

Monthly Editorial Consolidation



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Tackling India's Energy Crisis

This editorial is based on "Energy imports must be slashed" which was published in the Hindu Business Line on 30/03/2023. It discusses the issue of the Energy Crisis and ways to address the same.

Tag: Indian Economy, Mobilization of Resources, Infrastructure, Growth & Development, Mineral & Energy Resources, Conservation of Resources, GS Paper-3

India's energy imports are projected to surge by 43.6% in FY2023, which would significantly impact the country's import bill. Energy imports, including coal, coke, crude oil, LNG, and LPG, account for a significant portion of India's merchandise import bill, representing 36.6%.

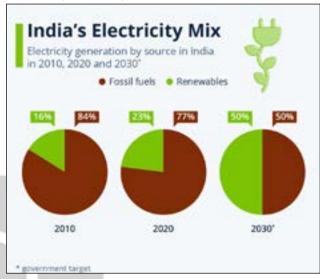
If the current import growth rate persists, the energy import bill will soon surpass that of all remaining merchandise imports, with projections indicating that it could exceed USD 1 trillion by December 2026, a troubling prospect. Additionally, the import value of items required for clean energy such as photovoltaic cells and Lithium Ion batteries would further exacerbate the situation.

However, India can cut its crippling import bill by boosting exploration of local oilfields and enhancing coal output.

What are the Reasons behind an Increase in the Price of Energy Sources?

- > Disruption of Oil Supply Chains:
 - O The Covid-19 pandemic and geopolitical tensions (US sanctions on Russia post the Russian invasion of Ukraine) have led to disruptions in the global oil supply chain, which has increased demand for alternative energy sources.
- ➤ Weakening of the US-Saudi Arabia 1970s Deal:
 - o The United States and Saudi Arabia reached a deal in the 1970s that allowed the US to rely on Saudi oil in exchange for security guarantees.
 - However, the US is now pursuing energy independence and is reducing its reliance on Saudi oil.
- **High Inflation in Developed Countries:**
 - o High inflation in developed countries can certainly lead to a surge in the price of oil, coal, and other energy sources.
 - o This can induce price increase of the oil all over the world including India and affects its buying power.

- **US Effort to Create Alternate Supply Chains excluding** China:
 - o The US efforts to create alternate supply chains excluding China can surge the prices of energy sources as China is a major producer and exporter of many critical minerals and metals, such as rare earth elements.
 - China is also a significant consumer of energy, particularly fossil fuels like coal and oil.



What are the Challenges in Tackling India's **Energy Crisis?**

- Limited Energy Resources:
 - India has limited energy resources such as coal, oil, and gas, and it depends on imports to meet its growing energy demands.
 - The estimated values of petroleum imports for FY 2023 are USD 210 billion. This includes crude oil with an import value of USD 163 billion and LNG and LPG of USD17.6 billion and USD 14 billion, respectively. Crude imports grew by 53% over the last fiscal.
 - o The country's coal reserves are of low quality and there are significant environmental concerns associated with their extraction and use.
 - O As a result, India is looking for alternative sources of energy, such as solar, wind, and hydro power.
- Poor Energy Infrastructure:
 - o India's energy infrastructure is **inadequate to meet** the growing demand for electricity. It suffers from frequent power cuts and blackouts, which can last for hours or even days.
 - A rapid addition of solar farms has helped India avert daytime supply gaps, but a shortage of coal-fired and hydropower capacity risks exposing millions to widespread outages at night.

- India's power availability in "non-solar hours" in April, 2023 is expected to be 1.7% lower than peak demand.
- The poor energy infrastructure is also affecting the development of the country's rural areas, where many people do not have access to electricity.

> Inadequate Investment:

- India's energy sector requires significant investment to improve its infrastructure and expand its energy capacity.
- However, the government and private sector are not investing enough in the energy sector.
- India's low per capita income and high poverty rates also make it difficult for people to afford clean energy sources.

> Political and Regulatory Barriers:

- India's energy sector is heavily regulated, and there are significant political barriers to energy sector reforms.
- India has been slow to adopt renewable energy policies, and there is a lack of coordination among various government agencies and ministries.

Climate Change:

- India is one of the largest emitters of greenhouse gases in the world, and its energy sector is a major contributor to these emissions.
- Climate change is also affecting the country's energy infrastructure, as extreme weather events such as floods and droughts are becoming more frequent and severe.

What Should be the Way Forward?

- Invest in Domestic Exploration and Production:
 - o India must evaluate its options to increase local production, including developing Category II sedimentary basins that have known hydrocarbon reserves but no commercial production yet. The government should provide incentives to attract investment in these areas.
 - India has 26 sedimentary basins divided into the following four categories:
 - Category I (7 Basins): Established commercial production
 - Category II (3 Basins): Known accumulation of hydrocarbons but no commercial production as yet.
 - Category III (6 Basins): Indicated hydrocarbon reserves considered geologically oil-bearing
 - Category IV (10 basins): Uncertain potential may be prospective by analogy with similar basins worldwide; and deep-water reserves.

> Improve Coal Quality:

 India should focus on improving the quality of domestic coal to reduce the reliance on imports.
 This can be achieved by investing in technology to increase the calorific value of coal and reduce the ash content.

> Encourage Renewable Energy:

- India has vast potential for renewable energy sources like solar, wind, and hydro.
- The government should encourage the development of renewable energy projects through incentives and subsidies.
- Carbon pricing can help to incentivize the use of renewable energy by putting a price on carbon emissions.

> Develop Energy Infrastructure:

- India must invest in developing its energy infrastructure to ensure efficient transmission and distribution of energy.
- This can be achieved by upgrading the existing infrastructure and building new power plants, pipelines, and transmission lines.

Reducing Coal Imports:

- India must also focus on reducing coal imports.
 There's not enough scope for reducing the import of coking coal as India does not have high-quality reserves but the import of thermal coal can be managed.
- Coal imports have increased mainly because of demand from new power plants that use only high-grade imported coal.
 - The need to import arises because of the low quality (high ash content of 30-40%) of Indian coal, the inability of Coal India Ltd. to increase production and use technology to increase the calorific value of coal, and within-country transport restrictions.

India's Policy on Co-Firing Biomass

This editorial is based on "Time to rake in more biomass in thermal plants" which was published in the Hindu Business Line on 31/03/2023. It discusses the challenges India's biomass co-firing policy is facing and the need for a robust regulatory framework.

P Tag: Biodiversity & Environment, GS Paper–2, GS Paper–3, Planning, Growth & Development, Environmental Pollution & Degradation, Agricultural Resources

India has **set ambitious targets for renewable energy and reducing greenhouse gas emissions** from the power sector, and the **Biomass Co-firing Policy** is a critical step towards achieving these goals.

However, the policy has not yet been widely accepted, despite the fact that using biomass is still a cheaper option than importing coal and offers an economically viable alternative for all thermal power plants.

The slow progress of State Generating Companies and Electricity Regulatory Commissions in using biomass in their power plants has prompted the Ministry of Power to consider suitable provisions that will encourage thermal power plants to use biomass along with coal as fuel.

The **Revised Biomass Co-firing Policy** of the Ministry of Power in 2021, is expected to have a significant impact on various sectors such as power, coal, agriculture, **Micro, Small and Medium Enterprises (MSME)** and the environment.

So, the **issues with the India's biomass co-firing policy needs to be addressed** to achieve the ambitious targets for renewable energy.

What is Biomass Co-firing and what are its Significance?

> About:

- Biomass co-firing is the practice of substituting a part of the fuel with biomass at coal thermal plants.
 - Coal and biomass are combusted together in boilers that have been designed to burn coal.
 For this purpose, the existing coal power plant has to be partly reconstructed and retrofitted.
 - Co-firing is an option to convert biomass to electricity, in an efficient and clean way, and to reduce GHG (Green house Gases) emissions of the power plant.
- Biomass co-firing is a globally accepted cost-effective method for **decarbonising** a coal fleets.
- India is a country where biomass is usually burnt on the field which reflects apathy towards resolving the problem of clean coal using a very simple solution that is readily available.

> Significance:

- Biomass co-firing is an effective way to curb emissions from open burning of crop residue, it also decarbonised the process of electricity generation using coal.
 - Substituting 5-7 % of coal with biomass in coalbased power plants can save 38 million tonnes of carbon dioxide emissions.

- It can help cut emissions from combustion of fossil fuels, address India's burgeoning problem of farm stubble burning to some extent, reduce waste burden while also creating jobs in rural areas.
- India has large biomass availability as well as rapid growth in coal-fired capacity.

What are the Challenges related to the Biomass Co-firing?

> Availability:

- The availability and quality of biomass vary across regions in India.
- While some regions have an abundance of biomass, others face a shortage.
- Moreover, the quality of biomass also varies, which can affect its combustion efficiency and emissions.
 - Biomass pellets are difficult to store at plant locations for extended periods of time because they quickly collect moisture from the air, making them unusable for co-firing.
 - Only pellets with a moisture content of less than 13-14% typically can be burned alongside coal.

> Infrastructure and Logistics:

- The transport and storage of biomass can be challenging, especially in areas where infrastructure is inadequate. This requires specialised equipment and facilities, which can increase the cost of biomass co-firing.
- Also, Biomass co-firing requires specialised equipment, such as biomass grinders, conveyors, and storage systems.
- Additionally, power plants need to be retrofitted to enable biomass co-firing.

> Combustion Characteristics:

- Biomass has different combustion characteristics than fossil fuels, which can create challenges for power plant operators.
- o For example, biomass may have higher moisture content, lower energy density, and higher ash content than coal, which can impact combustion efficiency and emissions.

> Emissions:

- Co-firing can reduce emissions of greenhouse gases and other pollutants, but it can also introduce new emissions challenges.
- For example, biomass combustion can produce emissions of particulate matter, nitrogen oxides, and sulfur dioxide, which can impact air quality and human health.

- Cost:
 - Biomass co-firing can be more expensive than traditional fossil fuel-based power generation, especially if significant modifications to the power plant are required.
 - This can make it challenging for biomass co-firing to compete economically with other renewable energy sources such as wind and solar.

What are the Related Initiatives?

- National Mission on use of Biomass in Coal Based Thermal Power Plants
- Carbon Capture and Storage
- Coal Beneficiation

What Should be the Way Forward?

- > Ensuring a Steady Supply of Biomass to Power Plants:
 - Steady supply of biomass to power plants can be ensured by developing a reliable supply chain that can transport biomass from source to plant.
 - This could involve partnering with farmers, forestry companies, or other biomass suppliers to secure a steady supply of biomass.
 - Another way to ensure a steady supply of biomass is to focus on surplus biomass, which is biomass that is not being used for other purposes.
 - This could include agricultural residues, such as straw or corn stover, or forestry residues, such as branches or sawdust.
 - By using surplus biomass, we can avoid competing with other uses of biomass, such as food production or the manufacture of paper products.

> Building Infrastructure and Logistics:

- Developing the necessary infrastructure and logistics to transport, store, and process biomass is critical to the success of biomass co-firing.
- This could involve building new storage facilities, upgrading transportation networks, or investing in new processing technologies.

> Robust Regulatory Framework:

- The Biomass Co-firing Policy needs to be backed by a strong policy and regulatory framework that provides incentives and support for biomass co-firing.
- Also, there needs to be a clear, competitive market for biomass to make sure that prices and distribution are fair.

- Developing and Deploying the Necessary Technology and Equipment:
 - Developing and deploying technology and equipment is crucial for the success of biomass co-firing.
 - o This includes developing specialized boilers, burners, and control systems that can handle the unique characteristics of biomass, as well as retrofitting existing equipment to accommodate biomass co-firing.

Upskilling India's Pharma Sector

This editorial is based on "Indian pharma sector needs a dose of upskilling and reskilling" which was published in the Hindu BusinessLine on 03/04/2023. It discusses the issues with the Indian pharma sector and steps needs to be taken to address it.

P Tag: Governance, GS Paper - 2, Government Policies & Interventions, Issues Relating to Development, GS Paper - 3, Industrial Growth, Indigenization of Technology, Industrial Policy

The Indian pharmaceutical industry has been instrumental in enhancing global health by producing inexpensive and high-quality generic medicines. Nonetheless, the industry still confronts various obstacles to become one of the world's leading pharmaceutical producers in terms of value.

The Indian pharmaceutical industry is the third largest in terms of volume globally. Currently, the Indian pharmaceutical market is valued at around USD 50 billion, out of which almost USD 25 billion constitutes the export market. The domestic market will touch USD 130 billion by 2030 out of which over 60% will only be exports.

Despite India's ever-increasing pool of talented scientists, engineers, and entrepreneurs along with its demographic advantage, it will be critical to invest in building an ecosystem for skilling. To stay competitive in the VUCA (Volatile, Uncertain, Complex and Ambiguous) world, there is a fundamental need for upskilling and reskilling.

What are the Challenges with India's Pharma Sector?

Regulatory Compliance:

- o The pharmaceutical industry is highly regulated, and Indian companies must comply with the regulations of various countries where they export their products.
- o In recent years, Indian companies have faced several regulatory hurdles, including issues with quality control, data integrity, and manufacturing practices, leading to import bans and loss of business.

Intellectual Property Issues:

- Intellectual Property Rights (IPR) are crucial for the pharmaceutical industry as it ensures that companies can protect their inventions and earn a fair return on their investment. However, Indian companies have been accused of violating IPR laws, leading to legal battles with multinational pharmaceutical companies.
 - Example: In 2014, Swiss pharmaceutical company Roche sued Indian drug manufacturer Cipla for allegedly infringing on its patent for the cancer drug, Tarceva. Roche claimed that Cipla's generic version of the drug violated its patent rights.
 - The case went to court, and in 2016, the Delhi High Court ruled in favor of Roche, stating that Cipla had infringed on Roche's patent and had to pay damages to the company.

Price Control:

- The government of India regulates the prices of essential medicines, which has led to low-profit margins for the pharmaceutical companies.
- O This, in turn, affects the research and development activities of the companies, as they have less money to invest in innovative products.

Lack of Innovation:

- O The majority of the pharmaceutical companies in India focus on manufacturing generic drugs and not on research and development.
- O The industry is yet to establish a strong base in innovative drug discovery, leading to a lack of new drugs being introduced in the market.

Infrastructure Challenges:

- O The infrastructure in India, including transportation, energy, and communication, poses significant challenges for the pharmaceutical industry.
- o The lack of adequate transportation facilities affects the timely delivery of products, while

power outages and communication breakdowns can disrupt manufacturing processes.

> Skilled Workforce:

- o The pharmaceutical industry requires a skilled workforce in various fields, including research and development, manufacturing, and quality control.
- O However, there is a shortage of skilled professionals in the industry, leading to a gap between demand and supply.

> Global Competition:

 The Indian pharmaceutical industry faces stiff competition from other countries such as China, which offers lower production costs and higher production capacities.

> Heavy Dependence on China:

- O Despite being a leading supplier of high-quality medicines to several countries, the Indian pharmaceutical industry is highly dependent on China for pharmaceutical raw materials i.e. Active **Pharmaceutical Ingredients.**
 - Indian drug-makers import around 70% of their total bulk drug requirements from China.
 - According to a report by Data Bridge Market Research, the Active Pharmaceutical Ingredient (API) market was valued at USD 300.72 trillion in 2021 and is expected to reach a value of USD 540.33 trillion by 2029 at a CAGR of 7.6% during the forecast period of 2022 to 2029.

What are the Related Initiatives?

Strengthening Pharmaceuticals Industry Scheme:

o The Scheme provides for credit linked capital and interest subsidy for Technology Upgradation of MSME units in pharmaceutical sector, as well as support of up to Rs 20 crore each for common facilities including Research centre, testing labs and ETPs (Effluent Treatment Plant) in Pharma Clusters.

Promotion of Bulk Drug Parks Scheme:

- The government aims to develop 3 mega Bulk Drug parks in India in partnership with States to reduce manufacturing cost of bulk drugs in the country and dependency on other countries for bulk drugs.
- o The scheme will also help in providing continuous supply of drugs and ensure delivery of affordable healthcare to the citizens.

> Production Linked Incentive (PLI) Scheme:

o The PLI scheme aims to promote domestic manufacturing of critical Key Starting Materials (KSMs)/Drug Intermediates and Active Pharmaceutical Ingredients (APIs) in the country.

What Should be the Way Forward?

> Research and Innovation:

 Professionals with expertise in life sciences, research methodologies, and cutting-edge technologies like Artificial Intelligence (AI)/Machine Learning (ML) and data analytics are essential in the innovation space, which constitutes two-thirds of the global market.

> Ensuring Proper Regulation:

 For the Indian pharma sector to retain the "pharmacy of the world" status, quality control professionals must be equipped to ensure that products meet international standards.

Leveraging Digital Tech:

 Leveraging digital technologies to improve productivity, efficiency and innovation will be critical for the companies.

o For example:

- Digital technology is being used to make clinical trials more efficient and effective.
- Artificial Intelligence is being used to improve drug discovery and development. Machine learning algorithms can be used to analyze large amounts of data to identify patterns and predict outcomes.

Competitiveness:

 There is a need for upskilling/reskilling in sales, marketing and supply chain management and to adopt Environmental, Social and Governance (ESG), green technology, and training employees in cross-functional skills.

> Skilling Pharma Professionals:

- The pharma sector demands professionals with diverse skill sets, including scientific research, drug development, regulatory compliance, marketing, and sales.
- Therefore, educational programs must focus on skill development, which helps the workforce to perform their roles more efficiently and effectively.
- The pharmacology curriculum of Indian institutions must be updated frequently to make the students future ready. In collaboration with the industry, LSSSDC and the Pharmacy Council of India (PCI) have developed skilling modules for the B. Pharm curriculum.
 - The LSSSDC aims to upskill around 7500 workers in small and medium enterprises.
 - LSSSDC is a not for profit, non-statutory certification Body under mandate of Ministry of Skill Development and Entrepreneurship.

Emerging Technologies and Judiciary

This editorial is based on "Doing Justice with Al" which was published in the Financial Express on 04/04/2023. It discusses how the application of emerging technologies can transform the judicial system and the benefits that it can bring.

P Tag: Governance, GS Paper - 2, Judiciary, GS Paper - 3, Artificial Intelligence

The world has witnessed a significant transformation in the past two decades, with digitalisation being the driving force behind it. The advent of new technologies has transformed all sectors, from banking to healthcare, changing the way we conduct business and access services. With the potential to improve efficiency and enhance experiences, digitalisation has earned its stature as the buzzword of the day.

In this context, the judiciary is an area that has significant potential for emerging technologies to play a bigger role.

There is no doubt that emerging technologies will play an indispensable role in strengthening the nation. While there are always concerns that arise with change, it is up to us to leverage potential, offset risks with checks, and deliver solutions that can truly impact change in a significant way.

How Emerging Technologies can Transform the Judicial System?

> Digitalization of Court Proceedings:

- One of the most significant benefits of emerging technologies is the digitalization of court proceedings.
- The use of electronic systems can help in reducing paperwork, improving accessibility, and facilitating the efficient management of cases.
- The digitization of court records can help in making them easily accessible, improving transparency, and speeding up the judicial process.
- For example, the e-Courts project aims to computerize the working of courts in the country and make the judicial system more efficient.

Use of AI and Machine Learning:

- Artificial intelligence and machine learning can help in analyzing vast amounts of data, identifying patterns, and predicting outcomes.
- Several SC and HC judges have recognised the value and proposed that AI tools be introduced to enhance the efficiency of the justice delivery system – both in terms of quality and quantity.

- Currently, the courts have implemented two tools - Supreme Court Vidhik Anuvaad Software (SUVAS) and Supreme Court Portal for Assistance in Court's Efficiency (SUPACE) in its systems.
 - SUVAS is an Al-enabled translation tool for conversion of orders/judgments to vernacular languages, while SUPACE is being developed to function as an AI Research Assistant tool.

E-filing of Cases:

- O The use of e-filing can make the process of filing cases faster, more efficient, and cost-effective. E-filing can help in reducing the time taken for filing, improve data accuracy, and eliminate the need for physical presence in court.
 - For example, the e-filing portal of the Supreme Court of India enables lawyers and litigants to file cases and access case records online.

Video Conferencing for Hearings:

- o The use of video conferencing can help in conducting hearings remotely, making it easier for lawyers and litigants to participate in the judicial process. Video conferencing can save time and money, reduce the burden of travel, and ensure the safety and security of all participants.
 - For example, during the Covid-19 pandemic, the Indian courts started using video conferencing to conduct virtual hearings.

Blockchain for Secure Record-Keeping:

- Blockchain technology can help in ensuring the security and transparency of court records. The use of blockchain can help in preventing tampering, maintaining the integrity of data, and ensuring that court records are secure and accessible only to authorized users.
 - For example, the Indian state of Telangana is using blockchain technology to secure land records and prevent fraud.

What are the Challenges with Application of Emerging Technologies in the Judicial System?

Data Security:

O With the increasing amount of sensitive data being collected by the judicial system, it is crucial to ensure that this data is kept secure. Any data breaches could compromise the integrity of the justice system and undermine public trust.

Bias and Discrimination:

 Emerging technologies such as Artificial Intelligence (AI) may inadvertently perpetuate bias and discrimination if the algorithms used are not designed with care. There is also the risk that

these technologies could amplify existing biases and inequalities in the justice system.

Lack of Understanding:

O Many legal professionals may not have the technical expertise required to fully understand the capabilities and limitations of emerging technologies. This could lead to misunderstandings about how these technologies should be applied and result in ineffective or inappropriate use.

Privacy Concerns:

- o The use of emerging technologies could potentially violate privacy rights.
 - For example, facial recognition technology could be used to identify individuals without their consent, and there is a risk that this technology could be misused by law enforcement or other organizations.

Cost:

- The implementation of emerging technologies can be expensive, and the judicial system may not have the resources to invest in these technologies.
- This could limit the potential benefits that these technologies could bring to the justice system.

Ethical Considerations:

- There are several ethical considerations that need to be taken into account when implementing emerging technologies in the judicial system.
- There is also concern with respect to the lack of the human element or 'conscience' required for the act of judging.
- o For example, it is essential to ensure that these technologies do not compromise the rights of individuals or undermine the integrity of the justice system.

What Should be the Way Forward?

Ethical Considerations:

 Emerging technologies can have ethical implications, and the judicial system needs to ensure that these technologies are being used in a way that is consistent with ethical standards.

> Data Privacy and Security:

o Emerging technologies such as AI and Internet Of Things (IoT) rely heavily on data collection, and it is important to ensure that this data is being collected and used in a way that is compliant with data privacy and security regulations.

> Accessibility:

 The judicial system must ensure that emerging technologies do not create barriers to accessibility

for individuals with disabilities or those with limited access to technology.

- Transparency and Accountability:
 - The use of emerging technologies must be transparent and subject to accountability measures to ensure that they are being used fairly and justly.
- > Training and Education:
 - The judicial system must ensure that judges, lawyers, and other stakeholders are properly trained and educated on the use of emerging technologies to ensure that they are being used effectively and appropriately.

New Economic Scenario for a New World

This editorial is based on "A new economics for a new world" which was published in The Hindu on 05/04/2023. It talks about how the paradigm of economics is changing in the West, and Indian economists must not only follow but also lead these developments.

P Tag: Indian Economy, GS Paper-3, Inclusive Growth, Economic Planning

The changing paradigm would refer to a shift away from the neoclassical model of economics and towards alternative frameworks that better incorporate real-world complexities and factors such as inequality, power dynamics, environmental concerns, and behavioral economics.

The Indian government is facing three economic challenges: managing inflation, interest rates, exchange rates, negotiating trade agreements, and ensuring secure employment with adequate incomes.

Economists do not have a systemic solution for this "poly-crisis" and are divided on various issues related to central banking, inflation, protection of workers' incomes, and currency depreciation.

In this context, the government need a new paradigm of economic scenario so that such issues can be resolved in most efficient way.

The Current Paradigm

- The current paradigm of economics is too linear, too mathematical, and too mechanical, and it is seen as having fundamental flaws.
- Economists often use Tinbergen's theory, which states that the number of policy instruments must equal the number of policy goals, to justify the necessity of independent monetary institutions for managing inflation.

- However, this approach does not provide a systemic solution for the economic challenges faced by many countries, including India.
- The current paradigm of economics is also criticized for being too focused on free trade policies as the cause of economic growth and not taking into account the importance of human development as a means for growth.

Problems with the Current Paradigm

The inadequacy of the current paradigm was revealed by several crises in this millennium: the **2008 global financial crisis**; **inequitable management** of the global **Covid-19 pandemic**; and **the looming global climate crisis**.

- Some of the major challenges include income inequality, climate change, resource depletion, globalization-related job displacement and the rise of digital monopolies.
- Income inequality is a growing concern in many countries, as a significant proportion of the population struggles to make ends meet while a few individuals accumulate vast amounts of wealth.
- Climate change, resource depletion, and environmental degradation threaten the sustainability of economic growth, while job displacement caused by globalization and automation is leading to economic insecurity and social unrest.
- Finally, the rise of digital monopolies has resulted in increasing market concentration and reduced competition, which could stifle innovation and lead to higher prices for consumers.

The Need for a New Economics

- There is a need for a new economics that takes into account the complexities of socio-economic systems and considers human development as a prerequisite for economic growth.
- Policymakers in India must find a way to strengthen the roots of the economic tree while harvesting its fruits at the same time.
- This requires breaking out of the current linear and mechanical paradigm and embracing a more holistic and adaptive approach to economics.

What are the Potentials of New Economic Paradigm?

- > Balanced Approach to Economic Growth
 - It emphasizes a more balanced approach to economic growth that takes into account environmental sustainability and social welfare.

> Drivers of Growth:

 It also highlights the importance of innovation, technology, and digitalization in driving economic growth.

> Inclusive Growth:

- This approach recognizes the need for more inclusive growth that benefits all segments of society, rather than just a select few.
 - Additionally, it encourages international cooperation and collaboration to address global challenges such as climate change and inequality.

What are the Challenges with the New Economic Paradigm?

Some potential challenges that may arise include:

- o Resistance from entrenched economic interests,
- Potential for increased inequality if not managed properly,
- Managing the transition from the old to the new paradigm,
- Ensuring environmental sustainability and addressing the geopolitical tensions that may arise as a result of shifting economic power dynamics.
- Additionally, there may be challenges associated with implementing new policies and regulations that support the new economic paradigm, as well as potential difficulties in coordinating global efforts to address shared economic and environmental challeng

What Should be the Way Forward?

> Embrace a Holistic and Comprehensive Approach:

- Multisectoral Collaboration involving government, academia, civil society, private sector, and local communities. This can help in leveraging diverse perspectives, expertise, and resources to develop integrated solutions that address the social, economic, and environmental dimensions of the issues at hand.
- Rely on data and evidence to inform decisionmaking, policy formulation, and implementation.
 Robust monitoring, evaluation, and learning mechanisms can help in tracking progress, identifying gaps, and refining interventions based on evidence and lessons learned.

> Prioritize Human Development:

- Investing in Education: By investing in education, governments and organizations can help individuals develop their skills and knowledge, which can lead to higher levels of economic and social mobility.
- Promoting Healthcare: Providing healthcare services and promoting healthy behaviors can help individuals lead healthy and productive lives.

Tailor Solutions to Local Contexts:

- Oconduct a thorough Needs Assessment: It's important to understand the specific needs and challenges of the local community. This can be done through surveys, focus groups, and interviews with community members.
- Build on Existing Infrastructure and Resources:
 Rather than starting from scratch, solutions should build on existing infrastructure and resources in the local context. For example, a health program may use existing clinics or community health worker.

> Engage with Real People:

- Engaging in ongoing dialogue and feedback loops with community members to ensure that solutions remain relevant and effective.
- Using human-centered design principles to create solutions that are inclusive, accessible, and meet the needs of a diverse range of people.
- Investing in training and capacity building for local people to enable them to take an active role in the development and implementation of solutions.

> Foster Collaboration and Coordination:

- Establish Clear Communication Channels: Effective communication is crucial to ensure collaboration and coordination among different stakeholders.
- Identify Shared Goals: Identify shared goals and objectives that all stakeholders can work towards.
 This helps to align efforts and reduce conflicts.
- Build Trust: Building trust among stakeholders is important for fostering collaboration and coordination. Encourage open communication, active listening, and mutual respect to build trust and promote collaboration.

> Embrace Innovation and Adaptability:

- Foster a Culture of Innovation: Encourage experimentation and creative thinking to solve problems.
- Embrace Emerging Technologies: Keep up-to-date with new technologies that can help to solve problems in innovative ways and encourage risktaking attitude.

Promote Inclusivity and Social Justice:

- Create Opportunities for Marginalized Groups: To promote inclusivity, we need to create opportunities for marginalized groups such as women, ethnic minorities, and people with disabilities. This includes access to education, training, employment, and other resources that can help them achieve their full potential.
- Eliminate Discrimination: Discrimination is a major barrier to inclusivity and social justice. To promote

inclusivity, we need to eliminate discrimination in all its forms, including racism, sexism, and other forms of prejudice.

Conclusion:

The current paradigm of economics is inadequate in addressing the complex economic challenges faced by India and other countries. Lessons from China and Vietnam highlight the importance of human development and simultaneous income growth in achieving sustainable economic growth.

Economists need to adopt a more comprehensive and adaptive approach to economics to better understand and solve complex socio-economic problems. Policymakers in India and other countries must be willing to embrace a new economics for a new world. It is time to rethink and reform the current economic paradigm to create a more inclusive and sustainable economic future.

Promoting Inclusive Growth through Microfinance

This editorial is based on "Move microloans to formal sector, be it banks or MFIs" which was published in the Hindu BusinessLine on 05/04/2023. It discusses the evolution of microfinance in India, its impact on women's empowerment and poverty alleviation, and the challenges it faces in the future.

P Tag: Indian Economy, Banking Sector & NBFCs, GS Paper-3

A 13th century Telugu quatrain mentions the importance of having a lender, doctor, flowing river and righteous people in a village, and today microfinance has become the key to fulfilling these essential requirements.

Microfinance has **emerged** as a **crucial tool for inclusive** and **sustainable growth in India.** India's vast rural landscape demands a financial ecosystem that is responsive to the needs of communities living in remote areas.

The concept of microfinance originated from the Self Help Group Bank Linkage Programme (SHG-BLP) that emerged as a result of an action research project conducted by MYRADA in 1989, commissioned by Nabard.

The Reserve Bank of India's (RBI) endeavor to connect informal groups with banks to facilitate micro deposits and loans led to the actualization of SHG-BLP.

The heart of India lies in rural areas, so is the economic engine of India. By bringing about financial inclusion, women empowerment and digital inclusion, microfinance will play a mighty role in India's emergence as a superpower.

What is the State of Microfinance in India?

- Microfinance contributes about 130 lakh jobs and 2% of our GVA, per a National Council of Applied Economic Research (NCAER) study.
- It has the potential to reach all the 6.3 crore unincorporated and non-agricultural enterprises. The RBI recently defined microfinance as collateral free loans given to households having annual income up to Rs.3 lakh.
- It is possible to ensure the future of microfinance by transitioning all microloans to the formal sector, such as through banks or microfinance institutions.

How can Microfinance Contribute India in the Emergence of Economic Superpower?

- Boosting Entrepreneurship:
 - Microfinance Institutions (MFIs) provide small loans to people who do not have access to traditional banking services. This can help boost entrepreneurship and small business development in India, which is crucial for economic growth and job creation.

> Financial Inclusion:

MFIs can help improve financial inclusion in India by providing access to credit and other financial services to those who have been excluded from the traditional banking system. This can help people save money, invest in education and healthcare, and start their own businesses.

> Poverty Reduction:

 Microfinance can help reduce poverty in India by providing small loans to poor people who do not have access to formal banking services. This can help them start income-generating activities and improve their standard of living.

> Empowering Women:

- Microfinance can also play a crucial role in empowering women in India.
- Women often have limited access to financial resources and are disproportionately affected by poverty.
- By providing them with access to credit and other financial services, microfinance can help women become more economically independent and improve their social standing.

> Supporting Rural Development:

 Microfinance can also support rural development in India by providing small loans to farmers and other rural entrepreneurs. This can help improve agricultural productivity, create jobs, and support overall economic development in rural areas.

What are the Challenges with Microfinance in India?

> Over-Indebtedness:

- One of the major challenges with microfinance in India is the issue of over-indebtedness, where borrowers are unable to repay multiple loans taken from different microfinance institutions.
- This can lead to default, which impacts the creditworthiness of the borrower, and in some cases, results in suicide.

> High-Interest Rates:

 Microfinance institutions charge high-interest rates due to the high cost of servicing small loans. This can create a debt trap for the borrowers and make it difficult for them to repay the loan.

> Lack of Financial Literacy:

Most of the microfinance borrowers in India are from rural areas and are often illiterate or have low financial literacy. This can make it difficult for them to understand the terms and conditions of the loan, leading to misunderstandings and disputes.

> Infrastructure Challenges:

 Microfinance institutions operate in remote and rural areas, where infrastructure is often lacking.
 This can lead to difficulties in communication, transportation, and accessing financial services.

> Political Interference:

 Political interference in the functioning of microfinance institutions can impact their effectiveness and create an unfavorable environment for them to operate.

> External Shocks:

 Microfinance borrowers are often vulnerable to external shocks, such as natural disasters, **economic downturns, and pandemics.** These shocks can impact their ability to repay the loan, leading to default and financial stress.

> Lack of Regulation:

• While microfinance institutions are regulated by the Reserve Bank of India, there is a lack of regulation at the state level. This can lead to inconsistencies in the functioning of microfinance institutions across different states in India.

What Should be the Way Forward?

> Strengthening the Regulatory Framework:

- The Reserve Bank of India (RBI) should continue to monitor and regulate the microfinance sector to ensure that it operates in a fair and transparent manner.
- The RBI should also consider introducing regulations that address the high-interest rates charged by Microfinance Institutions (MFIs).

Promoting Financial literacy:

- There is a need to increase financial literacy among microfinance borrowers to help them make informed decisions about borrowing and repayment.
- MFIs should conduct financial literacy programs regularly to educate their clients about savings, credit, insurance, and investment.

Encouraging Innovation:

The microfinance sector in India should encourage innovation in product development, delivery mechanisms, and technology adoption. The use of technology such as mobile banking and digital lending platforms can help in expanding access to financial services and lowering the cost of delivery.

Promoting Partnerships:

• The government, MFIs, and other stakeholders should work together to promote partnerships that can help in addressing the challenges faced by the sector. For instance, partnerships between MFIs and banks can help in providing better financial services to microfinance clients.

> Addressing the Issue of Over-Indebtedness:

Over-indebtedness is a major concern in the microfinance sector. To address this issue, there is a need to develop a credit information system that can track the borrowing history of microfinance clients and prevent them from borrowing beyond their capacity to repay.

> Ensuring Social Impact:

 Microfinance should be seen as a tool for poverty reduction and social empowerment. The sector should focus on delivering positive social impact by providing financial services to the poorest and most vulnerable sections of the population.

Promoting Internationalization of Rupee

This editorial is based on "Rupee invoicing of foreign trade has many positives" which was published in the Hindu BusinessLine on 06/04/2023. It discusses the Potential and Challenges of India's Push for Rupee Invoicing in International Trade.

P Tag: Indian Economy, GS Paper – 3, Banking Sector & NBFCs, Statutory Bodies, Monetary Policy, Growth & Development

India's push for rupee invoicing in international trade has gained momentum with the recent Foreign Trade Policy (FTP) 2023, which proposes invoicing, payment, and settlement of trade in Indian rupees.

This move is expected to lower transaction costs, promote international trade, and reduce hedging expenses, among other benefits. While the rupee currently accounts for a mere 2% of global currency market turnover, the framework could be particularly beneficial for trade partners such as Russia, Saudi Arabia, Nigeria, and the UAE.

However, the effectiveness of this policy ultimately depends on factors such as India's net trade deficit/surplus and the extent of trading in rupees in comparison to the total bilateral trade.

Overall, promoting the Internationalization of the Indian Rupee will **require a concerted effort by the government**, the **Reserve Bank of India**, and other stakeholders to increase the demand for the Indian Rupee in international transactions.

What are the Benefits of the Internationalization of Rupee?

> Lowering of Transaction Costs:

- The internationalization of the Rupee can reduce the need for currency conversion, thereby lowering transaction costs for businesses and individuals conducting international trade.
- This can make it more attractive for foreign investors to do business in India and make India's exports more competitive in global markets.
- > Greater Degree of Price Transparency:

• When the Rupee is widely used in international transactions, it can lead to a greater degree of price transparency. This can enable Indian businesses to better understand global market conditions and adjust their pricing strategies accordingly.

Quick Settlement Time:

 The internationalization of the Rupee can facilitate faster and more efficient settlement times for international transactions. This can benefit Indian businesses by reducing the time and costs associated with cross-border payments.

> Promoting International Trade:

 An internationalized Rupee can promote international trade by making it easier and cheaper for Indian businesses to transact with their global counterparts. This can lead to increased exports and economic growth for the country.

> Reduction in Hedging Expenses:

 As the Rupee becomes more widely accepted and used in international transactions, the need for hedging against currency fluctuations may reduce. This can lead to cost savings for businesses and investors.

Reduced Cost of Holding Foreign Reserve by the RBI:

An internationalized Rupee can reduce the cost of holding foreign reserve by the Reserve Bank of India (RBI). When the Rupee is widely used and accepted in international transactions, the RBI may not need to hold as much foreign currency to conduct its operations, thereby reducing costs.

What are the Challenges with the Internationalization of Rupee?

> Capital Controls:

 India still has capital controls in place that limit the ability of foreigners to invest and trade in Indian markets. These restrictions make it difficult for the INR to be used widely as an international currency.

> Exchange Rate Volatility:

 The INR has a history of volatility, which makes it unattractive for use as an international currency.
 Currency exchange rate stability is a key requirement for a currency to be used as a global reserve currency.

> Financial Market Development:

 The development of deep and liquid financial markets is a prerequisite for the Internationalization of a currency. The Indian financial market is still in the process of developing, and it needs to become more integrated with global financial markets.

> Regulatory Environment:

• The regulatory environment in India needs to be conducive to the use of the INR as an international currency. This requires the government to implement policies that support the growth of the financial sector, improve market transparency and reduce red tape.

> Lack of Internationalization Efforts:

o India needs to take more active steps to promote the use of the INR as an international currency. This includes establishing offshore INR trading centers, entering into currency swap agreements with other countries, and promoting the use of the INR in trade settlements.

> Low Inflation:

• Inflation rate is an important consideration when it comes to the Internationalization of a currency. The Reserve Bank of India has been successful in keeping inflation under control, but low inflation rates can make a currency less attractive to foreign investors.

> Geopolitical Factors:

• Geopolitical factors such as political instability, wars, and sanctions can have a significant impact on the Internationalization of a currency. India needs to have stable relations with other countries and avoid getting caught in geopolitical conflicts that could impact the use of the INR as an international currency.

What Should be the Way Forward?

- > Encourage Cross-Border Trade in Indian Rupee:
 - Government should encourage cross-border trade with other countries, especially neighboring countries like Nepal, Bhutan, and Bangladesh, in Indian Rupee instead of other currencies.
 - This will increase the demand for the Indian Rupee in these countries, thereby promoting its Internationalization.

Promote Financial Market Development:

- India could promote the development of its financial markets, especially the bond market, to attract foreign investors.
- This will increase the demand for Indian Rupeedenominated bonds and promote its use in international transactions.

Liberalize Capital Account Transactions:

- Government should further liberalize capital account transactions to attract foreign investment, which will increase the demand for the Indian Rupee in international transactions.
- Expand the Use of the Indian Rupee in International Transactions:
 - O Government should encourage its trading partners to use the Indian Rupee in international transactions by signing bilateral currency swap agreements. It could also explore the possibility of creating an Indian Rupee-based trading bloc with its neighboring countries.

> Strengthen the Indian Economy:

 A strong and stable Indian economy will increase the confidence of foreign investors in the Indian Rupee and promote its Internationalization.

Revolutionizing Legislation through AI

This editorial is based on "Directing AI for better and smarter legislation" which was published in the Hindu on 10/04/2023. It highlights the potential benefits and opportunities that AI could offer in improving the efficiency, transparency, and effectiveness of law-making, policy-making, and parliamentary activities.

P Tag: Governance, GS Paper – 2, Government Policies and Interventions, GS Paper – 3, Artificial Intelligence

Artificial Intelligence (AI) has been increasingly used in various industries to automate and streamline processes. In recent years, there has been a growing interest in using AI tools to enhance legislative procedures. These tools can help legislators analyze large amounts of data, identify patterns and trends, and make more informed decisions.

However, there are also concerns about the ethical implications of using AI in legislative procedures, particularly around issues of bias and transparency. Also, there are challenges with current laws in India, which are complex and opaque, making it difficult for AI to function effectively.

Therefore, it is important to carefully consider the benefits and potential drawbacks of using AI in legislative procedures.

What Role Artificial Intelligence can play in Legislation?

> Enhance Legislative Procedures:

- Al tools can assist parliamentarians in preparing responses for legislators, enhancing research quality, obtaining information about any Bill, preparing briefs, providing information on particular House rules, legislative drafting, amendments, interventions, etc. This can help to streamline legislative processes and make them more efficient.
 - The House of Representatives in the United States has introduced an AI tool to automate the process of analysing differences between Bills, amendments and current laws.

> Research Quality:

 Al can assist in conducting thorough research by analyzing large volumes of data, identifying patterns and trends, and presenting the results in a comprehensive manner. This can help lawmakers to make informed decisions based on reliable data and evidence.

> Assist in Decision-Making:

O Al can provide decision-making support to lawmakers by analyzing various factors and making predictions about the potential outcomes of different policy options. This can help to improve the accuracy of decision-making and minimize the risk of unintended consequences.

> Analysing Citizens' Grievances:

- Compared to western democratic nations, in India, parliamentarians manage constituencies with a huge population.
- Al can analyse citizens' grievances and social media responses, and flag issues and priorities that need immediate attention.
- It can also assist parliamentarians in seeking citizen inputs for public consultation of laws and preparing a manifesto.

> Simulate the Potential Effects of Laws:

- The use of AI in legislative procedures can help in modelling various datasets such as the Census, data on household consumption, taxpayers, beneficiaries from various schemes, and public infrastructure to uncover potential outcomes of a policy.
- It can also help in flagging laws that are outdated in the present circumstances and which require amendment.
- For example, during the Covid-19 pandemic, it became evident that 'the Epidemic Diseases Act, 1897' failed to address the situation adequately,

- highlighting the need to revisit and update outdated laws.
- Several provisions in the Indian Penal Code (IPC) are also controversial and redundant, such as Article 309 (attempted suicide), which continues to be a criminal offence.
- Al can help identify such outdated laws and streamline the legislative process by focusing on more relevant laws and policies.
 - There are several pieces of criminal legislation that were enacted more than 100 years ago that are of hardly any use today, such as the Press and Registration of Books Act, 1867, the Public Gambling Act, 1867, and the Prisons Act, 1894.

What are the Concerns with the use AI in Legislative Procedures?

Lack of Transparency:

Al models can be highly complex, and it may be difficult to understand how they are making decisions. This lack of transparency could undermine the democratic process if legislators and the public are unable to understand the reasoning behind legislative decisions.

> Bias:

- Al models are only as objective as the data they are trained on. If the data used to train an Al model is biased, the model may replicate and even amplify that bias in its decisions.
 - This could lead to discriminatory outcomes, such as laws that disproportionately impact certain groups.

> Accountability:

o If AI is used in legislative decision-making, it may be difficult to hold anyone accountable for the outcomes. This could pose a challenge to the democratic process, as accountability is a critical component of representative governance.

> Cybersecurity:

O Legislative procedures often involve sensitive and confidential information. If AI systems used in these procedures are not properly secured, they could be vulnerable to cyberattacks that could compromise this information.

> Dependence:

 Overreliance on AI in legislative procedures could reduce the human element in decision-making and could lead to a loss of expertise and judgment that comes from human interaction and debate.

What are the Related Steps taken around the World?

> Netherlands's "Speech2Write" System:

- The Netherlands House of Representatives, for instance, has implemented the "Speech2Write" system which converts voice to text and also "translates" voice into written reports.
- "Speech2Write comprises automatic speech recognition and automated editing capabilities that can remove filler words, make grammatical corrections and propose editing decisions."

> Japan's Al Tool:

 It assists in the preparation of responses for its legislature and also helps in the automatic selection of relevant highlights in parliamentary debates.

Brazil's Ulysses:

 Brazil has developed an AI system called Ulysses which supports transparency and citizen participation.

> India's Approach:

 India is also innovating and working towards making parliamentary activities digital such as the 'One Nation, One Application' and the National e-Vidhan (NeVA) portal.

What Should be the Way forward?

> Codify Laws and Regulations:

 The government should continue its efforts to codify laws and regulations in a comprehensive and accessible manner. This will provide a solid foundation for Al-based solutions to work with.

> Develop a Unified Platform:

 A unified platform should be developed that provides a complete view of all laws, regulations, and notifications. This platform should be accessible to all stakeholders, including citizens, businesses, and government officials.

> Encourage Collaboration:

 Al-based solutions for legislation should be developed through collaboration between various stakeholders, including government agencies, legal experts, technology companies, and civil society organizations.

> Ensure Transparency and Accountability:

 AI-based solutions should be designed to be transparent, explainable, and accountable. Citizens should be able to understand how the AI arrived at a particular decision or recommendation.

> Focus on Citizen-Centric Solutions:

 Al-based solutions should be designed to meet the needs of citizens. The solutions should be user-friendly and accessible to all, including those with disabilities or limited digital literacy.

Making Laws Machine-Consumable:

 There is a need to make laws machine-consumable with a central law engine, which can be a single source of truth for all acts, subordinate pieces of legislation, gazettes, compliances, and regulations.

o For Example:

- Al can tell us if an entrepreneur wants to open a manufacturing unit in Maharashtra and what acts and compliances are applicable.
- If a citizen wants to check the eligibility for welfare schemes, AI can recommend which schemes are eligible, based on details provided by citizens.

Promoting

Cooperatives in India

This editorial is based on "The knotty business of running cooperatives" which was published in the Hindu on 10/04/2023. It highlights the current state of the cooperative movement in India, especially in regard to financial cooperatives such as rural and urban cooperative banks.

P Tag: Governance, GS Paper - 2, Government Policies & Interventions, GS Paper - 3, Growth & Development, Industrial Growth

Cooperatives have a rich history in India and have been an integral part of the country's development since Independence. With over 10 lakh cooperatives, of which 1.05 lakh are financial cooperatives, India's cooperative movement has enormous potential to promote growth, formalize the economy, and reduce inequality.

However, there are issues with the current system of dual control over cooperative banks, leading to

jurisdictional disputes that have hindered their orderly growth. Despite this, cooperatives remain a crucial element of India's economic landscape and are a key tool for improving the standard of living of the poor.

In order to thrive in a **competitive landscape**, **cooperative banks need to improve their governance**. Alternatively, **State governments should focus on supporting non-financial cooperatives** instead of getting involved in conflicts over financial cooperatives.

What are the Challenges with the Financial Cooperatives in India?

> Regulation and Supervision:

- The regulatory and supervisory framework for financial cooperatives in India is fragmented, with different types of cooperatives being governed by different authorities. This can lead to inconsistencies and gaps in regulation and supervision, which can create vulnerabilities in the financial system.
 - When it comes to cooperative banks (both urban and rural) there is dual control leading to jurisdictional disputes.
 - While incorporation, management, audit, supersession of board and liquidation are administered by the Registrar of Cooperatives, banking licence, prudential regulation, capital adequacy, etc., are prescribed by the RBI.

Governance and Management:

- Many financial cooperatives in India are plagued by poor governance and management, which can lead to mismanagement, fraud, and corruption. There have been instances where cooperatives have failed due to poor governance, resulting in losses for depositors.
 - Poor corporate governance has been the main reason behind the failure of many cooperative banks. Since 2004-05, there were 145 mergers of non-scheduled Urban Cooperative Banks(UCBs), nine in 2021-22.
 - The collapse of the Punjab and Maharashtra Cooperative (PMC) Bank in 2019 was mainly due to financial irregularities, failure of internal control, and under-reporting of exposures.

> Capital Adequacy:

• Financial cooperatives in India often struggle to maintain adequate levels of capital, which can affect their ability to absorb losses and continue operating during periods of financial stress. This can also limit their ability to expand their operations and offer new products and services.

> Credit Risk Management:

• Financial cooperatives in India typically lend to Small and Medium-Sized Enterprises (SMEs) and individuals who may have limited credit history or collateral. This makes credit risk management a critical challenge for cooperatives, as defaults and loan losses can significantly impact their financial stability.

> Technology and Innovation:

• Many financial cooperatives in India lag behind in terms of technology and innovation, which can limit their ability to compete with larger banks and fintech firms. Cooperatives need to invest in modern technology and digital infrastructure to enhance their operational efficiency and offer new products and services to their customers.

> Competition:

• Financial cooperatives in India face intense competition from other financial institutions, including commercial banks, small finance banks, and fintech companies. This makes it challenging for cooperatives to attract and retain customers, especially those who are looking for more advanced and sophisticated financial services.

What is the Need to Focus on Non-Financial Cooperatives?

Promoting Equality and Democratic Participation:

Non-financial cooperatives are based on the principle of "one member, one vote," which means that all members have an equal say in the decision-making process. This promotes democratic participation and helps to ensure that everyone has an equal voice, regardless of their financial resources.

> Encouraging Community Development:

Non-financial cooperatives often serve specific communities or groups of people, such as local farmers or small business owners. By providing goods or services to these communities, non-financial cooperatives can help to support local economic development and build stronger communities.

> Fostering Sustainable Practices:

 Non-financial cooperatives are often focused on promoting sustainable practices, such as fair trade or organic farming. By prioritizing environmental and social sustainability, non-financial cooperatives can help to create a more just and equitable society.

Empowering Workers and Consumers:

 Non-financial cooperatives are often owned and controlled by workers or consumers, giving them a greater sense of ownership and control over their work or consumption. This can **help to promote worker empowerment and consumer rights**, leading to a more equitable and just society.

How Government Plans to Develop Non-Financial Cooperatives?

Ministry for Cooperation:

• The Government has recently created a separate Ministry for Cooperation to promote and develop the cooperative sector in the country. The Ministry is mandated to provide a supportive policy and regulatory environment for cooperatives, strengthen the cooperative movement, and increase their reach across the country.

Fiscal Incentives for FPOs:

 The Government provides fiscal incentives such as tax exemptions, credit guarantee schemes, and subsidies for Farmer Producer Organisations (FPOs).

> Schemes for Handicrafts and Handlooms:

 The Government has launched several schemes to promote and develop the handicrafts and handloom sector, which is an important source of livelihood for rural artisans.

> Government's Electronic Marketplace (GeM):

- After the electronic national agriculture market (eNAM), the Government's electronic Marketplace (GeM), version 4, is a successful innovative online platform dedicated to the marketing of several goods and services produced by MSMEs and nonfinancial cooperates.
 - As of now, more than 62,000 government buyers, 49 lakh sellers, 10,000 products, and 290 services are registered on this platform.

> One-District-One-Product Scheme:

• It aims to promote the unique products of each district in the country and develop them as brands.

> Welfare Schemes for Dairy Development:

- Government has launched several welfare schemes for dairy development and fisheries, which are important sources of livelihood for rural households.
 - Milk cooperatives are a grand success in India.

Cooperatives as a Business Model:

 Cooperatives can be pursued as a business model in several areas such as post-harvest processing, warehousing, and packaging.

Use of Technology:

 The Government has the vision to use technology for rural development under several schemes such as Digital India, BharatNet, and e-Governance.

> Growing Opportunities for Start-ups:

 Opportunities are growing for start-ups in rural areas, which can be pursued under non-financial cooperates.

What Should be the Way Forward?

> Embrace Technology:

O In today's digital age, it's important for financial cooperatives to keep up with technology trends and offer digital services such as mobile banking, online account opening, and remote deposit capture. This can help attract new members and retain existing ones, especially younger generations who are more tech-savvy.

> Expand Services:

- Financial cooperatives can expand their services beyond traditional savings and loans to include investment products, insurance, and financial education.
- This can help members achieve their financial goals and strengthen their loyalty to the cooperative.

> Collaborate with other Cooperatives:

 Financial cooperatives can collaborate with other cooperatives, including credit unions, to share resources, expertise, and best practices. This can help improve efficiency and reduce costs.

Focus on Non-Financial Cooperatives:

- While financial cooperatives, such as credit unions and microfinance institutions, are also important for providing access to credit and other financial services, they can sometimes become a source of conflict and controversy.
- O Given the potential benefits of non-financial cooperatives, it may be more productive for state governments in India to focus on supporting these types of organizations, rather than getting involved in conflicts over financial cooperatives.
 - This could involve providing funding and technical assistance to help establish and grow non-financial cooperatives, as well as promoting these organizations through public education and outreach campaigns.

Fostering India-Bhutan Relations

This editorial is based on "Bhutan's imperatives and India's dilemmas" which was published in the Hindu on 06/04/2023. It examines the history of Bhutan's border disputes with China, the current state of negotiations, and the impact of India-China competition on the region.

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

India and Bhutan share a **unique and special** relationship that is based on a long history of cultural, **economic, and political ties**. Despite its small size, Bhutan occupies a strategically important position in South Asia and has been a key partner for India in regional cooperation efforts.

Bhutan's border disputes with China and its relationship with India have been in the spotlight recently, with concerns over the possibility of the country moving away from its traditional ally, India. While **Bhutan has been engaging in negotiations with China over its territorial disputes**, recent developments suggest that continuity still looms large in Bhutan-India relations.

How Recent Developments in China Bhutan Relations Concerning India?

> Border Disputes:

- Bhutan and China have had a long-standing border dispute, with China claiming a large part of Bhutanese territory in the western region.
- This area is also strategically important as it is close to India's Siliguri Corridor, which connects mainland India to its northeastern states.
- If China were to make any advances in this region, it could potentially threaten India's security.
 - China disputes the following territories with Bhutan: In the north, Pasamlung and Jakarlung valleys, both of which are culturally vital for Bhutan and in the west, Doklam, Dramana, and Shakhatoe, Yak Chu and Charithang Chu, and Sinchulungpa and Langmarpo valleys.
 - The Doklam trijunction is crucial for India as it lies precariously close to the Siliguri Corridor.
 - Recently, China has also claimed the Sakteng sanctuary, which is on Bhutan's east and does not border China.

> Influence in the Region:

• Bhutan is one of India's closest allies in the region, and India has long provided economic and military support to Bhutan. However, in recent years, China has been increasing its economic and diplomatic ties with Bhutan, which could potentially weaken India's influence in the region.

China's Assertiveness:

- China has become increasingly assertive in its foreign policy, particularly in the Asia-Pacific region.
- This has led to tensions with several countries, including India.

 If China were to use its increasing influence in Bhutan to further its strategic goals, it could potentially pose a challenge to India's regional security.

What is the Importance of Bhutan for India?

Strategic Importance:

- Bhutan shares its borders with India and China, and its strategic location makes it an important buffer state for India's security interests.
- India has provided Bhutan with assistance in areas such as defense, infrastructure, and communication, which has helped to maintain Bhutan's sovereignty and territorial integrity.
- India has helped Bhutan build and maintain its border infrastructure, such as roads and bridges, to strengthen its defense capabilities and ensure its territorial integrity.
 - In 2017, during the Doklam standoff between India and China, Bhutan played a crucial role in allowing Indian troops to enter its territory to resist Chinese incursions.

Economic Importance:

- India is Bhutan's largest trading partner, and Bhutan's major export destination.
- Bhutan's hydropower potential is a significant source of revenue for the country, and India has been instrumental in assisting Bhutan in developing its hydropower projects.
- India also provides Bhutan with financial assistance for its development projects.

Cultural Importance:

- Bhutan and India share strong cultural ties, as both countries are predominantly Buddhist.
- India has provided assistance to Bhutan in preserving its cultural heritage, and many Bhutanese students come to India for higher education.

> Environmental Importance:

- Bhutan is one of the few countries in the world that has pledged to remain carbon-neutral, and India has been a key partner in helping Bhutan achieve this goal.
- India has provided assistance to Bhutan in areas such as renewable energy, forest conservation, and sustainable tourism.

What are the Challenges in the India-Bhutan Relations?

China's Growing Influence:

 China's increasing presence in Bhutan, particularly along the disputed border between Bhutan and China, has raised concerns in India. India has been Bhutan's closest ally and has played a key role in protecting Bhutan's sovereignty and security. However, China's growing economic and military influence in the region poses a challenge to India's strategic interests in Bhutan.

> Border Disputes:

- o India and Bhutan share a 699 km long border, which has been largely peaceful.
- However, there have been some incidents of border incursions by Chinese forces in recent years.
 - The Doklam standoff in 2017 was a major flashpoint in the India-China-Bhutan tri-junction.
 Any escalation of such disputes could strain India-Bhutan relations.

> Hydropower Projects:

- Bhutan's hydropower sector is a key pillar of its economy, and India has been a major partner in its development.
 - However, there have been concerns in Bhutan over the terms of some of the hydropower projects, which have been seen as too favorable to India.
 - This has led to some public opposition in Bhutan to Indian involvement in the sector.

> Trade Issues:

- O India is Bhutan's largest trading partner, accounting for over 80% of Bhutan's total imports and exports. However, there have been some concerns in Bhutan over the trade imbalance, with Bhutan importing more from India than it exports.
 - Bhutan has been seeking greater access to the Indian market for its products, which could help to reduce the trade deficit.

What Should be the Way Forward?

Economic Cooperation:

- o India can help Bhutan to boost its economy by investing in infrastructure development, tourism, and other sectors. This will not only help Bhutan to become self-reliant but also create employment opportunities for its people.
 - Recent decision to set up the first Integrated Check Post (ICP) along the border near Jaigaon and Phuntsholing, the busiest trading point between the countries will help in boosting trade between the two countries.
 - The decision to expedite the operationalisation of the third international internet gateway for Bhutan is also a great step in the direction.

> Cultural Exchange:

- India and Bhutan can promote cultural exchange programs to foster greater understanding and appreciation of each other's culture, art, music, and literature.
 - A visa-free movement of peoples from both countries can strengthen sub-regional cooperation.

> Strategic Cooperation:

 India and Bhutan can strengthen their strategic cooperation to address shared security concerns.
 They can work together to combat terrorism, drug trafficking, and other transnational crimes.

> Renewable Energy:

 Bhutan has enormous potential for generating hydropower, and India can help Bhutan to harness its hydropower resources by investing in renewable energy projects.

> Education and Skill Development:

- India can help Bhutan in the areas of education and skill development by providing scholarships to Bhutanese students and training programs to enhance the skills of Bhutanese professionals.
 - According to All India Surveys of Higher Education (AISHE), the number of Bhutanese students receiving tertiary education in India declined from 2,468 in 2012-13 to 1,827 in 2020-21, accounting for just 3.8% of all international students from 7% a decade ago.

Abuse of Preventive detention Laws

This editorial is based on "Safeguards and procedures: On India's preventive detention laws" which was published in the Hindu on 12/04/2023. It discusses the issues associated with the colonial era preventive detention laws.

P Tag: Indian Polity, GS Paper - 2, Judiciary, Fundamental Rights

Recently, the Supreme Court has observed that preventive detention laws are of colonial legacy and confer arbitrary powers on the state. It also observed that they also pose serious threat to the personal liberty of an individual provided by Article 21.

In addition to the Supreme court's observation, there have been several instances where the misuse of the laws has been seen and cases have been filed before the Courts.

In this context let's discuss what is preventive detention, issues related to this and what should be the way forward.

What is Preventive Detention?

- Preventive detention means to detain a person so that to prevent that person from commenting on any possible crime.
- In other words, preventive detention is an action taken by the administration on the grounds of the suspicion that some wrong actions may be done by the person concerned which will be prejudicial to the state.

What are the Provisions related to Preventive Detention?

- > Sec 151 of CrPC provides a police officer may arrest a person without any orders from the magistrate and without any warrant, if it appears to him that the commission of the offence cannot be prevented without arrest.
- Art 22 provides for the constitutional safeguards related to such detentions.

On what grounds a person can be detained?

The grounds for Preventive detention are:

- State security,
- Public order,
- Foreign Affairs, and
- Community services.

What are the Safeguards Available to the person detained?

- At the first instance, a person may be taken to preventive custody only for 3 months.
 - o The period of detention may be extended beyond 3 months, only on approval by the Advisory Board.
- > The detainee has the right to know the grounds of his/her detention.
 - O However, the state may refuse to tell the grounds if it is necessary to do so in public interest.
- The detainee is provided opportunity to challenge his/her detention.

What are the Arguments in Favour of **Preventive Detention?**

Protection of National Security: Preventive detention laws are essential to safeguard national security by allowing authorities to detain individuals who may pose a threat to public safety, national security or the peace and order of the society.

- Proactive Measure to Prevent Crimes: Preventive detention can be used as a proactive measure to prevent crimes before they happen. It is often used to detain individuals who are likely to engage in criminal activities or who have already committed crimes in the past.
- Upheld by Judiciary: The judiciary has upheld the validity of such laws as they have been very useful in maintaining public order. The Supreme Court has also laid down guidelines to ensure that preventive detention is used judiciously and that individuals are not detained arbitrarily.
 - o In Ahmed Noor Mohamad Bhatti V. State of Gujarat, the Supreme Court upheld the constitutional validity of Section 151 of CrPC ruling that the abuse of this power by the police officer cannot render this provision as arbitrary and unreasonable.
 - o In Mariappan v. The District Collector and Others case, it held that the aim of detention and its laws is not to punish anyone but to stop certain crimes from being committed.
- > Constitutional Safeguards are Available: The Constitution of India provides several safeguards to prevent the misuse of preventive detention laws.
 - O At the first instance, a person may be taken to preventive custody only for 3 months.
 - The period of detention may be extended beyond 3 months, only on approval by the Advisory Board.
 - o The detainee has the right to know the grounds of his/her detention.
 - However, the state may refuse to tell the grounds if it is necessary to do so in public interest.
 - o The detainee is provided opportunity to challenge his/her detention.
- > Deterrent for the Potential Offenders: The fear of being detained can act as a deterrent to individuals who may be planning to engage in criminal activities.

What are the Issues with the Preventive **Detention Law?**

- > Used for trivial reasons: There have been several instances where the authorities have been found using the laws for petty issues. One of the strangest instances is when a person was detained as goonda for selling substandard chilli powder.
- Lack of Proper Definition: In various state laws, there's no clarity on what grounds a person must be detained. Thus, law's ambit is rarely restricted to habitual offenders.

- ➤ Has Colonial Legacy: Some experts argue that such laws are not needed in modern times as it was used against the freedom fighters during the British raj.
- > Against Fundamental Rights: Such laws are in clear conflict with the Fundamental rights. detaining a person on uncertain grounds as he could commit a crime infringes the Fundamental Rights under Art 19 and 21.
- Misuse: In several instances, it has been seen that such laws have been misused in vindictive manner. In several cases political parties have been seen misusing the laws to punish the members of opposition. During the COVID period, various state governments invoked National Security Act (NSA) on several opposition leaders and journalists.
- Safeguards aren't Enough: Art 22 gives the person the right to be informed of grounds of his arrest, but the very same article also provides for non-disclosure of the grounds in public interest. The refusal of disclosing the grounds of detention is not a safeguard in true sense.

What should be the Way Forward?

- Uniformity in Laws: Different states have different laws related to this as Law and order is a subject under state list. Still the central government must urge states to have some kind of uniformity through some model act.
- Remove the Scope of Ambiguity: The nature of the crimes under the laws must be clearly defined in a view to reduce the scope of ambiguity. For instance, Tamilnadu's Goondas Act' covers offenders who range from bootleggers, slum grabbers, forest offenders to video pirates, sex offenders and cyber-criminals.
- Ensure Effective Use of Laws: The authorities must be trained in way that they act proportionately and do not misuse the laws. Also, the laws must be used to serve the greater purpose of maintaining public order and should not be used on trivial issues and for vendetta. As directed by hon'ble Supreme court in Mariappan v. The District Collector and Others case.
- Use Alternate Methods: The authorities must find some alternate and try to avoid detention if possible. The punishment for a crime should be directly related and proportionate to the severity of the crime committed. For example, a small fine might be appropriate for a minor offense, while a long prison sentence might be appropriate for a serious or violent crime.
- Use in Rarest of the Rare cases: The laws must not be used arbitrarily in any case. The gravity of the crime must be judged by the authorities and laws should be used in rarest of the rare instances.

Conclusion

While preventive detention laws can be a useful tool in maintaining law and order, their implementation needs to be done with caution to avoid any violations of human rights. The government needs to ensure that these laws are not misused and that they are used only when necessary to prevent any undue harm to individuals.

Online Dispute Resolution for Ease of Business

This editorial is based on "India must board the Online Dispute Resolution bus" which was published in the Hindu on 13/04/2023. It explores India's current position in institutional arbitration, its challenges in enforcing contracts, and the potential for Online Dispute Redressal to improve the country's business environment.

P Tag: Indian Polity, GS Paper - 2, Judiciary, Dispute Redressal Mechanisms, Issues Relating to Development, E-Governance, GS Paper - 3, IT & Computers

At the Delhi Arbitration Weekend in February 2023, Union Law Minister emphasised the need for institutional arbitration to enhance the ease of doing business. India has shown tremendous improvement in the World Bank's Ease of Doing Business report (now World bank stopped publishing) rising from the 142nd rank among 190 countries in 2014 to 63rd in 2019.

However, India is still struggling in terms of enforcing contracts, with a rank of 163rd out of 190 countries. While India may have missed the bus in becoming an international arbitration hub, there is potential for the country to catch up with Online Dispute Redressal (ODR).

With the current issue of cases pending for prolonged periods, Online Dispute Resolution (ODR) has the capability to provide accessible justice to everyone, thereby tackling the problem.

What is India's Current Position in Institutional **Arbitration?**

- > India has made significant progress in institutional arbitration in recent years.
- The Indian government has taken several measures to promote institutional arbitration, including the establishment of the Mumbai Centre for International Arbitration (MCIA) and the Delhi International Arbitration Centre (DIAC). These institutions aim to provide a world-class platform for conducting international arbitration in India.

- In 2022, to speed up dispute resolution, Finance Minister announced the setting up of an international arbitration centre at GIFT City.
- In addition to these institutions, the Indian government has also enacted the Arbitration and Conciliation (Amendment) Act, 2019, which seeks to streamline the arbitration process in India and make it more time-bound and cost-effective.
 - The Act provides for the establishment of the Arbitration Council of India (ACI) to promote the development of arbitration in India and to regulate the conduct of arbitrators.

How Online Dispute Redressal can improve India's Business Environment?

> Faster Resolution of Disputes:

• The traditional legal system in India is known for its slow and cumbersome process. ODR can help resolve disputes faster as it is based on technologyenabled processes and does not involve physical presence.

Cost-Effective:

 Litigation can be an expensive affair, and small and medium enterprises (SMEs) often find it difficult to bear the high costs. ODR can help reduce costs by eliminating the need for physical hearings, travel, and other related expenses.

> Access to Justice:

 India is a diverse country with a large population, and many people in remote areas do not have easy access to courts. ODR can help bridge this gap by providing a platform for remote dispute resolution.

> Increased Efficiency:

ODR can be more efficient than traditional dispute resolution methods as it uses technology to streamline the process. This can lead to faster resolution of disputes and reduce the burden on the judiciary.

Better Compliance:

 ODR can help improve compliance as it provides a structured process for dispute resolution. This can help businesses avoid disputes in the first place by ensuring that contracts are clear and that all parties are aware of their obligations.

What are the Challenges with Online Dispute Redressal?

> Lack of Physical Presence:

 ODR takes place entirely in the digital realm, which makes it challenging to verify the identity of the parties involved in a dispute. This lack of physical presence can also make it difficult to enforce judgments, as there is no way to physically seize assets or property.

Jurisdictional Issues:

Online transactions can involve parties from different countries, which can create jurisdictional challenges. Different countries have different laws, and it can be difficult to determine which laws apply to a particular dispute. This can make it challenging to enforce judgments, as there may be conflicting laws or no legal framework in place for cross-border enforcement.

Privacy Concerns:

ODR platforms must balance the need for privacy with the need for transparency. Parties may be hesitant to share sensitive information online, which can hinder the resolution process. Additionally, online platforms must comply with data privacy laws, which can be challenging in cross-border disputes.

> Technology Limitations:

 ODR platforms rely on technology, which can be vulnerable to technical glitches or cyber attacks.
 Technical issues can delay or disrupt the resolution process and cyber-attacks can compromise the security of sensitive information.

Limited Access to Justice:

- Not all parties have equal access to ODR platforms, which can exacerbate power imbalances.
 - For example, parties with limited financial resources may not be able to access the necessary technology or legal support to participate in ODR. This can result in unequal outcomes and undermine the legitimacy of the ODR process.

What Should be the Way Forward?

Incentivise use of ODR:

• Government can incentivise use of ODR by way of legislative measures such as setting ODR as a default dispute resolution tool for categories of disputes arising out of online transactions, fast-tracking enforcement of ODR outcomes, and exempting or reducing stamp duty and court fees.

> Solving Infrastructural Challenges:

- Government needs to address the Infrastructural challenges, curb the digital divide, and catalyse ODR's growth by optimising existing setups such as Aadhaar kendras to also function as ODR kiosks.
- Each court can have an ODR cell along with supplemental technical and administrative support.

- On the lines of the finance minister allocating Rs. 7,000 crore for the third phase of the e-Courts project in the Union Budget 2023 (aimed at digitising the justice system), a dedicated fund must be set up for furthering ODR.
- **Exploring ODR as a Grievance Redress Mechanism:**
 - O Government departments should explore ODR as a grievance redress mechanism.
 - Proactive use of ODR by government entities will not only increase trust in the process but also ensure that citizens have access to a convenient and cost-effective means of resolving disputes with the government.

Boosting Farm Mechanization Efforts

This editorial is based on "Skills shortage hampering farm mechanisation" which was published in the Hindu on 13/04/2023. It discusses the issues with India's Farm Mechanization Efforts and steps that need to be taken.

P Tag: Agriculture, GS Paper-3, Agricultural Resources, **Government Policies & Interventions**

According to a recently released white paper by the National Council of Applied Economic Research (NCAER), the farm machinery industry in India faces significant challenges in meeting the demands of small and marginal farmers.

The farm machinery industry is characterised by both demand and supply-side challenges. Farm mechanisation in India, at 40-45%, remains low compared to the rest of the world; in the US it is 95%, Brazil 75%, and China 57%.

Despite low levels of farm mechanization in India, skills shortages and a lack of awareness among farmers about technology and machinery management pose significant obstacles to progress.

What is the Farm Machinery Industry?

- The Farm Machinery Industry is an industry sector that produces and supplies a range of machinery, equipment, and tools used in agriculture and farming activities such as ploughing, planting, harvesting, and more.
- These machines are **designed to improve productivity** and efficiency in farming operations, and the industry encompasses both small-scale and large-scale farming equipment.
 - Some examples of products offered by this industry include tractors, combine harvesters, irrigation systems, tillers, and more.

What are the Challenges with the Farm Machinery Industry?

> Skills Shortage:

- o The shortage of skills is a pressing issue that creates a low-equilibrium trap for the industry.
- O At the bottom of the industry pyramid, village craftsmen represent the largest group, primarily catering to Indian farmers by supplying, repairing, and maintaining farm machinery.

> Lack of Adequate Information:

- O There is a lack of adequate information and awareness amongst farmers about the technology and the management of machinery.
- O Consequently, their selection of machinery is poor, often making it a wasted investment.

Lack of Skilled Personnel:

o The Micro, Small, and Medium Enterprises (MSMEs) face a shortage of skilled personnel. Semi-skilled workers, lacking proper equipment, often fabricate agricultural tools and machinery. The absence of qualified supervisors in small-scale fabrication makes it challenging to ensure quality. Moreover, finding qualified personnel for testing machinery is also difficult.

High Capital Cost:

 Farm machinery is expensive, and farmers may not have the resources to invest in new equipment. This can lead to a lack of access to the latest technology and reduced efficiency in farming operations.

Rapidly Changing Technology:

o Farm machinery technology is evolving rapidly, and manufacturers must continually invest in research and development to keep up. This can be challenging for smaller manufacturers who may not have the resources to innovate quickly.

Dependence on Weather Conditions:

 Farm machinery is highly dependent on weather conditions and adverse weather can cause delays and disrupt farming operations. This can result in lost productivity and reduced profitability.

Maintenance and Repair:

o Farm machinery requires regular maintenance and repairs to keep it running efficiently. This can be costly and time-consuming, especially for smaller farmers who may not have the resources to maintain their equipment properly.

Environmental Concerns:

o There is growing concern over the environmental impact of farming, including the use of fossil fuels in farm machinery. Manufacturers are under pressure to develop more sustainable and environmentally friendly equipment.

What Should be the Way Forward?

- Training Young Farmers/Owners/Operators:
 - o Tractor training centres, Krishi Vigyan Kendras, and industry should be made responsible for training **young farmers/owners/operators** on how to select, operate and service farm machinery.
 - o They should also provide information on developments in mechanisation including the availability of new and better farm equipment for different applications.
- > Strengthening Front-line Demonstration:
 - Front-line demonstration of farm machinery should be strengthened and handheld training to users of new-generation farm machinery may encourage the extension and adoption of farm power.
- Address Skilling Shortages:
- > The Agricultural Skills Council of India should work at the district level to address skills shortages on the demand side.
- Public-private partnerships with Custom Hiring Centres may be especially useful, and Indian Council of Agricultural Research (ICAR) institutes can offer short courses that address skills shortages on the demand side.
- Industrial Training Institutes (ITIs) can be leveraged to address the skill gaps in repair and maintenance, and service centres at the regional and State levels may be promoted in the private and industrial sectors.
- Provisioning available Technical Knowledge and Skills:
 - The District Industries Centre should work with local industrial clusters so that ITIs can provide relevant courses with the latest available technical knowledge and skills.
 - Dual vocational skilling programmes will greatly benefit industrial clusters located in tier-II and tier-III cities, and MSMEs should also leverage the Apprentices Policy of the Central Government.

A Reminder About Unfettered **Constitutional Posts**

This editorial is based on "A reminder about unfettered constitutional posts" which was published in The Hindu on 15/04/2023. It talks about why there should not be any dilution of the essential attribute of the independence of India's constitutional bodies.

P Tag: Indian Polity, GS Paper-2, Constitutional bodies, Separation of powers.

India's Constitution-makers recognized the need for independent institutions to regulate sectors of national importance without executive interference.

As a result, various constitutional authorities, such as the Public Service Commission, the Comptroller and Auditor General of India (CAG), the Election Commission of India (ECI), the Finance Commission, and the National Commissions for Scheduled Castes, Scheduled Tribes, and Backward Classes, were created.

How Appointment of Constitutional Authorities Done?

- > The Constitution provides for the manner in which individuals heading these institutions are to be appointed.
 - The appointment of various constitutional authorities is done by the President of India.
 - The Prime Minister (Article 75),
 - The Attorney-General for India (Article 76),
 - The Chairman and other members of the Finance Commission (Article 280),
 - The Chairman and other members of the Public Service Commission (Article 316), and
 - A Special Officer for Linguistic Minorities (Article 350B)
 - O However, the appointments done by the President using the words 'shall be appointed by the President by warrant under his hand and seal'.
 - Judges of the Supreme Court and the High Court (Articles 124 and 217)
 - The CAG (Article 148)
 - The Governor (Article 155)
 - The same words have been used in Articles **338, 338A, and 338B** authorising the President for appointing Chairman and members of the National Commissions for SCs, STs, and BCs.
- > The Constitution-makers crafted the appointment process for these institutions with specific emphasis on independence.
- > The President appoints these individuals "by warrant under his hand and seal." This wording gives the President unrestricted and unfettered choice, ensuring independence from the legislature.

Why Unrestricted and **Unfettered Choice Given?**

> The **Supreme Court has held** (N. Gopalaswami and Ors vs The Union of India) that the President acts on the aid and advice of the Council of Ministers, with the Prime Minister as the head in all matters which vest in the executive.

- > However, in cases where the appointment of a particular constitutional authority is to be kept independent of the executive, the question arises whether such an interpretation would be in line with the thinking which prevailed during the relevant **Constituent Assembly debates.**
 - o In the Constituent Assembly debates, it was recognised that individuals heading constitutional bodies must be independent of the legislature or the executive.
 - The Assembly discussed that the choice of the President should be unrestricted and unfettered to ensure the independence of these individuals.
 - o The **amendments made** to the Constitution **reflect** this thinking.

What are the Recent Supreme Court Comments?

- > Two recent comments of the Supreme Court of India have a direct bearing on the independence of various constitutional authorities in India.
 - Sena versus Sena:
 - In the "Sena versus Sena" case, the Court expressed its "serious concern" over the active role being played by Governors in State politics.
 - The Court observed that **Governors becoming** part of political processes is disconcerting.
 - Election Commission of India case:
 - Earlier, the Court divested the executive of its sole discretion in appointing the Chief Election Commissioner and Election Commissioners by forming a committee to suggest suitable names to man these constitutional posts.

Why is the Need for Independent Institutions?

- For Checks and Balances:
 - o In a democracy, it is essential to have a system of checks and balances to prevent the arbitrary use of power by the elected government of the day.
- To Regulate Various Sectors:
 - o India's Constitution provides for various constitutional authorities to regulate sectors of national importance without executive interference.
- Protecting the Rule of Law:
 - O Without independent institutions, there is a risk that those in power may abuse their authority, leading to a breakdown in the rule of law and undermining the principles of democracy.
- **Promoting Good Governance:**
 - o Independent institutions are essential for promoting good governance by ensuring that government

- actions are fair, transparent, and in the public
- o This helps to build trust in government and ensures that citizens are able to participate in the democratic process.

> Protecting Human Rights:

- o Independent institutions are often tasked with protecting human rights and ensuring that the rights of all citizens are respected.
- o This includes protecting vulnerable groups such as minorities, women, and children, and ensuring that their voices are heard in the decision-making process.
- These institutions require complete independence to enable them to function without fear or favour and in the larger interests of the nation.

What Should be the Way Forward?

- **Clear and Transparent Appointment:**
 - Establish clear and transparent criteria for the appointment of individuals to these positions, including requirements for expertise, experience, and integrity.
 - Developing clear guidelines, involving experts in the selection process, establishing a selection committee can be some measures.

Accountability of Constitutional Authorities:

- Establish clear lines of accountability for individuals holding these positions, including regular reporting requirements and mechanisms for investigating any allegations of misconduct or impropriety.
 - Developing mechanisms for investigating misconduct. Enforcement of strict codes of conduct etc. can be helpful in ensuring accountability.

Training and Capacity building:

- O Support the development of training and capacitybuilding programs for individuals appointed to these positions, to ensure that they have the skills and knowledge necessary to carry out their functions effectively.
 - Through lectures, case studies, simulations, and hands-on training.

Evaluation of Performance:

- Monitor and evaluate the performance of individuals holding these positions on a regular basis, to ensure that they are fulfilling their responsibilities and upholding the standards of independence and integrity.
 - Establish performance indicators, Feedback mechanisms, Publish performance reports.

Extreme Heat Waves and Mitigation

This editorial is based on "Dealing with extreme heat" which was published in The Hindu on 18/04/2023. It talks about a comprehensive overview of the problem of heat waves and suggests mitigation strategies for policymakers at various levels.

P Tag: Geography, GS Paper-1, GS Paper-3, Disaster Management

For last few years, heat wave during the summer season is increasingly affecting morbidity

and mortality in the country. Heat waves are a growing concern for disaster management in India, causing widespread health and environmental impact.

Extreme weather events have become more frequent globally, requiring communities to understand and cope with heat waves.

From the view of hazard mitigation, rising number of heat wave related deaths is expected to serve as danger signal and corroborate the need to develop innovative methods to control summer-time losses.

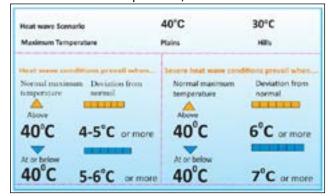
What is Heat Wave?

Heat wave as a hazard causing disaster scenario, is little more than the physical phenomenon of high heat conditions and is characterized as a complex of hydro-climatic risks coupled with social, occupational and public health risks.

Definition:

- As such there is no universal definition for heat
- o It is generally defined as a prolonged period of excessive heat.
- Indian Meteorological Department (IMD) Criteria:
 - O Heat Wave need not be considered till maximum temperature of a station reaches at least 40°C for Plains and at-least 30°C for Hilly regions.
 - o If the **normal maximum temperature** of a station is less than or equal to 40°C, then an increase of 5°C to 6°C from the normal temperature is considered to be heat wave condition.
 - Further, an increase of 7°C or more from the normal temperature is considered a severe heat wave condition.
- If the **normal maximum temperature** of a station is more than 40°C, then an increase of 4°C to 5°C from the normal temperature is considered to be heat wave condition. Further, an increase of 6°C or more is considered a severe heat wave condition.

O Additionally, if the actual maximum temperature remains 45°C or more irrespective of normal maximum temperature, a heat wave is declared.



To What Extent Heat Wave is the Problem?

- Heat Stress:
 - 350 million Indians exposed to strong heat stress between April and May 2022
- **Temperature Trends:**
 - o Summer temperatures have risen by 0.5-0.9°C across districts in Punjab, Haryana, Uttar Pradesh, Bihar, and Rajasthan between 1990 and 2019.
 - o 54% of India's districts have seen a similar rise in winter temperatures.
 - Maximum temperature is expected to rise by 2-3.5°C in 100 districts and by 1.5-2°C in around 455 districts between 2021 and 2050.
- Urban Heat Island Effect:
 - Rising temperatures lead to urban heat island effect with temperatures 4-12°C higher than rural area.
- > Climate change exacerbates local weather patterns, leading to weather variability and losses in agriculture.

What are the Causes?

- > Sparse Pre-Monsoon Season Showers:
 - O Less moisture in many areas, leaving large parts of India arid and dry.
 - The sudden end of pre-monsoon rain showers, an uncommon trend in India, has contributed to the heat waves.
- > El Nino Effect:
 - o El Nino often increases temperatures in Asia, combined with the weather pattern to create record high temperatures.
 - o **Trade winds** coming from South America normally blow westward towards Asia during Southwest Monsoon and warming of the Pacific Ocean results in weakening of these winds.

• Therefore, moisture and heat content get limited and results in reduction and uneven distribution of rainfall across the Indian subcontinent.

What are the Impacts of Heat Waves?

> Health Impacts:

O Heat rash:

• Also known as sunburn phenomenon with pinkish skin resulting in burning of skin and pain sensation.

O Heat syncope:

• Giddiness, vertigo headache and sudden onset drowsiness/unconsciousness.

O Heat Cramps:

• Edema (swelling) and Syncope (Fainting) are generally accompanied by fevers below 39°C i.e.,102°F.

O Heat Exhaustion:

• Fatigue, weakness, dizziness, headache, nausea, vomiting, muscle cramps and sweating.

O Heat Stroke:

• Body temperatures of 40*C i.e., 104*F or more along with delirium, seizures or coma. This is a potentially fatal condition.

Impact on Labor and Productivity:

- Heat exposure leads to a loss of 162 hours per year for laborers doing heavy work, impacting productivity.
- O About 50% of India's workforce is estimated to be exposed to heat during their working hours, including marginal farmers, construction workers, and street vendors.
- > Impact on Agriculture Sector: Crop yields suffer when temperatures exceed the ideal range.
 - o Farmers in Haryana, Punjab and Uttar Pradesh have reported losses in their wheat crop in the past rabi season.
 - Livestock is also vulnerable to heatwaves.

Food Insecurity:

- o The concurrence of heat and **drought events** are causing crop production losses and tree mortality.
- o The risks to health and food production will be made more severe from the sudden food production losses exacerbated by heat-induced labour productivity losses.
- o These interacting impacts will increase food prices, reduce household incomes, and lead to malnutrition and climate-related deaths, especially in tropical regions.

Impact on Energy Demand:

Average Daily peak demand rises due to increased

What Should be Mitigating Strategies?

Urban Greening:

- o Greener and more permeable urban surfaces can help reduce urban heat.
- O Development plans for Tier 2 and Tier 3 cities can set up a mandate to increase the density and area of urban forests.
- O Natural landscapes in urban areas, such as trees, parks, and vegetation, can help in cooling.

Infrastructure:

- o Greater usage of permeable materials in civic infrastructure and residential construction can reduce the urban heat island effect.
- Encouraging cleaner cooking fuels such as Biogas, **Compressed Natural Gas, liquified Petroleum Gas** will reduce indoor air pollution and urban heat.
- o Improving public transportation and reducing personal vehicle usage can help in reducing extreme heat waves.

Waste Management:

 Reducing the size of landfills, waste segregation, and solid waste management at the source can reduce methane production and fires that exacerbate urban heat.

Policies and Guidelines:

- Policies and guidelines on weather variability and urban heat management are needed at various levels.
- o Expanding wetlands and restoring ponds and lakes may also help.

Building Design:

- o Promoting the use of green roofs and cool roofs in buildings, increasing ventilation, and setting up green spaces.
- o Passive cooling techniques such as natural ventilation, shading, and thermal insulation can significantly reduce indoor temperatures and energy consumption.
- O High-albedo roofs and pavements in the buildings.

> Renewable Energy:

 Promoting the use of renewable energy sources such as solar and wind energy for cooling and electricity needs.

Public Awareness:

Educating the public about the risks of heatwaves, how to stay cool, and the importance of reducing carbon footprint.

> Agricultural Adaptation:

- Supporting farmers with resilient farming practices that take into account the risks of heatwaves, droughts, and water scarcity.
- Crop diversification, Agroforestry, mulching, crop rotation, and cover cropping, drip irrigation and sprinkler systems can be helpful.

Disaster Management:

 Developing emergency response plans for heatwaves, including providing cool shelters and adequate medical facilities.

O In the short-term:

- It is essential to establish an effective early warning system that can provide timely and accurate information to people at risk.
- This system should be integrated with public health services and local governments and should be able to mobilize resources quickly in response to a heat wave.

o In the long-term:

• Structural infrastructure measures are required to help Indians adapt to extreme heat.

Green Transport:

- Encouraging the use of public transport and bicycles to reduce vehicle emissions and traffic congestion.
- Bicycles, Electric Vehicles etc. can be helpful.

What are Government Initiative Regarding Heat Waves?

> National action Plan for Climate Change (NAPCC):

- There are 8 national missions forming the core of the NAPCC which represent multi-pronged, long term and integrated strategies for achieving key goals in climate change. These are-
 - National Solar Mission
 - National Mission for Enhanced Energy Efficiency
 - National Mission on Sustainable Habitat
 - National Water Mission
 - National Mission for Sustaining the Himalayan Ecosystem
 - National Mission for A Green India
 - National Mission for Sustainable Agriculture
 - National Mission on Strategic Knowledge for Climate Change

India Cooling Action Plan (ICAP):

 ICAP is a long-term vision to address the cooling requirement across sectors. Reducing cooling demand by 20-25% and refrigeration demand by 25-30% by the year 2037 are the goals of this plan.

NDMA Guidelines:

 In 2016, the National Disaster Management Authority (NDMA) issued comprehensive guidelines to prepare national level key strategies for mitigating the impact of heatwaves.

Dealing with the China

This editorial is based on "A message for the planners in dealing with the Dragon" which was published in The Hindu on 19/04/2023. It talks about China's geopolitical ambitions that have implications for India, and India needs to be prepared for any dynamic activity at its border.

P Tag: International Relations, GS Paper-2,India and Its Neighbourhood

The recent developments in India-China relations have raised concerns about the possibility of a future conflict between the two nations. The use of Sun Tzu's philosophy of winning without fighting has also been questioned, with others arguing that China is preparing for war.

India and China's strained relationship has been fueled by recent Chinese provocations, including the allocation of names to places in Arunachal Pradesh, denial of visas to Indian media personnel, and President's statements on preparing for war. These events have led to concerns about China's intentions and the need for India to be prepared for any eventualities.

In this context, India's defence preparedness has come under scrutiny, with the Parliamentary Standing Committee on Defence highlighting the need for urgent modernisation of the armed forces.

What are the Causes of the India-China Conflict?



- ➤ **The Dispute**: India-China relations have gone through cycles of conflict and cooperation over nearly 75 years.
 - The most serious recent episodes of conflict were in Galwan Valley in Ladakh in 2020 and in Tawang in Arunachal Pradesh in 2022.

- Observers on both sides of the border—the Line of Actual Control (LAC)—agree that the number of serious military confrontations has increased since 2013.
- No Clear Demarcation: The border between India and China is not clearly demarcated throughout and there is no mutually agreed Line of Actual Control (LAC) along certain stretches.
 - O LAC came into existence after the 1962 Indo China war.
 - o India-China border is divided into three sectors.
 - Western Sector: Ladakh
 - Middle Sector : Himachal Pradesh and Uttarakhand
 - Eastern Sector: Arunachal Pradesh and Sikkim
- Partnerships with each other's main enemies, including the Soviet Union/Russia and the United States, have prevented them from becoming strategic partners and cooperating on strategic matters.
- > The growing power gap between China and India, with China's GDP being five times that of India's, has made it difficult for India to be accommodative without appearing to surrender.
- Infrastructure build-up, particularly in Tibet, has led to a security dilemma in which military relations go into a spiral that could tempt one side or both to go to war.

What have been the Border Dispute Settlement Mechanisms?

- > The Agreement on the Maintenance of Peace and Tranquility:
 - o It was **signed in 1993**, which called for a renunciation of the use of force, recognition of the LAC, and the resolution of the border issue through negotiations.
 - The Agreement on Confidence Building Measures in the Military Field along the LAC:
 - It was signed in 1996, which laid down pledges on non-aggression, prior notification of large troop movements, and exchange of maps to resolve disagreements over the LAC.
- The Border Defence Co-operation Agreement:
 - o It was signed in 2013 following the Depsang Valley incident.

What the Parliamentary Standing Committee on Defence's Report Says?

> The Indian Air Force's deterrent and striking power would be vital in any India-China conflict.

- The government should consider buying state-of-theart fifth-generation fighter aircraft without losing time to keep the force in a comfortable position.
- Slow production rate of the Tejas fighter by Hindustan Aeronautics Limited is adversely affecting the IAF.
 - o The supply of 40 LCA Tejas jets from Hindustan Aeronautics Limited (HAL) has been considerably delayed and needs attention.
- > Urgent need to make up the dwindling squadron numbers through the 114 Multi Role Fighter Aircraft
- > Similar observations were made for hardware procurement for the Indian Army and Indian Navy.
 - O The Ministry of Defence should make a final decision on having a third aircraft carrier, which would enhance India's maritime capabilities.
 - Committee recommends allocation for defense should be 3% of GDP to maintain India's deterrent posture.

What Should be the Way Forward?

Diplomatic Engagement:

o It is crucial to maintain open channels of communication to avoid any misunderstandings or escalation of tensions.

Reassess Defence Acquisition Plans:

o India needs to re-evaluate its defence acquisition plans to ensure that they are geared towards longterm sustainability, rather than just possessing capability.

> Prepare for Potential Conflict:

- o India needs to prepare for the possibility of conflict with China, particularly given the Chinese President's recent articulations at the National People's Congress.
- o This preparation should involve bolstering India's military capabilities, particularly in the Indian Air Force, Indian Army, and Indian Navy.

> Allocate Adequate Funds for Defence:

- o The Parliamentary Standing Committee on Defence has recommended that allocation for defence should be 3% of GDP to maintain India's deterrent posture.
- o The Indian government should seriously consider this recommendation and allocate sufficient funds for defence, rather than relying on emergency armament purchases from abroad.

Emphasize Negotiations from a Position of Strength:

o India should adopt a negotiating strategy that emphasizes its strength and power, rather than capitulation.

 This would involve casting a shadow of power across the bargaining table and making it clear that India is prepared to defend its interests.

Border Infrastructure Development:

 Development of infrastructure along the border, such as roads and bridges, can help both countries access remote areas and reduce the possibility of any misunderstandings or conflicts.

New IT Rules and Social Media

This editorial is based on "It is a new assault on India's liberty" which was published in The Hindu on 20/04/2023. It talks about the consequences of recent amendments made in the Information Technology (Guidelines for Intermediaries and Digital Media Ethics Code) Rules, on free information and freedom of speech.

P Tag: Governance, GS Paper-2, Fundamental Rights, Government Policies and Interventions.

Recently, the Indian government introduced a new amendment to the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021, or IT Rules, which gives the Ministry of Electronics and Information Technology (MeitY) unrestricted power to create a "fact check unit" to identify false or misleading online content.

Failure by social media intermediaries to prevent users from hosting or publishing flagged information may result in the withdrawal of their "safe harbour" immunity, which could expose them to criminal prosecution. This could have negative implications on freedom of speech and civil liberties in India.

The new regulation grants the Union government the power to determine what information is false and exercise censorship through intermediaries. This goes against the principles of free information and freedom of speech guaranteed by the constitution.

The spread of misinformation and fake news is a significant problem in the age of the internet. It can have serious consequences for individuals, communities, and even nations. In India, the government has attempted to address this issue through amendments to the IT Rules. However, concerns have been raised about the impact of these amendments on freedom of speech and expression.

What are the IT Rules?

The IT Rules derive their authority from the Information Technology Act, 2000, which provides legal recognition for electronic commerce.

Safe Harbour Provision:

 The Act provides a "safe harbour" for intermediaries that observe due diligence in discharging their duties and follow guidelines prescribed by the state.

> Intermediaries:

- Section 79 of the Act grants immunity to intermediaries, as long as they follow due diligence and state-prescribed guidelines.
- o Intermediaries **include social media platforms** like WhatsApp, Twitter, Facebook, and Instagram.

First Originator:

- The IT Rules impose obligations on intermediaries and require social media platforms to provide technological solutions to identify the first originator of any information on their service, under certain circumstances.
- The IT Rules have been subject to several sets of challenges, and petitions are pending consideration in the Supreme Court of India.

What are the New Regulations?

- The 2021 IT Rules replaced the previous guidelines and sought to regulate intermediaries and digital news media.
- Social media platforms were required to provide technological solutions to identify the first originator of any information, risking privacy.
- The amendments introduced in April 2023 give the government power to decide for itself what information is bogus and exercise wide-ranging powers of censorship by compelling intermediaries to take down posts deemed fake or false.
- The new regulations threaten freedom of speech and civil liberties in India by restricting speech through executive order rather than legislation.
 - Article 19(1)(a) of the Indian Constitution grants every citizen the right to freedom of speech and expression, which can only be limited through reasonable restrictions made by law on the grounds stipulated in Article 19(2).
- Fake news and misinformation are not grounds on which speech can be limited, and the amendments made to the IT Rules do not caveat the restraints they place in any manner.
- The Fact Check Unit has limitless powers to decide what information is false and compel social media intermediaries to act based on these findings, which are open-ended and undefined.

What are the Concerns?

Lacks Clear Definitions:

- The amendment fails to define fake news and allows the government's fact-check unit to declare the veracity of any news "in respect of any business" that involves the state.
- The use of **undefined words**, **especially** the phrase "any business", gives the government unchecked power to decide what people can see, hear, and read on the internet.

Not a Standard Practice:

- O A comprehensive parliamentary legislation on fake news, grounded in Article 19(2), would have been a more constitutionally committed campaign against fake news.
 - In France, an independent judge is responsible for making declarations to counter the spread of misinformation during elections.
 - A lawfully enacted statute would have demanded consideration of less restrictive alternatives to removing misinformation.

Removable of Information:

- Intermediaries will remove information deemed false by the Fact Check Unit, leaving only the state to determine what is true.
- o The new regulation gives the government the power to decide what information is bogus and exercise censorship by compelling intermediaries to take down posts deemed fake or false.

Lesser Rights:

 The rights of the press and individuals to question authority and speak truth to power will be diminished, and civil liberties will be curtailed.

Violates the Supreme Court's Judgment:

 Shreya Singhal vs Union of India (2015), Supreme Court held that a law that limits speech can neither be vague nor over-broad.

What Should be the Way Forward?

> Technology Solutions:

- o Instead of relying solely on censorship, the government and intermediaries can invest in technology solutions to tackle misinformation and fake news.
- o For instance, algorithms can be developed to identify and flag false information, and factchecking websites can be promoted.

Self-Regulation:

- o Intermediaries can adopt self-regulatory measures to prevent the spread of fake news and misinformation.
- O This can include setting up internal committees to monitor content and flag any false information

and working with fact-checking websites to ensure accuracy.

Public Awareness:

- o It is essential to create awareness among the public about the dangers of censorship and the importance of free speech.
- O This can be done through Social media campaigns, workshops, and discussions in schools, colleges, and other public forums.

> Collaborative Approach:

- o The government, intermediaries, and civil society organizations can work together to develop a collaborative approach to tackle the problem of fake news and misinformation.
- This can include **setting up a joint task force** to identify and remove false information and promoting media literacy among the public.

India's Demographic Potential

This editorial is based on "Numbers game: On the State of World Population Report 2023 and the India projection" which was published in The Hindu on 21/04/2023. It talks about the state of India's population as per the State of World Population Report 2023.

P Tag: Social Issues, GS Paper - 1, GS Paper - 2, Population and Associated Issues, Human Resource, Salient Features of Indian

India has come a long way from the initial days of evolution under conditions of high mortality due to famines, accidents, illness, infections and war, when relatively high levels of fertility was essential for species survival. Over the years, better equipped in dealing with diseases and vagaries of nature, it has witnessed a significant increase in life expectancy along with a steep fall in mortality.

According to The UN's State of World Population Report 2023 India will become the world's most populous country by mid-2023, surpassing China's 1.425 billion people by about 3 million. There are implications of this demographic shift for India's economy, society, and environment. Population growth previously seen as a disadvantage, now viewed as an advantage due to the demographic dividend.

India needs to create economic opportunities to fully utilize the potential of its demographic dividend.

What is the Population **Growth History of India?**

> India's population growth has been a point of concern in the past.

- In the socialist era, the growing population was blamed for poverty and led to sterilization programs.
 - Globalization in the 1990s saw India as a vast market with untapped potential, shifting the perception of population as an advantage.
 - India's demographic dividend has provided valuable economic opportunities.
- India currently has 17.5% of the world's population.
 - This is four times the population India had at the time of Independence in 1947 (34 crore)
- Period of Slow Growth Rate of Population (1891-1921):
 - Between 1891 and 1921, the rate of population growth in India was low.
 - In these 30 years, the population increased by 1.26 crore.
 - It was so because in these years, calamities and epidemics, like famines, plague, malaria etc. took a heavy toll on human lives.
- Period of High Growth of Population (1921-51):
 - Since 1921, the population has been increasing at a rapid rate.
 - The Census Commissioner has referred to the year 1921 as the Year of Great Divide.
- > Period of Population Explosion (1951-1981):
 - Between 1951-1961 the population increased rapidly. It is called the 'period of population explosion.
- Period of High Growth with definite Signs of slowing down from 1981 onwards:
 - The decadal growth rate during 1981-91 was recorded 23.87 percent as against 24.66 percent during the previous decade (1971-81).
 - This is a healthy and definite sign indicating the starting of a new era in the demographic history of India.
- Recent Population Growth Trends:
 - Despite overtaking China, India's population growth is slowing.
 - The total fertility rate is below the replacement level of 2.1 for the first time according to the National Family Health Survey
 - UN estimates India's population to reach 1.67 billion in 2050 before settling at 1.53 billion in 2100.

What about Demographic Transition?

Demographic transition refers to a process of change in a population's birth and death rates and patterns over time, as a society moves from a high-fertility, high-mortality regime to a low-fertility, low-mortality

- regime. This transition is typically divided into four stages.
- India is at stage three of the four stage model of demographic transition from stable population with high mortality and fertility to stable population with low mortality and fertility, with some of the states/ UT's already into stage four.
- > Stages of Demographic Transition:
 - O Stage 1:
 - Less developed countries, high birth rate, high death rate due to preventable causes, stable population. E.g. South Sudan, Chad, Mali etc.
 - O Stage 2:
 - Death rates fall due to improved public health but high fertility due to limited access to health and contraceptive services, spurt in population.
 E.g. Afghanistan, Pakistan, Bolivia, sub-Saharan countries such as Niger, Uganda etc.
 - Stage 3:
 - Birth rate also falls, population continues to grow due to large no. of people in reproductive age group. E.g., Columbia, India, Jamaica, Botswana, Mexico, Kenya, South Africa, and the UAE.
 - Stage 4:
 - Stable population but at a level higher than the initial, low birth & death rates, high social & economic development. E.g. Argentina, Australia, Canada, China, Brazil, most of Europe, Singapore, South Korea, and the U.S

What are the Causes of the Declining Trend of Population?

- > Decline in Population Growth:
 - Percentage decadal growth rate of population has been declining since 1971-81 at all India level.
 - However, significant fall in case of EAG States (Empowered action group states: UP, Uttarakhand, Bihar, Jharkhand, MP, Chhattisgarh, Rajasthan and Orissa) has been noticed for the first time during the 2011 census.
- Decline in India's TFR:
 - The Total Fertility Rate (TFR) has further declined from 2.2 to 2.0 at the national level between NFHS 4 and NFHS 5.
 - There are only five states in India which are above replacement level of fertility of 2.1. These states are Bihar, Meghalaya, Uttar Pradesh, Jharkhand and Manipur.
 - Replacement level fertility is the total fertility rate, the average number of children born per woman at which a population exactly replaces

itself from one generation to the next, without migration.

Improvement in Mortality Indicators:

- O Life expectancy at birth saw a remarkable recovery from 32 years in 1947 to 70 years in 2019.
- O According to NFHS 5 Infant Mortality Rate stands at 32 per 1,000 live births which includes an average 36 deaths for rural and 23 for urban areas.

Increase in Family Planning:

o According to NFHS 5, Overall Contraceptive Prevalence Rate (CPR) has increased substantially from 54% to 67% at all-India level and in almost all Phase-II States/UTs with the exception of Punjab.

Climate change and migration:

- o Population debates in the past did not account for the climate crisis and the fact that many migrants are becoming permanent immigrants.
- O Over 1.6 million Indians have renounced citizenship since 2011, including over 225,000 in 2022.

What is the Significance of Population Growth?

Better Human Capital:

- A larger population is perceived to mean greater human capital, higher economic growth and improved standards of living.
- However, if not managed properly it can also lead to war, internal conflicts, and rupture social fabric.

Better economic growth:

o Better economic growth is brought about by increased economic activities due to higher working age population and lower dependent population.

High Working Age Population:

- o In the last seven decades, the share of the working age population has grown from 50% to 65%.
- This has resulted in a decline in the dependency ratio (number of children and elderly persons per working age population).
- o In the next 25 years, one in five working-age group persons will be living in India.

What are the Challenges Associated with **Demographic Dividend?**

Asymmetric Demography:

• The growth in the working-age ratio is likely to be concentrated in some of India's poorest states and the demographic dividend will be fully realized only if India is able to create gainful employment opportunities for this working-age population.

Lack of Skills:

- o Most of the **new jobs** that will be **created** in the future will be highly skilled and lack of skill in the Indian workforce is a major challenge.
- o India may not be able to take advantage of the opportunities, due to a low human capital base and lack of skills.

> Low human Development Parameters:

- o India ranks 132 out of 191 countries in UNDP's Human Development Index 2023, which is alarming.
- o Therefore, health and education parameters need to be improved substantially to make the Indian workforce efficient and skilled.

> Informal nature of the economy:

o It is another hurdle in reaping the benefits of demographic transition in India.

What Should be the Way Forward?

Create Economic Opportunities:

 India needs to create more economic opportunities to fully benefit from its demographic dividend.

Boost Entrepreneurship:

O Support the growth of small and medium-sized businesses through tax incentives and financial assistance.

Increase Investment:

 Attract more foreign investment by improving ease of doing business, reducing bureaucratic hurdles, and enhancing infrastructure.

Promote Digital Transformation:

- Promote digital transformation to unlock new economic opportunities and create more efficient and productive businesses.
- o Invest in high-speed internet connectivity and digital infrastructure to support businesses and individuals.

Address Economic Inequality:

O Increase access to education:

• India needs to invest in quality education for all, especially for those from disadvantaged backgrounds.

O Ensure social protection:

- India needs to ensure social protection for vulnerable groups, such as the elderly, disabled, and children.
- This can include programs like pensions, disability benefits, and child support.

> Focus on Economic Opportunity:

o Infrastructure Development, Foreign Investment, Fostering Innovation can be helpful for creating economic opportunity.

50 Years of Kesavananda **Bharati Judgment**

This editorial is based on 50 years of Kesavananda Bharati judgment: which was published in Indian Express on 24/04/2023. It talks about the basic structure doctrine and its importance.

P Tag: Indian Polity, GS Paper - 2, Fundamental Rights, Judicial Review, Judgement and Cases

The concept of 'basic structure' came into existence in the landmark judgment in Kesavananda Bharati vs State of Kerala case (1973) 50 years ago.

The basic structure doctrine is a highly controversial pluralist judicial creation that has been accepted by all branches of the government and the people of India.

Kesavananda Bharati case curtailed unlimited parliamentary sovereignty and started a new interpretive enterprise by recognizing the basic identity of the Constitution, which may not be destroyed by any amendment.

The basic structure doctrine has become a thriving aspect of constitutional judicial review.

What was Kesavananda Bharati Case?

- Kesavananda Bharati Case (1973):
 - o In this case, the **Supreme Court overruled** its judgment in the Golak Nath case. It upheld the validity of the 24th Amendment Act and stated that Parliament is empowered to abridge or take away any of the Fundamental Rights.
 - O At the same time, it laid down a new doctrine of the 'basic structure' (or 'basic features') of the Constitution.
 - o It ruled that the constituent power of Parliament under Article 368 does not enable it to alter the 'basic structure' of the Constitution.
 - O This means that the Parliament cannot abridge or take away a Fundamental Right that forms a part of the 'basic structure' of the Constitution.

What are Important Cases Leading to Basic Structure Doctrine?

- > Sankari Prasad Judgment 1951:
 - o Initially judiciary was of the view that the amendment power of the parliament is unrestricted because it can amend any part of the constitution, even the Article-368 which provides the power to amend to the parliament
- Golak Nath Vs State of Punjab 1967:
 - o The Supreme Court **adopted a new vision** to see the powers of parliament that it cannot amend

Part III of the constitution i.e. Fundamental rights and thus awarded fundamental rights a "Transcendental Position".

- Keshavanada Bharti Vs State of Kerala 1973:
 - o It gave birth to the landmark judgment which pronounced that the parliaments cannot alter or disturb the basic structure of the constitution.
 - o It was held that, however, the parliament has unfettered power to amend the constitution, but it cannot disturb or emasculate the basic structure or fundamental features of the constitution as it has only the power of amendment and not of rewriting the constitution.
- > Indira Nehru Gandhi v. Raj Narain
 - o In this case, the Supreme Court invalidated a provision of the 39th Amendment Act (1975) which kept the election disputes involving the Prime Minister and the Speaker of Lok Sabha outside the jurisdiction of all courts.
 - As per the court, this provision was **beyond the** amending power of Parliament as it affected the basic structure of the constitution.
- Minerva Mills vs. Union of India:
 - In the Minerva Mills case, the Supreme Court held that 'the Indian Constitution is founded on the bedrock of the balance between the Fundamental Rights and the Directive Principles.
 - The Parliament can amend the Fundamental Rights for implementing the Directive Principles, so long as the amendment does not damage or destroy the basic structure of the Constitution.

What is the Doctrine of Basic Structure?

- > The Constitutional Bench in Kesavananda Bharati case ruled by a 7-6 verdict that Parliament could amend any part of the Constitution so long as it did not alter or amend the basic structure or essential features of the Constitution.
- ➤ However, the court did not define the term 'basic structure', and only listed a few principles — federalism, secularism, democracy — as being its part.
- The 'basic structure' doctrine has since been interpreted to include -
 - The supremacy of the Constitution,
 - The rule of law,
 - Independence of the judiciary,
 - Doctrine of separation of powers,
 - Sovereign democratic republic,
 - The parliamentary system of government,
 - The principle of free and fair elections,

- Welfare state, etc.
- > An example of the application of basic structure is the SR Bommai case (1994).
 - o In this case the Supreme Court upheld the dismissal of BJP governments by the President following the demolition of the Babri Masjid, invoking a threat to secularism by these governments.

What is the Significance of Basic Structure Doctrine?

> Limiting Political Power:

- o Golaknath (1967) set limits to political power by subjecting Article 368's amending power to the discipline of fundamental rights.
- o Basic structure recognized the basic identity of **the Constitution**, which may not be destroyed by any amendment.
- o Basic structure discredits the repeal of the Constitution and authorizes a constitutional amendment, not constitutional desecration or dismemberment.

Wise Exercise of Judicial Review Process and Power:

- o Kesavananda Bharati emerged as an opportunity for the wise exercise of co-constituent power by the Supreme Court.
- o It articulated vast plenary powers of the executive and legislature and repudiated the argument of fear by holding that the possibility of abuse of power is no ground for its non-conferment.

Last Word Resting with the Supreme Court:

- The Court feels that it has a responsibility to identify and uphold fundamental principles, which are crucial to maintaining the integrity of the Constitution.
- o The decision in the NJAC case (2015) makes it compellingly clear that the power may be exercised only "within the parameters of the law, nothing more and nothing less" and the validity of amendments "cannot be tested on opinions, however strong or vividly expressed".
- Judicial independence is important as the "essence" of rule of law, which embeds both "decisional autonomy" and "institutional autonomy".

Constitutional Conventions and Practices:

- o Rule of law means that the "parameters of decision making and discretion" remain always circumscribed by the Constitution and demands respect for "constitutional conventions".
- O A convention according to the Chief Justice of India in matters of judicial appointments has existed since the Government of India Act, 1935.

 "Constitutional conventions and practices" mark the intersection of the unwritten Constitution with the written text.

What are the Issues?

No Such Provision:

- O The most common issue of the basic structure doctrine is that there has been no basis for the doctrine in the language of the Constitution.
- There is an absence of a provision that can stipulate that the Constitution has a basic structure beyond the competence of amending power.

> Against Separation of Power:

- This principle visualizes a tripartite system where the powers are delegated and distributed among three organs outlining their jurisdiction each.
- o It is inconsistent with the concept of separation of power.

Subjective Matter:

- o It is seen that the basic structure doctrine gets defined differently by different judges based on their subjective satisfaction.
- o This leaves the decision to decide the validity or invalidity of Constitutional Amendments influenced by the personal preferences of judges who then acquire the power to amend the Constitution.

Limitations on Powers of Elected Parliament:

- O A law made by Parliament can be declared null and void by the Courts if courts consider it against basic structure of the Constitution.
- o It gives power to the judiciary that allows it to impose its philosophy on a government that is formed democratically.

> No Clear Definition:

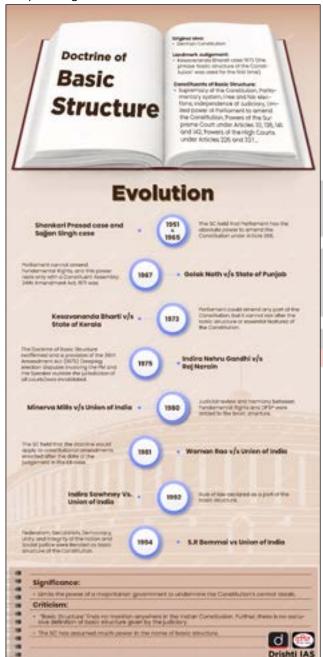
- o The lack of definite explanation as to what constitutes the basic structure, thereby leaving the doctrine ambiguous.
- o It is upto the Courts to decide what constitute basic structure.

> Leads to Judicial Overreach:

- National Judicial Appointments Commission (NJAC) was unanimously enacted as an amendment to the constitution by the Parliament and passed by the legislature of twenty [out of twenty-eight] States in India.
- O However, the basic structures doctrine used in cases regarded as incidents of judicial overreach like the NJAC bill.

Conclusion

The Basic Structure Doctrine is a cornerstone of the Indian Constitution, which has been instrumental in ensuring the preservation of the fundamental principles of democracy and protecting the rights of citizens. Its establishment in the Kesavananda Bharati case is a testament to the strength and resilience of India's democratic institutions and the judiciary's commitment to upholding the Constitution.



Governor Inaction Over Bills

This editorial is based on Pending Bills, the issue of gubernatorial inaction which was published in The Hindu on 25/04/2023. It talks about issues with pending bills with the governor.

P Tag: Indian Polity, GS Paper - 2, Role of Governor, Cooperative Federalism

The recent controversy surrounding the Tamil Nadu Governor's actions regarding the passage of Bills in the State Assembly has led to a resolution being passed urging the President of India to intervene. Several Bills passed by the Assembly have been pending as the Governor has not made any decision.

The Assembly passed a resolution urging the President of India to fix a timeline for assent to be given to Bills passed by the Assembly.

This has raised questions over discretionary power of governor with respect to unlimited delay in giving assent to the bills which are duly passed by state legislature.

What are the Discretionary Powers of the Governor?

The Constitution makes it clear that if any question arises whether a matter falls within the governor's discretion or not, the decision of the governor is final and the validity of anything done by him cannot be called in question on the ground that he ought or ought not to have acted in his discretion.

> Constitutional Discretion:

- Reservation of a bill for the consideration of the **President** (Article 200).
- Recommendation for the imposition of the President's Rule (Article 356) in the state.
- While exercising his functions as the administrator of an adjoining union territory (in case of additional charge).
- Determining the amount payable by the Government of Assam, Meghalaya, Tripura and Mizoram to an autonomous Tribal District Council as royalty accruing from licenses for mineral exploration.
- Seeking information from the chief minister with regard to the administrative and legislative matters of the state.

> Situational Discretion:

- Appointment of chief minister when no party has a clear-cut majority in the state legislative assembly or when the chief minister in office dies suddenly and there is no obvious successor.
- Dismissal of the council of ministers when it cannot prove the confidence of the state legislative assembly.
- Dissolution of the state legislative assembly if the council of ministers has lost its majority.

Can the Governor withhold His Assent to a Bill in Exercise of His Discretionary Powers?

- While a plain reading of Article 200 suggests that the Governor can withhold his assent, experts question whether he can do so only on the advice of the Council of Ministers.
- > The Constitution provides that the Governor can **exercise** his executive powers only on the advice of the Council of Ministers under Article 154.
- > The larger question is why a Governor should be allowed to withhold assent when the Bill is passed by the Assembly.
 - The Supreme Court of India recently addressed the issue of Governors sitting on Bills that they do not agree with, leading to an indefinite delay in State Legislative Assemblies. The Court referred to the provision of Article 200 of the Constitution, which mandates that Governors should not delay over Bills sent to them for assent after they had been passed by Legislative Assemblies.

What are the Issues with Pending Bills?

Delay in Decision-Making:

o The Governor's failure to take a decision on the Bills passed by the legislature leads to a delay in decision-making, which affects the effective functioning of the state government.

Delay in Implementation of Policies and Laws:

- O When the Governor fails to make a decision on a Bill passed by the assembly, it delays the implementation of policies and laws.
- o This delay can have significant consequences, especially when the Bill is related to public welfare.

Undermines the Democratic Process:

o The Governor, who is appointed by the Centre, can use his powers to delay or reject Bills passed by state assemblies for political reasons, which undermines the democratic process.

Public Perception:

o The public often views pending Bills with the Governor as a sign of inefficiency or even corruption in the state government, which can damage the government's reputation.

Constitutional Ambiguity:

- o There is ambiguity in the Constitution regarding the Governor's power to withhold assent.
- O Although the Constitution grants the Governor the power to withhold his assent, it is unclear whether he can do so only on the advice of the Council of Ministers.

> Lack of Accountability:

- When the Governor withholds assent, he does not provide any reason for his decision.
- o This lack of accountability undermines the principles of transparency and accountability in governance.

What Should be the Way Forward?

> Timeframe for assent:

- The Supreme Court can consider fixing a reasonable time frame for Governors to take a decision on a Bill passed by the Assembly, in the larger interest of federalism in the country.
- O This can prevent undue delay and ensure that governance of the state is carried out in accordance with constitutional provisions.

> Dialogue between the Centre and States:

 There is a need for a dialogue between the Centre and States to address this issue and ensure that the constitutional provisions are upheld.

Public awareness and activism:

- o It is important to raise public awareness and activism on this issue and demand that the constitutional provisions are followed in a transparent, fair, and timely manner.
- O Civil society groups, media, and citizen forums can play a crucial role in this regard by highlighting the issue and putting pressure on the authorities to act in the public interest.

India and Shanghai **Cooperation Organisation** (SCO)

This editorial is based on SCO meet highlights China's growing role and India's challenge which was published in Indian Express on 26/04/2023. It talks about India, as the chair of the organisation, has opportunity of discussing bilateral issues and easing out tensions between countries.

P Tag: International Relations, GS Paper - 2, Regional Groupings, Important international Institutions.

The visit of Chinese and Russian defence ministers to attend a ministerial meeting of the Shanghai Cooperation Organisation (SCO) in Delhi is attracting attention. India, as the chair of the organisation, has several bilateral issues to discuss with fellow SCO members such as de-escalation of border confrontation with China and supply of Russian spares and arms to India amidst the war in Ukraine.

Many countries are queuing up to join the SCO, which is inclusive and highlights the rise of non-Western security institutions. However, despite growing interest in the SCO from regional states, internal contradictions within the organisation are casting a shadow over its strategic coherence.

Who are the Members?

> Membership:

O The SCO has eight members, including China, India, Kazakhstan, Kyrgyzstan, Pakistan, Russia, Uzbekistan, and Tajikistan. Iran is set to join the SCO.

Observers:

O Afghanistan, Belarus, and Mongolia are observers who would like to follow Tehran.

Dialogue Partners:

• The list of current and incipient dialogue partners includes Azerbaijan, Armenia, Egypt, Qatar, Turkey, Saudi Arabia, the United Arab Emirates, Maldives, Nepal, and Sri Lanka.



What are the Conflicts Among Member Countries of SCO?

Conflicts Exist Between:

- O India and China over Border Issues:
 - After the 18th round of India- China Corps Commander Level Meeting still there is no breakthrough in easing tensions.

O India and Pakistan over Terrorism:

- State sponsored terrorism is cause of tension between India and Pakistan.
- Frequent cease fire violations on India Pakistan border is another cause of concern.

O Kyrgyzstan and Tajikistan over Border Issues:

• The escalation of conflict between the two countries, as witnessed on September and then again in November 2022, has been a troubling development for the region.

- The conflict has the potential to cause a negative impact on the stability of Central Asia and its neighbouring regions.
- > There are several conflicts between Taliban-led Afghanistan and Pakistan which makes the border area of the two countries unstable.
- The SCO's main objective is to promote peace in Eurasia, but its ability to cope with intra-state and inter-state conflicts among member states is under scrutiny.

What are the Challenges?

China's Rise:

- O China's rise is increasing the prospects for China's emergence as the dominant force in inner Asia.
- o This has led to external pressures from other regional powers, such as the **United States**, which has sought to contain China's rise and limit its influence in the region.

Limited institutional mechanisms:

- o While the SCO has a number of bodies, such as the Council of Heads of State, the Council of Ministers of Foreign Affairs, and the Council of National Coordinators, these bodies lack the formal decision-making and enforcement powers that are necessary for effective governance.
- SCO lacks a formal mechanism for resolving disputes between member states.



Divergent Interests and Disagreements:

 The SCO includes member states with different political systems, economic models, and strategic priorities such as CPEC, border infrastructure projects etc., which can lead to internal conflicts and disagreements on issues such as economic cooperation and security.

> Limited geographical scope:

o The SCO's geographical focus is **limited to Eurasia** and neighboring regions, which restricts its ability to engage with global issues and challenges.

Western skepticism and criticism:

 The SCO faces criticism from Western countries for its lack of democratic credentials, its support for authoritarian regimes, and its internal conflicts and border disputes among members.

What is the Importance of SCO for India?

Economic Cooperation:

- The SCO provides a platform for India to enhance economic cooperation with Central Asian countries, which have vast reserves of natural resources.
- India is seeking to increase its trade and investment ties with the SCO countries to diversify its economic partnerships.

> Energy Security:

- Central Asia has vast reserves of oil and gas, and India is looking to tap into these resources to enhance its energy security.
- The SCO provides a forum for India to engage with the energy-rich countries of Central Asia and explore opportunities for cooperation in the energy sector.
- The Samarkand Declaration, signed at the 22nd Summit, centralizes connectivity which is a priority for India, as well as energy and food security.

> Cultural Cooperation:

- The total Cultural Heritage of the SCO member states, observers and partners include 207 UNESCO World Heritage Sites.
- SCO member countries have decided to designate one city (from SCO member countries) as tourism and cultural capital every year under a rotating initiative.
- "Kashi" (Varanasi) has been designated as the first cultural capital of the SCO under this initiative.

> Counterterrorism:

- The SCO has a **strong focus** on counterterrorism cooperation.
- India, which has been a victim of terrorism, can benefit from the collective efforts of the organization to combat terrorism in the region.

What is the Significance of the SCO?

Economic Cooperation:

• The eight member countries of SCO represent around 42% of the world population and 25% of the global GDP. There is an immense tourism potential in the region which can be promoted by increasing awareness about SCO countries.

> Connectivity:

 The SCO is promoting connectivity among its member states through infrastructure projects, including the China-Pakistan Economic Corridor (CPEC) and the International North-South Transport Corridor (INSTC).

> Security Cooperation:

- The main threats which are the focus of the SCO include terrorism, separatism and extremism.
- Regional Anti-Terrorist Structure (RATS) to promote cooperation among member states in the fight against terrorism, separatism, and extremism.
- RATS provides a platform for sharing intelligence, conducting joint exercises and operations, and coordinating actions to prevent and combat terrorism in the region.

Conclusion

The SCO is an attractive forum for regional states, but its internal contradictions are a cause for concern. Preventing conflict between member states is a higher priority for the SCO, but its record here is not impressive. While China's growing regional influence may come at Russia's expense, Russia and China have drawn closer than ever before and have little reason to quarrel over Central Asia. Russia's muscle and China's money provide a sensible basis for their strategic division of labour in Central Asia to keep the Western powers out of the region.

Reviving a Sense of Fraternity

This editorial is based on The challenge of reviving a sense of fraternity which was published in The Hindu on 27/04/2023. It talks about inclusion of the principle of fraternity in the Preamble to the Constitution of India and the idea of fraternity.

P Tag: Indian Polity, GS Paper - 2, Indian Constitution, Constitutional Amendments.

Fraternity means a sense of common brotherhood of all Indians, which gives unity and solidarity to social life.

The **idea of fraternity** is closely linked to that of social solidarity, which **is impossible to accomplish without public empathy**.

Acharya Kripalani pointed out that the contents of the Preamble were not only legal and political principles but also had a moral, spiritual and mystical content.

It became an official demand of the Indian National Congress in 1935 and was officially adopted in the Lucknow session in April 1936 presided by Jawaharlal Nehru, who also drafted the Objectives Resolution.

In the concluding session of the Constituent Assembly, B.R. Ambedkar pointed out the absence of recognition of the principle of fraternity in the Constitution. He stated that without fraternity, equality and liberty would be no deeper than coats of paint.

The Constitution of India was drafted by the Constituent Assembly, recognizing the **need for fraternity** as one of the fundamental principles. However, the concept of fraternity is not sufficiently understood, and its duties are not explicitly mentioned in the Constitution.

What are the Challenges in Achieving Fraternity?

Social and Cultural Differences:

- o The diversity of cultures and traditions among different communities can lead to misunderstandings and conflicts.
- o This can create social and cultural barriers that hamper the spirit of brotherhood.
- For instance, religious or caste-based differences can lead to mistrust, discrimination, and even violence. This can result in the erosion of fraternity and the polarization of society.

Economic Disparities:

- The vast economic divide between different sections of society can lead to resentment and feelings of discrimination, leading to a lack of trust and cooperation among citizens.
- o When people feel that they are being treated unfairly or that their economic status is a barrier to their success, they are less likely to cooperate and work together for the common good.
- o This can lead to a breakdown in social cohesion, which is a fundamental aspect of fraternity.

Political Differences:

- o Political ideologies can create deep divides in society and impede cooperation and dialogue.
- o Political differences also lead to polarization, where people become deeply divided along political lines.
- O This can create an atmosphere of hostility and intolerance, where people are unwilling to engage in constructive dialogue or work towards common goals.

Lack of Trust:

- O A lack of trust and mutual understanding among different groups can undermine the spirit of brotherhood.
- O When people do not trust each other or have misunderstandings, it becomes difficult to work together towards a common goal.

Failure of Constitutional Morality:

- o Constitutional morality, which is based on the values enshrined in the Indian Constitution, is critical to maintaining fraternity.
- o The failure of constitutional morality can lead to a loss of confidence in institutions and the rule of law.
- o This can create a climate of uncertainty and instability, which can ultimately undermine the spirit of brotherhood and social cohesion in society.

> Inadequate Moral Order:

- O A functioning moral order in society is essential for the success of democracy. This includes adherence to ethical values, social responsibility, and a sense of social justice.
- Any failure in this area can lead to the erosion of the spirit of brotherhood.
- o For instance, if individuals are not held accountable for unethical actions, it can lead to a breakdown in trust among citizens, resulting in social and cultural barriers that hinder fraternity.

What are the Constitutional Provisions Related to Fraternity?

Preamble:

o The principle of fraternity was added to the principles in the Preamble along with liberty, equality, and justice.

> Fundamental Duties:

- o Article 51A on Fundamental Duties, added to by the 42nd Amendment in 1977 and further amended by 86th Amendment in 2010.
- o Article 51A(e) generally refers to the duty of every citizen 'to promote harmony and the spirit of common brotherhood amongst all the people of India.'

What are the Measures can be Taken to **Achieving Fraternity in Indian Context?**

> Promote Interfaith Dialogue:

o India is a diverse country with a rich cultural and religious heritage. Encouraging dialogue and understanding between different faiths can help foster a sense of fraternity.

> Celebrate Diversity:

o India is home to people from various religions, castes, and communities. Celebrating the differences and embracing the diversity can help bring people closer and create a sense of fraternity.

Educate People About Constitutional Values:

o The Indian Constitution lays down several values such as equality, liberty, and fraternity. Educating people about these values can help inculcate a sense of fraternity among them.

Encourage Volunteering:

O Volunteering for social causes can bring people from different backgrounds together and help them work towards a common goal, fostering a sense of fraternity.

Support Social Initiatives:

 Supporting social initiatives that promote inclusivity and equality can help create a sense of fraternity in society.

Foster a Sense of National Pride:

 Promoting patriotism and national pride can bring people together, fostering a sense of fraternity and unity.

Conclusion:

- Fraternity is an essential principle that requires collective action and public empathy. The Constitution recognizes the importance of fraternity, but its implications and duties require further discussion and understanding. B.R. Ambedkar drew attention to a lacuna in the draft of the Constitution and stated that fraternity is a difficult thing to achieve.
- A distinction has to be made between the psychological fact of common emotion and the political principle of fraternity or co-operation. By excavating the moral values embedded in the Constitution, the sense of fraternity in India can be revived.

Revisiting the Need of **Nuclear Energy**

This editorial is based on Should India consider phasing out nuclear power? which was published in The Hindu on 28/04/2023. It talks about the key opportunities and challenges associated with the adoption of Nuclear Energy in India.

P Tag: Science and technology, GS Paper – 1, Mineral & Energy, Resources, GS Paper – 3, Nuclear Technology

As renewable energy sources like solar and wind power gain popularity globally and supply of nuclear fuel continuously being a big burden on country's finances, questions arise on whether nuclear power is still relevant in a fossil-free future, particularly in India where safety and cost concerns persist.

- Recently, Germany has closed its last nuclear plant, and France struggles to replace its aging reactors despite being a nuclear powerhouse.
- On one hand, Nuclear energy provides low carbon, firm and reliable source of energy but on the other hand, it creates challenges regarding safety of reactors and safe disposal of nuclear waste. Also, supply of nuclear fuel is a constraint in growth of nuclear energy.

What is the Current Status of **Nuclear Power Globally?**

Nuclear power is witnessing a renaissance post Ukraine war, as many countries from Europe and USA have started increasing the share of Nuclear energy in their energy mix.

- > South Korea's new president has changed the energy policy and committed to increasing the share of nuclear **power** in the country's energy mix to 30% by 2030.
- > Japan, which should have completely shut down reactors after the Fukushima (accident), is restarting the reactors to diversify from coal and natural gas. Currently, 10 nuclear reactors have resumed operation while 17 are in the pipeline in Japan.
- **U.K.** has said that without scaling up nuclear power, it won't be possible to decarbonise the electricity sector.
- China has anyway been surging ahead on nuclear power.

What is the Status of Nuclear Energy in India?

- Nuclear energy is the fifth-largest source of electricity in India, contributing about 2% of the country's total electricity generation.
- India currently has over 22 nuclear reactors in 7 power plants across the country, which together produce 6,780 MW of nuclear power.
 - Of these reactors, 18 are Pressurised Heavy Water Reactors (PHWRs) and 4 are Light Water Reactors (LWRs).
- In January 2021, the Kakrapar Atomic Power Project (KAPP-3), India's first 700 MWe unit and the biggest indigenously developed variant of the PHWR, was connected to the grid.
- The Indian government has allowed joint ventures between the Nuclear Power Corporation of India Limited (NPCIL) and public sector undertakings (PSUs) to enhance India's nuclear program. NPCIL is now in joint ventures with the National Thermal Power Corporation Limited (NTPC) and the Indian Oil Corporation Limited (IOCL).
- The government is promoting the expansion of nuclear installations to other parts of the country. For example, an upcoming nuclear power plant in

- **Gorakhpur town in Haryana** will become operational in the near future.
- India is also working on an entirely indigenous thoriumbased nuclear plant, "Bhavni," which will be the first of its kind using Uranium-233. The experimental thorium plant "Kamini" already exists in Kalpakkam.

Why is Nuclear Energy a Necessity?

> Cheaper to Operate:

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

> Availability of Thorium Reserves:

Thorium availability makes nuclear energy a promising solution for India's energy needs. It is considered the fuel of the future, and India is a leading country in Thorium resources. This could help India achieve its goal of being a fossil fuel-free nation.

> Reduction in Petroleum Imports:

 Nuclear energy can help India reduce its import bills by up to \$100 billion annually, which is currently spent on importing petroleum and coal.

> Firm and Dispatchable Power:

- Unlike solar and wind power, which are dependent on weather conditions, nuclear power provides a reliable, high-density source of energy that is widely available.
- Firm/dispatchable power is the power that can be sent to the electric grid to be supplied whenever needed. It can be turned on or off whenever needed.

Cleaner Form of Energy:

- A 1,000 megawatts plant operating at 90% plant load factor requires over a year only 25 tonnes of low enriched uranium fuel.
 - Uranium enriched to concentrations above 0.7% but less than 20% uranium-235 is defined as low enriched uranium (LEU). Most nuclear reactors use LEU that is about 3-5% uranium.
- Compared to it, a coal plant (of similar capacity) will require approximately five million tonnes of coal, and coal produces ash.

Why are there Calls for Phase out of Nuclear Energy?

> Sourcing of Nuclear Fuel:

 India's nuclear plan is premised on working around its limited supply of enriched uranium, which is difficult to source and is a burden on finances. Though India has sufficient reserves of Thorium, we have not yet shifted to Thorium based Nuclear plants.

Fears About Safety:

- Nuclear industry is moving towards 'passive safety' designs (for nuclear reactors) and are safer than older designs of nuclear plants.
- For Instance, Fukushima reactor based on older design led to disaster in Japan.

Nuclear Waste:

- Another side effect of nuclear power is the amount of nuclear waste it produces. Nuclear waste can have drastically bad effects on life, causing cancerous growths, for instance, or causing genetic problems for many generations of animals and plants.
- For instance, Kudankulam plant in Tamil Nadu has met with several delays due to the land acquisition and protest from villagers.

> Capital Intensive:

O Nuclear power plants are capital intensive and recent nuclear builds have suffered major cost overruns. An illustrative example is the V.C. Summer nuclear project in South Carolina (U.S.) where costs rose so sharply that the project was abandoned — after an expenditure of over \$9 billion.

What can be the Way Ahead?

Open up the Market:

 Allow other government companies like the National Thermal Power Corporation (NTPC) to get into nuclear on their own to break the monopoly held by the Nuclear Power Corporation of India Limited (NPCIL) and promote competition.

Focus on a Portfolio of Technologies:

 Energy, especially electricity, is not going to be solved by one technology alone. India should focus on a mix of supply-side and demand-side options, both within and outside the nuclear sector such as solar and hydro energy.

> Encourage an Enabling Policy Framework:

o Instead of setting targets for nuclear energy growth, the government should focus on creating frameworks and support mechanisms that encourage the growth of low-carbon, firm, and reliable energy sources, including nuclear.

> Invest in Research and Development:

 India should invest in research and development of advanced nuclear technologies, such as small modular reactors, to improve efficiency, reduce costs, and address safety concerns and make use of Thorium reserves.

Small Modular Reactor:

o Small Modular Reactors present numerous advantages, such as the reduction of costs and construction time. They also present a high level of **inherent safety**, since they use passive safety factors.

Conclusion:

From environmental perspective, shutting down cement plants or other assets before their full life term means wasting the carbon already sunk in them. Hence, it is better to use them until their end of life.

Hence, India should involve a balanced approach that addresses the challenges and opportunities of the sector and enables the growth of a portfolio of lowcarbon, firm, and reliable energy sources.

Same Sex Marriage: Struggle for Equality

This editorial is based on "Derek O'Brien on same-sex marriage: Queer Indians fighting the good fight" which was published in the Indian Express on 28/04/2023. It discusses the issue of the same sex marriage and right to marry for same-sex couples, which is already enjoyed by the other citizens.

Tag: Indian Governance, Issues Related to Transgenders, Fundamental Rights, Comparison of the Indian Constitutional Scheme With Others, Gender, etc.

Recently, the Supreme Court of India began hearing a series of petitions seeking solemnisation of same-sex marriage under the Special Marriage Act. The Special Marriage Act of 1954 provides a civil form of marriage for couples who cannot marry under their personal law.

In the proceedings the center advised the Supreme Court to defer the case to Parliament on the matter, stating that the law cannot be revised to permit same-sex marriage again.

In this context, there is a need to look into the matter of Same-sex marriage and its related issues.

What are Arguments Against the Same Sex Marriage?

- Religious Definitions of Marriage: Marriage has traditionally been between a man and a woman in many religions. The Special Marriage Act, 1954 was created to overcome the limitations of religious personal laws, not to create a new institution of marriage.
- 'Legitimate' Interest of State: The state has a legitimate interest in regulating marriage and personal relationships, as seen in laws regarding age of consent, prohibited degrees of marriage, and divorce. The right to marry is not absolute and subject to state laws. Just

like a parent cannot claim absolute control over their child's education, individuals cannot claim absolute control over their personal relationships.

- o The state can claim legitimate interest to regulate, when to marry, how many times to marry, whom to marry, how to separate, and law on bestiality or incest.
- The Right to Privacy: In 2017, the Supreme Court recognized the right to privacy as a fundamental right and stated that sexual orientation is a crucial part of one's identity that must be protected without discrimination.
 - However, privacy exists but it cannot be extended to marriage, which has a necessary public element. Consenting sexual relationships between adults are private, but marriage has a public aspect that cannot be ignored.
- Legislation by Parliament: Only Parliament has the authority to decide on same-sex marriage as it is a matter of democratic right and court should not legislate on the issue. There could be potential unintended consequences in law and the complexity of dealing with the various permutations and combinations of genders falling under the LGBTQIA+ community (which has 72 categories).
- Interpreting the Law: The Special Marriage Act (SMA) cannot be interpreted to include same-sex marriage because the Act's entire architecture would need to be examined, not just a few words. For example, the Act provides specific rights to a wife, and it's unclear who would have these rights in a same-sex marriage. Additionally, allowing one party in a same-sex marriage to have a specific right could create a problem for heterosexual marriages.
 - O Law provides specific rights to a wife like "the law says that the wife acquires the domicile of the husband upon marriage. So, who will be the wife in a same-sex marriage?"
 - o Issue of divorce, under the SMA, a wife may seek divorce on the ground that her husband has been guilty of rape, sodomy, or bestiality.
- Issues with Adoption of Childrens: When queer couples adopt children, it can lead to societal stigma, discrimination, and negative impacts on the child's emotional and psychological well-being, especially in Indian society where acceptance of the LGBTQIA+ community is not universal.
- Gendered terms: Argument that gendered terms like 'mother' and 'father', 'husband' and 'wife' would be problematic in same-sex marriages.

What are Arguments in Favour of Same Sex Marriage?

Threat to Human Race: Opposing same-sex marriage by saying it will end the human race is unreasonable

- Elitist Concept: The demand for marriage equality comes from less economically privileged people who need legal protection. Claiming that it's a matter for urban elites is deceptive. E.g. The story of Leela and Urmila, two policewomen who were suspended and locked up for getting married in 1987, shows the discrimination faced by LGBTQIA+ people in society.
- Extend Special Marriage Act to Queer Indians: The Special Marriage Act should be extended to include queer Indians by using gender-neutral language like "spouse" instead of "husband" or "wife". This would grant them the right to marry without asking for special rights.
 - The Special Marriage Act allowed for a Bengali Hindu and an Anglo-Indian Roman Catholic to marry in 2006, and they hope this legislation will be extended to queer Indians.
- Cohabitation as a Fundamental Right: The Chief Justice of India (CJI) acknowledged that cohabitation is a fundamental right, and it is the government's obligation to legally recognize the social impact of such relationships.
 - The justices suggested that recognition is needed for such relationships to receive certain benefits, but not necessarily as marriage. The CJI emphasized the importance of providing a sense of security and social welfare for people in such relationships.
 - o The court suggested labels like "contract" or "partnership" instead of "marriage". The government said there is no fundamental right to seek recognition of same-sex relationships as marriage.
 - o The Supreme Court of India discussed the recognition of cohabitation as a fundamental right for same-sex couples, which would entitle them to benefits without being equated to marriage.
- Assimilation of same-sex couples: The CJI has emphasized the need to assimilate same-sex couples into society rather than ostracizing them. The decriminalization of Section 377 of the IPC has recognized the existence of same-sex relationships.
 - Government should address the practical issues faced by same-sex couples, such as joint bank accounts and entitlement to pension and gratuity.
- Indian Culture and Value System: In culturally rich India, where social norms and obligations wield significant

- influence, the acceptance of same-sex relationships still poses a challenge, even after legal recognition.
- It goes against the traditional values and beliefs of the Indian society. However, the recognition of same-sex marriage adds to the diversity of relationships that exist in society.
- Human Dignity: In Navtej Singh Johar vs. Union of India, the Supreme Court granted same-sex couples the freedom to lead a dignified private life.
- Biological gender is not 'absolute: The Supreme Court of India says that biological gender is not absolute, and that gender is more complex than just one's genitals. There is no absolute concept of a man or a woman.
- 'Bouquet of rights' being denied: The LGBTQIA+ community is being denied important legal benefits like tax benefits, medical rights, inheritance, and adoption by not being allowed to marry. Marriage is not just about dignity, but also a collection of rights.

What could be the Way Forward?

- Raise awareness: The purpose of awareness campaigns is to promote equality and acceptance of all sexual orientations and expand public opinion about the LGBTQIA+ community.
- Legal reforms: Amends in the special marriage Act to allow same-sex couples to legally marry and enjoy the same rights and benefits as opposite-sex couples. Meanwhile bring the contract like agreement so the homosexual people can enjoy similar rights like heterosexuals.
- ➤ **Dialogue and engagement:** Engaging in a dialogue with religious leaders and communities can help bridge the gap between traditional beliefs and modern attitudes towards same-sex relationships.
- ➤ Legal challenges: The Indian LGBTQIA+ community can challenge the constitutionality of the current laws that prevent same-sex marriage in court. Such legal challenges can help establish a legal precedent that will pave the way for the legalization of same-sex marriage.
- The legalization of same-sex marriage requires a concerted effort from all stakeholders, including the LGBTQIA+ community, the government, civil society, and religious leaders. By working together, we can create a more inclusive society where everyone has the right to love and marry whomever they choose, regardless of their gender.

Drishti Mains Questions

- 1. What are the key challenges that need to be addressed in effectively tackling India's energy crisis and how can they be overcome?
- 2. What are the major challenges associated with the co-firing of biomass in conventional coal-fired power plants, and how can they be effectively addressed to promote the wider adoption of this renewable energy technology?
- What are the key challenges faced by India's pharmaceutical sector, and how can they be addressed to ensure sustained growth and competitiveness in the global market?
- What are the main challenges hindering the effective application of emerging technologies in the judicial system, and how can they be addressed to improve the efficiency and fairness of the justice system?
- 5. Discuss the fundamental flaws in the current paradigm of economics in the context of India?
- What are the challenges faced by microfinance institutions in India and how can they overcome these challenges to effectively serve the financial needs of the country's low-income population?
- What are the challenges faced in the process of Internationalization of the Indian Rupee and how can they be addressed?
- What impact can Artificial Intelligence have on the legislative process and decision-making, and what challenges and opportunities does it present for lawmakers and society as a whole?
- What is the current state and impact of cooperative movements in India, and how do they contribute to the socio-economic development of the country?
- 10. What is the current state of Bhutan-India relations and how have they evolved over time in terms of political, economic, and cultural ties?
- 11. The Preventive detention laws have often been criticized for their misuse. Critically analyse the need of such laws in the light of judiciary's view on such laws.
- 12. How can Online Dispute Resolution (ODR) empower India's business environment and what steps can be taken to effectively implement and promote ODR mechanisms across industries and regions in the country?
- 13. What are the key challenges hindering the successful implementation of farm mechanization efforts in India, and how can they be addressed?
- 14. Unfettered constitutional posts play a critical role in ensuring the independence and integrity of important government institutions. Discuss the significance of these positions in promoting democracy and good governance.
- 15. Discuss the impact of rising temperatures on India and suggest measures to mitigate the problem.
- 16. In the light of the recent remarks of the Parliamentary Standing Committee on Defence, critically evaluate India's preparedness to counter China's growing military ambitions.
- 17. Critically analyze the new amendments introduced by the Union government to the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021, and discuss their impact.
- 18. Analyse the demographic dividend in India and its potential impact on the economy.
- 19. "Discuss the significance and evolution of the Basic Structure Doctrine in India's Constitutional Jurisprudence. How has it impacted the separation of powers and the role of the judiciary in ensuring the protection of individual liberties and upholding the rule of law?"
- 20. Discuss the issue of justiciability in the context of the Governor's role in giving assent to Bills passed by the legislature.
- 21. Despite being a multilateral organization, the Shanghai Cooperation Organization (SCO) faces significant challenges in achieving its goals. Analyze the key challenges faced by the SCO and suggest measures to enhance its effectiveness in promoting regional stability and economic cooperation.
- 22. Analyse the concept of fraternity in the Indian Constitution and discuss the challenges of reviving a sense of fraternity in India today.
- 23. Discuss the opportunities and challenges of nuclear energy sector in India. Would it be right on India's part to look for Phase down of Nuclear energy?
- 24. Discuss the challenges faced by the LGBTQIA+ community in India with respect to the legalization of homosexuality and same-sex marriage. Analyze the impact of its legal recognition on the social and political landscape of the country.