renewable energy sources **depend on weather, climate and geographical location**, therefore meaning that one type of energy generation is not appropriate for the region.
- DRE's applications such as **rooftop solar** can **decarbonise the developing world's manufacturing supply chain**; **solar agri-pumps** could **provide solar-based irrigation solutions**, and the faster implementation of electric vehicles into the urban freight.
- **Increasing the scale of DRE** would offer an opportunity to meet renewable energy targets and provide returns to investors.
- **Heeding WWF's Suggestions:** There is a need to develop a **robust strategic framework to boost the renewable power sector** by learning from other countries who have successfully devised green recovery packages.
  - The **World Wildlife Fund for Nature (WWF)**'s report on **Green Recovery Through Renewables** mentions that as part of the green recovery package, the priorities should be fourfold –
    - focusing on **job creation**
    - **injecting liquidity** for financial relief
    - enhancing **economic competence** for improved trade prospects
    - ensuring a **green energy transition**
  - A holistic view which examines a range of solutions that complement each other and identifies key elements, including technology development, manufacturing, storage, power generation and distribution will be very effective.
- **RE as a Responsible Energy:** RE shouldn't stand merely for renewable energy but also for responsible energy.
  - To avoid negative impacts, the RE industry must act on four principles:
    - Actively **promoting universal labour, land, and human rights**;
    - Protecting restoring and nurturing **resilient, thriving ecological systems**;
    - Committing to **participatory governance principles**;
    - Recognising that **resilient communities and an inclusive workforce** are critical to their success.
  - The leading RE sector players must build a shared understanding of how to **avoid the extractive mindset** that drove much of the fossil fuel-based energy production.
    - They must also study **environmental and social impact assessments** to prevent and mitigate negative impacts and **enhance their RE procurement processes**, and include designing for circularity and traceability in the supply chain.
- **Climate Financing:** Calling for **climate finance** of \$1 trillion, the Prime Minister of India highlighted in

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

- **Global Partnerships:** Global partnerships can open new channels of **support through technology or financial resources being shared**.
  - For science and technology to inform climate action policies, developing countries need ambitious, concrete research and development (R&D) funding and supportive funding infrastructure.
  - Developing countries can also **integrate cost-effective indigenous technologies** into energy planning.
- **Distributed Renewable Energy (DRE):** Distributed RE - in which power from renewable sources is generated near points of use instead of centralised plants - can **help achieve the Global South's ambitious renewable energy targets** as well as increase access to reliable and modern energy, if a favourable regulatory and policy environment is created.

his COP26 address that **developing nations cannot achieve ambitious targets** of net-zero with **older, unfulfilled climate finance targets**.

- **Energy-poor countries need funding** to accelerate their carbon-cutting goals and invest in new technologies to decouple their growth trajectories from fossil fuels.
- These investments from climate financing can be used as-
  - First, a concerted push for **clean electrification** through scaling up the deployment of renewable energy technologies.
  - Second, a focus on energy efficiency and measures to lower energy demand through **technology deployment and behavioural change**.
  - Third, **cutting methane emissions** from fossil fuel operations.
  - Fourth, investing in **clean energy innovation**.



## Enhancing The Competitive Spirit of India

*This editorial is based on “Is It Time for India to go for Competitiveness Legislation” which was published in Livemint on 01/06/2022. It talks about the challenges to enhancing India’s competitiveness and the measures that India can take to improve its Competitiveness.*

**Tags:** Indian Economy, GS Paper 2, Government Policies & Interventions, GS Paper 3, Growth & Development, Inclusive Growth

India has been on a steady path of reforms for its economy to achieve better competitiveness. Economic reforms including digital growth, trade policy reforms and a mix of inward and outward looking measures have been brought with the agenda of alleviating poverty and creating better jobs and enhancing India’s competitiveness at the global level.

However, there still exist several impediments to developing India’s competitiveness such as the under-developed manufacturing sector, impact of Covid-19, technological and infrastructural challenges.

### What is the Growth Story of India’s Competitiveness?

- According to the **World Competitiveness Yearbook (WCY)**, **India maintained 43rd rank** on the annual World Competitiveness Index.

- Among the **BRICS nations**, India ranked **second after China** followed by Russia, Brazil and South Africa.
- India’s **strengths lie in investments in telecoms**, mobile telephone costs, **ICT services exports**, **remuneration in services professions** and **terms of trade index**.
- In the **Global Innovation Index (GII) 2021**, India climbed two spots and has been ranked 46th.
  - India has been on an **upward trajectory over the past few years** in the GI.
  - India **performs better in innovation outputs** than innovation inputs in 2021.
  - India **ranks 1st among the 10 economies in Central and Southern Asia**.
- India has made appreciable efforts to **ensure resilience in manufacturing capacity** such as via **Atmanirbhar Bharat** and **Make in India** initiatives which are aimed at domestic supply chains and heavy investment in manufacturing hubs.
  - The government has introduced the **Production-Linked Incentive (PLI) Scheme** in various sectors for enhancing India’s manufacturing capabilities and exports.
- To facilitate technological advancement for increasing competitiveness, India’s Department of Telecom (DoT) has constituted **six task forces on 6G technology**.
  - The Ministry of External Affairs, through its **NEST division** is also ensuring India’s **active participation in international forums on technology governance**.

### New and Emerging Strategic Technologies (NEST)

- In 2020, the **Ministry of External Affairs** established a New, Emerging And Strategic Technologies (NEST) division.
- It acts as the **nodal division within the ministry** for **issues pertaining to new and emerging technologies** and assists in collaboration with foreign partners in the field of technology.
- Its mandate includes, but is not be limited to, **evolving India’s external technology policy** in coordination with domestic stakeholders and in line with India’s developmental priorities and national security goals.
  - It will also help **assess foreign policy and international legal implications** of new and emerging technologies and technology-based resources, and recommend appropriate foreign policy choices.
- NEST also negotiates technology governance rules, standards and architecture, suited to India’s conditions, in multilateral and plurilateral frameworks.



### **What are the Challenges to Enhancing India's Competitiveness?**

- **Challenges in Export Competitiveness:** Some of the drawbacks obstructing export preparedness in many states are **poor trade support, gaps in export infrastructure, basic trade support, lack of access to financial facilities** and low export credit.
- **Insufficient R&D:** There is a lot of room for improvement in research & development (R&D) infrastructure across the country. The **regional disparities in terms of R&D infrastructure** are high in India.
  - In the context of the **evolving nature of globalisation** that is likely to reward high-quality products and innovation more than ever before, **India's cost competitiveness may not be sufficient** to establish itself in the global economy.
    - Gradual improvement in R&D would be greatly rewarding in the long run.
- **Inadequate infrastructure:** Infrastructure remains India's weakest link. Infrastructure extends to multiple sectors such as **power, communication, water, and waste**. But for international trade, it is transport infrastructure that is the most important.
  - India's under-developed transport infrastructure poses many problems to exporters, chief of which are:
    - Congested ports
    - Congested roads
    - Lack of connectivity
    - Outdated rail equipment
- **Underdeveloped Manufacturing Sector:** While the neighbouring as well as competitor nation China is currently in the midst of a 10-year transformational campaign - '**Made in China 2025**' to move the country beyond labour-intensive manufacturing and into cutting-edge sectors like robotics and aerospace, India in contrast is still aiming to bring **old-school, labour-intensive manufacturing** to an economy that desperately needs to create millions of new jobs.
  - Even this low-end goal has been hit by a faltering economy over the last two years.
- **Lesser Technological Understanding:** Smaller, local businesses are often **hesitant in adopting digital solutions** due to **limited understanding and inadequate training**.
  - The emergence of new technologies of the **Fourth Industrial Revolution** (AI, Data Analytics, Robotics and related technologies) is a **bigger challenge for MSMEs than for organised large-scale manufacturing**.

### **What should India do to Improve its Competitiveness?**

- **Policy Intervention:** One of the essential pillars for raising India's competitiveness is the **need for a 'whole of government' approach**, within the Centre, and with and among states.
  - It is time for India to **consider a law and an institution** which can **persuade all organisations to pursue competitiveness**.
    - A **robust institutional structure** is essential for achieving business competitiveness, capacity building and supply chain resilience.
    - It is also a **prerequisite for negotiating free trade agreements (FTAs)**, which are crucial for the growth of the Indian economy.
  - The **creation of a National Competitiveness Commission** under a new law could provide a robust forum for policy dialogue to energise and sustain the growth of Indian manufacturing industries; empowered adequately.
- **Investment in Intangible Assets:** India needs better and higher investment in intangible assets such as **health and education**, accompanied by '**future friendly**' skills building.
  - These issues are to be worked upon by **states in partnership with the Central government**, insofar as policies and funding is concerned.
    - However, one size doesn't fit all so the **states must be given the opportunity to devise their own strategies**.
  - The potential of promoting **peoples-first public-private partnerships** should be leveraged to **raise funding to cover health, jobs and skills**, and ensure efficient **implementation in consultation with all stakeholders**.
- **Focus on FTAs:** The FTAs help the industries participate in global supply chains. **Intra- and inter-sectoral firm-level cooperation** and participation must be encouraged.
  - The FTAs should also **complement PLI schemes** so that the products whose manufacturing is incentivized domestically can compete at a global level.
- **Focus on R&D:** In the post-Covid world, India needs to create its own niche in the global market. Thus, it is essential to tap into the capabilities of Indian states by plugging in the gaps in policy and infrastructure.
  - At the same time, it is also necessary that the **more developed states expand their focus towards improving R&D infrastructure**, with the view to create that niche.

- It is because R&D plays a significant role in improving the quality of products to match up to the international standards, and enables greater innovation.

### Where does India need to Specifically Focus?

- **Semiconductors** have taken the centre stage in this context. Experts have hypothesised that **oil has been replaced by semiconductors** (and digitization) in **shaping geoeconomics and geopolitics**.
  - With supply chain disruptions triggered by covid, **export controls by China** and the **Russia-Ukraine conflict**, **building a semiconductor manufacturing base** is imperative for India.
- Other key areas include information and communication technology (ICT).
  - To enhance its competitiveness, India must **leverage advanced technologies such as 6G, Internet of Things and blockchain**. This will also help anchor our position in FTA negotiations.
- There is a need to **reduce tax burden**, especially on the MSME sector to improve their profitability. More **support to enhance the skills of the workers** is needed from the government.
- Action is also needed on **non-tariff factors**; incentivize innovation, strengthen the **intellectual property regime**, reduce logistical costs and ease the running of a business.



## Acknowledging the Contributions of ASHA

*This editorial is based on "A Case for Community-Oriented Health Services" which was published in The Hindu on 02/06/2022. It talks about significance of ASHA volunteers in India's primary healthcare systems, the issues they face and the necessary steps that can be taken to improve their conditions*

**Tags:** Governance, GS Paper 2, Health, Government Policies & Interventions, Welfare Schemes, Issues Related to Women

India's one million **Accredited Social Health Activists (ASHA)** volunteers have received arguably the **biggest international recognition** in form of the **World Health Organisation's Global Health Leaders Awards 2022**. The ASHAs were among the six awardees announced at the **75th World Health Assembly in Geneva**.

ASHAs have made extraordinary contributions towards enabling increased access to primary health-care services like maternal and child health and immunisation.

Despite such a significant contribution, ASHA workers face several issues relating to payment, social security and permanence in jobs.

The WHO recognition for ASHA volunteers is a reminder and an opportunity to further strengthen the ASHA programme from the perspective of ASHA workers.

### About ASHA (Accredited Social Health Activist)

#### When was the ASHA Programme Launched?

- India launched the ASHA programme in 2005-06 as part of the **National Rural Health Mission**.
  - With the launch of the **National Urban Health Mission** in 2013, the programme was extended to urban settings as well.
- The core of the ASHA programme has been an intention to **build the capacity of community members in taking care of their own health and being partners in health services**.

#### What Inspired ASHA?

- The ASHA programme was inspired from the learnings from two past initiatives:
  - In 1975, a **WHO monograph** titled '**Health by the people**'
  - In 1978, an **international conference on primary health care in Alma Ata** (in the then USSR and now in Kazakhstan)
- However, the biggest inspiration for designing the ASHA programme came from the **Mitanin initiative of Chhattisgarh** (Mitanin meaning 'a female friend' in Chhattisgarhi) which had started in May 2002.
  - The Mitani were the **all-female volunteers available for every 50 households** and 250 people.

#### What are the Key Features of an ASHA?

- ASHA is a **social health activist in the age group of 25-45 years** who serves as the **first point of contact** to cater any health-related requirements of deprived sections of the rural population including women and children, who pose a difficulty in accessing the health services.
- An ASHA worker **comes from the same village where she works**. It ensures a sense of **familiarity**, better community connection and acceptance.
- Generally, there is **"1 ASHA per 1000 population"**. However, this norm can be relaxed in tribal, hilly and desert areas to **"1 ASHA per habitation"** depending upon the workload.
- The purpose of having 'activist' in 'ASHA' is to reflect that they are the **community's representative in the health system, and not the lowest-rung government functionary** in the community (as was the perception with the erstwhile Community Health Volunteer).

### How Significantly do ASHA Workers Contribute to the Healthcare System of India?

- They **create awareness** about health determinants by **providing information to the people about nutrition, basic sanitation** & hygienic practices, healthy living and working conditions, etc.
- ASHA **counsels women on birth preparedness, safe delivery's importance**, breastfeeding, contraception, immunization, child care and prevention of Reproductive Tract Infection/Sexually Transmitted Infection (RTIs/STIs).
- ASHA provides **primary medical care for minor disorders** like fever, diarrhoea and minor injuries.
- They also **keep the sub-centres/primary health centres informed** about **births** and **deaths** in their village and any **disease outbreaks/** unusual health concerns in the community.

### What are the Challenges Faced by ASHAs?

- **Inadequate Pay and Job Insecurity:** Among the 3As in the rural areas (**Anganwadi Workers (AWW)**, **Auxiliary Nurse Midwife (ANM)** and ASHA), the **ASHAs are the only ones who do not have a fixed salary**. They also **do not have opportunities for career progression**.
  - These issues have **resulted in dissatisfaction, regular agitations and protests by ASHAs** in many States of India.
  - Moreover, even the workload for the ASHAs is not less; they have to work from morning to night without any place for rest.
- **Social Stigma and Humiliation:** ASHA workers often experience stigma not only in public space but also in the private sphere; there is often pressure from their to discontinue their work due to very low honorarium.
  - Even from the patients' families, they often suffer allegations of not doing their job properly.
  - An even more disheartening fact is that ASHA workers have to experience sexual harassment during field visits.
- **Unavailability of Facilities:** ASHAs reported facing **challenges in ensuring access to health services** during and immediately after **outbreaks of conflict**. They experienced **difficulty in arranging transport** and breakdown of services at remote health facilities.
  - Many ASHAs are working in fragile and **conflict-affected settings such as Kokrajhar and Karbi Anglong districts of Assam state**. No efforts have yet been made to understand the challenges and vulnerabilities of these volunteers working under such conditions.

### What can be done to Improve the Status Quo for ASHA Workers?

- **Role of State Governments:** The global recognition for ASHAs should be used as an opportunity to review the programme afresh, from a solution perspective.
  - The state governments need to develop **mechanisms for higher remuneration for ASHAs**.
  - The performance-based incentives should not be interpreted that ASHAs — no matter how much and how hard they work — need to be paid the lowest of all health functionaries.
- **Upskilling and Capacity Building:** It is time that **in-built institutional mechanisms** are created for **capacity-building** and **avenues for career progression** for ASHAs **to move to other cadres** such as ANM, public health nurse and community health officers are opened.
  - A few Indian States have started such initiatives but these are smaller in scale and at nascent stages. **Implementation at a higher level** is required.
- **Providing Social Security Benefits:** Extending the benefits of social sector services including **health insurance (for ASHAs and their families)** should be considered.
  - The possibility of **ASHAs automatically being entitled and having access to a broad range of social welfare schemes** needs to be institutionalised.
- **Bringing Permanence in Jobs:** There are arguments for the regularisation of many temporary posts in the National Health Mission and **making ASHAs permanent government employees**.
  - Considering the extensive shortage of staff in the workforce at all levels, and more so in the primary health-care system in India, and an ongoing need for functions being undertaken by ASHAs, it is a policy option that is worth serious consideration.
- **Incentivising ASHAs in Conflicted Areas:** The governments at state and central level first need to recognize the challenges and vulnerabilities that ASHAs working in conflicted areas continue to experience.
  - The health administration shall consider **incentivising the ASHAs when they provide services during conflicts**.
  - They must not be forgetful of the fact that ASHA workers deserve **adequate training, support, recognition, and compensation** for the tasks they are carrying out in areas and situations **where other cadres and workers are simply unavailable**.
  - **Psychological support** for these community health workers is also equally essential.



## Conclusion

Even though they contribute significantly to better health outcomes, the ASHA workforce continues to protest across the country, for better remuneration, health benefits and permanent posts. It is the **duty of the governmental agencies that employ them to ensure their welfare, safety and security.**

While cheerleading about the award is rightfully reaching a crescendo, what matters is how the Government of India **serves its last mile health workers who are its feet on the ground.**



## Corporate Social Responsibility - A Strategic Endeavour

*This editorial is based on “Corporate Social Responsibility Is A Strategic Endeavour” which was published in Indian Express on 11/06/2022. It talks about why compliance to Corporate Social Responsibility is significant for the companies and what can be the possible challenges in complying to CSR.*

**Tags:** Indian Economy, GS Paper 2, Government Policies & Interventions, GS Paper 3, Mobilisation of Resources, Management of Social Sector/Services

The term **“Corporate Social Responsibility”** in general can be referred to as a corporate initiative to assess and take responsibility for the company's effects on the environment and impact on social welfare.

With nearly two-thirds of India still living in poverty by today's quality-of-life standards and the climate situation worsening day by day, the importance of CSR can't be overestimated. Companies should take compliance to CSR more seriously and responsibly.

### Corporate Social Responsibility (CSR)

#### Does the CSR have a Legal-backing in India?

- In India, the concept of CSR is governed by **clause 135 of the Companies Act, 2013.**
  - India is the first country in the world to mandate **CSR spending** along with a framework to identify potential CSR activities.
- The CSR provisions within the Act is **applicable to companies with an annual turnover of 1,000 crore and more, or a net worth of Rs. 500 crore and more, or a net profit of Rs. 5 crore and more.**
  - The Act requires companies to **set up a CSR committee** which shall recommend a Corporate Social Responsibility Policy to the Board of Directors and also monitor the same from time to time.

- The Act encourages companies to **spend 2% of their average net profit** in the previous three years on CSR activities.

#### What Activities can be Undertaken by A Company under the CSR?

Specified under Schedule VII of the Companies Act 2013, these activities include:

- Eradicating extreme **hunger and poverty**
- Promotion of **education, gender equality and empowering women**
- Combating **HIV-AIDS** and other diseases
- Ensuring **environmental sustainability**
- Contribution to the **PM's National Relief Fund** or any other fund set up by the Central Government for **socio-economic development and relief.**

#### What is the Significance of CSR Compliance?

- CSR is increasingly being leveraged to **build a positive brand identity for corporations** and help their **ESG compliance.**
  - Brand image has gained importance as stakeholders have become more aware and involved in social issues.
- Since the onset of the Covid-19 pandemic, the number of India's philanthropic collaboratives has more than doubled, mobilising an array of funding from foreign and domestic philanthropy, high-net worth individuals, CSR funders, private capital, etc.
  - Through these varied streams, the amount of collaborative **funding for improving people's lives** has increased significantly.
- As funding levels have risen, so too have **innovative financing approaches to drive social impact**, including pay-for-outcomes models such as development impact bonds in education and health, and other blended financing mechanisms.

#### What are the Issues Pertaining to CSR Compliance?

- **Finding Right Partners:** Despite growing awareness about the significance of CSR compliance, the challenges remain in **identifying the right partners and projects**, as well as in **selecting projects that are long-term impactful, scalable, and are self-sustaining.**
- **Lack of Community Participation in CSR Activities:** There is a **lack of interest of the local community** in participating and contributing to CSR activities of companies.
  - This is largely attributable to the fact that **there exists little or no knowledge about CSR within the local communities** as no serious efforts have been made to spread awareness about CSR.

- The situation is further aggravated by a **lack of communication between the company and the community** at the grassroots.
- **Issues of Transparency:** There is an expression by the companies that there exists lack of transparency **on the part of the local implementing agencies** as they **do not make adequate efforts to disclose information** on their programs, audit issues, impact assessment and utilisation of funds.
- This reported lack of transparency **negatively impacts the process of trust building** between companies and local communities, which is a key to the success of any CSR initiative at the local level.
- **Non-availability of Well Organised NGOs:** There is non-availability of well organised NGOs **in remote and rural areas** that can assess and identify real needs of the community and work along with companies to ensure successful implementation of CSR activities.

### ***How can the CSR be made more Effective?***

- **Role of Companies:** Beyond just allocating funds, the companies shall conduct **regular reviews on progress of CSR compliance** and put in place some measures for a **more professional approach** towards the same. Also, they should **set clear objectives** and **align all the stakeholders** with them.
- It is equally important to **let their NGO partners know of their business needs**.
  - The latter should know that companies which award money from their CSR budgets are sincere about the causes they pick.
- The Companies must also **refresh the roles of Board, CSR Committee, CFO** and **set-up new SOPs** including a **defined process for fund utilisation**, determine **applicability of impact assessment**, prepare a detailed checklist of processes with the owners and timelines and formulate an annual action plan.
- **Role of Government:** The government must ensure that the activities included in the CSR Policy of a company are implemented by it.
- It is also the responsibility of the government to **address the issues of non availability of the NGOs and create awareness** in the society about the significance of the CSR and its activities.
- The government plans to use technology tools such as Artificial Intelligence and Machine Learning to do data mining of the mandated reports to bring changes to its policy on CSR.
  - Leveraging technology to improve the oversight of India Inc is welcome, but this should be applied to the financial and governance aspects

of companies before moving on to their social obligations.

### **What are the Suitable Areas where CSR Investments can be Diverted to?**

- **Technological Innovation:** The key to a non-linear scale-up of any project lies in leveraging technology and solving societal problems is no exception.
  - A policy environment that encourages CSR investments in technology-led solutions has made sustainable and scalable solutions a reality.
  - Additionally, **collaborations with local bodies** and the **establishment of governance and community engagement structures** can ensure these projects become self-sustainable in the long run.
- **Higher Education:** CSR can be used to meaningfully **support the tertiary education sector** in a number of ways.
  - Funds can be channelled into the implementation of **socially relevant projects conceptualised by faculty members**, or for **supporting scientific research** that will unravel the answers to key scientific questions underlying social problems.
- **Incubators Management:** Such grants can also be given towards **government-recognised incubators, setting up new incubators, supporting existing incubators** to hire more people through internships and fellowships, and **providing seed funding for start-ups**.
  - The fact that the government's CSR policy allows a company to choose to intervene at any point in the end-to-end tech value creation process is a great enabler.
- **Environment Friendly Projects:** Creating **sustainable construction materials** that are affordable and recyclable, developing **India-centric greening options** such as **novel heat and power management systems** and addressing socio-technical issues (such as **flood management systems**) by carrying out in-depth risk analytics on relevant parameters.
  - Projects such as these **enabled through CSR funding and led by higher education institutions** would accelerate the transition from laboratory to actualisation and serve communities in innovative ways.

■■■

## **Sustainable Cities through Urban Agriculture**

*This editorial is based on "The Farm in The City" which was published in Indian Express on 04/06/2022. It talks*

*about the significance of Urban and Peri-Urban Agriculture (UPA) and measures that can be taken to promote it.*

**Tags:** Indian Economy, GS Paper 3, Food Security, GS Paper 2, Government Policies & Interventions, GS Paper 1, Urbanisation

Premature and scorching summers are making life miserable for many across India, especially in the cities and the soaring temperatures are adversely affecting health, causing a dip in agricultural production, and drying up rivers.

The repercussions of climate change are being felt more strongly than ever, especially in climate-vulnerable zones. Cities in India are also feeling the heat due to a combination of factors, including the **urban heat island effect**, but largely on account of **ill-conceived urbanisation**.

Given the current context and future exigencies, it is an opportune moment to critically engage with **Urban Land-Use Planning (ULP)**, especially **Urban And Peri-Urban Agriculture (UPA)**, as one of the essential elements of **Sustainable Urbanisation**.

### **Urban and Peri-Urban Agriculture (UPA)**

#### **What do we Understand by UPA?**

- Urban agriculture is the practice of **cultivating, processing and distributing food in or around urban areas**. This can address major dimensions of food security.
  - The activities in urban agriculture include **growing plants and rearing livestock**, including **aquaculture** and apiculture, harvesting, processing and distributing food and non-food products from aromatic and medicinal herbs.
- **Peri-urban agriculture** occurs in **surrounding the boundaries of cities** throughout the world.
  - It includes products from crop and livestock agriculture, fisheries and forestry and non-wood forest products, as well as ecological services provided by agriculture, fisheries and forestry.
  - Often **multiple farming and gardening systems exist** in and near a single city.

#### **How Active has India been About Adopting UPA?**

- With rapid urbanisation, industrialisation and capital investment on urban lands, green zones are being converted to developable areas in cities. Agriculture, mostly associated with rural practice, hardly finds a mention in urban planning reforms.
  - Although **India's Urban and Regional Development Plans Formulations and Implementation (URDPFI)** guidelines mention agriculture while preparing city plans, there is **little offered for inclusion of agriculture in city plans**.

- **Green India Mission** is one of the eight missions under the **National Action Plan on Climate Change** aiming to increase the forest and tree cover, restore degraded lands and promote **agro-forestry** in cities.

#### **Why is UPA Significant?**

- The **Food and Agriculture Organisation (FAO)** recognises UPA as a significant contributor to -
  - **food security**
  - **livelihood generation** - especially for women
  - **poverty alleviation**
  - strengthening **cities' resilience** to climate change.
- Urban areas already house at least 55% of the world's population and consume 80% of the food produced globally, thus underlining UPA as **key to achieving sustainable food systems**.
  - There is a growing recognition among citizens and governments alike that **urban farming and gardening can be an important "shock absorber"** and must be the centrepiece in our reimagination of a more resilient urban food system.
- Already suffering from high population density, unaffordable housing, pollution, water scarcity at some places and flooding at others, urban poverty etc; the cities are a far cry from the **"centres of sustainable living with opportunities for all"**.
  - Adhering to the critical need for a paradigm shift in urban planning, UPA stands well as one of the **essential elements of sustainable urbanisation**.

#### **What Challenges have been Associated with UPA?**

In an urban setting, there are a certain constraints and issues which need to be addressed in order to make UPA successful-

- **Lack of access to water** and other productive resources - **competition for land** and issues related to tenure rights.
- There are **food safety concerns** regarding the **use of waste water and organic material** and the **risk of the spread of diseases** and contamination.
- City planners would also require **technical guidance for the integration** of agricultural activities into urban development and **training needs to be provided** on urban sustainable production systems.

#### **What can be Done to Promote Urban and Peri-urban Agriculture?**

- **Adhering to Environmental Norms:** Urban Land-Use Planning (ULP) must **prioritise estimation of waste management capacity**, build infrastructure for it and **regulate industrial installations** to this capacity.



- Adequate political will for financial inputs and enforcement of regulations will be essential for often fund-starved urban administrations and for curbing violations of environmental norms.
- Urgent attention to **UPA and its incorporation into ULP** with enabling support will also go a long way in **achieving urban food security** and even a **circular bioeconomy**.
- **Inclusive Development and Upskilling:** Advocating urban gardening among those who can afford it, without **integrating vulnerable groups in the plan** for a resilient and transformative food system will have limited impact.
  - Most importantly, this urban planning shall **include skill development programmes for the lower-income groups** to offer them **livelihood opportunities in gardening, food processing, and retail** and marketing.
  - The hope is to build a **sustainable local food production-distribution system** while strengthening the capacity of the urban poor.
- **Initiatives at Local Level:** Professionals such as urban planners and landscape architects need to **effectively utilise available public spaces** and offer citizens an opportunity to enjoy nature's bounty. This will generate income for local bodies and also **attract urban agri-tourism**.
  - To begin with, public institutions and work spaces, especially those with residential services, could be **encouraged to create green corners in their premises by growing vegetation** that are regularly consumed by the residents.
  - The community of small producers can also **exchange ecological knowledge and barter produce** making such initiatives successful; to city-raised children such spaces **provide avenues for eco-cultural learning**.
- **Governance of Peri-Urban Areas:** The recommendations for more effective governance of peri-urban regions include:
  - **planning** for peri-urban areas;
  - providing a **rational regional land use pattern**;
  - formulating an **effective regulatory regime**;
  - constitution of **Metropolitan Planning Committees (MPCs)**;
  - provision of **affordable housing, basic services, regional transport corridors and facilities**; and,
  - developing a **cluster of rural settlements/growth centres** including census towns.



## Creating An Open Network for e-Commerce

*This editorial is based on "Open Network for E-Commerce: It's an Idea whose Time has Come" which was published in Livemint on 07/06/2022. It talks about the possibilities that the Open Network for Digital Commerce (ONDC) can offer to the Indian economy.*

**Tags:** Indian Economy, GS Paper 2, Government Policies & Interventions, GS Paper 3, Growth & Development

The government's **Digital India initiative**, the vibrancy of the information technology sector and the urgency highlighted by the pandemic make now an opportune time to establish and promote expansion to digital commerce by the digital enablement of a wide cross-section of businesses. The **Open Network for Digital Commerce (ONDC)** has the **potential to usher in a disruptive change in this regard**.

### India and Digitalisation of Commerce

#### What is India's Scenario of Digitisation?

- The fast-expanding digital economy has been one of the major supporting pillars for India in recent times. It has the **world's highest fintech adoption rate of 87%**, as compared with the **global average of 64%**.
  - The e-commerce market in India has **doubled between 2017 and 2020**.
- **Three of the largest public digital platforms** in the world are from India: **Aadhaar** is the largest unique digital identity platform, **Unified Payments Interface (UPI)** is the largest digital payments ecosystem, and **Co-Win** is the largest vaccination platform.
- India has utilised a financial technology stack in which a **unified, multi-layered set of public sector digital platforms** combine to provide substantial benefits to the population, from **promoting financial inclusion and increasing efficiency to enhancing financial stability**.

#### How has It helped People?

- Aadhaar facilitated a **surge in financial inclusion and digital payments**, especially during the Covid-19 pandemic.
- India's **low-cost, population-scale digitalization** has **improved the ease of living** for its citizens in all income categories.
- UPI has **changed the dynamics of retail payment systems** and is now being used country wide.
- These digital platforms are becoming an **avenue for a new type of global diplomacy** too. India's identity and payments platforms are being looked at with interest across the world.



- Recently, the **Co-Win platform** was offered by **India to interested countries**.
- In July 2021, the Finance Minister of India along with her counterpart in Bhutan **jointly launched BHIM-UPI in the country**.

### **Open Network for Digital Commerce (ONDC)**

#### **What do we Understand by ONDC?**

- ONDC is a globally first-of-its-kind initiative that aims to **democratise digital commerce**, moving it from a **platform-centric model** (where the buyer and seller must use the same platform or application to be digitally visible and do a business transaction) to an **open network**.
- It is based on **open-sourced methodology**, using open specifications and open network protocols, and is **independent of any specific platform**.

#### **What is the Government of India's ONDC Project?**

- The **Department for Promotion of Industry and Internal Trade (DPIIT)** has issued orders appointing an **advisory committee for its Open Network for Digital Commerce (ONDC) Project** to curb "digital monopolies".
  - This is in the direction of **making e-commerce processes open source**, thus creating a platform that can be **utilised by all online retailers**.
- Once ONDC gets implemented, all e-commerce companies and online **businesses in India will have to operate using the same processes** and standards.
  - According to reports, this could mean a **complete revamp of systems for e-commerce players**; they could **end up losing control over their user interface**, and, even more importantly, consumer behaviour insights.
    - This could be **problematic for larger e-commerce companies**, which have their own processes and technology deployed for these segments of operations.
    - However, this would also give a huge **booster shot to smaller online retailers and new entrants**.

#### **What Possibilities does ONDC Offer?**

- ONDC is expected to **digitise the entire value chain, standardise operations** (like cataloguing, inventory management, order management and order fulfilment), promote the inclusion of suppliers, derive efficiency in logistics, and **enhance value for consumers**.
- The platform envisages **equal-opportunity participation** and is expected to make e-commerce more **inclusive and accessible for consumers** as they can potentially discover any seller, product or service by using any

compatible application/platform, thus increasing their freedom of choice.

- It will enable transactions of any denomination, thus making ONDC a **truly 'open network for democratic commerce'**.
- ONDC would enable small businesses to **use any ONDC-compatible applications** instead of being governed by specific platform-centric policies.
  - It would also **encourage easy adoption of digital means** by those currently not on digital commerce networks.

### **What should be the Key Areas of Focus while Creating an ONDC Platform?**

- **Layers of Open Digital Ecosystem:** There are three "layers" of an open digital ecosystem which provide a useful conceptual framework to think of both adoption and safeguards. These layers are:
  - **Technology Layer:** It should be designed for **minimalism and decentralisation**.
    - The ONDC platform should be built on "**privacy by design**" principles.
    - It should **collect minimal amounts of data (especially personal)** and **store it in a decentralised manner** so that there is no honeypot for hackers.
    - Data exchange protocols should be designed to **minimise friction** but be **based on clear rules that protect the consumer interest**.
    - **Tools like blockchain could be used** to build technical safeguards that cannot be overridden without active consent.
  - **Governance Layer:** It should allay business' fears of excessive state intervention in e-commerce.
    - Any **deployment of standards or tech should be accompanied by law** or regulation that lays out the scope of the project.
    - If collection of any personal data is envisaged, passing the **data protection bill** and creating an **independent regulator should be a precondition**.
    - To assure the industry of fairness, the government could **hand over the stewardship of the standards or platform to an independent society or non-profit**.
  - **Community Layer:** It should foster a truly **inclusive and participatory process**. This may be achieved by making civil society and the public active contributors by seeking wide feedback on drafts of the proposal.
    - Also, ensuring **quick and time-bound redressal of grievances** will help build trust in the system.

- **Encouraging rather than Compelling:** In order to drive the adoption of an open e-commerce platform or standards in a sector with entrenched incumbents, compelling the suppliers or consumers to use it is inadvisable.
  - A viable solution would be **creating non-mandatory “reference applications”, and financial or non-financial incentives.**
    - Useful learnings can be drawn from the adoption of UPI: The government supported the rollout of BHIM as a reference app, and offered financial rewards through a lottery scheme to drive early adoption.
  - It is timely that India is exploring innovative ways to bridge the gaps in e-commerce markets. But the **boldness of this vision must be matched by the thoughtfulness of the approach.**



## Shaping India's Techade

*This editorial is based on “The Design Principles We Should Employ To Shape India's Techade” which was published in Livemint on 08/06/2022. It talks about the concept and key elements of India's ‘Techade’.*

**Tags:** Science & Technology, GS Paper 2, Government Policies & Interventions, Issues Relating to Development, GS Paper 3, Growth & Development, IT & Computers, Industrial Policy, Technology Missions, Indigenization of Technology

With the deadline for the **2030 Sustainable Development Goals** approaching, we are running out of time to tackle mega challenges, from the climate crisis to our need for inclusion and better healthcare and education for all. And the only way to solve these problems is by **significantly raising our ability to leverage technology.**

The **United Nations General Assembly** back in 2019 underscored that the next 10 years must be a “**Decade of Action**”. **Technology is the key enabler** of this decade of action, and for it to become real, we would have to unlock the real power of technology as a tool for problem-solving.

### The Concept of ‘Techade’

#### What does Techade mean?

- Techade is a **portmanteau of technology and decade** i.e., a decade powered by the impact of technology. The concept gained salience right before the world was disrupted by the Covid-19 outbreak.
  - The pandemic has actually, exponentially upped the urgency and role of technology in finding

solutions to some of the most daunting challenges faced by humankind.

- To bring the idea of a techade to success, the key point of consideration should be the design principles that would ultimately shape this decade into India's own techade.
  - It should not only come to mean an **increased use of technology** but stand for **impact, especially human-centric.**

#### How well has India conceived the Idea of Techade?

- **India as a Hub for Innovation:** India is fast becoming such a hub for the world. At present, **nearly every Fortune 500 company has an R&D centre in India.**
  - These aren't back offices for secondary tasks, but **front-end leaders of the innovation charters** of companies.
  - The Fortune 500 is an annual list compiled and published by Fortune magazine that ranks 500 of the largest US corporations by total revenue for their respective fiscal years.
- **Digital India Programme:** The major initiative in technology adoption is the **Digital India programme** - a flagship programme of the Government of India with a vision to **transform India into a digitally empowered society and knowledge economy.**
  - In July 2021, addressing a virtual event to mark the completion of **six years of Digital Indian programme**, the Prime Minister of India described the decade 2021-30 as India's Techade wherein the **data** and **demographic dividend** combined with **India's proven tech prowess** will play a massive role in the growth and development of the country.
- **Financial Inclusivity:** No country has been able to demonstrate the power of inclusive scale as India has done in the past few years.
  - India rolled out several inclusion initiatives to drive financial inclusion across a population of about 1.4 billion.
    - Through the **Jan Dhan Yojana**, India has seen the **opening of 430+ million bank accounts** resulting in over 80% Indians now having bank accounts.
  - India's flagship digital payments platform, the **Unified Payments Interface (UPI)**, recorded its **highest ever number of transactions** in April 2022 at 5.58 billion (**worth ₹9.83 trillion in value**).

#### What are the Impediments to Fulfilling the Idea of Techade?

- **Brain-Drain:** India's failures are linked to its inability to make use of the market-driven growth opportunities

consequently leading the talented people out to countries like the U.S. for job opportunities.

- As of 2019, there were **2.7 million Indian immigrants in the U.S** who are **among the most educated and professionally accomplished communities** in that country.
- **Gradual Decline in R&D Spending:** In 1991, when India embraced markets and globalisation, it should have redoubled efforts to strengthen its technological capabilities.
  - However, the spending on research & development as a proportion of GDP declined in India (**0.85% in 1990-91 to 0.65% in 2018**).
  - In contrast, this proportion increased over the years in China and South Korea to reach 2.1% and 4.5%, respectively, by 2018.
- **Lesser Public Spending for Tertiary Education:** An overwhelming proportion of tertiary students in India are enrolled in private institutions.
  - According to the **Organisation for Economic Cooperation and Development (OECD)**, It was 60% for those enrolled for a bachelor's degree in 2017, while the average for G20 countries was 33%.
- **High Import of Electronic Items:** India is a large market for all kinds of new technologies. However, the **domestic industry has not yet managed to derive the benefits**.
  - The country is operating far below its potential in electronic manufacturing; **electronic goods and components are the second largest item in India's import bill** after oil.
  - As of 2020-21, India's **imports are almost five times its exports** in this technology sector.
- **Other Roadblocks:** In the successful implementation of the Digital India Programme, there are many roadblocks like **digital illiteracy, poor infrastructure, low internet speed, connectivity issues, lack of coordination** among various departments, **issues pertaining to taxation** etc.

### ***What should be the Key Elements of this Tech-Revolution?***

- **Disruption:** 'Disruption' is the action of completely changing the traditional way an industry or market operates by using new methods or technology.
  - This is the need of the techade that's underway as the **status quo of technology adoption will not suffice**.
- **Innovation and Impact:** This techade should see technology **move from 'potential' to 'real life problem solving and impact'**. Given the urgency, we have to

make innovation count like never before in order to solve real problems.

- **Inclusivity:** The techade has to be about scale; while moving towards achieving the SDGs, it must be ensured that no one gets left behind.
  - As we innovate, **inclusion and security must be built into the design process** from the very start.
- **Ethical Use of Tech:** Responsibility must be borne by the Governments to ensure that we use technology as an **equaliser and enabler of a better life for all**.
  - It is imperative to come up with an **ethical framework for using technology** to minimise risks as much as possible.
  - The techade must be **shaped from a human-centric lens**.

### ***What should be the Key Areas of Focus?***

- **Keeping with the Global Standards:** Technology is going to be the key driver of the global economy in the next 20 years.
  - To take full advantage of the techade, India will need to play a **constructive role in joining and shaping global standards** that are currently in evolution – around **privacy, data localisation, tax laws**, the definition of **monopolies, cyber security, immigration and predictability of regulations**.
- **Looking out for Growth Opportunities:** The techade offers tremendous growth opportunities for the Indian industry.
  - There is immense potential in **green technology** and sustainability solutions, **Internet of Things, cloud computing, artificial intelligence** and analytics, digital twins, cybersecurity, **blockchain**, and applications like green building, **carbon footprint management**, weather monitoring and forecasting, air and water pollution monitoring, forest monitoring, crop monitoring, **soil condition/moisture monitoring** and water purification.
    - All this was valued at \$10.32 billion in 2020, and is projected to reach \$74.64 billion by 2030.
- **More Public Spending on Education:** The **'Make in India' initiative** will have to go beyond increasing the 'ease of business' for private industry. Indian industry needs to deepen and broaden its technological capabilities.
  - This will happen only if **universities and public institutions in the country are strengthened** and emboldened to enter areas of technology development for which the private sector may have neither the resources nor the patience.



- **Strengthening the Public Sector:** A strengthened public sector will create **more opportunities for private businesses** and **widen the entrepreneurial base**.
  - Small and medium entrepreneurs will flourish when there are mechanisms for the diffusion of publicly created technologies, along with greater availability of bank credit and other forms of assistance.



## Dealing with Indo-Pacific Countries

*This editorial is based on “Dealing with the Indo-Pacific is not Easy” which was published in The Hindu on 09/06/2022. It talks about the significance major geopolitical challenges of the Indo-Pacific region.*

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

In recent times there has been a shifting of goal posts by major world powers from other areas of conflict to the Indian and Pacific Ocean. This has largely been due to Chinese belligerence in the **South China Sea** by hegemonizing its intention over the entire seawater defying the laid down UN conventions and **international maritime laws**.

The present geo-political situation in the Indo-Pacific is fraught with major irritants destabilising the region. There is a need to establish common standards to form the basis of deeper integration in the future and to ensure equal access to **global commons** for all the countries as a right under international law

### What are the Recent Geo-Political Developments in the Indo-Pacific Region?

- **US' Indo-Pacific Strategy:** Recently, the **US administration has announced its long-awaited Indo-Pacific strategy** which focusses on building collective capacity to deal with challenges in the region.
  - These include a focus on **challenges from China**, advancing the US relationship, a **'Major Defence Partnership' with India** and supporting its role as a **net security provider in the region**.
- **EU's Indo-Pacific Strategy:** The **European Union (EU)** has recently come up with an **Indo-Pacific strategy** that aims to enhance its engagement across a wide spectrum.
  - The EU already sees itself and the Indo-Pacific as **“natural partner regions”**.

- It is a significant player in the **Indian Ocean littoral states**, the **ASEAN** area and the Pacific Island states.
- **AUKUS Grouping:** In September 2021, the US has announced a new trilateral security partnership for the Indo-Pacific, between Australia, the UK and the US (**AUKUS**).
  - The security grouping AUKUS will focus on **advancing strategic interests in the Indo-Pacific region**.
    - The major highlight of this arrangement is the sharing of US nuclear submarine technology to Australia.
- **Indo-Pacific Economic Framework:** Nearly every one of the nations in this part of the world recognises the assertiveness and aggressiveness of China.
  - To deal with China, the US at the recently held **Quad Summit** in Tokyo launched the **Indo-Pacific Economic Framework (IPEF)** to offer the region better alternatives to fulfil its developmental goals.
  - The IPEF will work on **fine-tuning four major pillars:** standards and rules for **digital trade**; resilient **supply chains**; **green energy** commitments; and **fair trade**.

### Why is the Indo-Pacific Significant?

- The Indo-Pacific region has **more than half of the world's population** with **2 billion people living under democratic rule**.
- This region generates **a third of the world's economic output**, more than any other region of the World.
- Three of the most important allies of the United States namely Japan, South Korea and Australia are located here.
- **More than one-third of the foreign trade** of the world takes place in this region.
- The **world's largest economies are located** in the Indo-Pacific region namely, China, **India**, Japan, Indonesia, South Korea, Thailand, Australia, Taiwan, Malaysia and Philippines.

### What are the Major Challenges in the Indo-Pacific Region?

- **Aggressive Policies of Certain Countries:** The Indo-Pacific region has been under pressure and East Asia, in particular. **South Korea and Japan face regular nuclear and missile threats** from North Korea.
  - **China, too, not only challenges international maritime laws** in the **South China Sea**, but also confronts Japan over the **Senkaku Islands dispute**.
  - Six nations, including **China and Taiwan**, are involved in the **dispute over the Spratly Islands**, which are supposedly sitting on vast reserves of oil and natural gas.



- China has vigorously **militarised some portions of the disputed isles**, islets and coral reefs; and countries like Vietnam and the Philippines are anxious not to be left behind.
- **Unwillingness to Act Against China:** There is a limit to which countries in the region will want to get on the anti-China bandwagon, economic or strategic.
  - Whether it is in East, Southeast or South Asia, **every country has its own unique relationship with China.**
  - Though South Korea and Japan are part of a strong American security/strategic partnership, they will be **keen on maintaining their economic status with China.**
    - This is also true for the **ASEAN Nations.**
  - India may be a part of the Quad, but is quite mindful that it is the only country in the group that shares a **land border with China which is laced with disputes.**
- **Issues with IPEF:** The first indications are that while the IPEF may be a good idea, there is discontent that the framework does not address issues of trade and tariffs.
  - Also considering that the U.S.'s previous initiatives (the **Blue Dot Network** and the **Build Back Better World (B3W) Initiative**) have made little headway in changing the region's infrastructural needs, the IPEF faces a credibility challenge.

### **What Needs to be Pacify the Indo-Pacific?**

- **Pondering Over Strong Actions:** In response to geopolitical tensions, countries have increasingly emphasised resilience and national security considerations over the economic gains from free trade and investment flows but they should be very careful about taking extreme measures, preemptively before conflicts arise.
  - Whether to **disconnect themselves from global supply chains** and strive for reshoring or to go for **"friend-shoring"** and to **cut off countries that are not allies or friends.**
    - **Such actions shut off avenues for regional growth and cooperation, deepen divisions between countries, and may precipitate the very conflicts that should be avoided.**
  - Over the next decade, a range of major events could occur that would have a significant impact in this region such as large-scale interstate conflicts over disputed territories.
    - **Appropriate policies and actions** need to be taken by **India to promote and defend its own interests** in the Indian Ocean.

- **Establishing Common Standards:** The immediate focus for the stakeholders should be on establishing the common standards, which could **form the basis of deeper integration in the future.**
  - Such standards will cover **labour rights, environmental standards, protection of intellectual property rights** and rules covering the digital economy.
- **Initiatives for Peace Mongering:** The countries in the region should have **equal access as a right under international law** to the **use of common spaces** on sea and in the air that would require freedom of navigation, **unimpeded commerce and peaceful settlement of disputes** in accordance with international law.
  - It is important to establish connectivity in the region based on **respect for sovereignty and territorial integrity**, consultation, **good governance**, transparency, viability and sustainability.
- **A Combined Indo-Pacific Strategy:** The Indo-Pacific strategies of the countries have to devolve themselves on **strengthening relations with all the stakeholder countries.**
  - The areas which need addressal are **improvement in defence cooperation** so as to **strengthen each other's military capabilities**, reduce external military threat, promote economic assistance and look at threatening environmental issues such as ozone depletion and greenhouse emissions.
  - Seven key players identified which would need to get together to enhance cooperation and counter the Chinese challenge would be the **US, India, Japan, Australia, South Korea, Indonesia and Taiwan.**

■■■

## **Need for Cooperatives in Tackling Climate Change**

*This editorial is based on "Greening India through cooperatives" which was published in The Hindu Business line on 06/06/2022. It talks about the significant role that is being played and could be played by the various cooperatives in the near future in mitigating climate change impacts.*

**Tags:** Governance, GS paper 2, Government Policies & Interventions, GS paper 3, Conservation

With the rise in global temperature and extra people-contradictions all over the globe, there is a need to find innovative solutions to mitigate the major impact of climate change. Here, the cooperative societies with their unique solutions at the local level could provide alternative

solutions to mitigate the risk of climate change. There is a need to support their role by the government with adequate funding and policy support.

### What are Co-operatives?

- **Co-operatives** are people-centered enterprises owned, controlled and run by and for their members to realize their common economic, social, and cultural needs and aspirations.
- Cooperatives bring people together in a **democratic and equal way**. Whether the members are the customers, employees, users or residents, cooperatives are **democratically managed by the 'one member, one vote'** rule.
  - Members share equal voting rights regardless of the amount of capital they put into the enterprise.

### What are the Initiatives taken by the Government to Support Cooperatives in India?

- In the Indian context cooperatives are incorporated under **Article 19** of the Indian constitution as “**Unions and associations**”. Further **Article 43B** was added in the **Directive principle of state policy (DPSP), Part IV** regarding the promotion of cooperative societies.
- The **Constitution (97th Amendment) Act, 2011** added a new **Part IXB** right after **Part IXA (Municipals)** regarding the cooperatives working in India.
- Recently, a separate **'Ministry of Co-operation'** has been created by the Central Government for realizing the vision of **'Sahkar se Samriddhi'** (Prosperity through Cooperation) and to give a **new push to the cooperative movement**.

### How are Cooperatives Significant in Mitigating Climate Change?

- **Collective & Innovative Solutions:** Cooperatives collectively provide solutions to the **looming impact of rising temperature, loss of jobs, depletion of water resources**, degradation of land and forest resources and accumulation of wastes leading to health hazards.
- **Implementation through Consensus:** The explicit adoption of eco-social agendas by cooperatives is **viability and vitality**, providing a basis for **positive differentiation** and stronger ties to important constituencies, stakeholders, and strategic allies.
- **Emission Neutral Work:** Cooperatives **contribute to the sustainable management of natural resources** in several ways.
- **Add Innovation to Mission:** Cooperatives have the potential of **solving real-world problems** with their **innovative skills** like alternative sources of clean water for communities and helping to accomplish

**sustainable goals** of energy access, energy efficiency, and reduced emissions.

### Are There any Real-Life Examples?

- **Dhundi village in the Kheda district of Gujarat** had formed the **world's first solar irrigation cooperative** as **Dhundi Saur Urja Utpadak Sahakari Mandali (DSUUSM)** in 2016.
  - The members of this cooperative society are often called **solar entrepreneurs** who are harvesting solar energy.
  - This has enabled them to reap a better harvest and they are connected to the grid for additional income.
- **Indian Farm Forestry Development Co-operative (India)**, the **umbrella co-operative**, is **turning wasteland back into the forest** in three north-central States of India, Rajasthan, Uttar Pradesh and Madhya Pradesh.
- **Self Employed Women's Association's (SEWA's)** interventions regarding the **environment, climate, water, clean energy, and spreading awareness** are apt in the current times and support our national goals (sustainable development goals) to be achieved by 2030.
- There are also examples from leading **cooperatives giants** like **AMUL, IFFCO and NAFED** etc., diversified into **organic farming** by supporting the cooperatives for production certification, **adherence to food safety** and linking to the **market-driven value chains**.
  - The initiatives of this kind have made cooperatives oriented towards natural and organic farming and are all set to cater to the demand for organic produce.

### What are the Challenges faced by the Cooperatives?

- **Neglected by the Policy Makers:** The role of cooperatives has been overlooked by policymakers at various levels **due to their lack of visibility**.
- **Lack of Awareness:** There is a lack of awareness about business strategies and knowledge about how the market works.
- **Lack of Funding and Capabilities:** Whether public or private sector, both are not showing any amount of confidence in this sector, as there is **little or no financial support for cooperatives**, so this harms their potential.
- **Poor Management:** In some cooperatives, due to the **lack of understanding of the market** and **poor level of skill set** of workers, many cooperatives underperform and are not able to provide the desired results.

### What can be the Way Forward?

- **Dual Status for Cooperatives:** Their role should be accomplished and further support should be provided by various **stakeholders** including **government, corporates etc.**, by bringing their most significant **competitive advantage** to the table, namely their **dual status as associations and enterprises** (as they are businesses which are run by local communities for example members of a village).
- **Economic, Social and Societal Role:** The complementarity of their **triple roles**, the economic, social, and societal role that is by making profits and sustaining a business they are supporting the economy, and by creating wealth they also give back to the society and fulfilling their social role.
- **Need for Enhanced Capabilities:** The **cooperative members** need to understand the **pervasive impact of climate change and environmental degradation** (know-how of climate change developments).
- **Awareness and Action:** Reaching out to cooperatives for **raising awareness about environmental problems, training on adaptation and mitigation, forging alliances to work together, and investing in cooperative enterprises and innovations** are required to have a green agenda for a sustainable future.
- **Role of Government:** The government needs to work upon **enhancing their capabilities** by providing them with proper **guidance and support** from **market and business communities** so that they can get the desired level of **skill set** and knowledge of running an enterprise and can further utilize these capabilities to solve environmental problems.



## India and Advanced Computing Technologies

*This editorial is based on "In an Era of Cyber Wars, India Needs A Fortified Computing Ecosystem" which was published in Hindustan Times on 10/06/2022. It talks about India's initiatives on adoption of advanced technologies like supercomputers and quantum computing and the challenges associated.*

**Tags:** Science and Technology, GS Paper 2, Government Policies & Interventions, GS Paper 3, Growth & Development, Scientific Innovations & Discoveries, Technology Missions, Indigenisation of Technology

The 21<sup>st</sup> century is earmarked as **Information Technology driven** and India is at the Centre of global attraction and considered as a **knowledge powerhouse**.

Advanced mechanisms have taken over the field of computing, with governments, along with private companies, embroiled in a high-stakes race to **increase indigenous computing power for economic and strategic purposes**.

With India's data generation at an all time high, there is a **need to improve computational capabilities** by using **advanced computing technologies**.

### Advanced Computing Technologies – How much has India Progressed?

- **National Supercomputing Mission:** The **National Supercomputing Mission (NSM)**, 2015, was the **first step** taken by the Government of India in this regard.
  - It is a jointly funded programme, by the **Department of Science and Technology (DST)** and the **Ministry of Electronics and Information Technology (MeitY)**.
  - The main objectives are to spearhead research in the **development of supercomputers** and build a **national supercomputing grid**.
    - As of May 2022, **India now has 15 supercomputers disclosed to the public**, with combined performance capability of 24 petaflops.
    - The NSM **recently deployed PARAM Ganga** - a High-Performance Computational (HPC) facility at IIT Roorkee.
      - **PARAM PORUL**, a state-of-the art Supercomputer at NIT Tiruchirappalli was also inaugurated under the mission.
      - **PARAM Siddhi-AI** is the **fastest supercomputer in India** built under NSM.
- **Quantum Computing:** In 2018, the Department of Science & Technology unveiled a programme called **Quantum-Enabled Science & Technology (QuEST)** and committed to investing Rs. 80 crore over the next three years to **accelerate research**.
  - In the 2020 Budget speech, the Finance Minister of India announced the **National Mission for Quantum Technologies and Applications (NM-QTA)** with a total outlay of ₹8000 crore over five years for **strengthening the quantum industry** in the country.
  - In 2021, the government unveiled the **indigenously developed Quantum Key Distribution (QKD) solution**.
  - The **domestic private sector of India** has also **been involved** in the development of quantum computing hardware, software, and algorithms.

### What are the Challenges Pertaining to Adopting these Technologies in India?



- **Slow Growth Rate:** Although there has been significant progress in the introduction of supercomputers in India, considering the distribution of the world's top 500 most powerful supercomputers, **India accounts for just 0.6% of the total.**
  - There is still a long way to go before India can develop an interconnected grid of supercomputers.
- **Slow Progress in Legislative Procedures:** Although the NM-QTA was announced in the 2020 Budget speech, the **mission has still not received any approval and no funds were allocated, disbursed or utilised** under NM-QTA during the FY 2020-21.
- **Limited Private Sector Involvement:** The Union Minister of Science & Technology has also claimed that for the NM-QTA, **no private sector partners had been identified yet** and no one from outside the government had been tapped for consultations for the national mission.
  - The government must recognise the leaps made by these companies.
- **Foreign Dependence:** The ability to build advanced computing facilities rests on raw materials.
  - It would be impossible to indigenously manufacture the whole system from scratch. This is where the **reliance on high-tech imports** kicks in.
  - Moreover, **trade barriers** — export control mechanisms and import restrictions — can **hamper access to the building blocks** of these systems.

### What Areas Need to be Worked Upon?

- **Better Policy Making and Regulations:** The focus should be to develop an **overarching strategy for the next 10-15 years** where it must be **ensured that there is no misallocation of resources** and that the efforts put in are concentrated in key areas that provide both economic and strategic benefits.
  - The primary focus must be on **establishing Centres of Excellence** dedicated to such advanced computing technologies within academic institutions as well as government research institutes.
  - A majority of the Indian **government's outlay has to be pumped into such institutions.** This can pay dividends in two ways:
    - It will help **create crucial intellectual property (IP) infrastructure** that can be used for the country's benefit.
    - The focus on research and academia will also **improve the talent pool and strengthen the domestic technology workforce.**
- **Liberalisation in Tech-Trade:** Advanced processors for supercomputers and cryogenic cooling systems for

quantum computers are a necessity. But indigenously developing them will take time.

- **Cutting down on import tariffs**, along with **embracing multilateral trade agreements** such as the **Information Technology Agreement** must be the government's priority.
- Moving towards a **liberalised technology trade policy** can help the country accelerate its computing programme.
- **Nationwide Computing Grid:** China's **national computing network**, which talks about a **geographical approach to building data centres** and computing clusters across the mainland, **can serve as a blueprint** to scale-up computing infrastructure.
  - The concept of **"eastern data and western computing"** in China has been proposed, which involves setting up computing architecture in the less-developed western regions of the country to handle the data stored in centres in the tech-aligned east.
  - A computing grid in India can follow a similar pattern; the government, which has so far focused on academic research institutions as hosts for computing systems, must disperse these facilities.
    - **Creating a better network will improve the functioning** of an advanced computing grid and **handle large-scale data processing with ease.**
- **Advancing Computing from Military Lens:** India must focus on its computing strategy, **keeping the national security angle in mind.**
  - It is necessary to **develop India's computing power from a military lens**; it will facilitate the advancement of the military and improve computing technology.
    - In the age of information warfare and cyber-security threats from across the border, **increased computational capacity is a necessary risk-mitigation tool.**
  - **Advanced computing facilities at strategic environments** such as **naval bases, air command control centres, and border outposts** can help in the faster analysis and real-time data processing that contains critical military intelligence.

■■■

## Bringing down Oil Import Bills

*This editorial is based on "Cutting Crude Import Bill is no Easy Task" which was published in The Hindu BusinessLine on 11/06/2022. It talks about India's current import dependence for oil and the initiatives that have been/can be taken to reduce oil-import dependence.*



**Tags:** Indian Economy, GS Paper 2, Government Policies & Interventions, GS Paper 3, Mobilisation of Resources, Growth & Development, Effect of Policies & Politics of Countries on India's Interests

India's energy needs are enormous with a **daily consumption of around 5 million barrels** and a **refining capacity of 250 mmtpa** (million metric tonnes per annum), which is the third largest in the world.

To maintain energy security and to fulfil the objective of providing energy justice to each of its citizens, Indian energy companies buy from all major oil producers in the world. On an average, India has the unique distinction of **servicing 60 million visitors at its petrol pumps** every single day.

Now, due to the ongoing **Russia-Ukraine conflict**, the U.S. announced the banning the import of Russian oil which led to the **surge in international oil prices by a 14-year high**. The surge in oil prices, however, does not imply a decline in requirements.

Therefore, it is important for the government to ensure access to affordable energy to our citizens. Encouraging domestic production of oil and transitioning to alternate sources of energy are two of the viable solutions that can be taken to overcome this problem.

### India's Oil Import/Consumption

#### What is the Current Scenario?

- **India is the world's third-largest oil consumer** at around 5 million barrels a day, behind the US and China. The oil demand is **growing at 3-4% a year** in the country.
  - By this estimate, in a decade, India could be consuming about 7 million barrels a day.
- Inferring from the latest data available under the **Petroleum Planning and Analysis Cell (PPAC)**, India's oil import dependence based on consumption was **85% in 2019-20**, which **declined marginally to 84.4% in 2020-21**.
  - It **rose again to 85.6%** in 2021-22.
- According to PPAC, India imported 212.2 million tonnes of crude oil in 2021-22, up from 196.5 million tonnes in the previous year.
  - For **April 2022-23**, the oil import dependence was **around 86.4%** against 85.9% in the corresponding year-ago period.
- It has been argued that **due to increasing demand**, the **consumption of oil has gone up**, which has marginalised the efforts being made to increase output.
  - Higher crude oil import bill is **expected to dent the macroeconomic parameters**.

#### What Initiatives have been taken to Cut down Crude Oil Imports?

- In March 2015, the Prime Minister of India inaugurated the **'Urja Sangam 2015'** — India's **then biggest global hydrocarbon meet** aimed at shaping India's energy security.
  - All the stakeholders were urged to **increase the domestic production of oil and gas to reduce import dependence from 77% to 67% by 2022 and further to 50% by 2030**.
- The government has also introduced various policies for increasing domestic production of oil and natural gas under the **Production Sharing Contract (PSC) Regime, Discovered Small Field Policy, Hydrocarbon Exploration and Licensing Policy (HELP), New Exploration Licensing Policy (NELP)**, etc.
  - However, an underlying issue with domestic oil production is that oil and gas projects — from exploration to production — **have a long gestation period**.
  - Besides, **pricing and tax policies are not stable** and the oil and gas business **requires huge capital**, so **investors are often wary of taking risks**.
- The Government of India promotes the **Ethanol Blending Programme (EBP)** with the aim of reducing the country's dependence on crude oil imports, cutting carbon emissions and boosting farmers' incomes.
  - The Government has advanced the **target for 20% ethanol blending in petrol** (also called E20) to 2025 from 2030.

#### What can be Done to Reduce India's Oil Import Dependence?

- **Encouraging Domestic Production:** It must be kept in mind that India's demand for oil is only going to go up as we go for 10% GDP growth and that **India will continue to be an oil economy for many more years** to come.
  - The only way India can reduce its dependence on imports is to **increase the size of India-owned exploration and production assets overseas**. That is what China has done.
  - The public sector oil giant **Oil and Natural Gas Corporation (ONGC)** is also taking various steps to **increase the production by redevelopment of existing matured fields and development of new/marginal fields**.
    - Further, improved oil recovery and **enhanced oil recovery technologies** are being inducted for enhancing recovery from matured fields.
- **Alternate Green Sources:** Another way out for India is to expand its basket and focus on **green energy**. With

the economy gaining momentum, demand for power is on the upswing. With the **CoP26 commitments** in place, the demand for **Renewable Energy** is at an all-time high, which calls for **substantial capacity addition**.

- The wind sector gained momentum, thanks to private investments and government initiatives coupled with regulatory support.
- However, backed by global supply of solar cells and modules and favourable policies, **solar power emerged more competitive than wind power**.

### How Focussing on Energy Generation from Wind can be Helpful in this Context?

- **Wind power generation** developed on the foundations of the **Electricity Act, 2003** and the establishment of a robust home-grown manufacturing base.
- More recently, the Ministry of New and Renewable Energy (MNRE) set a target of **installing 5 GW of offshore capacity by 2022** and 30 GW by 2030.
- While both solar and wind are susceptible to intra-day and seasonal variability, from a technological and resource perspective as well as from the commercial angle, **wind is a better bet in helping India achieve its RE aspirations**.
- However, lately, there is a policy overdrive in favour of solar, which is resulting in a decline in wind capacity addition.
- While there is a short-term tariff advantage, in the long term it is **essential to have a balanced diversified resource mix**.
- Wind is more desirable in India's power basket due to **higher capacity utilisation** and **throughout the day generation of power**.
- It also complements solar, providing a **more consistent and viable generation profile**.

### Conclusion

Despite the initiatives for reducing India's oil import dependence, the situation remains dismal. India will need to work its policy around this reality. The strategy should be that key **energy uses, like for cooking and transport, shift to other sources like green energy**. On their part, the policymakers have to ensure that all stakeholders are on board and there is no policy flip-flop.



## Movement For Raising Voice Against Wasteful Consumption

*This editorial is based on "Climate and Us | A movement that puts a spotlight on West's wasteful consumption"*

which was published in *The Hindustan Times* on 08/06/2022. It talks about the initiative taken by India to highlight the wasteful consumption of the western countries and also provides solutions to India's problems related to climate change.

**Tags:** Biodiversity and environment, GS Paper-3 Environment pollution and degradation

The **Global lifestyle movement** is launched by India to highlight consumption patterns and highlight historical responsibility, per-capita CO<sub>2</sub> emissions holistically. It is administered by **NITI Ayog** along with various in with various individuals & international organizations.

### What are the Objectives of Global Lifestyle Movement?

- It will initiate a global call for **inviting ideas and suggestions from academics, universities, and research institutions** on an **environment-conscious lifestyle**, which can also persuade individuals, communities, and organizations to change their way of living.
- These include **behavioral-change** solutions aimed at individuals, households, and communities on **water, transport, food, electricity, recycling, and reuse**.
- It will **leverage the strength of social media networks** to further influence local societal solutions regarding the climate crisis.
- Ideas are also invited on **innovative solutions** that promote wider adoption of traditional, climate-friendly practices and/or create livelihood options for communities that may lose their jobs with a shift towards climate-friendly production.
- The focus would be on following any **international, national, and/or local best practices that can be feasibly scaled up for driving behavioral change related to climate action**.

### Why do We Need Such Type of Movement?

During the drafting of the **Glasgow pact text of COP 26 Glasgow climate conference**, there was a **clash between developed and developing countries** on the issue of -

- **Historical Responsibility:** It tries to address the historical emissions created by the developed world since the inception of the industrial revolution,
- **Carbon Colonialism:** According to the **Like-Minded Developing Countries (LMDC including India & China)** developed countries are performing "carbon colonialism".
  - This means rather than following the principle of **CBDR (Common But Differentiated Responsibility towards climate change)** developed countries

are pushing developing countries to announce immediate net-zero targets or lopsided conversations about achieving the 1.5-degree global temperature target while entirely ignoring the development needs of a large part of the world.

- Recently, at the **Stockholm +50 conference** which was to commemorate 50 years of the landmark Stockholm conference, a statement of key recommendations also misses out on the issue of consumption and wasteful exploitations.
  - Due to this, there is a **lack of accountability** for historical consumption patterns.

#### What is CBDR?

- Common but differentiated responsibility (sometimes with the addition of the phrase 'and respective capacities') is a **principle of international law** which means that **different countries have different capabilities and responsibilities** to address cross-border environmental issues such as climate change. It balances:
  - The need for all states to take **individual responsibility for environmental destruction and its mitigation**.
  - The recognition that **states aren't equally responsible for the problem nor equally capable of responding to it**.

#### What are Annex 1 and Non-annex 1 countries?

- **Annex I Parties** include the **industrialized countries** that were members of the **OECD (Organization for Economic Co-operation and Development)** in 1992, **plus countries with economies in transition** (the EIT Parties), including the Russian Federation, the Baltic States, and several Central and Eastern European States.
- **Non-Annex I Parties** are mostly **developing countries**. Certain groups of developing countries are recognized as being **especially vulnerable to the adverse impacts of climate change**, including **countries with low-lying coastal areas and those prone to desertification and drought**.
- Others **least developed countries (LDC)** (countries that rely heavily on income from fossil fuel production and commerce) feel more **vulnerable to the potential economic impacts of climate change response measures**. The climate change Convention emphasizes activities that promise to answer the **special needs and concerns of these vulnerable countries**, such as investment, insurance and technology transfer.

**What are the various disparities highlighted by India?**

- There is an enormous gap in **per capita emissions and resource consumption**
- According to **Climate Equity Monitor**, an online dashboard for assessing equity in climate action put together by **MS Swaminathan Research Foundation (MSSRF)**, the per capita emissions of countries are as follows-
  - **Australia - 22tco2eq per person (CO<sub>2</sub> emissions (metric tons per capita))**
  - **the US - 20.2 tco2eq per person**
  - **India - 2.4 tco2eq per person**
  - **Brazil - 5.3 tco2eq per person**
- It shows the **US and other developed countries had the highest per capita electricity consumption in 2019**,
- **Climate Equity Monitor (CEM)** also has an **interactive map** of the global **carbon budget** with the categorization of countries based on **how much of the global budget they have already exhausted**.
- Also, most of the **annex 1 countries have consumed more than their fair share and are in debt** while **non-annex 1 countries** have credit for not yet consuming their share.
- This shows a **lack of decision-making or unwillingness to take action** and **policy paralysis** among **developed countries**.

#### What could be the Way Forward?

- The movement is backed by **big names like LiFE, United Nations, World Resources Institute, Centre for Social and Behavior Change (CSBC) and Bill and Melinda Gates Foundation (BMGF), Lord Nicholas Stern, Chair of the Grantham Research Institute; Prof Cass Sunstein, the Robert Walmsley University Professor at Harvard; Inger Andersen, UNEP Global Head; David Malpass, World Bank**, who hold a **big influence** on the individuals as well as various communities and societies, it would help in increasing the engagement with the masses.
- There is a need to **highlight the disparities and drive change with innovative solutions**
- Movement should also be an **opportunity to highlight and address inequities within India**,
  - As **71% of Indians cannot afford a healthy diet** according to an analysis by the **Centre for Science and Environment**,
  - It suggests that the **diet of an average Indian does not contain enough fruits, vegetables, legumes, nuts, and whole grains**;
  - Access to clean water and the environment also remains elusive in most parts of the country.



- Need to address the well-being and livelihoods of millions of poor people in India.
- It should also **focus on a just transition of coal-dependent states which may soon undergo a major transition in industry and jobs.**



## New Great Game in South Pacific

*This editorial is based on "South Pacific: Challenging times ahead" which was published in The Hindustan Times on 13/06/2022. It talks about the Chinese emerging role in the crucial islands of the South Pacific and how the US is responding to it and how India can learn its lesson.*

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

Recently, China and Solomon islands signed the security framework agreement, which would increase China's role in the region and Solomon island's military and commercial ports, airbases, etc, the deal is just short of having a permanent Chinese base on the island.

This set the emergence of a new Great game i.e big power rivalry between the USA and China. There is a need for India to weigh all the options and keep the best foot forward in this multipolar world.

### Why are South Pacific Islands Important?

- It's a strategic location, as they sit between the Pacific ocean and Australia and New Zealand and also a part of the Indo-Pacific region.
- A sizable amount of shipping lanes pass through these islands.
- Pacific Island countries have substantial natural resources.
- They are rich in cultural diversity and are rapidly increasing their trade and digital links with global markets.

### What are The Issues on These Islands?

- They are the most vulnerable in the world to the effects of climate change and disasters.
- They are small in size with limited natural resources and narrow-based economies, they are physically detached from major markets.
- Small populations spread across many islands, and they are vulnerable to external shocks.

### What is the New Great Game in the South Pacific?

#### ➤ China's Expansion of Power in the Region:

- China is worried about QUAD (**India, US, Australia, and Japan**) gaining more influence in the region, so it also started to woo these island nations.
- The great power competition in the Pacific, has led to some Pacific Island countries engaging in hedging behavior.
- China is trying not just to increase its influence in the Pacific, but also to undermine the US and Australian influence.
- China has been engaged in a charm offensive, focussing on the Pacific Island Countries for some time, through **sustained political, economic, and other efforts.**
- Beijing sees the south Pacific as its **sphere of influence** and is playing the **long-term game** by substantially increasing its presence in the region like the signing of an **MoU** (memorandum of understanding) with ten countries.
- Solomon island's decision to cut ties with Taiwan and follow 'one china policy'

#### ➤ The US Apprehensions and its Countermeasure:

- US President Joe Biden became the **first-ever US President to participate in the virtual gathering of the Pacific Island Forum (PIF) leaders.**
- Announced its intention to **reopen its embassy in the Solomon Islands** after it was closed in 1993.
- US Secretary of State Antony Blinken also visited Pacific Island nations. He became the **first US secretary to visit Fiji in 36 years.**
- White House delegation led by Indo-Pacific Coordinator Kurt Campbell also visited these islands.

#### ➤ Viewpoints of Pacific Island Nations:

- Some countries had **raised concerns** that it could become the **epicenter of a future great power confrontation.**
- While others have argued that it's their **sovereign right to diversify security partners** which are being guided by their **national interest** by **reducing dependence on Australia.**

### What are the Implications for India?

- It can be correlated with the Maldives, where earlier also China has invested in its **debt trap policy.**
  - India needs to provide these small and vulnerable countries with **sustainable economic help coupled with providing innovative solutions to climate change as well.**
- India needs to step up its game, for example setting up the **Forum for India-Pacific Islands Cooperation (FIPIC)** and further enhancing cooperation between



these island economies, to unlock the underutilized potential.

- India's focus has largely been on the Indian Ocean where it has sought to play a major role and protect its strategic and commercial interests. The FIPIC initiative marks a serious **effort to expand India's engagement in the Pacific region**.
- Though these countries are relatively small in land area and distant from India, many have large **Exclusive Economic Zones (EEZs)**, and offer promising possibilities for fruitful cooperation.

### Way Forward

- With the rising belligerence of China and counter balancing by the USA, there is the emergence of new competition among superpowers.
- It's a manifestation of challenging times ahead in the South Pacific, India needs to navigate carefully in these troubled waters and churn out its best possible national interest without indulging in great power rivalry.



## Counteracting China's Influence by Improving Self-Capacity

*This editorial is based on **Tackling China's infra build-up along LAC**, which was published in Hindustan Times on 14/06/2022. It talks about China's infrastructure buildup along the LAC and the steps India can take for deterrence against any Chinese attack.*

**Tags:** International Relations, GS Paper 2, India and its Neighbourhood, Effect of Policies & Politics of Countries on India's Interests, GS Paper 3, Cyber Warfare, Cyber Security

With the rise of belligerent China and its increasing level of infrastructure buildup near India's border area, there is a need for India to enhance its infrastructure capabilities to deter China from pursuing any misadventure along the **LAC (Line of Actual Control)**, and to further develop its long term strategy to contain China.

### What's the Issue?

- China has been **developing infrastructure along with LAC**. The latest satellite images revealed that China was **building a second bridge over the Pangong Tso**. This bridge can **carry tanks and facilitate faster movement of military forces between the north and south banks of the lake**.

### What kind of Infrastructure is being built by China?

- **For Improving Air Assets:** The first type of area is aimed at enhancing the capabilities of the **PLAAF**

(Chinese air force), as earlier, it has a limited no of operational airfields in the **Tibetan plateau**, and **problems of operating from high altitudes** were a severe handicap for the People's Liberation Army (PLA) Air Force.

- After the **Doklam incident in 2017**, **37 airports and heliports within Tibet and Xinjiang** have been newly **constructed or upgraded**, of which **at least 22 are identifiable as military or dual-use facilities**.
- Dual-use facilities are those infrastructures that can have both military and civilian applications. **These facilities include:**
  - Hardened shelters for housing military aircraft,
  - Underground facilities to ensure survivability,
  - Air defense missiles for protection,
  - Runways extension,
  - Helicopter operations facilities.

- **For Enhancing Logistics:** The **second area** is focused on the ability of the **PLA (People's Liberation Army)** to **rapidly mobilize its forces from its mainland bases** to their battle locations through an improved road and rail network.

- In between 2015 and 2020, **Tibet's highways grew from 7,840 km to 11,820 km**, a **51% increase**,
- In June 2021, a **high-speed rail line** connecting **Lhasa and Nyingchi** entered service, covering the **435 km distance in 2.5 hours**.

- **For Ramping up Forward Movement:** The infrastructure is also being developed for speedy application of combat power at LAC.

- China has **constructed at least eight key roads toward LAC** from the G219 highway, These roads provide **connectivity to areas opposite important Indian military posts in Ladakh**, from **Daulat Beg Oldie to Galwan Valley**, Pangong Tso, and Chumar. In addition, infrastructure such as **the bridge at Pangong Tso will assist in the faster north-south movement of troops**.

### What are China's Intentions?

- China's infrastructure buildup is aimed at **reducing India's advantage** in the employment of airpower during a conflict along LAC.
- It is to **overcome their shortfalls, neutralize India's airpower edge over Tibet**, and **increase the PLA's combat capability for war fighting along LAC**.

### What are the Challenges for India?

- It would increase the **PLA's combat capability** for war fighting along LAC.

- With the improved infrastructure in Tibet and Xinjiang, China could **quickly mobilize its troops** on the border from its bases.
- China would be able to **neutralize India's airpower edge over Tibet**.

#### What is the response from the Indian side?

- The Indian Army has **redesigned significant forces from the Pakistan border to the northern front**.
- A major push has been given to infrastructure development, **improving surveillance, and construction of roads**.
- After the 2020 standoff in eastern Ladakh, the government has sanctioned the **construction of 32 roads along LAC**.

#### What Could be the Way Forward?

- **Build Deterrence:** India must develop a **strategy that strengthens its deterrent posture**.
  - **Deterrence** is based on a **strong army deployment** along with LAC.
  - India must focus on capabilities that seek to impose punishing costs in the event of a conflict.
- **Tactical Thinking:** Apart from infrastructure development and troop deployments, which are necessary measures, there is the need for India to define a **long-term military strategy**.
- **Superior role of the IAF and Navy:** It is needed to ensure operational readiness and dominant role of airforce in **high-altitude** operations as China doesn't have many forward bases in the region, further harsh climate of Tibetan plateau makes transportation and mobilization of troops very difficult.
  - India also need to develop a **dominant naval position** in the Indian Ocean.
- **Going Beyond traditional means:** Capabilities must be developed in all domains to impose costs beyond the immediate area of conflict through long-range missiles, cyber warfare, space weapons, etc.

■■■

## Effective Subsidy Delivery Mechanism

*This editorial is based on **what commodities distribution of commodities should be distributed for free or at a subsidised level** was published in The Indian Express on 16/06/2022. It talks about wasteful expenditure occurs by the state by giving subsidies to non-essential goods and services, and how the state can utilise best practices to further enhance its delivery mechanism.*

**Tags:** Indian Economy, GS Paper-3, Planning, Mobilisation of Resources, Fiscal Policy, Direct and Indirect Farm Subsidies, GS Paper-2 Poverty, Health, Government Policy and Intervention

Recently, the Punjab government announced a subsidy scheme to provide free electricity up to 300 units, this sparked the debate around the subsidies and what are the essential goods and services that required the government efforts to reach the downtrodden section of society.

#### What are Subsidies?

- It's the difference between the market price of a commodity, for example wheat and rice which are procured by the government, and the price at which they are being sold to the beneficiary in the form of subsidized food grain.
- **Fiscal Cost of Subsidies:**
  - As India is a developing country, hence, there are limited budgetary resources to enhance subsidies net coverage to far more population.
  - In the central budget, the food subsidy amounts to **Rs. 2.06 lakh crore**, which is **almost 1.9% of the GDP in 2018-19 and 2.5% in 2019-20**.
  - The **revenue to GDP ratio** has been stagnating over a long period during 2010-11 to 2019-20, which is around the **narrow range of 18.4% to 20.3%**.
  - Whereas in many **developed and emerging market economies**, this ratio tends to be much higher. In 2019, these ratios were **36% and 30.1% for the UK and USA, 48.6% and 43.6% for Sweden and Netherlands, and 31.5% for Brazil**.

#### What is the Delivery

##### Mechanism for Dispersal of Subsidy?

- Support for **low-income households** in a **targeted manner**, which is the free or subsidized provision of **food grains and services such as health and education e.g. - (Public Distribution System)**.
  - For example, **Direct Benefit Transfer (DBT)** through **providing money to the beneficiary's bank account**, so that a person is **free to choose any food grains** in the open market according to his choice and on the other hand the person avails subsidized food grain through **PDS (Public Distribution System)**
- **Incentives to support selected categories of investors and producers** like **reduction of corporate taxes** have been offered to **promote investment in general, or in certain regions such as backward areas**. e.g. - **PLI (production linked incentives)**.
  - **PLI (Production Linked Incentives)**-alternative methods include direct budgetary support and indirect support through tax concessions, schemes

also require to be carefully designed to avoid their misuse and minimize their costs.

### What could be the Rationale for Selection of Subsidy?

- With limited budget, poor targeting and leakages we need to focus on commodities which are considered “essential” and “merit” goods.
  - Primarily food grains, particularly wheat and rice, are supplied to target groups at a highly subsidized price through the public distribution system.
    - Further there is enough evidence that such a distribution has helped to reduce poverty.
  - There is also a category of goods which are called “merit” goods where significant positive externalities are associated with their consumption — for instance, health and education-related provisions, including midday meals and breakfast. In these cases, the benefit of the use of such goods extends beyond the immediate consumer to the wider community.
  - Subsidization or the free provision of essential and merit goods can be justified on the grounds of meeting social objectives but there are enormous examples of wasteful or populist subsidies recently Punjab government announced 300 units of free electricity which has led to an undue increase in the wasteful power consumption.

### Way Forward

- **Innovative Solutions:** Need proper targeting of beneficiaries leveraging technology.
- **Regulation Body:** There is a need to establish a efficient procurement and public distribution system which would manage procurement and distribution. So, that is to stop leakages and avoidable administrative costs.
- **Choice of Goods & Services:** The need of the hour is to limit subsidies to essential and merit goods only.
- **Less Fiscal Space:** There is a need to be very efficient and select subsidies on goods and services as there is limited overall financial support.
- **Generating More Income:** Governments, both state and centre need to pay adequate attention to further strengthening their fiscal revenue.
- **Social Impacts:** Although there are leakages in the PDS system it shows the major impact on the individuals and benefits go beyond the individual to a social and community level, but the benefits from direct income support and PLI are not yet measurable.
  - So, the best way to continue with the PDS scheme is to stop its leakages wherever possible and side

by side keep on experimenting with direct income support with measurable results.



## Protecting the Wetlands

*This editorial is based on “Many Virtues of Wetlands” which was published in The Hindu BusinessLine on 15/06/2022. It talks about the manifold benefits that Wetlands offer to us and the threats that are leading to their degradation. It also suggests the measures that can be taken to protect them.*

**Tags:** Biodiversity & Environment, GS Paper 1, Distribution of Key Natural Resources, Water Resources, Conservation of Resources, GS Paper 2, Government Policies & Interventions, GS Paper 3, Conservation, Environmental Pollution & Degradation

**Climate change** estimates for India indicate rising temperatures, sea-level, intensified rainfall and more catastrophic events. Conservation and wise use of wide diversity of inland and coastal wetlands can be a powerful climate change response.

However, according to the **Global Wetland Outlook by the Ramsar Convention**, wetlands - one of the world’s most economically valuable ecosystems and regulators of the global climate, are disappearing three times faster than forests. Yet, while a lot is known about their importance, the utility of wetlands is not fully understood.

### What do we Need to Know About Wetlands?

- **Wetlands** are areas where water is the primary factor controlling the environment and the associated plant and animal life. They occur where the water table is at or near the surface of the land, or where the land is covered by water.
  - They are the lands transitional between terrestrial and aquatic eco-systems where the water table is usually at or near the surface or the land is covered by shallow water.
- As per recent estimates, wetlands of at least 2.25 ha in size makeup 4.86% of the country’s geographical area (15.98 million-hectares).

### Why are Wetlands Significant?

- **Assist in Fighting Against Climate Change:** Wetlands assist in stabilising CO<sub>2</sub> (Carbon dioxide), CH<sub>4</sub> (Methane), N<sub>2</sub>O (Nitrous oxide) and Greenhouse Gas (GHG) concentrations by minimising climate and land-use-mediated GHG releases and by boosting the potential to actively collect CO<sub>2</sub> from the atmosphere and sequester carbon.



- Wetlands also help reduce the risk of disasters such as floods, by protecting coastlines.
- **Sequester Carbon:** Wetlands' microbes, plants and wildlife are part of global cycles for water, nitrogen and sulphur. Wetlands **store carbon** within their plant communities and soil instead of releasing it to the atmosphere as carbon dioxide.
  - Salt marshes and mangrove swamps are known to **accumulate soils vertically**.
- **Significance of Peatlands:** The term 'peatland' refers to the peat soil and the wetland habitats growing on the surface.
  - They account for just 3% of the world's land surface but **store twice as much carbon as forests**, thus playing a crucial role in **delivering global commitments on the climate crisis**, sustainable development, and biodiversity.
  - Peatlands **one of the world's largest carbon reserves**, are sparse in India and require immediate attention.
- **Paradise for Migratory Birds:** Millions of migratory birds flock to India, and wetlands are critical to this annual phenomenon. **Ecologically dependent on wetlands**, migratory waterbirds connect continents, hemispheres, cultures, and societies through their seasonal movements.
  - A diversity of wetland communities **offers essential stopovers for birds**.
- **Cultural and Tourism Importance:** Wetlands also have a deep connection with Indian culture and traditions.
  - **Loktak Lake in Manipur** is revered as "Ima" (Mother) by locals, whereas **Sikkim's Khecheopalri Lake** is popular as the "wish fulfilling lake".
  - The north Indian festival of **Chhath** is one of the most unique expressions of the association of people, culture, water and wetlands.
  - The **Dal Lake in Kashmir**, **Khajjiar Lake in Himachal Pradesh**, **Nainital Lake in Uttarakhand** and **Kodaikanal in Tamil Nadu** are popular tourism destinations.

### What Initiatives have been Taken to Protect Wetlands?

- **At Global Level:**
  - **Ramsar Convention:** The convention envisages the **conservation and wise use of all wetlands** through local and national actions and international cooperation, as a contribution towards **achieving sustainable development** throughout the world. It **came into force in 1975**.
  - **Montreux Record:** It is a register of wetland sites on the **List of Wetlands of International Importance**

where changes in ecological character have occurred, are occurring, or are likely to occur as a result of technological developments, pollution or other human interference.

- It is **maintained as part of the Ramsar List**.
- **World Wetlands Day:** It is celebrated every year on the **2<sup>nd</sup> of February** across the globe.
  - This day marks the date of the **adoption of the Convention on Wetlands** on 2nd February 1971 in the Iranian city of **Ramsar**.
  - On **World Wetlands Day 2022**, two new Ramsar sites **Khijadiya Wildlife Sanctuary** in Gujarat and **Bakhira Wildlife Sanctuary** in UP were announced in India.
- **At National Level:**
  - **Statutory Protection:** In India, the wetlands are regulated under the **Wetlands (Conservation and Management) Rules, 2017**.
    - The 2010 version of the Rules provided for a Central Wetland Regulatory Authority, but new Rules of 2017 replaced it with **state-level bodies** and **created a National Wetland Committee**, which functions in an advisory role.
  - **Action Plan of MoEFCC:** The Ministry of Environment, Forest and Climate Change (MoEFCC) supports the implementation of management **action plans for over 250 wetlands** under schemes such as National Plan for Conservation of Aquatic Ecosystems, Mangroves and Coral Reefs, and Integrated Development of Wildlife Habitats.
    - Towards her commitment under the Ramsar Convention, **India has designated 49 Ramsar sites**, and is likely to expand the list to 75 wetlands.

### What are the Threats to Wetlands?

- **Human Activities:** As per the **IPBES (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services)**'s global assessment, **wetlands are the most threatened ecosystem** due to human activities and global warming.
  - The **National Wetland Decadal Change Atlas** recently published by the Space Application Centre indicates declining natural coastal wetlands (reducing from 3.69 million hectare to 3.62 million hectare in the last decade).
- **Urbanisation:** Wetlands near urban centres are **under increasing developmental pressure** for residential, industrial and commercial facilities.
  - Areas surrounded by urbanised wetlands are **expected to lead to a coastal squeeze** in the face of sea-level rise ultimately leading to wetland loss.



- **Climate Changes:** Climate change and linked drivers and pressures are highly likely to increase vulnerability of wetlands.
  - **Increased air temperature; shifts in precipitation;** increased frequency of **storms, droughts, and floods; increased atmospheric CO<sub>2</sub> concentration;** and **sea level rise** could also affect wetlands.
- **Maladaptation:** Wetlands are also exposed to the risk of maladaptation — the likelihood of adverse impacts on these ecosystems **in response to adaptation actions in other sectors.**
  - **For example, the construction of hydraulic structures** to increase freshwater storage in upstream stretches, may further accentuate the risks of salinisation in downstream coastal wetlands.

### ***What are/will be the Impacts of Degrading Wetlands?***

- Degradation of wetlands **diminishes landscapes capability** to absorb and moderate floods, droughts, and storm surges.
  - **Floods in the Kashmir Valley** in September 2014 **and in Chennai** in December 2015 illustrate how wetland degradation can threaten lives.
- According to **UNESCO**, the threat to wetlands will have an **adverse impact on 40% of the world's flora and fauna** that live or breed in wetlands.

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

- **Integration of Wetlands in Policies:** **India's emission pledges at the Glasgow summit** include **net-zero emissions** by 2070, reducing carbon emissions by one billion tonnes and reducing the carbon intensity of the economy to less than 45%.
  - **Including wetlands blue carbon** can assist towards this goal, which is presently overlooked in **absence of systematic wetland carbon inventories.**
  - **Integrating wetland conservation** and wise use **into disaster risk reduction policies** and programmes provides **"cost-effective" and "no-regrets" options.**
  - It is also essential to ensure that conservation action is not led by the role of wetlands in carbon cycles alone, instead **takes into account the full range of ecosystem services** and biodiversity values of these ecosystems.
- **Tackling GHG Emissions from Wetlands:** It is essential to have an effective management strategy for preventing increases in GHG emissions from wetlands.
  - A first step in this direction would be to **include carbon storage and GHG emissions from wetlands within the national carbon stock** and

flux assessments. A **detailed peatland inventory** is also much needed.

- Secondly, **climate risks need to be factored** in wetlands management. This can be done by **strengthened wetland monitoring systems** geared towards identification of climate risk indicators and trends thereof.
- **Effective Management of Wetlands:** To counter unplanned urbanisation and a growing population, **management of wetlands has to be an integrated approach** in terms of planning, execution and monitoring.
  - **Effective collaborations among academicians and professionals**, including ecologists, watershed management specialists, planners and decision makers for overall management of wetlands.
  - **Spreading awareness by initiating awareness programs** about the importance of wetlands and constant **monitoring of wetlands for their water quality** would provide vital inputs to safeguard the wetlands from further deterioration.



## **Economic Participation of Rural Women**

*This editorial is based on "Recognising the 'compulsory' woman worker" which was published in The Hindu on 20/06/2022. It talks about the struggle of rural women workers in the process of switching roles to earn livelihood.*

**Tags:** Indian Economy, GS Paper 1, Role of Women, Social Empowerment, Women's Issues, GS Paper 2, Gender, Welfare Schemes, Issues Related to Women, GS Paper 3, Employment, Inclusive Growth

India is celebrating and commemorating the progressive 75 years of India after independence with '**Azaadi Ka Amrit Mahotsav**' and promulgating the mission of warranting women as "**Empowered women- Empowered Nation**".

The need to improve women's participation in the economy has been a long standing priority and is also crucial towards achieving the **Sustainable Development Goals**.

A report by "**The Centre for Monitoring Indian Economy**" shows the labour participation rate of rural women was only 9.92% in March 2022 as compared to 67.24% for men.

With continuous dodging between different types of work to earn livelihood, even with low pay and tough working conditions, one can refer to *such* women workers as "**Compulsory Workers; whose work never ends**".

With the rural economy constituting a significant part of India's National Income, there is a need to look into the issues of rural women and take urgent actions.

### **What are the Various Challenges Faced by Rural Women Workers?**

- **Mechanisation of Rural Economy:**
  - With the arrival of hitech machines in the agriculture sector, operations have become less labour intensive and resulted in a decrease in working days to less than 3 months/year. It forced many rural women to migrate and become part time construction workers.
- **Incomplete Presentation of Data:**
  - Women who stopped looking for work due to the belief that "no work is available" are wrongly described as women "dropping out" or "Leaving the market", showcasing as a "choice", rather than a compulsion forced upon them, hence rural economy suffers
- **Absence of Pay Parity:**
  - In the field of manual labour work, women are being paid less than men in terms of piece rate due to physical constraints in lifting heavy weights.
    - One particular project in Kalaburagi district of Karnataka which focuses on creation of percolation ponds. Since the digging of ponds required lifting about 3,000kg of mud a day and women were not able to meet the targets, they did not get the piece rate of ₹309; they got only ₹280 to ₹285.
- **Lack of Education:**
  - Majority of women construction workers are not registered as "**Construction Workers**" and therefore ineligible for any benefit accruing to them from the Construction Workers' Welfare Board.
  - The paid formal jobs go to men and women with higher educational qualifications, leaving women with education till secondary level for non-agricultural, construction, house care and other roles.
- **Limitation of MGNREGA:**
  - The **Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)**, a labour demand-driven programme, is limited to providing only 100 days of paid labour on public works projects per year.
  - For the rest of the period, women workers have to continuously look for alternative source of income meet expenses
- **Lack of Nutritious Food:**
  - The high prices of essential commodities have

led to a huge cut in women's consumption of vegetables and pulses.

- The deprivation of nourishment that women face due to high prices and low incomes is another dimension of the 'compulsory' woman worker's life.
- Due to a patriarchal society, boys are given relatively more nutritious food as they are deemed breadwinners of the family, especially if the family is poor and is not in a position to provide nutritious food to all the children.
- **Financial Constraints:**
  - What the women earn from multiple tasks, for which there are no fixed rates is in no way equal to the amount of labour they do.
  - Due to non-availability of sufficient funds and lack of knowledge, they're most vulnerable to land in debt traps.

### **What Initiatives have been Taken for the Upliftment for Rural Women Workers?**

- **e-Shram Portal:**
  - The Ministry of Labour and Employment launched the **e-Shram portal**.
  - The aim is to register 38 crore unorganised workers such as construction labourers, migrant workforce, street vendors, and domestic workers, among others.
  - If a worker is registered on the e-shram portal and meets with an accident, he will be eligible for Rs 2.0 Lakh on death or permanent disability and Rs 1.0 lakh on partial disability.
- **The Mahila Kisan Sashaktikaran Pariyojana (MKSP):**
  - The Ministry of Rural Development launched **MKSP** in 2011.
  - Aim is to impart skill development and capacity building programmes for rural women.
  - This scheme was introduced as a sub component of **DAY-NRLM (Deendayal Antyodaya Yojana — National Rural Livelihoods Mission)** and implemented through State Rural Livelihoods Mission (SRLM) across India.
  - Under DAY-NRLM scheme, trainings on use of latest agriculture, allied techniques, agro-ecological best practices are being imparted to women farmers through the community resource persons and extension agencies.
- **Pradhan Mantri Kaushal Vikas Yojana (PMKVY)**
  - The Ministry of Skill Development and Entrepreneurship implemented **PMKVY** in 2015.
  - It provides several short duration skill training programmes viz. Short-Term Training (STT) and **Recognition of Prior Learning (RPL)**, etc. for

rural youth and women to earn their livelihood. Government schemes viz. **The Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY)** is a placement linked skill development program for wage employment for rural youth.

➤ **Biotech-Krishi Innovation Science Application Network (Biotech-KISAN) Programme:**

- The Department of Biotechnology (DBT) under the Ministry of Science and Technology initiated the **Biotech-KISAN Programme**.
- It provides scientific solutions to farmers in the north east region to link available innovative agriculture technologies to the farm with the small and marginal farmers, especially women farmers of the region.

➤ **Pradhan Mantri Jan-Dhan Yojana (PMJDY)**

- **PMJDY** has boosted confidence and prospects of rural women participation in economic activities. The Jan Dhan campaign has ensured access to financial services, viz, banking/ savings and deposit accounts, remittance, credit, insurance, pension in an affordable manner to rural women.

➤ **Other Initiatives**

- **Pradhan Mantri Matru Vandana Yojana (PMMVY)**
- **Pradhan Mantri Garib Kalyan Ann Yojana**
- **Sub-Mission on Agricultural Mechanization Scheme**
- **PM-KISAN Scheme**

**What Should be the Way Forward?**

➤ **Survey Conduction:**

- Timely village surveys should be conducted which could reveal the real image of ground reality, as with the deep penetration of capitalist processes in rural India, there is a crisis of livelihood options for rural workers.
- Widespread surveys of poor rural women and how they spend their time are an urgent necessity.

➤ **Adult Education and Training:**

- One of the greatest barriers to the sustainable development of women is their lack of access to quality adult education and training.
- Capacity building and adult training range from providing adult education, life, and social skills training.
- When women have access to quality holistic personal, emotional and entrepreneurial development training opportunities, they will be empowered to speak for themselves.

➤ **Health:**

- Women are primarily vulnerable to every form of health issues in different communities.

- Individuals, organisations, and agencies can design projects that focus on providing affordable health care and training for women on healthy living, getting and taking clean water, keeping the clean and green environment and access to basic monthly menstrual care and maternal care.

➤ **Extension of PM-KISAN Scheme:**

- The annual cash transfer of ₹6,000 to landowning farmers under PM-KISAN Scheme should be extended to rural landless labourers also.

➤ **Minimum Wages:**

- There should be strict implementation of minimum wages with piece rates fixed for different types of women's labour.

➤ **MGNREGA Standards:**

- The performance standards set under MGNREGA should be established gender wise and the work sites made more worker friendly.

- The 'compulsory' woman worker must be recognised and protected by laws and policies that address her issues.



## Resetting India-Iran Relations

*This editorial is based on "Iran foreign minister's visit reaffirms resolve of two countries to strengthen ties" which was published in The Indian Express on 17/06/2022. It talks about how by overcoming challenges India-Iran Relations can utilise their huge potential.*

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

In keeping with the **"Asia-oriented"** foreign policy of the new Iranian Regime, the Iranian Foreign Minister visited India and it was the first ministerial-level visit from Iran to reset ties with India since the new Government took control in 2021.

Let's look at the challenges faced by both sides and how these issues can be resolved.

### What is Historical background?

- **India and Iran** share close **civilizational ties** since the times of the Persian Empire and Indian kingdoms.
- Iran is an important nation in India's neighborhood and in fact, the two countries shared a border until India's partition and independence in 1947.
- The **"Tehran Declaration"** signed during former Prime Minister Atal Bihari Vajpayee's visit to Iran affirmed the

shared vision of the two countries for an “**equitable, pluralistic and co-operative international order**”.

- It recognized the then Iranian President Mohammad Khatami’s vision of a “**dialogue among civilisations**” as a paradigm of international relations based on **principles of tolerance, pluralism and respect for diversity**.

### ***What is Strategic Importance?***

- **For India:**
  - **Location:** Iran is located at strategic and crucial **geographical location** between the **and the Caspian Sea**.
  - **Connectivity:** Iran is important to India as it provides an alternate **route of connectivity** to Afghanistan and Central Asian republics, in the absence of permission for India to use the land route through Pakistan.
  - **Natural Resources:** It sits on **one of the largest deposits of crude oil and natural gas** in the world.
- **For Iran:**
  - **Strategic location of India:**
    - Second largest populous country coupled with major economy and huge demographic dividend.
    - It helps Iran to sell its oil to a large market, that’s near to its geographical location, which eventually reduces its cost.
  - **Improve Trade Ties:** It gives Iran access to the 5th largest economy to invest in and enhance trade relations. it will also give fillip to Iran’s crippling economy.

### ***What are the Issues Between Indo-Iranian Ties?***

- The stoppage of oil imports from Iran after May 2019 owing to **U.S. sanctions (CAATA)** following the revocation of the **Iran nuclear deal**, therefore, impacting India’s energy security.
- India’s close relations with Israel, and **Iran’s ties with China**, including signing a **25-year strategic partnership agreement**.
- Iran-backed **Houthis** in Yemen launching drone attacks against Saudi Arabia and UAE, both are close partners of India,
- Iran’s tough statement on the Indian government’s abrogation of Article 370 of the Indian Constitution, gave special status to Kashmir.

### ***What are the Optimistic Conditions for Resetting Ties?***

- **Areas of Convergence:**

#### ○ **Afghanistan:**

- The Taliban government has largely been isolated since it took over Kabul in August 2021. Iran was one of the few countries that did not withdraw its embassy from Kabul and has continued to keep its channels of communication open with the Taliban.
- India is now keen to open back its embassy in Kabul and recently started negotiations with the Taliban.
- India and Iran have the potential to forge a common and effective policy of engagement with Afghanistan in the future.

#### ○ **West Asia:**

- There is **rebalancing** taking shape in the West Asian region this offers great potential to strengthen India-Iran ties.
- For a long time, India’s growing ties with the Gulf countries, especially Saudi Arabia and the UAE were seen as a “**zero-sum game**” pitted against their rivalry with Iran.
- The UAE and Qatar recently held good talks with Iran. Iranian President has already visited Qatar and Oman this year.
- Syria and Iraq are slowly consolidating and are positively disposed toward Iran.
- The **Abraham Accords** signed with Israel give **hope** towards the acceptance of Israel by the regional countries as a potential partner and not necessarily a foe.
- All these developments work well for India, as it has close and good relations with the Gulf countries, Iran, and Israel.
- This gives **India the tremendous opportunity to develop and scale up its cooperation with Iran** without fear of losing out on other friends in the region.
- In fact, at some point in time, India may emerge as the perfect interlocutor in the region, as it has the trust and confidence of all stakeholders.

### ***What are the Advantages of Restructuring India-Iran relations?***

- **Unlocking Bilateral Potential:** The bilateral ties could open doors to fully exploit the **potential of cooperation between India and Iran**. Which would ultimately lead to regional and global good.
- **Cheaper Crude Oil:** India may well consider restarting oil imports from Iran, Should India change course and resume imports of Iranian oil, it could potentially encourage some other countries to follow suit and



open up additional oil in the market, which could eventually bring prices of crude oil down.

- **Connectivity with Eurasia: The International North-South Transport Corridor (INSTC)**, an ambitious project launched at the start of this century, aims to connect India, Iran, Afghanistan, Russia, Central Asia, and Europe through multi-modal transport, reducing the transit time of goods drastically.
  - Although some part of it has been operationalized, again, due to sanctions on Iran, its full potential has not been realized. India and Iran could well play a major part in giving INSTC the required boost to reap the benefits of resultant trade.
- **Energy Security: The Iran-Oman-India gas pipeline (IOI)** too is an ambitious project that has been stuck for a long time. Fortunately, Iran and Oman signed a deal during Raisi's recent visit, to develop two gas pipelines and an oil field along their maritime borders.
  - If this comes through, there is potential for the pipeline being extended to India, which would help overcome the loss of the failed **Iran-Pakistan-India (IPI) pipeline** and facilitate the supply of natural gas to India.

### What Could be the Way Forward?

- There is a need to look forward toward areas of convergence, where both countries have a mutual understanding of each other's common interests and further work together to achieve the same.
- India and Iran, therefore, have a lot that can be achieved together. The assertive diplomacy being practiced by India, emphasizing on standing by its neighbors and friends and focusing solely on fulfilling its national interests, is a refreshing change.
  - If India can extend the same vision toward its engagement with Iran, it could open a huge potential for cooperation between these two great nations and civilizations. Time is therefore ripe for a reset.



## A Global Standard of AI Ethics

*This editorial is based on "A new global standard for AI ethics" which was published in The Hindu on 22/06/2022. It talks about the significance of Artificial Intelligence (AI) in human life and the need to have regulations for AI System.*

**Tags:** Science and Technology, GS Paper 2, E-Governance, Skill Development, GS Paper 3, NITI Aayog, E-Technology in the Aid of Farmers, Cyber Security, Artificial Intelligence

In simple words, **Artificial intelligence** leverages computers and machines to mimic the problem-solving and decision-making capabilities of the human mind. From predicting what we want to see as we scroll through social media to helping us understand weather patterns to manage agriculture, AI is ubiquitous.

The global AI market size was valued at USD 93.5 billion in 2021 and is projected to expand at a compound annual growth rate (CAGR) of 38.1% from 2022 to 2030. The share of AI in the Indian market is valued at USD 7.8 billion in 2021.

With the rise in the market for AI, there arises a need to have global regulations and agreements on Ethics of Artificial Intelligence to ensure that AI is developed with common, humanistic values at its core.

In November 2021, 193 countries reached a groundbreaking agreement at **UNESCO** on "**Ethics of Artificial Intelligence**". It sets the first global normative framework while giving States the responsibility to apply it at their level.

The agreement aims at how AI should be designed and used by the governments and the tech companies.

### What are the Objectives of the Agreement?

- **To Maintain Balance of Power:**
  - It aims to fundamentally shift the balance of power between people, and the businesses and governments developing AI.
    - If human interest are not given priority in how these technologies are developed, inequalities will grow to a magnitude never before experienced in history
- **Regulate Life Cycle:**
  - UNESCO's member countries have agreed to implement this recommendation by enacting actions to regulate the entire AI system life cycle: '**Research-Design-Development-Deployment and Use**'
    - It means they must use affirmative action to make sure that women and minority groups are fairly represented on AI design teams.
- **Management of Data, Privacy and Access to Information:**
  - It establishes the need to keep control over data in the hands of users, allowing them to access and delete information as needed.
  - It calls on member states to ensure that appropriate safeguards schemes are devised for the processing of sensitive data and effective accountability, and redress mechanisms are provided in the event of harm.

- **Banning Social Scoring and Mass Surveillance:**
  - It explicitly bans the use of AI systems for social scoring and mass surveillance.
  - It stresses that when developing regulatory frameworks, Member States should consider that ultimate responsibility and accountability must always lie with humans and that AI technologies should not be given legal personality themselves.
- **Protecting the Environment:**
  - It emphasises that AI actors should favour data, energy and resource-efficient AI methods which are more prominent in the fight against climate change and on tackling environmental issues.
  - It asks governments to assess the impacts such as carbon footprint, energy consumption and the environmental impact of raw material extraction for supporting the manufacturing of AI technologies.

### ***What are the Benefits of Artificial Intelligence?***

- **Policing:**
  - With the help of AI, one can match facial recognition with the central database, predict the pattern of crime, analyse CCTV footage which are available across the country to identify suspects.
  - Government is digitising all the records, especially the crime records, putting it into one single place called **CCTNS** where all the data including the image, biometrics, or the criminal history of a convict or suspect is available.
- **Agriculture:**
  - **AI Helping Analyse Farm Data:**
    - Farmers can analyse factors like weather conditions, temperature, water usage or soil conditions collected from their farm to better inform their decisions.
  - **Precision in Agriculture:**
    - Precision agriculture uses AI technology to aid in detecting diseases in plants, pests, and poor plant nutrition on farms.
    - AI sensors can detect and target weeds and then decide which herbicides to apply within the right buffer zone.
  - **Water Management, Crop Insurance and Pest Control:**
    - **International Crops Research Institute for Semi-Arid Tropics ICRISAT** has developed an AI-power sowing app, which utilises weather models and data on local crop yield and rainfall to more accurately predict and advise local farmers on when they should plant their seeds.

- **To Tackle the Pandemic:**
  - **At National Level:**
    - For the Covid-19 response, an **AI-enabled Chatbot** was used by MyGov for ensuring communications.
    - The Indian Council of Medical Research (ICMR) deployed the Watson Assistant on its portal to respond to specific queries of frontline staff and data entry operators from various testing and diagnostic facilities across the country on Covid-19.
- **Education:**
  - The Ministry of Electronics and Information Technology (MeitY) had launched a **“Responsible AI for Youth”** programme this year in April, wherein more than 11,000 students from government schools completed the basic course in AI.
  - The Central Board of Secondary Education has integrated AI in the school curriculum to ensure that students passing out have the basic knowledge and skills of data science, machine learning and artificial intelligence.
- **Healthcare:**
  - **Machine Learning:**
    - Application of AI can be beneficial in precision medicine – predicting what treatment protocols are likely to succeed on a patient based on various patient attributes and the treatment context.
  - **Natural Language Processing:**
    - NLP involves the creation, understanding and classification of clinical documentation and published research.
    - NLP systems can analyse unstructured clinical notes on patients, prepare reports, transcribe patient interactions and conduct conversational AI.

### ***What are the Issues identified in Artificial Intelligence?***

- **Incomplete Presentation of Data:**
  - The data used to feed into AI often aren't representative of the diversity of our societies, producing outcomes that can be said to be biased or discriminatory.
  - For instance, while India and China together constitute approximately a third of the world's population, Google Brain estimated that they form just 3% of images used in ImageNet, a widely used dataset.
- **Technological Challenges:**

- facial recognition technologies, which are used to access our phones, bank accounts and apartments, and are increasingly employed by law enforcement authorities, in identifying women and darker skinned people
  - For three such programs released by major technology companies, the error rate was 1% for light skinned men, but 19% for dark skinned men, and up to 35% for dark skinned women. Biases in facial recognition technologies have led to wrongful arrests.

➤ **Promoting Prejudices and Inequalities:**

- It shouldn't be forgotten that AI systems are created by humans, who can be biased and judgemental. Thus, AI can promote prejudices and inequalities, if initial training of the AI algorithms are biased.
  - For example, it can lead to AI facial recognition and surveillance technology to discriminate against people of color and minorities.

➤ **Compromising 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.

### ***What Initiatives have been Taken to Promote Ethical AI?***

➤ **National Initiatives:**

- **Global Partnership on Artificial Intelligence (GPAI):**
  - In 2020, India joined the GPAI as a founding member to support the responsible and human-centric development and use of AI.
- **RAISE 2020:**
  - RAISE (Responsible AI for Social Empowerment) 2020 is a first of its kind, global meeting of minds on Artificial Intelligence to drive India's vision and roadmap for social transformation, inclusion and empowerment through responsible AI.
- **NITI Aayog's AI For All Campaign:**

- In 2018, NITI published a discussion paper titled 'National Strategy for Artificial Intelligence #AI4ALL', which demonstrates how AI can be successfully applied to five principal sectors in India:
  - healthcare, agriculture, education, smart cities and infrastructure, smart mobility and transportation, to benefit the country's general population.

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

➤ **International Cooperation:**

- Given that various governments have only recently established AI policies, and in some cases are still formulating them, international cooperation is still very much a work in progress. In the setting of standards at the multilateral level.

➤ **Right Steps Taken:**

- AI technological revolution brings great opportunities for prosperity and growth — but it has to be ensured that the technology will be applied and used in the right direction.
  - In this regard, some steps are already being taken in different parts of the world, like Explainable AI (XAI) and the **European Union's GDPR — General Data Protection Regulation**.

➤ **Common Rule Book:**

- It is a recognition that AI related technologies cannot continue to operate without a common rulebook.
  - Over the coming months and years, the UNESCO Agreement's recommendation will serve as a compass to guide governments and companies, to voluntarily develop and deploy AI technologies that conform with the commonly agreed principles

➤ **Inclusion of All:**

- Affirmative actions should be taken to make sure that women and minority groups are fairly represented on AI Design Teams to eliminate the risk of gender/class/caste biasedness.

■■■

## **Caste - A Barrier to Economic Transformation**

*This editorial is based on "The role of caste in economic transformation" which was published in The Hindu on 23/06/2022. It talks about the significant role of caste as a hindrance to the economic transformation of the nation.*

India has been in a phase of jobless growth for at least two decades now, coupled with rising poverty and discontent in rural areas.

One of the biggest challenges India is facing today is “How to generate a pattern of growth that produces jobs and **inclusive development** in the way most of the East Asian countries have done?”.

The most suitable answer to this question would be: Inclusion of all the castes in the economic growth of the country. Caste might not be a residual variable, but is an active agent which stifles economic transformation.

### **How Caste System Impedes Economic Growth and Development?**

#### ➤ **General Biasedness:**

- Caste, through its rigid social control and networks facilitates economic mobility for some and erects barriers for others by mounting disadvantages on them.
- It also shapes the ownership pattern of land and capital and simultaneously regulates access to political, social, and economic capital too.

#### ➤ **Land Ownership & Productivity:**

- **British Rule:**
  - India has one of the highest land inequalities in the world today.
  - This unequal distribution of land was perpetuated by British Colonial intervention, which legalised a traditional disparity.
    - Some castes were assigned land ownership at the expense of others by the British for its administrative practices. They made an artificial distinction between proper cultivators who belong to certain castes and those labourers — lower caste subjects who cultivated granted/ gifted lands, that have institutionalised caste within the land revenue bureaucracy.
    - The British inscribed caste in land governance categories and procedures that still underpin postcolonial land ownership pattern in India.
- Land reform that took place after India's independence largely **excluded Dalits and lower castes**.
  - It emboldened and empowered mainly intermediate castes at the expense of others in rural India.
- **Green Revolution:**
  - The **Green Revolution** that brought changes in the farm sector did not alter land inequality as it was mostly achieved through technological intervention.

- The castes that were associated with this land pattern and benefited from the Green Revolution tightened their social control over others in rural India.

#### ➤ **Neglect of Education:**

- The Indian education system has been suffering from an elite bias since colonial times.
  - British colonialists educated tiny groups of elites, largely from upper castes, for their own administrative purpose.
- Although the Indian Constitution guaranteed free and compulsory education under its **directive principles**, it was hardly translated into practice. Instead, attention was given to higher education for the elites.
  - Inequality in access to education got translated into inequality in other economic domains including wage differentials in India.

#### ➤ **Barrier to entrepreneurship:**

- Castes that were already in control of trading and industrial spaces resisted the entry of others.
  - Even those who had economic surplus in farm sectors could not invest in nonfarm modern sectors.
- Social inequalities have mounted barriers for economic transition due to which the agrarian capital could not move into modern sectors.
  - Even the relative success in South India is being attributed to the ‘Vaishya vacuum’ — an absence of traditional merchant castes.

### **Why India Lagged in Economic Transformation?**

#### ➤ **The Three Parameters:**

- The divergent outcomes in structural transformation between countries in the global South, particularly India, China and SouthEast Asia, is due to their focus on “**Land Equity**”, “**Access to Education**” and “**Access to Entrepreneurship**”.
  - **Focus on Education:**
    - Chinese and other East Asian countries invested in basic education and gradually shifted towards higher education.
  - **Focus on Low End Jobs:**
    - South East Asia and China captured low end manufacturing jobs, India largely concentrated in high end technology jobs.
  - **Focus on Human Capital:**
    - In China, rural entrepreneurship was able to grow out of the traditional agricultural sector on a massive scale due to its investment in **human capital**.



- It also resulted in diversification into urban enterprises by agrarian capitalists.
- China taking over India in manufacturing is due to this neglect in human capital formation.
- Their success in manufacturing is a direct outcome of the investment in human capital.

➤ **British Colonial Intervention:**

- The biggest challenge India as a nation faced was intervention by Britishers which amplified caste based and racial differences.
- This intervention is one of the major factors why Indian couldn't cope up with the pace of economic transformation when compared to its neighbours.

**What are Initiatives Taken to Eliminate Discrimination and Promote Transformation?**

➤ **Constitutional Provisions:**

- **Prohibition of Discrimination:**
  - **Article 15** of the Constitution of India states that
    - The State shall not discriminate against any citizen on grounds only of religion, race, caste, sex, place of birth or any of them.
- **Equality of Opportunity:**
  - **Article 16** of the Constitution of India states that:
    - There shall be equality of opportunity for all citizens in matters of employment under the State.
    - No citizen shall, on grounds only of religion, race, caste, sex, descent, place of birth or any of them, be ineligible for any office under the State.
- **Compulsory Education:**
  - **Article 21A** of the Constitution of India states that:
    - The State shall provide free and compulsory education to all children of the age of six to fourteen years in such manner as the State may, by law, determine.

➤ **Land Reforms:**

- **Land Ceiling:**
  - The laws set a limit on how much land an individual or corporation could hold, also known as a land 'ceiling', and allowed the government to reapportion surplus land to the landless.

➤ **Human Development:**

- **Pradhan Mantri Kaushal Vikas Yojana (PMKVY):**
  - It aims to mobilise youth to take up skill training with the aim of increasing productivity and aligning the training and certification to the needs of the country.
- **SANKALP Scheme:**

- Skills Acquisition and Knowledge Awareness for Livelihood (SANKALP) is an outcome-oriented programme of the **Ministry of Skill Development & Entrepreneurship (MSDE)** with a special focus on decentralised planning and quality improvement.

○ **Stand Up India Scheme:**

- It was launched in April 2016 to promote entrepreneurship at the grass-root level focusing on economic empowerment and job creation.
- To leverage the institutional credit structure to reach out to the underserved sector of people such as SCs, STs and Women Entrepreneurs.

○ **Pradhan Mantri Mudra Yojana:**

- It provides funding to the non-corporate small business sector through various last-mile financial institutions like Banks, **Non-Banking Financial Companies (NBFCs)** and **Micro Finance Institutions (MFIs)**.
- Loans have been given to disadvantaged sections of society such as women entrepreneurs, SC/ST/OBC borrowers, Minority community borrowers, etc. The focus has also been on new entrepreneurs.

**What should be the way forward?**

➤ **Learning from Neighbours:**

- As success witnessed in China and other S.E Asian Countries, India should put more focus on areas of Human Development, Low End Jobs, Rural Development to support economic transformation.

➤ **Rationalisation of Reservation Policy:**

- It should be made sure that every community/caste under a **reservation** category should be provided with equal representation in the employment/educational opportunities.
- Saturation of a particular community/caste in reservation violates the aim of reservation i.e. equal opportunity to all.

➤ **Audit of Initiatives:**

- An audit of the existing initiatives could be carried out at state level to ensure that the initiatives are efficiently providing the result for which they were launched.

➤ **Going Rural:**

- Ground level survey of the Socio Economic needs of the backward classes at rural level would provide the real picture of their situation.
- It would enable the government to prepare an efficient blueprint for their welfare, which would contribute to the economy in a significant manner.

## Costly Fertilisers: Rethink Consumption

*This editorial is based on "The fertiliser Pinch" which was published in The Indian Express on 24/06/2022. It talks about the need to cap India's consumption of fertilisers due to rising global prices.*

**Tags:** Agriculture, GS-2, Welfare Schemes, Government Policies & Interventions, GS-3, Cropping Patterns, Irrigation, E-Technology in the Aid of Farmers, Direct & Indirect Farm Subsidies

**Fertilisers** are any material of natural or synthetic origin that is applied to soil or to plant tissues to supply plant nutrients.

India is facing the challenge of meeting its requirement of fertiliser due to disruption in supply chain and increase in price of fertilisers.

No country has as much area under farming as India. At 169.3 million hectares (mh) in 2019, its land used for **crop cultivation** was higher than that of the US (160.4 mh), China (135.7 mh), Russia (123.4 mh) or Brazil (63.5 mh). India has a legacy of having no dearth of land, water and sunshine to sustain vibrant agriculture.

But there's one resource in which the country is short and heavily import-dependent — Mineral Fertilisers.

India is heavily dependent on imports for fertilisers. In Fiscal Year 2021-22, imports of all fertilisers touched an all-time high of \$12.77.

In this context, India today needs to cap and reduce the consumption of fertilisers and reduce its import bill.

### What are Different Kinds of Fertilisers?

#### ➤ Urea:

- Urea fertiliser is majorly obtained from **Natural Gas**.
- Since the basic component of natural gas is **methane**, one can easily obtain **hydrogen** by subjecting natural gas into a reaction called "steam reforming".
  - Once we obtain hydrogen, we can react with nitrogen to obtain **ammonia**, which can be used alone as a fertiliser or reacted with carbon dioxide to obtain urea fertiliser.

#### ➤ Di-ammonium phosphate (DAP):

- **DAP** is the second most commonly used fertilisers in India after urea.
- DAP (46% Phosphorus, 18% **Nitrogen**) is the preferred source of Phosphorus for farmers. This is similar to urea, which is their preferred nitrogenous fertiliser containing 46% N.

#### ➤ Muriate of Potash:

- Muriate of potash, also known as potassium chloride contains 60% potash. Potash is essential

for plant growth and quality. It plays a vital role in the production of proteins and sugars.

### How much does India Imports?

#### ➤ Imports of Direct Use:

- In 2021-22, India imported total of 18.93 mt of fertilizers ( \$12.77 billion)

#### ➤ Imports of Raw Material:

##### ○ Urea:

- Urea's primary feedstock is Natural Gas.
  - In 2021-22, India imported 23.42 mt of **Liquefied Natural Gas (LNG)** (\$13.47 billion).
  - As per the **Ministry of Petroleum and Natural Gas's** data, the fertiliser sector's share in the consumption of re-gasified LNG was over 41%. The industry's LNG imports would have, then, been worth more than \$5.5 billion.

##### ○ Di-Ammonium Phosphate:

- Domestic manufacturers import intermediate chemicals, namely phosphoric acid and ammonia. Some even produce phosphoric acid by importing rock phosphate and sulphuric acid.
  - Phosphoric Acid can be made from the import of sulphur.
- **Others:**
  - 8.33 mt of complex fertilisers (containing nitrogen-N, phosphorus-P, potassium-K and sulphur-S in different ratios).

### What are the Challenges Faced by India?

#### ➤ Rise in Global Prices:

- India is facing the challenge of meeting its requirement of fertiliser supply which has been disrupted ahead of kharif sowing in the wake of **Russia's invasion of Ukraine**.
- Russia is a major exporter of natural gas and supplied almost a third, or 32%, of the gas consumed in the European Union (and the U.K.) in 2021.
  - Sanctions on Russia have stopped much of this from getting out.
  - Natural Gas derived Urea's supply has been disrupted majorly in the wake of Russia's invasion.

#### ➤ Increase in Demand of Fertilisers:

- The agricultural output of India has increased every year, and the country's need for fertilisers has also increased.
- Despite imports, gaps remain between requirements and availability after indigenous production targets haven't been met.

- Demand has increased, but supply has been constrained.
- **Fertiliser Subsidy:**
  - The government pays a **subsidy** to fertiliser producers to make this critical ingredient in agriculture affordable to farmers.
  - This allows farmers to buy fertilisers at below-market rates.
    - The difference between the cost of production/import of a fertiliser and the actual amount paid by farmers is the subsidy portion borne by the government.
  - **Subsidy on Urea:**
    - The Centre pays subsidy on urea to fertiliser manufacturers on the basis of cost of production at each plant and the units are required to sell the fertiliser at the government-set **Maximum Retail Price (MRP)**.
  - **Subsidy on Non-Urea Fertilisers:**
    - The MRPs of non-urea fertilisers are decontrolled or fixed by the companies. The Centre, however, pays a flat per-tonne subsidy on these nutrients to ensure they are priced at "reasonable levels".
    - **Examples of non-urea fertilisers:**
      - Di-Ammonium Phosphate (DAP), Muriate of Potash (MOP).
- **Impact of Pandemic:**
  - The pandemic has impacted fertiliser production, import and transportation across the world during the last two years.
  - China, who is the major fertiliser exporter, has gradually reduced their exports in view of a dip in production.
    - This has impacted countries such as India, which sources 40-45% of its phosphatic imports from China.

### **What are the Initiatives**

#### **Taken by India to Address the Issue?**

- **Neem Coating of Urea:**
  - The Department of fertilisers (DoF) has made it **mandatory for all the domestic producers to produce 100% urea** as Neem Coated Urea (NCU).
  - The benefits of NCU are:
    - Due to slow release of Nitrogen, Nitrogen Use Efficiency (NUE) of Neem Coated Urea increases, resulting in reduced consumption of NCU as compared to normal urea.
    - Improvement in soil health.
    - Reduction in usage of plant protection chemicals.

- Reduction in pest and disease attack.
- **New Urea Policy (NUP) 2015:**
  - Objectives of the policy are-
    - To maximize indigenous urea production.
    - To promote energy efficiency in the urea units.
    - To rationalize the subsidy burden on the Government of India.
- **New Investment Policy – 2012:**
  - The Government announced New Investment Policy (NIP)-2012 in January, 2013 and made amendments in 2014 to facilitate fresh investment in the urea sector and to make India self-sufficient in the urea sector.
- **Use of Space Technology in Fertiliser Sector:**
  - Department of fertilisers commissioned a three year Pilot Study on "**Resource Mapping of Rock Phosphate using Reflectance Spectroscopy and Earth Observations Data**" by National Remote Sensing Centre under ISRO, in collaboration with Geological Survey of India (GSI) and the Atomic Mineral Directorate (AMD).
- **The Nutrient Based Subsidy (NBS) Scheme:**
  - It has been implemented from April 2010 by the DoF.
  - Under **NBS**, a fixed amount of subsidy decided on an annual basis, is provided on each grade of subsidized Phosphatic & Potassic (P&K) fertilisers depending on its nutrient content.
  - It aims at ensuring the balanced use of fertilisers, improving agricultural productivity, promoting the growth of the indigenous fertilisers industry and also reducing the burden of Subsidy.

### **What Should be India's**

#### **Approach Going Forward?**

- **Urease and Nitrification:**
  - Incorporating urease and nitrification inhibition compounds in urea.
  - These are basically chemicals that slow down the rate at which urea is **hydrolysed** (resulting in the production of ammonia gas and its release into the atmosphere) and **nitrified** (leading to below-ground loss of nitrogen through leaching).
  - By reducing ammonia volatilisation and nitrate leaching, more nitrogen is made available to the crop, enabling farmers to harvest the same, if not better, yields with a lesser number of urea bags.
- **Other Methods:**
  - Promoting sales of Single Super Phosphate SSP (containing 16% Phosphorus and 11% Sulphur) and complex fertilisers.

- India can also import more rock phosphate to make SSP directly or it can be converted into “weak” phosphoric acid, which can be used to manufacture complex fertilizer.
- DAP use should be restricted mainly to paddy and wheat; other crops don’t require fertilisers with 46% Phosphorus content.
- Regarding MOP, roughly three-fourths of the imported material is now applied directly and only the balance is sold after incorporating into complexes. It should be the other way around.

➤ **Moral Suasion:**

- India needs to wean its farmers away from all high-analysis fertilisers.
- It requires a concerted push, alongside popularizing high nutrient, use-efficient, water-soluble fertilisers (potassium nitrate, potassium sulphate, calcium nitrate, etc) and exploiting alternative indigenous sources (for example, potash derived from molasses-based distillery spent-wash and from seaweed extract).
- No plan to cap/reduce consumption of high-analysis fertilisers can succeed without farmers knowing what is a suitable substitute for DAP and which NPK complex or organic manure can bring down their urea application from 2.5 to 1.5 bags per acre.



## Future of Agniveers

*This editorial is based on “Don’t Cry for Agniveers” which was published in The Indian Express on 25/06/2022. It talks about the possible opportunities which will be made available to the Agniveers after 4 years of service in the armed forces.*

**Tags:** Governance, GS Paper 2, Government Policies & Interventions, Issues Relating to Development, GS Paper 3, Various Security Forces & Agencies & Their Mandate

We live in times where the nature of combat has transformed beyond recognition. India faces threats not just from land, water and the sky but also from **cybertech**, the **internet of military things** and **artificial intelligence**.

There is, therefore, a need for a better equipped and more prepared military. To fulfill the need of young and well equipped **armed forces**, the government came up with the **Agnipath Scheme**.

Soon, the armed forces will begin the all-important task of recruiting India’s Agniveers, who have been envisaged as the backbone of our combat units. In this context, let’s understand the nucleus of the Agnipath Scheme.

## What is Agnipath Scheme all About?

➤ **About:**

- The government has unveiled the Agnipath scheme for recruiting soldiers across the **Three services (Army, Navy and Airforce)**.
- It allows patriotic and motivated youth to serve in the Armed Forces for a period of four years.
- Youth joining the army will be called Agniveer. Youth will be able to be recruited into the army for a period of 4 years.
  - However, after four years, only 25% of the batch will be recruited back into their respective services, for a period of 15 years.

➤ **Eligibility:**

- It is only for personnel below officer ranks
  - those who do not join the forces as commissioned officers
    - Commissioned officers hold an exclusive rank in the Indian armed forces. They often hold a commission under the president’s sovereign power and are officially instructed to protect the country.
- Aspirants between the ages of 17.5 years and 23 years will be eligible to apply.

➤ **Benefits for Agniveers:**

- Upon the completion of the 4-years of service, a one-time ‘Seva Nidhi’ package of ₹11.71 lakhs will be paid to the Agniveers that will include their accrued interest thereon.
- They will also get a ₹48 lakh life insurance cover for the four years.
- In case of death, the payout will be over ₹1 crore, including pay for the unserved tenure.
- The government will help rehabilitate soldiers who leave the services after four years. They will be provided with skill certificates and bridge courses.

## What was the need for such a scheme?

➤ **Lower the Median Age:**

- One of the reasons for implementation of the Agnipath Yojana is to lower the median age of our personnel.
  - The need for it was felt after the 1962 war with China. Decades later, the Kargil Review Committee also highlighted the same.
  - In the Indian Army today, only 19% of the personnel are below 25 years of age and a whopping 19% are in the age group of 36-40.
  - Since both China and Pakistan have mountainous terrain, units with a lower age profile will perform better in such areas.



### ➤ **Future Ready Soldiers:**

- Nature of warfare is changing and is becoming increasingly multi-domain and becoming increasingly evolving in different aspects of warfare, be it cyber, space, information warfare.
- There are **new technological infusions** in terms of recruitment and systems. So the forces need to leverage this technology to come up with a future-ready fighting force.

### ➤ **Focus on Research and Development:**

- More than half the **defence budget** is allocated for pensions every year while less than 5% is allocated for research and development.
  - One key reason for the Agnipath scheme, which aims to recruit defence personnel in short-term contracts, could be to reduce increasing pension payments in the Army, Navy, and Air Force.
    - It will enable more investment in R&D of the Defence Sector.

## **What are the Concerns of Agniveers?**

### ➤ **Difficult to Find Another Job:**

- The 'Agnipath' scheme opens the way for recruitment of about 45,000 soldiers into Army, Navy and Air Force in the first year but on a short-term contract of four years. After the completion of the contract, 25% of them will be retained and the rest will leave the forces.
- Our four years of service will mean other jobs will be out of reach after that, and we will be left behind our peers.

### ➤ **No Pension Benefit:**

- Those hired under the 'Agnipath' scheme will be given a one-time lump sum of a little more than Rs 11 lakh when they end their four-year tenure.
- However, they do not receive any pension benefits. For most, seeking a second job is essential to support themselves and their families.

### ➤ **Training May Remain Unutilized:**

- Forces will lose experienced soldiers.
- The jawans joining the Army, Navy and Air Force will be given technical training so that they are able to support the ongoing operations. But these men and women will leave after four years, which could create a void.

## **What are Government's Promises for Non-Retained Agniveers?**

### ➤ **Ease in Bank Loans:**

- The government will help the disbanded Agniveers

to start the next phase with bank loans, which will be extended to them on priority.

### ➤ **Preference in Other Services:**

- A proposal to reserve 10% of the job vacancies in the Union Ministry of Defence for Agniveers meeting the eligibility criterion has also been approved
  - This reservation will be implemented in the **Indian Coast Guard**, defence civilian posts and all 16 **Defence Public Sector Undertakings**.
    - This is in addition to the existing reservation for ex-servicemen.
- The Ministry of Home Affairs has also announced schemes to ensure that the Agniveers get opportunities to remain in the nation's service beyond the four years they serve under the Agnipath Scheme.
  - It has announced a 10% reservation as well as an upper age limit relaxation for Agniveers for recruitment in the **Central Armed Paramilitary Forces (CAPFs)** and **Assam Rifles**.
    - The upper age limit for the CAPFs — **Border Security Force (BSF)**, **Central Reserve Police Force (CRPF)**, **Central Industrial Security Force (CISF)**, **Indo-Tibetan Border Police (ITBP)**, **Sashastra Seema Bal (SSB)**, and the **National Security Guard (NSG)**, **Special Protection Group (SPG)** — will be 26 years.
- The Ministry of Ports, Shipping and Waterways (MoPSW) has announced six service avenues for a smooth transition of the Agniveers in various roles of the Merchant Navy after their stint in the Indian Navy.
- Several states, including Assam, Haryana, Uttar Pradesh and Madhya Pradesh, have announced preferential recruitment of Agniveers in respective government jobs.

### ➤ **Education:**

- **National Institute of Open Schooling** has announced that it will institute a special programme in consultation with defence authorities to enable Agniveers to further their education and obtain a Class XII pass certificate.
- The Ministry of Education has decided to launch a **three-year skill-based bachelor's degree programme for serving defence personnel** that will recognise the training they have received during stint time in the armed forces.

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

### ➤ **Ease in Licensing:**

- Government should consider relaxation in mandatory licensing regulations for Agniveers to attract more of them to invest in starting up a business unit.

- It will act as a double benefit move of providing entrepreneurial opportunity and growth in the economy.

➤ **Tax Exemptions:**

- Tax exemptions on salary income/profit earned through business for a specific initial period could be considered. It will attract more Agniveers to either take up an employment opportunity or start up a business.
  - It will work as an eliminating factor of spending idle money and being unemployed.

➤ **Attractive Interest Rates:**

- Banks can consider giving attractive interest rates on the deposits of Agniveers.
- It will also act as a double benefit move as an attractive interest rate will act as earning for Agniveers and banks will get access to more money in the market.

➤ **Relaxation in Admission to Institutions:**

- For those Agniveers who want to pursue higher education, a relaxation in the admission criteria (relaxation in cut off etc) will prove to be a major attraction.
  - Highly qualified and disciplined Agniveers will have the ability to take up ample opportunities available to them.



## Women's Choice & Governance

*This editorial is based on "West Steps Back, India Shows Way" which was published in The Indian Express on 27/06/2022. It talks about USA's decision of Abolition of Right to Abortion and India's efforts to protect women's liberty and uplift their position in society.*

**Tags:** Governance, GS Paper 1, Role of Women, Social Empowerment, Women's Issues, GS Paper 2, Fundamental Rights, Government Policies & Interventions, Gender, Welfare Schemes, Issues Related to Children, Issues Related to Women

On 24<sup>th</sup> June 2022, the U.S. Supreme Court overturned **Roe v. Wade**, a 1973 landmark decision and abolished the **Women's Right to Have Abortion**.

President Joe Biden called the decision a "tragic error" and a "sad day" for the court and the country.

At a time of distressing furore on social media and the streets against the near-total bans on abortion in the West, India's generous stance on the termination of pregnancy is a comforting sanctum.

Let us understand the nucleus of India's efforts for Women's Liberty and Empowerment in different spheres.

But before that, we must understand the historic decision that took place in the West.

### What Decision has the U.S. Supreme Court Taken?

- SC has overturned *Roe v. Wade*, a 1973 landmark decision giving women in America the right to have an abortion before the foetus is viable outside the womb — before the 24-28 week mark.
- SC also overturned *Planned Parenthood v. Casey*, a 1992 case that upheld *Roe*.
- Abortion rights — which have been available to women for over two generations — will now be determined by individual States.
- "The Constitution makes no reference to abortion, and no such right is implicitly protected by any constitutional provision." The Court said.

### How Could This Decision Impact Women's Life?

- **Increase in "Unwanted Pregnancies":**
  - **Unwanted pregnancies** unexpectedly curtail the life choices of parents, especially mothers, and may limit their mental well-being and personal growth.
  - Further, children born unwanted may suffer reduced opportunities. Illustratively, the WHO links the likelihood of children being born "wanted" to greater parental investments in their education.
- **Fate up to the States:**
  - The legality of abortion is now up to each state. Majority of states in US are expected to ban or restrict access to abortion.
- **Psychological Impact:**
  - Pregnant women who were denied an abortion were more likely to stay in contact with a violent partner and ultimately raise the child alone.
  - Being denied an abortion has also been associated with higher levels of anxiety and depression.
- **Economical Impact:**
  - Women who were denied an abortion are more likely to be unemployed than those who received an abortion.
- **Riskier Alternatives:**
  - **The World Health Organization (WHO)** acknowledges that legal restrictions on abortion do not result in fewer abortions. Rather, they force pregnant people to pursue riskier abortion services.

### What are Other Issues A Woman Faces in This World?

- **Patriarchal Stigma:**

- **Patriarchy** is an institutionalized social system in which men dominate over others, but can also refer to dominance over women specifically.
  - It portrays women as physically, mentally, emotionally and sexually inferior to men.
  - Women are not considered intelligent or smart enough to make decisions. This undervaluation results in low confidence and low productivity, while depriving them of the opportunity to showcase their talent..
- **Son Meta-Preference:**
  - It involves parents continuing to produce children until the desired number of sons are born, which is detrimental to women's health.
  - This meta-preference leads naturally to the notional category of 'unwanted' girls globally.
    - As such girls and women are neglected in their food and health needs. Majority of them suffer from anemia and malnutrition.
    - Since daughters are seen as a burden, poor parents are keen to marry them off as soon as possible. **Child marriages** lead to early pregnancy.
      - Having a child at an early age hinders the mother in pursuing higher studies and career ambitions for herself.
- **Absence of Pay Parity:**
  - Gender pay gap refers to pay inequality between men and women in paid employment.
  - Worldwide, women only make 77 cents for every dollar earned by men. As a result, there's a lifetime of income inequality between men and women and more women are retiring into poverty.
  - The so-called "**motherhood penalty**" pushes women into informal economy, casual and part-time work, and tends to be larger in developing countries than in developed countries.
- **Political & Judicial Representation:**
  - **Political Representation:**
    - As per the data compiled by the **Inter-Parliamentary Union**, of which India is a member, women represent 14.44% of the total members of the **Lok Sabha**.
    - In the last 75 years of independence, women's representation in Lok Sabha has not even increased by 10%.
  - **Judicial Representation:**
    - In **High Courts**, the percentage of women judges is a mere 11.5%, while in the **Supreme Court** there are 4/33 sitting women judges in office.
    - The situation of women lawyers in the country

is not any better. Out of 1.7 million advocates registered, only 15% are women.

➤ **Glass Ceiling:**

- **Glass ceiling** refers to the fact that a qualified person wishing to advance within the hierarchy of his/her organization is stopped at a lower level due to a discrimination most often based on sexism or racism.
- Female employees are seldom considered for promotions above a certain grade as they are portrayed as inferior/ineligible for the position as per the social stigmas of the society.

**What Developments has India Made on Women Welfare?**

➤ **The Medical Termination of Pregnancy (Amendment) Act 2021:**

- The 2021 Act was passed to amend the **Medical Termination of Pregnancy (MTP) Act, 1971**.
- **Increase Gestational Limit:**
  - Abortions may be performed up to 24 gestational weeks on grounds of risk to the mother's life, mental anguish, rape, incest, contraception failure or the diagnosis of foetal abnormalities.

➤ **The Prohibition of Child Marriage (Amendment) Bill 2021:**

- It seeks to push the marriage age for women from 18 years to 21 years.
- Reasons behind the Minimum Age:
  - Child marriages expose women to early pregnancy, malnutrition, and violence (mental, emotional, and physical).
  - Early pregnancy is associated with increased child mortality rates and affects the health of the mother.

➤ **The Surrogacy (Regulation) Act 2021:**

- The Act prohibits couples who are not of Indian origin from availing surrogacy in the country and allows only locals with certified, medical reasons necessitating gestational surrogacy to avail of it.
  - Under the Surrogacy (Regulation) Act, 2021, a woman who is a widow or a divorcee between the age of 35 to 45 years or a couple, defined as a legally married woman and man, can avail of surrogacy if they have a medical condition necessitating this option.
- It also bans commercial surrogacy, which is punishable with a jail term of 10 years and a fine of up to Rs 10 lakhs.

➤ **Other Efforts:**

- **Ayushman Bharat- Jan Arogya Yojana (PM-JAY)**
- **Pradhan Mantri Matru Vandana Yojana (PMMVY)**
- **Pradhan Mantri Surakshit Matritva Abhiyaan (PMSMA):**
  - provides a fixed day for assured, comprehensive and quality antenatal care free of cost to pregnant women on 9 of every month.
- **Janani Suraksha Yojana:**
  - It is a safe motherhood intervention under the **National Health Mission (NHM)**.
  - Eligible pregnant women are entitled to cash assistance irrespective of the age of mother and number of children for giving birth in a government or accredited private health facility.
- **LaQshya:**
  - Aim of the LaQshya program is to reduce preventable maternal and newborn mortality, morbidity and stillbirths associated with the care around delivery in the Labour Room and Maternity Operation Theatre (OT) and ensure respectful maternity care.
- **Beti Bachao, Beti Padhao Campaign:**
  - **Objectives:**
    - Prevention of gender-biased sex-selective elimination.
    - Ensuring survival & protection of the girl child.
    - Ensuring education and participation of the girl child.
    - Protecting rights of Girl children.
- **Criminalising Triple Talaq:**
  - Any pronouncement of “talaq” by a Muslim husband to his wife in any manner, spoken or written, will be void and illegal.
  - Any Muslim husband who communicates the “talaq” orally or in writing may face punishment up to three years in jail. The punishment may also be extended.
  - If a Muslim man pronounces “talaq” to his wife, then the woman and her children are entitled to receive an allowance for subsistence. Such an amount can be determined by a Judicial Magistrate of the First Class.

### How can we Ensure Women's Holistic Development?

- **Reproductive Rights:**
  - **The Puttaswamy judgment** specifically recognised the constitutional right of women to make reproductive choices, as a part of personal liberty under **Article 21** of the Indian Constitution.

- Such rights should be monitored efficiently and should be implemented globally to improve women's status in society.

#### ➤ **Deconstructing Stereotypes:**

- Society needs to deconstruct the stereotype of women as limited to household activities only.
- It is important for all institutions (state, family and community) to respond to women's specific needs such as bridging gaps in education, renegotiating gender roles, the gender division of labor and addressing biased attitudes.

#### ➤ **Reservation for Women in Panchayati Raj Institutions:**

- **Article 243D of the Constitution** ensures participation of women in **Panchayati Raj Institutions** by mandating not less than one-third reservation for women out of total number of seats to be filled by direct election.
  - Effective implementation of such reservation should be carried out.

#### ➤ **Women Quotas in political parties:**

- The Election Commission of India recommends making it mandatory for the recognized **political parties** to ensure putting of minimum agreed percentage for women in State Assembly and Parliamentary elections, so as to allow them to retain the recognition with the Election Commission as political parties.

#### ➤ **Reservation in Judiciary:**

- As **CJI N. V. Ramana** highlighted “the presence of women as judges and lawyers, will substantially improve the justice delivery system”.
- To achieve this target, reservation for women in Law Colleges should be implemented which will result in more women advocates, who can ultimately become judges in The Supreme Court.

■■■

## Domination of E-Commerce Giants

*This editorial is based on “A Skewed Playing Field” which was published in The Indian Express on 28/06/2022. It talks about the growth of E-Commerce giants in the market and how they harm the small and medium businesses in different ways.*

**Tags:** Indian Economy, GS Paper 1, Capitalism, GS Paper 2, Government Policies & Interventions, Dispute Redressal Mechanisms, GS Paper 3, Scientific Innovations & Discoveries



As technology flattens the world, the way we operate our daily lives — travel, entertain, educate, shop, communicate and even obtain food — is undergoing a radical change.

This has impacted a variety of stakeholders in the country differently — there are obvious winners and losers.

With the availability of a wide range of e-commerce platforms, life has become more convenient and easier. But looking at the bigger picture depicts that with tactics like huge discounts and cashbacks etc, e-commerce giants have caused significant damage to small and medium businesses.

In this context, let's understand more about 'E-commerce and its Functioning'.

### **What Do We Mean By E-commerce?**

- The term **electronic commerce (e-commerce)** refers to a business model that allows companies and individuals to buy and sell goods and services over the Internet.
- Nearly every imaginable product and service is available through e-commerce transactions, including books, music, plane tickets, and financial services such as stock investing and online banking. As such, it is considered a very disruptive technology.
- E-commerce operates in all four of the following major market segments. These are:
  - **Business to business (B2B):**
    - It is the direct sale of goods and services between businesses.
      - Example: Amazon Business.
  - **Business to consumer (B2C):**
    - It involves sales between businesses and their customers.
      - Example: Amazon, Google, Facebook.
  - **Consumer to consumer (C2C):**
    - It allows individuals to sell to one another, usually through a third-party site.
      - Example: eBay.
  - **Consumer to business (C2B):**
    - It enables individuals to sell to businesses, such as an artist selling or licensing their artwork for use by a corporation.
      - Example: Google AdSense, Commission junction.

### **What are the Benefits E-Commerce Provides?**

- **Proximity Between Buyer and Seller:**
  - E-commerce enables sellers to come closer to customers that lead to increased productivity and perfect competition.

- The customer can also choose between different sellers and buy the most relevant products as per requirements.
- Customers now have access to virtual stores 24/7.

#### ➤ **Wider Range of Customers:**

- It provides a wider reach and reception across the global market, with minimum investments.
- It enables sellers to sell to a global audience and also customers to make a global choice. Geographical boundaries and challenges are eradicated/drastically reduced.

#### ➤ **Reduction in Product Distribution Cost:**

- Through direct interaction with final customers, this e-commerce process cuts the product distribution chain to a significant extent.
  - A direct and transparent channel between the producer or service provider and the final customer is made.
    - This way products and services are created to cater to the individual preferences of the target audience.

#### ➤ **Other Benefits:**

- The growth in the e-commerce sector can boost employment, increase revenues from export, increase tax collection by ex-chequers, and provide better products and services to customers in the long-term.
- The e-commerce industry has been directly impacting the **micro, small & medium enterprises (MSME)** in India by providing means of financing, technology and training and has a favorable cascading effect on other industries as well.

### **What are the Concerns**

#### **Relating to E-Commerce Giants?**

##### ➤ **Predatory Pricing:**

- **Predatory pricing** is a pricing strategy, using the method of undercutting on a larger scale, where a dominant firm in an industry will deliberately reduce the prices of a product or service to loss-making levels in the short-term.
  - These companies resort to predatory pricing to acquire customers even as they suffer persistent financial losses.
  - It can be viewed as an exclusionary practice that eliminates other players from the market. The ultimate loss bearer is the consumer who will have a reduced bargaining position due to less competition and will be subject to the arbitrariness of monopolistic conduct.

➤ **Affiliated Partner Biasedness:**

- While neutrality is the fundamental basis of a marketplace, claims of outfits such as Flipkart or Amazon to be a marketplace for a wide variety of sellers can be questioned.
- Selected affiliated sellers with the platform reap the benefits of greater visibility and better terms of trade — reduced commissions and platform-funded discounts.
  - Zomato, like other food aggregators, is said to run cloud kitchens.
  - Many of them run private-labelled products in categories where other sellers have been successful.

➤ **Cartelisation:**

- Cartelisation means forming an association of producers, sellers, distributors, traders or service providers who, by agreement amongst themselves, limit, control or attempt to control the production, distribution, sale or price of, or, trade in goods or provision of services.
  - Online travel aggregators are often accused of cartelisation.
  - The Competition Commission of India's investigation in the OYO-MakeMyTrip collusion case resulted in MakeMyTrip being ordered to relist properties of Treebo and FabHotels.

➤ **Data Security:**

- While using these platforms, citizens share their data voluntarily and involuntarily.
- The aggregators gather shopping habits, consumer preferences, and other personal data.
- The platforms are accused of using this data to create and improve their own products and services, taking away business from other sellers on their platform.
- This information asymmetry is exploited by the aggregators to devour organisations they promise to support.

➤ **Lack of Transparent Dispute Redressal Mechanism:**

- There is a lack of a fair and transparent dispute resolution mechanism for sellers on these platforms.
- Delayed payments, unreasonable charges, and hidden fees are common occurrences.
- The power of these platforms is at the cost of small hardworking businesses:
  - Small restaurants complain that food-service aggregators' inability to service a customer request is attributed to the restaurant's inability.
  - Hotels listed on these platforms are blamed

for customer grievances arising from over-committing.

- In some cases, restaurants and hotels are arbitrarily shown as closed.

### ***What Steps Have We Taken Regarding E-Commerce?***

➤ **Draft E-Commerce Rules 2021:**○ **Mandatory Registration:**

- Mandatory registration for e-commerce entities with the **Department of Promotion for Industry and Internal Trade (DPIIT)**, Ministry of Commerce and Industry.
  - E-commerce entity means persons who own, operate or manage a digital or electronic facility or platform for electronic commerce.

○ **Limiting Flash Sales:**

- Conventional e-commerce **flash sales** are not banned. Only specific flash sales or back-to-back sales which limit customer choice, increase prices and prevent a level playing field are not allowed.

○ **Compliance Officer:**

- The e-commerce sites need to ensure appointment of Chief Compliance Officer (CCO) and a nodal contact person for 24x7 coordination with law enforcement agencies.

○ **Restricting Related Parties:**

- To tackle growing concerns of preferential treatment, the new rules propose to ensure none of the related parties are allowed to use any consumer information (from the online platform) for 'unfair advantage'.

○ **Clause of Country of Origin:**

- The entities will also have to identify goods based on their country of origin and provide a filter mechanism at a pre-purchase stage for customers.
  - They will also have to offer alternatives to these imported goods to provide a "fair opportunity" to domestic sellers.

○ **Reporting Cybersecurity Issues:**

- All e-commerce entities must provide information within 72 hours on any request made by an authorized government agency, probing any breach of the law including cybersecurity issues.

➤ **Consumer Protection (E-Commerce) Rules, 2020**○ **Grievance Redressal Mechanism:**

- **Marketplaces**, as well as sellers, need to appoint a grievance officer.

- **Restriction on Unfair Trade Practice, Manipulation and Discrimination:**
  - No e-commerce entity shall manipulate the price of goods or services to gain unreasonable profit or discriminate between consumers of the same class or make any arbitrary classification of consumers affecting their rights.
- **Should not Post Fake Reviews or Mislead:**
  - No seller or inventory e-commerce entity shall falsely represent itself as a consumer and post reviews about goods or services or misrepresent the quality or the features of any goods or services.
- **Record Information of Sellers Selling Counterfeit Products:**
  - E-commerce entities need to maintain a record of information for the identification of all sellers who have repeatedly offered goods or services that have previously been removed or restricted under the **Copyright Act, 1957**, the Trade Marks Act, 1999 or the **Information Technology Act, 2000**.
- **Open Network for Digital Commerce (ONDC):**
  - **ONDC** is a freely accessible government-backed platform that aims to democratise e-commerce by moving it from a platform-centric model to an open network for buying and selling of goods and services.
    - Thus creating a platform that can be utilized by all online retailers.

### How Can We Improve E-commerce Functioning?

- A parliamentary panel on the **Consumer Protection (E-Commerce) Rules, 2020** has recommended that the government should amend the rules to provide better protection to consumers rights and stop unfair practices. Key recommendations are:
  - **Clear Definition:**
    - There should be a more clear-cut definition of what constitutes Unfair Trade Practice and practical legal remedy to tackle such circumventing practices by e-commerce entities
    - Clearly define 'drip pricing' wherein the final cost of the product goes up due to additional charges, and provide for protecting consumers against this by including penal provisions for violation.
  - **Categorization of Personal Data:**
    - For protection of privacy of users and security of their data, the panel has recommended that users' **personal data** may be categorised as per

the level of sensitivity and appropriate protection may be assigned for each level.

- **Customer Care:**
  - E-commerce entities should provide a dedicated customer care number as well as a mechanism to monitor the time taken by customer care executives to resolve an issue.
- **Discourage Deceptive Technique:**
  - Some corrective mechanisms to discourage deceptive tactics including manipulation of algorithms, fake product reviews & ratings must be created so that the consumer interest is not harmed in any way.
- There is a lot to learn from the **Digital Markets Act of the EU** that seeks to address unfair practices by these gatekeepers.
- Market dominance and subsequent invoking of fair competition rules should be triggered at the level of micro-markets and for product segments.
  - The rules should allow for punitive penalties for unfair practices.

■■■

## 5G and Optical Fibre

*This editorial is based on "Preparing for 5G" which was published in The Indian Express on 29/06/2022. It talks about the significance of 5G Technology and how optimum use of optical fibre can help in achieving digital inclusiveness.*

**Tags:** Science & Technology, GS Paper 3, IT & Computers, Indigenization of Technology, Scientific Innovations & Discoveries

**5G technology** is going to make inroads into the country very soon. Top smartphone manufacturers in India have already released phones with 5G capability. With over 117 crore telecom users and more than 82 crore internet subscribers, India is one of the fastest-growing markets for digital consumers.

**Digital infrastructure**, which seamlessly integrates with physical and traditional infrastructure, is critical to India's growth story and the country's thrust towards self-reliance.

**Internet connectivity** is critical for making the **Digital India project** inclusive, and widespread use of optical fibre in the remotest corners of the country is vital to ensure that no one is left behind in this endeavour.

In this context, let's understand the fundamentals of 5G and Optical Fibre.

### What do we mean by 5G Technology?

#### ➤ Basics:

- 5G is the 5th generation mobile network. It is a new global wireless standard after **1G, 2G, 3G, and 4G** networks.
- 5G works in **3 bands (Low, Mid and High frequency spectrum)** - all of which have their own uses as well as limitations.
- It enables a new kind of network that is designed to connect virtually everyone and everything together including machines, objects, and devices.
- In India, Satcom Industry Association-India (SIA) has voiced concerns over the Government's plan to include the **Millimetre Wave (mm Wave) bands** in the **5G spectrum auction**.

### What Benefits Does 5G Provide?

#### ➤ Enhanced Mobile Broadband:

- In addition to making our smartphones better, 5G mobile technology can usher in new immersive experiences such as **Virtual reality (VR)** and **Augmented Reality (AR)** with faster, more uniform data rates, lower latency, and lower cost-per-bit.

#### ➤ High Speed Technology:

- 5G will increase the downloading and uploading speeds over the mobile network.
- Internet speeds in the high-band spectrum of 5G have been tested to be as high as 20 Gbps (gigabits per second).
  - The maximum internet data speed in 4G has been recorded at 1 Gbps.
- 5G will also reduce the latency i.e. the time taken by a network to respond.

#### ➤ Machine-to-Machine Interaction:

- 5G will be the first technology to facilitate machine-to-machine communication, the foundation of **Internet of Things (IoT)**.
  - Combined with IoT, **cloud, big data, AI, and edge computing**, 5G could be a critical enabler of the **fourth industrial revolution**.

#### ➤ Boost to the Economy:

- 5G is expected to create a cumulative economic impact of USD1 trillion in India by 2035, according to a report by a government-appointed panel (2018).
  - It will give a huge amount of economic boost to India by increased connectivity between machines and various sectors which will in turn increase efficiency.
  - Production will also increase which would lead to huge revenue collections.

#### ➤ Collaborative Network Deployment:

- 5G will lead to, for the first time, the business verticals and technical verticals come together for network deployment.
  - Earlier, the **telecommunications** used to discuss internally and deploy networks but now, the businesses, technology companies and cyber experts will be coming together for deploying networks.

### How Optical Fibre Can Quantify Benefits?

#### ➤ High Speed:

- Fiber provides more bandwidth and has standardized performance up to 10 Gbps and beyond, something that it is impossible to achieve when using copper.
  - More bandwidth means that fiber can carry more information with far greater efficiency than copper wire.

#### ➤ Range of Transmission:

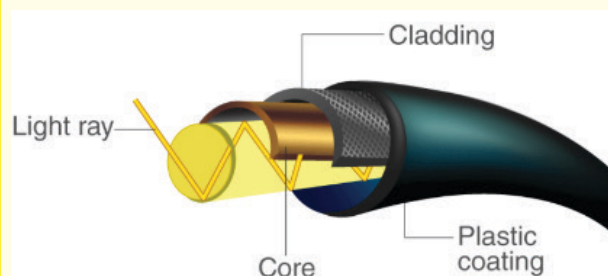
- Since data travels in the form of light in fiber-optic cables, very little signal loss occurs during transmission and data can move at higher speeds and greater distances.

#### ➤ Not susceptible to interference:

- Fiber-optic cable is also much less susceptible to noise and electromagnetic interference than copper wire.

### What Do We Mean by Optical Fibre?

- Optical fibre is the backbone of the digital infrastructure — the data is transmitted by light pulses travelling through long strands of thin fibre.
- Metal wires are preferred for transmission in optical fibre communication as signals travel with fewer damages.
  - The optical fibre works on the principle of **total internal reflection (TIR)**.
- Light rays can be used to transmit a huge amount of data (In case of long straight wire without any bend).
  - In case of a bend, the optical cables are designed such that they bend all the light rays inwards (using TIR).





- It is so efficient, in fact, that roughly 99.7% of the signal reaches the router in most cases.

➤ **Durability:**

- Fiber-optic cable is completely immune to many environmental factors that affect copper cable.
- The core is made of glass, which is an insulator, so no electric current can flow through.

### **What are the Challenges for 5G Rollout in India?**

➤ **Low Fiberization Footprint:**

- There is a need to upgrade fibre connectivity across India, which at present connects only 30% of India's telecom towers.
  - India exported optical fibre worth \$138 million to over 132 countries between April 2020 and November 2021.
  - Indian optical fibre cable consumption is predicted to increase to 33 million fibre km by 2026 from 17 million fibre km in 2021.
    - A little more than 30% of mobile towers have fibre connectivity; this needs to be scaled up to at least 80%.

➤ **Dumping by other countries:**

- Countries like China, Indonesia and South Korea have been **dumping** their fibre products in India at rates lower than the market price.
  - **The World Trade Organisation** defines dumping as "an international price discrimination situation in which the price of a product offered in the importing country is less than the price of that product in the exporting country's market".

➤ **Choosing the Optimal 5G Technology Standard:**

- The tussle between the homegrown 5Gi standard and the global 3GPP standard needs to be concluded in order to hasten 5G technology implementation.
  - While 5Gi brings obvious benefits, it also increases 5G India launch costs and interoperability issues for telcos.
  - 3GPP is a collaborative Project Agreement between telecommunications industry partners (Organizational Partners) for formalizing global mobile 3G wireless systems based on radio access technologies and Global System for Mobile Communications (GSM) specifications.

➤ **'Make in India' Hardware Challenge:**

- The ban on certain foreign telecom OEMs (original equipment manufacturer) upon which most of the 5G technology development depends, presents a hurdle in itself.

➤ **Lesser Government Subsidies:**

- A low likelihood of government subsidies is expected, given the history of high reserve prices set by the governments for spectrum auctions amid ongoing fiscal deficits.

➤ **Health and Environmental Setbacks:**

- Concerns regarding impact of 5G and low intensity radiofrequency (RF) electronic magnetic field (EMF) radiation on human health, and its environmental impact have been raised by various scientists.
- 5G technology and associated RF radiation from wirefree gadgets and network cell towers will be "extremely harmful and injurious to the health and safety of the people and also of animals and birds.
- Radiation at very high levels, also referred to as ionizing radiation, heats up our tissue and can eventually lead to cancer.

### **What Initiatives have India Regarding Digital Inclusiveness?**

➤ **BharatNet:**

- **BharatNet** is the world's largest rural broadband connectivity programme using Optical fibre. And also a flagship mission implemented by **Bharat Broadband Network Ltd. (BBNL)**.
- It is a highly scalable network infrastructure to provide on demand, affordable broadband connectivity of 2 Mbps to 20 Mbps for all households and on demand capacity to all institutions, to realize the vision of Digital India, in partnership with States and the private sector.
- It is being implemented by the Department of Telecommunication under the Ministry of Communications.

➤ **National Broadband Mission:**

- **NMB** will facilitate universal and equitable access to broadband services across the country, especially in rural and remote areas.
- The vision of the Mission is to fast-track growth of digital communications infrastructure, bridge the **digital divide**, facilitate digital empowerment and inclusion, and provide affordable and universal access to broadband for all.

➤ **Ghar Tak Fibre Scheme:**

- **GTFS** aims to connect all 45,945 villages of Bihar with high-speed optical fibre.
- Under the scheme, Bihar has to provide at least five fibre-to-the-home (FTTH) connections per village and at least one WiFi hotspot per village.
- The Scheme will lead digital services including **e-Education, e-Agriculture, Tele-Medicine, Tele-**

**law** and other social security schemes in Bihar ensuring easy access to all state natives.

- It is also likely to boost the local employment generation with the implementation of Bharat Net initiative which will be done by recruiting local workers.

➤ **Other Initiatives:**

- GramNet
- JanWiFi
- Fibre First Initiative

**What Should Be Our Approach Going Forward?**

➤ **Anti-Dumping Duties:**

- India should impose **anti-dumping duties** on the imports of cheap fibre products from countries like China, Indonesia etc.

➤ **Production-Linked Incentive:**

- In order to boost domestic manufacturing of optical fibre, the government should consider introducing a **PLI** scheme that aims to give companies incentives on incremental sales from optical fibre manufactured in domestic units.

➤ **Bridging the Rural-Urban Gap:**

- 5G can be deployed at different band spectrums and at the low band spectrum, the range is much longer which is helpful for the rural areas.

➤ **Government's Assistance:**

- The government has complete control over the inputs. One of the key inputs of 5G is the band spectrum.
  - By managing the design of the spectrums, the government can control the price to be paid by the people.
  - The government shall support the telecom companies to roll out networks which are sustainable and affordable for the public.

➤ **Viable Technology from Consumers' Perspective:**

- For widespread 5G deployment, it needs to become financially viable otherwise rural integration will remain a pipe dream.
- Also, the 5G technology has to be viable to the telecom operators too.

■■■

## Law of Anti-Defection Law

*This editorial is based on "The anti-defection law - political facts, legal fiction" which was published in The Hindu on 30/06/2022. It talks about the challenges in the Tenth*

*Schedule and how members of the house are using them as safeguard to facilitate defections.*

**Tags:** Indian Polity, GS Paper 2, Judicial Review, Parliament, Role of Governor, State Legislature, Indian Constitution

The practice of legislators from changing political parties during their term continues unabated in Indian legislatures despite the **Tenth Schedule** having been inserted into the **Constitution** in 1985.

Commonly known as the 'Anti - Defection Law', it was meant to arrest the practice of legislators from changing political affiliations during their term in office.

The political crisis in Maharashtra, and many others before it, are grim reminders of what the Tenth Schedule can and cannot do.

### What Do We Mean by Anti - Defection Law?

- The anti-defection law punishes individual Members of **Parliament** (MPs)/MLAs for leaving one party for another.
- Parliament added it to the Constitution as the **Tenth Schedule in 1985**. Its purpose was to bring stability to governments by discouraging legislators from changing parties.
  - The Tenth Schedule - popularly known as the **Anti-Defection Act** - was included in the Constitution via the **52nd Amendment Act, 1985**.
  - It sets the provisions for disqualification of elected members on the grounds of defection to another political party.
  - It was a response to the toppling of multiple state governments by party-hopping MLAs after the general elections of 1967.
- However, **it allows a group of MP/MLAs to join** (i.e., merge with) another political party without inviting the penalty for defection. And it does not penalize political parties for encouraging or accepting defecting legislators.
  - As per the 1985 Act, a '**defection**' by **one-third of the elected members of a political party was considered a 'merger'**.
  - But the **91<sup>st</sup> Constitutional Amendment Act, 2003**, changed this and now **at least two-thirds of the members of a party must be in Favour** of a "merger" for it to have validity in the eyes of the law.
- The members disqualified under the law can stand for elections from any political party for a seat in the same House.
- The decision on questions as to disqualification on ground of defection are referred to the **Chairman**

or the **Speaker** of such House, **which is subject to 'Judicial review'**.

- However, the law does not provide a timeframe within which the presiding officer has to decide a defection case.

### **What are the Grounds for Defection?**

#### ➤ **Voluntary Give Up:**

- If an elected member **voluntarily gives up his membership** of a political party.

#### ➤ **Violation of Instructions:**

- If he **votes or abstains from voting** in such House contrary to any direction issued by his political party or anyone authorized to do so, without obtaining prior permission.
  - As a pre-condition for his disqualification, his abstention from voting **should not be condoned** by his party or the authorized person **within 15 days** of such incident.

#### ➤ **Elected Member:**

- If any **independently elected member joins any political party**.

#### ➤ **Nominated Member:**

- If any **nominated member** joins any political party **after the expiry of six months**.

### **How Defection Affects the Political System?**

#### ➤ **Subversion of Electoral Mandates:**

- Defection is the subversion of electoral mandates by legislators who get elected on the ticket of one party but then find it convenient to shift to another, due to the lure of ministerial berths or financial gains.

#### ➤ **Affects the Normal Functioning of Government:**

- The infamous "Aaya Ram, Gaya Ram" slogan was coined against the background of continuous defections by the legislators in the 1960s.
- The defection leads to instability in the government and affects the administration.

#### ➤ **Promote Horse Trading:**

- Defection also promotes horse-trading of legislators which clearly go against the mandate of a democratic setup.

### **What are the Challenges with Anti - Defection Law?**

#### ➤ **Paragraph 4 of the law:**

- Paragraph 4 of the Anti - Defection Law creates an exception for mergers between political parties by introducing three crucial concepts:

#### ● **Original Party:**

- The political party to which a member belongs (this can refer to the party generally, outside of the House).

#### ● **Legislature Party:**

- Consisting of all elected members of a House for the time being belonging to one political party.

#### ● **Deemed Merger:**

- Paragraph 4 **does not clarify whether the original political party refers to the party at the national level or the regional level**, despite the fact that that is how the **Election Commission** of India recognises political parties.

#### ○ **Paragraph 4 states that:**

- A merger can take place only when an original party merges with another political party, and at least two thirds of the members of the legislature party have agreed to this merger.

- Paragraph 4 seems to be creating a "legal fiction" so as to indicate that a merger of two third members of a legislature party can be deemed to be a merger of political parties, even if there is no actual merger of the original political party with another party.

#### ➤ **Undermining Representative & Parliamentary Democracy:**

- After enactment of the Anti-defection law, the MP or MLA has to follow the party's direction blindly and has no freedom to vote in their judgment.
- Due to Anti-Defection law, the chain of accountability has been broken by making legislators accountable primarily to the political party.

#### ➤ **Controversial Role of Speaker:**

- There is no clarity in the law about the timeframe for the action of the House Chairperson or Speaker in the anti-defection cases.
- Some cases take six months and some even three years. There are cases that are disposed - off after the term is over.

#### ➤ **No Recognition of Split:**

- Due to the **91st Constitutional Amendment Act, 2003**, the anti-defection law created an exception for anti-defection rulings.
- However, the amendment does not recognize a 'split' in a legislature party and instead recognizes a 'merger'.

#### ➤ **Allows only Wholesale Defection:**

- It allows wholesale defection, but retail defection is not allowed. Amendments are required to plug the loopholes.

- He raised concern that if a politician is leaving a party, s/he may do so, but they should not be given a post in the new party.

➤ **Affects the debate and discussion:**

- The Anti-Defection Law has created a democracy of parties and numbers in India, rather than a democracy of debate and discussion.
  - In this way, it does not make a differentiation between dissent and defection and weaken the Parliamentary deliberations on any law.

***What are Different Suggestions related to the Anti-defection Law?***

- The Election Commission has suggested it should be the deciding authority in defection cases.
- Others have argued that the **President** and **Governors** should hear defection petitions.
- The **Supreme Court** has suggested that Parliament should set up an independent **tribunal** headed by a retired judge of the higher judiciary to decide defection cases swiftly and impartially.
- Some commentators have said the law has failed and recommended its removal. Former Vice President Hamid Ansari has suggested that it applies only to save governments in no-confidence motions.

***What Can be Done to Make Anti-Defection Law More Effective?***

- **Rational use of the anti-defection law:**
  - Several experts have suggested that the law should be valid only for those votes that determine the stability of the government. Example: passage of the annual budget or no-confidence motions.

➤ **Advice of Election Commission:**

- Various commissions including National Commission to review the working of the constitution (NCRWC) have recommended that rather than the Presiding Officer, the decision to disqualify a member should be made by the President (in case of MPs) or the Governor (in case of MLAs) on the advice of the Election Commission.

➤ **Independent authority to deal with disqualification:**

- Justice Verma in **Hollohan judgment** said that tenure of the Speaker is dependent on the continuous support of the majority in the House and therefore, he does not satisfy the requirement of such independent adjudicatory authority.
- Also, his choice as the sole arbiter in the matter violates an essential attribute of the basic feature.
- Thus, the need for an independent authority to deal with the cases of defection.

➤ **Promoting the principle of intra-party democracy:**

- 170<sup>th</sup> Law Commission report underscored the importance of intra-party democracy by arguing that a political party cannot be a dictatorship internally and democratic in its functioning outside.
- Thus, the parties should listen to the opinions of the members and have discussions on the same. This would give the freedom of speech and expression to its members and promote inner-party democracy.

➤ **Analysis by Supreme Court:**

- An academic revisiting of the Tenth Schedule by the Supreme Court, so as to guide future use of the anti-defection law, is timely and should happen soon.

■■■



## Drishti Mains Questions

1. "With the global average temperature in 2100 expected to rise to around 2.1°C above pre-industrial levels, a pivotal move to bend the global emissions curve becomes imperative. In this context, renewable energy (RE) transition is vital to building a resilient and secure future energy system". Discuss.
2. "Despite the introduction of several economic reforms, the competitive spirit of India is often suppressed by the issues of the underdeveloped manufacturing sector, lack of research & development, infrastructural challenges and limited technological knowledge." Comment.
3. "The WHO's act of recognising India's ASHA (accredited social health activists) is a step towards correcting the wrong of giving credit to only those at the top. The government of India must also recognise the problems faced by the ASHA workers and address them at the earliest as possible." Discuss.
4. "With nearly two-thirds of India still living in poverty by today's quality-of-life standards and the climate situation worsening day by day, the importance of Corporate Social Responsibility (CSR) can't be overestimated. It is the responsibility of both the companies and the government to ensure a more stringent compliance to CSR." Analyse.
5. "The current exigencies provide an opportune moment to include Urban And Peri-Urban Agriculture (UPA) as one of the essential elements of Sustainable Urbanisation." Discuss.
6. The ONDC (Open Network for Digital Commerce) Project proposed by the Government of India has the potential to curb "digital monopolies" of large companies and provide a huge booster shot to smaller online retailers and new entrants. Discuss.
7. The Prime Minister, in his virtual address at the event marking the completion of six years of Digital India programme described the ongoing decade as India's Techade. What factors should be considered as the key elements to bring this idea of techade to success?
8. "India's partnerships today are built on converging strategic interests and a new security environment. As such, the Indo-Pacific is now a theatre of opportunity to increase India's profile and role globally." Comment.
9. "Cooperative sector has immense potential in mitigating the impacts of climate change; however, it has not been optimally realized so far." In the light of the statement suggest measures to fully utilize the sector's potential to reduce the impact of climate change.
10. What are the challenges associated with the adoption of advanced technologies (introduction of supercomputers, quantum computing) in India. Discuss the steps that can be taken to speed-up the adoption.
11. "Energy is the life blood of economic stability, and the only way to emerge as a true superpower is by attaining energy security through policies promoting use of domestic resources and creating an ecosystem to accelerate production." Discuss.
12. Highlight the issues raised by the India-led global lifestyle movement and according to you what could be the solutions to these problems?
13. What is the new cold war between the US and China in the south pacific islands and how could it affect India's maritime security? Discuss.
14. What are the areas of contention between India and China and what steps India could take to counter any Chinese actions?
15. There is a need for proper targeting of beneficiaries in order to rational subsidy burden on government exchequer. Discuss.

16. Despite their economical, environmental and cultural significance, the wetlands in India and across the world have been disappearing at a rate faster than that of forests. Discuss the key threats faced by the wetlands and suggest measures that can be taken to protect them.
17. Despite the government's continuous efforts to uplift women's status in the rural economy, the traditional struggle for women performing temporary jobs at lower wage rate still prevails. Discuss.
18. What are the challenges between India-Iran relations and how can it be resolved? Give examples to support your answer.
19. With the rise in the market for Artificial Intelligence (AI), there arises a need to have global regulations and agreements. Discuss
20. Caste is not just a social system, but is an active agent which stifles economic transformation. Discuss.
21. India's agriculture sector is hampered by the double edged sword of high demand of fertilisers and global rise in their price. Discuss.
22. Short Tenure of Service and Absence of Pension has led to agitation against Agnipath Scheme of Government of India. Critically analyze the statement and suggest measures for growth in the Defence Sector.
23. While the West is curtailing abortion rights, India is giving a new meaning to women empowerment by recognizing and protecting women's rights. Discuss.
24. The online marketplace is skewed in favour of big players and hurts small businesses and consumers. Comment.
25. Internet Connectivity in the remotest corner of the country is critical for making the Digital India Project inclusive. Discuss the utility of Optical fibres in the light of the present statement.
26. The anti-defection law has been singularly responsible for stifling debate in our Parliament and state legislatures. Comment.