Monthly Editorial Consolidation

1st August to 31st August 2022

Content

India's Industrial Sector

This editorial is based on "Core constraints: On economic recovery" which was published in Hindustan Times on 01/08/2022. It talks about the core sectors of economy in India and related concerns related to economic recovery.
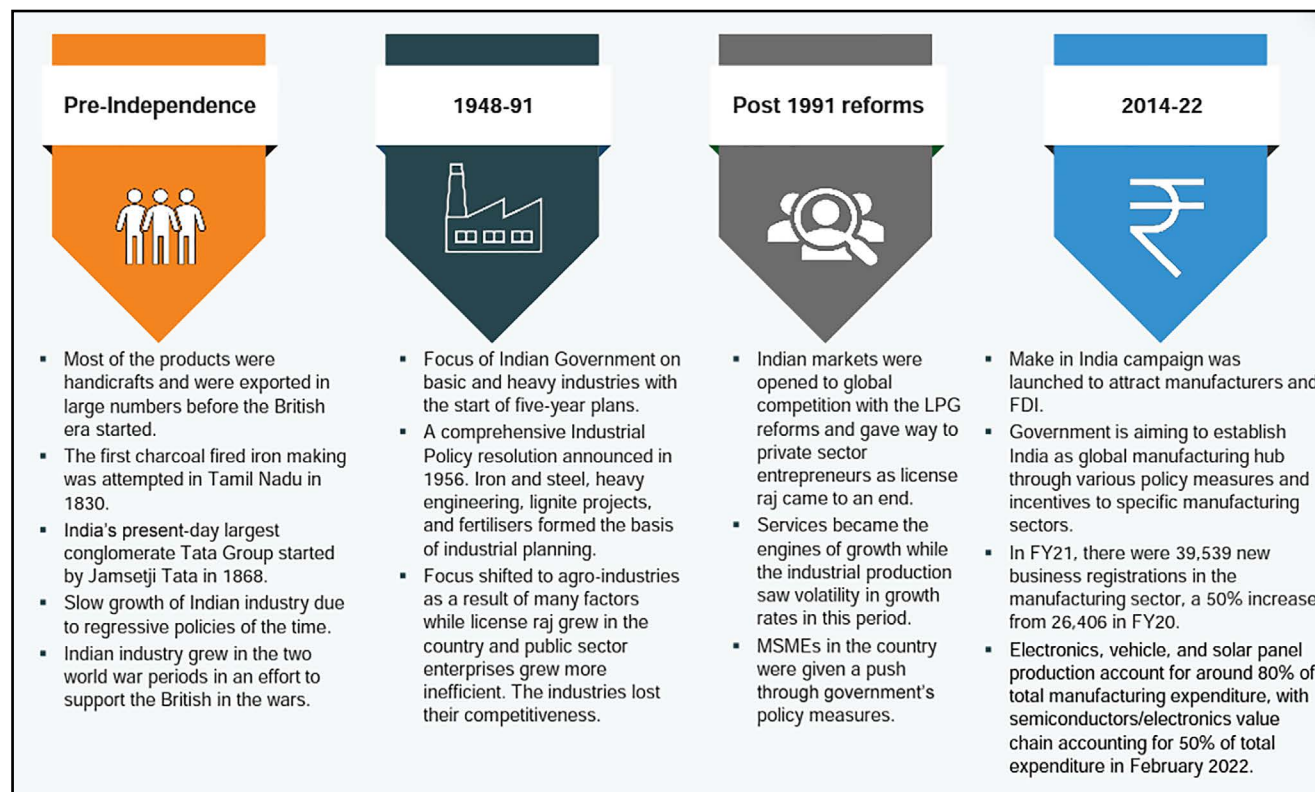
Tags: Indian Economy, GS Paper – 3, Industrial Policy, Infrastructure, Growth & Development

India's vision of a **USD 5 Trillion Economy** will significantly depend on the growth of the **Industrial sector.** There are **eight industrial sectors that are considered the core in India.**

The **core sector makes up 40% of the Index of Industrial Production (IIP)**, making it a lead indicator of industrial activity. The core sector **reported 8% growth in June 2022 from the Covid level**, with a healthy performance from all the sectors, **except steel and crude oil.**

With **Industry 4.0** fast approaching, it is **important to acknowledge the hurdles that exist in India's industrial development,** especially the **core sector**, since demand is exceeding the supply.

Pre-Independence	1948-91	Post 1991 reforms	2014-22
■ Most of the products were handicrafts and were exported in large numbers before the British era started. ■ The first charcoal fired iron making was attempted in Tamil Nadu in 1830. ■ India's present-day largest conglomerate Tata Group started by Jamsetji Tata in 1868. ■ Slow growth of Indian industry due to regressive policies of the time. ■ Indian industry grew in the two world war periods in an effort to support the British in the wars.	■ Focus of Indian Government on basic and heavy industries with the start of five-year plans. ■ A comprehensive Industrial Policy resolution announced in 1956. Iron and steel, heavy engineering, lignite projects, and fertilisers formed the basis of industrial planning. ■ Focus shifted to agro-industries as a result of many factors while license raj grew in the country and public sector enterprises grew more inefficient. The industries lost their competitiveness.	■ Indian markets were opened to global competition with the LPG reforms and gave way to private sector entrepreneurs as license raj came to an end. ■ Services became the engines of growth while the industrial production saw volatility in growth rates in this period. ■ MSMEs in the country were given a push through government's policy measures.	■ Make in India campaign was launched to attract manufacturers and FDI. ■ Government is aiming to establish India as global manufacturing hub through various policy measures and incentives to specific manufacturing sectors. ■ In FY21, there were 39,539 new business registrations in the manufacturing sector, a 50% increase from 26,406 in FY20. ■ Electronics, vehicle, and solar panel production account for around 80% of total manufacturing expenditure, with semiconductors/electronics value chain accounting for 50% of total expenditure in February 2022.

What is the Index of Industrial Production (IIP)?

➢ It is an **indicator that measures the changes in the volume of production of industrial products** during a given period. Base Year- 2011-2012.

➢ It is compiled and published monthly by the **National Statistical Office, Ministry of Statistics and Programme Implementation.**

➢ It is a composite indicator that measures the growth rate of industry groups classified under:

○ **Broad sectors:** Mining, Manufacturing, and Electricity.

○ **Use-Based Sectors**: Basic Goods, Capital Goods, and Intermediate Goods.

➢ **Index of Eight Core Industries (ICI):** This is an index of the eight most fundamental industrial sectors of the Indian economy and comprises **40.27% of the weight in IIP.**

○ The monthly **Index of Eight Core Industries (ICI)** measures collective and individual performance of production in **eight core industries**.

○ The eight core sector industries in **decreasing order** of their weightage:

● **Refinery Products> Electricity> Steel> Coal> Crude Oil> Natural Gas> Cement> Fertilizers.**

What are the Challenges Associated with the Industrial Sector in India?

➢ **Lack of Efficient Infrastructure and Manpower: High technology based Infrastructure** especially for transportation and **skilled manpower** are crucial for enhancing manufacturing competitiveness in the globalized economy.

○ **Telecom communication** facilities are mainly **confined to big cities.** Most of the **State Electricity**

Boards **are running in loss** and are in deplorable condition.

○ **Rail transport** is **overburdened** while **road transport** suffers from a variety of problems.

➢ **Maintaining a Level Playing Field: The MSME sector seems to be relatively less favorably placed in terms of credit availability** and credit cost of working capital as compared to the medium and large scale industrial and services sectors. **This persistent bias needs to be corrected.**

➢ **Reliance on Foreign Imports:** India is still dependent on foreign imports for **transport equipment, machinery** (electrical and non-electrical), iron and steel, paper, chemicals and fertilizers, plastic material etc.

○ In India, the **total industrial production of consumer goods contributes 38%** In newly industrialized countries like Singapore, South Korea and Malaysia this percentage is 52, 29 and 28 respectively.

○ This shows that **import substitution is still a distant goal for the country.**

➢ **Improper Location Base:** Industrial locations, in several instances, were established **without reference to cost-effective points.** Each **state** clamors for the establishment of **major industries in the public sector within its boundaries**, and the **location decisions are often politically motivated.**

➢ **Loss in Public Sector Industries:** Owing to focus on the socialistic pattern of development, investment under public sector industries increased phenomenally during early five year plans.

○ But due to ineffective policy implementation characterized by **red-tape** and **strained labor-management relations** most of these public sector enterprises are running in loss.

○ Every year the **government has to incur huge expenditure to cover up this loss** and meet obligations of paying wages to the employees.

What are the Recent Government Initiatives for Growth of the Industrial Sector in India?

➢ **Production-Linked Incentive (PLI)** - To scale up domestic manufacturing capability.

➢ **PM Gati Shakti- National Master Plan** - **Multimodal connectivity** infrastructure project.

➢ **Bharatmala Project** - To Improve **connectivity in North East India**.

➢ **Start-up India** - To catalyse **Startup culture** in India

➢ **Make in India 2.0** - To transform India into a global design and **manufacturing hub.**

➢ **Atmanirbhar Bharat Campaign** - To **cut down import dependence**

➢ **Disinvestment Plans -** To support India's economic recovery

➢ **Special Economic Zones-** To **create additional economic activity** and **boost the export of goods and services.**

➢ **MSME Innovative Scheme-** To promote the **complete value chain** from developing **ideas into innovation** through **incubation** and **design interventions.**

What Should be the Way Forward ?

➢ **Public-Private Partnership Projects:** There is a strong case for enhancing public investment and building PPP projects that will increase efficiency and transparency.

○ The first line of **Mumbai Metro** between Ghatkopar and Versova **was built on PPP model.**

➢ **Removal of Infrastructural Bottleneck:** Slow rate of capacity addition in physical infrastructure sectors is constricting industrial sector growth. **Capacity addition in core sectors** and **removal of infrastructure bottlenecks would spur industrial sector output** in the medium to long term.

➢ **Optimum Use of India's Demographic Dividend: With increasing share of young working population** in the total population, **India can achieve its full manufacturing potential** as it looks to benefit from its **demographic dividend** and a large workforce over the next two to three decades.

➢ **Improving Research and Development:** Industrial research and development needs to be strengthened in general and **industrial sector-specific in particular**, so that the industrial sector can become more **demand-driven.**

➢ **Potential to become a Global Hub:** India's manufacturing industry is already moving in the direction of **Industry 4.0** where every datapoint will be connected and analyzed.

○ With a **large pool of engineers**, a **young labor force**, **wages that are half that of China's, strengthens India to be a global powerhouse.**

➢ **Reforms in Industrial Policy:** Over the medium to long term, to s**ustain double-digit output growth** and **reduce the vulnerabilities of the core sector,** there is a need to put in place an effective **industrial policy** framework for embarking on another round of **multifaceted reforms.**

■■■

Feminization of Agriculture

This editorial is based on "India's natural farming policy should recognise women's new role" which was published in Hindustan Times on 01/08/2022. It talks about the feminization of agriculture in India and benefits of women's participation in natural farming.

Tags: Agriculture, GS Paper- 2, GS Paper- 3, Welfare Schemes, Issues Related to Women, Government Policies & Interventions

As per the **2011** census, approximately **33.7% of rural males migrate in search of employment and better economic opportunities.** The **increasing migration** of **rural men has led to the feminization of the agriculture sector,** with the participation of women in agriculture and allied activities becoming more significant.

To address this changing scenario, it becomes essential to **keep women at the center of India's policy initiative.**

What are the Causes of Feminization of Indian Agriculture?

➢ **Gender-Division of Work**: Women are **more willing to accept low-paid irregular work**, are **easy to hire and fire**, are thought to be docile and hardworking, and certain jobs are typified as women's work.

➢ **Social Mobility and Migration - Reserved for Males:** Men are generally perceived as **breadwinners,** as they **receive more education opportunities** and are **preferred for physical labor.**

  ❍ As a result, in the Indian rural belt, **males are more likely to migrate and move from rural to urban areas in search of better jobs**, while **females** are primarily responsible for **household chores** and **agriculture**.

➢ **Poverty:** Because of **poverty,** women often work as agricultural laborers or domestic laborers in order to **supplement the family's income,** or as **domestic laborers.**

What are the Impacts of Feminization of Agriculture on Women?

➢ **Work Overload**: In line with patriarchal social roles, **women are responsible for reproduction and care activities.** With male out-migration, women have additionally taken on the role of agriculture.

  ❍ This means that they now have to take care of their own family and also work as agricultural wage laborers.

➢ **Socio-Cultural Isolation:** Women who take up **traditional male roles** to sustain the family after men migrate are often **frowned on in communities** because they have **transgressed sociocultural norms.**

➢ **Insufficient Time for Child Raising:** Work overload leaves women with inadequate time for their children. Despite economic gains derived from male migration, **parental absence** may lead directly to **decreased care** and **supervision, negatively affecting child rearing.**

➢ **Mental Health Issues:** Spousal separation due to male migration, **lack of companionship,** and **increased household responsibilities** may trigger **mental health** problems in left-behind female spouses of migrant workers.

➢ **No Recognition and Ownership:** Women manage **work at both household and farm levels**, including **maintaining livestock,** and selling milk and other produce in the market. But, unfortunately, they are never recognized enough and continue to be **marginalized in terms of land ownership**.

How Women's Participation in Natural Farming can be a Win-Win Situation?

➢ **Natural farming** uses **methods based on natural or ecological processes through natural inputs**. It is a promising tool to **minimize farmers' dependence on purchased inputs** while increasing their incomes, delivering ecological benefits, and **maintaining nutritional food security.**

➢ **Women Empowerment:** Women's Participation in Natural Farming Initiatives can help them to **boost their incomes and their involvement in decision-making.** It would also positively impact the health and **nutritional status of the family.**

  ❍ Studies have indicated that there is a **direct correlation between women's control over agricultural resources** as a primary producer **and the socio-economic characteristics of their household.**

➢ **Effective Natural Farming**: Since women mostly cook for their families, **they understand the importance of natural products to nurture and nourish their children**. As a result, women are likely to adopt natural farming sooner than men.

  ❍ Womens have played a key role in **biodiversity management** and sustainable agriculture through ecological practices, such as **conserving traditional seeds, preparing natural fertilizer**, and using diverse natural resources to meet daily household needs.

○ Their participation in natural farming will ensure the practice's sustaining and scaling to the extent of natural farming and **support the nation's sustainable development agenda.**

➤ **Example - Andhra Pradesh Community-Managed Natural Farming (APCNF):**

○ APCNF has **engaged women in social mobilization, collective action, community learning** and community marketing by utilizing the existing institutional platform of **women's Self-Help Groups (SHGs)**, which are instrumental in scaling, sustaining and deepening the natural farming programme.

● This movement has also helped women improve their household nutrition and incomes and **empowered them to create their agency in their village.**

What Should be Our Approach Moving Forward?

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

➤ **Farm Ownership to Women:** There continues to be a growing need to **identify women as farmers, with farm ownership** that would in turn make them **eligible for schemes and benefits,** and **not mere cultivators** who work on farms.

○ **According to the agricultural census (2015-16)**, of the **73.2%** of rural women **engaged** in farming, only **12.8% own land**.

➤ **Recognize Women's Contribution:** Inclusive **approaches in agricultural policy** implementation are required to recognize the presence and contribution of women in the sector.

○ In addition, better extension services and **training programmes** aimed at women can address gender disparity.

➤ **Gender Budgeting:** **Gender sensitive formulation of legislation,** programmes and schemes, allocation of resources can be a powerful tool for achieving **gender mainstreaming** so as to **ensure that benefits of development reach women as much as men.**

➤ **Inclusion of Local Womens at Planning Stage:** Mainstreaming women's role in India's agriculture **sector**, upcoming developmental projects and action plans should include women in its planning stages.

○ Women working in farms are more **aware of their village's geography and land topography** and it **can also introduce an equity and inclusivity lens to planning.**

What are the Recent Government Initiatives Related to Women Empowerment and Agriculture?

➤ **Rashtriya Mahila Kisan Diwas**

➤ **National Mission on Sustainable Agriculture (NMSA)**

➤ **Paramparagat Krishi Vikas Yojana**

➤ **Mahila Kisan Sashaktikaran Pariyojana (MKSP)**

■■■

From Non Alignment to Multi Alignment

This editorial is based on "Decoding India's new multi-alignment plan" which was published in Hindustan Times on 02/08/2022. It talks about the India's shift from non-alignment to multi alignment and International North-South Transport Corridor.

Tags: International Relations, GS Paper-2, India and its Neighbourhood, Effect of Policies & Politics of Countries on India's Interests, Groupings & Agreements Involving India and/or Affecting India's Interests, Non-aligned Movement (NAM)

While the **Cold War (US-USSR)** was raging and shaking **international politic**s, in the initial two decades following India's independence, **India's foreign policy** was heavily determined by the policy of **non-alignment,** which later became a full-fledged movement and forum of discussion in 1961 (**Non Alignment Movement)**.

But today, **India skillfully maneuvers** between China-led or Russia-led groupings such as the **BRICS** and the **Shanghai Cooperation Organization (SCO)**, along with its involvement in US-led groupings such as the **Quadrilateral Security Dialogue** (Quad), in which **Japan** and **Australia** are also members.

In order to understand the practicality of multi-alignment, we need to flip back a few pages of history to understand the non-alignment approach first.

What is the History of Non-Alignment in India?

➤ The **Non-Aligned Movement (NAM)** was created and founded during the collapse of the colonial system and the independence struggles of the peoples of **Africa, Asia, Latin America** and other regions of the world and at the height of the **Cold War.**

➤ **In 1960,** it was at the fifteenth ordinary session of the **United Nations General Assembly** that the **Movement of Non-Aligned Countries** was created, resulting in the **admission of 17 new African and Asian members.**

○ **The then Prime Minister Jawahar Lal Nehru** also promoted the concept of **'non-alignment'**, or equidistance of the **'third world'** from the two

superpowers of the Cold War. These concepts found their way to the **Bandung Conference of 1955.**

- The primary objectives of the non-aligned countries focused on the **support of self-determination, national independence and the sovereignty and territorial integrity of States, non-adherence to multilateral military pacts.**

➤ **By the end of the 1980s,** the **Movement was facing the great challenge brought about by the collapse of the socialist block.** The end of the clash between the two antagonistic blocks that was the reason for its existence, name and essence was seen by some as the **beginning of the end for the Movement of Non-Aligned Countries**.

What is India's New Multi-Alignment Approach?

➤ **Multi-Alignment**: It is a **series of parallel relationships** that strengthen **multilateral partnerships** and seek a **common approach among the grouping towards security, economic equity and the elimination of existential dangers like terrorism.** Below are a few forums where India's Multi-Alignment Approach is clearly evident:

- ○ **International North-South Transport Corridor (INSTC):** A 7,200-kilometer multi-modal transport corridor that combines road, rail and maritime routes, connecting Saint Petersburg (Russia) to Mumbai.
  - **International North-South Transport Corridor** offers a platform for India **to collaborate with Russia, Iran, and the Central Asian Republics** towards fostering a Eurasian Free Trade Area.
  - Once fully operational, INSTC is **expected to reduce freight costs by 30%** and the journey time by 40% compared to the deep-sea route via the **Suez Canal.**

- ○ **BRICS** : BRICS is an acronym for the grouping of the world's leading emerging economies, namely **Brazil, Russia, India, China and South Africa**, seeks for **economic, political and security cooperation including people-to-people exchange** through a well-planned mechanism.
  - India was instrumental in co-founding the **New Development Bank (NDB)**, a new multilateral initiative **expected to rival the World Bank.**

- ○ **Shanghai Cooperation Organization**: **SCO** is a **Eurasian political, economic and military organization** aiming to maintain peace, security and stability in the region.
  - **Membership:** Kazakhstan, China, Kyrgyzstan, Russia, Tajikistan, Uzbekistan, India and Pakistan.

- **Iran and Belarus** are likely to be the two newest additions.
  - From SCO, **China and Russia are looking to counter the West**, especially the **expansion of NATO (North Atlantic Treaty Organization).**

- ○ **Quadrilateral Security Dialogue:** **QUAD** is the informal strategic dialogue between **India, USA, Japan and Australia** with a shared objective to ensure and support a **"free, open and prosperous" Indo-Pacific region** and **counter China.**

What is India's Current Foreign Policy ?

➤ **Sammaan:** Respect for every nation's sovereignty

➤ **Samvaad**: Greater engagement with all countries.

➤ **Suraksha:** Security; India is a responsible power-neither aggression nor adventurism exists in its DNA

➤ **Samriddhi:** Shared prosperity

➤ **Sanskriti and Sabhyata**: The persuasive reach of cultural values anchored in a philosophy which believes that the world is a family.

What are the Contemporary Challenges for India's Foreign Policy?

➤ **Growing Russia-China Axis:** Russia has become increasingly interested in its periphery's affairs. Furthermore, **sanctions imposed after the annexation of Crimea** have **pushed it towards a closer relationship with China t**hat can certainly deflect its interest in India.

➤ **Self-Imposed Isolation of India:** Currently, India remains isolated from supranational bodies like **South Asian Association for Regional Cooperation (SAARC)**. Moreover, India has **opted out of the Regional Comprehensive Economic Partnership (RCEP).**

- ○ Self-imposed isolation does not fit with India's ambition to become a global power.

➤ **Weakening Ties with Neighbors:** A more worrying concern for Indian foreign policy is weakening ties with the neighbors. This can be seen from instances like **China's Cheque Book Diplomacy** vis-a-vis **Sri Lanka and Pakistan, strain in relation with Bangladesh on National Register of Citizens (NRC) issue** and a **border dispute with Nepal.**

- ○ Thus instead of looking towards development of the country, **India is forced to invest heavily in security.**

What Should be the Way Forward?

➤ **Strengthening Ties with Neighbors:** India should make valiant efforts to improve relations with some of its neighbors such as **Bangladesh, Myanmar, and Sri Lanka.**

○ In this context, India can look forward to extending more diplomatic policies like **"vaccine diplomacy" under its Neighbourhood First Policy** with neighbors, which supplied vaccines for free or at affordable prices in 2021.

➢ **Thinking Beyond Geo-Political:** It is imperative to expand the focus of India's foreign policy agenda beyond the traditional thinking of geopolitical boundaries to address issues such as regulatory oversight of **trans-boundary digital giants, big data management, trade issues and disaster relief.**

➢ **G20 in 2023: India's presidency of G20 in 2023** will give it the chance to **weave geoeconomic themes with geopolitical interests**. Until now, India has played the role of an emerging power trying to become a global power. The G20 summit of 2023 will allow India to articulate and be proactive on issues that matter to the world.

Conclusion

Therefore, a **multi-alignment approach preserving certain prominent values of non-alignment** is good for India's interests and advancing towards **"Vasudeva Kutumbakam''.**

∎∎∎

US-China Conflict over Taiwan

This editorial is based on "Why US-China tensions may lead to strategic instability" which was published in Hindustan Times on 03/08/2022. It talks about the current visit by US speaker Nancy Pelosi to Taiwan and related US-China issues.

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

The visit by **US speaker Nancy Pelosi to Taiwan** is **not being well received by China.**

It has sparked intense tensions between the two powerful countries- **China and US** as **China sees Taiwan** as a **breakaway province.**

Taiwan, which **considers itself a sovereign nation**, has long been **claimed by China,** who considers Taiwan to be its **breakaway province**. Yet **Taiwan also counts the US as its biggest ally,** and **Washington** has a law that requires it to **assist Taiwan in defending itself.**

Why are US-China Loggerheads over Taiwan?

➢ **Taiwan,** officially the **Republic of China**, is a country in **East Asia,** and is the largest land mass between **Japan** and the **Philippines** at the **junction of the East and South China Sea** in the northwestern **Pacific Ocean.**

○ Much of the world's **global supply chain of semiconductors** is reliant on Taiwan.

● Further, its contract manufacturers together accounted for more than **60% of total global semiconductor revenue in 2021.**

○ Currently, **only 13 countries (plus the Vatican) recognise Taiwan** as a **sovereign country.**

➢ **Relevance to China**: Also, **China and Taiwan's economies are inextricably linked. China is Taiwan's biggest export partner,** with an export value of **515 billion dollars** from 2017 to 2022, more than double the US, which was the next biggest partner.

○ Taiwan is much **closer to mainland China** than the other islands, and **has been claimed by Beijing** since Nationalists were driven there during the **Chinese revolution in 1949**.

○ Some have seen **Russia's invasion of Ukraine as a potential catalyst for a China-Taiwan conflict.**

➢ **Relevance to the United States**: Taiwan **anchors a chain of islands** which includes a list of **US-friendly territories** that the US is planning to use as a place of leverage for **countering China's expansionist plans.**

○ The **United States does not have official diplomatic ties with Taiwan** but is **bound by US law (Taiwan Relations Act, 1979)** to provide the island with the means to defend itself.

○ It is by far the **largest arms dealer for Taiwan** and follows a **'strategic ambiguity' policy**.

What is the First Island Chain?
➢ The **First Island Chain** comprises the **Kuril Islands, the Japanese Archipelago, Ryukyu Islands, Taiwan, northwest Philippines** and **ending at Borneo.**

- ➢ This chain is also the first line of defence and serves as the maritime boundaries between the **East China Sea** and the **Philippine Sea** and the **South China Sea** and the **Sulu Sea.**
  - ❍ In this chain are located the **Bashi Channel** and the **Miyako Strait** which are critical chokepoints for China.
- ➢ China's maritime strategy, or the **"Island Chain Strategy,"** is a **geographical security concept crafted by the United States in the 1940s** to deter China and the Soviet Union's maritime ambitions.

What has been the Stand of India on the Taiwan Issue?

- ➢ **India-Taiwan Ties:** As a part of **India's Act East Foreign Policy**, India has sought to cultivate extensive ties with Taiwan in **trade and investment** as well as developing **co-operation in science & technology**, environment issues and **people-to-people exchange.**
  - ❍ For instance, the **India-Taipei Association (ITA)** and **Taipei Economic and Cultural Centre (TECC)** in New Delhi.
  - ❍ **India and Taiwan do not have formal diplomatic relations** but since 1995, both sides have maintained representative offices in each other's capitals that function as de facto embassies.
- ➢ **Stand of India**:
  - ❍ Since **1949**, **India has accepted the One China policy** that accepts **Taiwan and Tibet as part of China.**
  - ❍ However, **India uses the policy to make a diplomatic point**, i.e., **if India believes in "One China" policy, China should also believe in a "One India" policy.**
  - ❍ Even though **India has stopped mentioning its adherence to One China policy in joint statements and official documents since 2010**, its engagement with Taiwan is still restricted due to the framework of ties with China.

What is the One China Principle and One China Policy?

- ➢ It is important to distinguish between the **One China Principle** and the **One China Policy** to understand the **cross-Taiwan Strait problems.**
- ➢ The **People's Republic of China** follows the **One China Principle**, a core belief that sees **Taiwan as an inalienable part of China,** with its sole legitimate government in Beijing.
  - ❍ The **US** acknowledges this position but not necessarily its validity.
- ➢ The **US instead follows the One China Policy**, meaning that **The People's Republic of China was and is the only China,** with **no recognition for the Republic of China (ROC, Taiwan)as a separate sovereign entity.**
  - ❍ At the same time, the **US refuses to give in to the PRC's demands to recognise Chinese sovereignty over Taiwan**.

Where Do We Go From Here?

- ➢ The **Chinese economy is far more interconnected with the global economy than Russia's Economy.** Thus, China will look to mind the gap very carefully if they want to launch an invasion of Taiwan, especially so close to the Ukraine crisis.
- ➢ After all, the **Taiwan issue is not just about a moral question of allowing the destruction of a successful democracy,** or about international ethics, the **day after China's invasion of Taiwan will mark a very different Asia,** regardless of what happens.
- ➢ In addition, India can rethink the **One China Policy** and **separate its relationship with mainland China from that with Taiwan** just as China is expanding its involvement in Pakistan occupied Kashmir (PoK) through its ambitious project **China Pakistan Economic Corridor (CPEC).**

■■■

Freebies v/s Welfare

This editorial is based on "Sop or welfare debate: On freebies" which was published in The Hindu on 05/08/2022. It talks about the political dialogue that is built around freebies and related issues.

Tags: Governance, GS Paper- 2, Government Policies & Interventions

The political parties in India try to outdo each other in **luring the Indian voters with assorted goodies** called **freebies**. This trend has gained more momentum in recent times with the political parties being innovative in their offerings as the **'traditional free water and electricity'** is **no longer sufficient as election goodies.**

The political dialogue built around freebies is **fraught with danger** as it **shakes the root of free and fair elections to a large degree**.

The unviable pre-election promises adversely **affect the informed decision-making by voters**. This calls for fixing the gaps in **design, execution and accountability of freebie culture.**

What is the Positive Side of Freebies in India ?

➢ **Foundation for Welfare Schemes**: Freebies **not only include unviable pre-election promises** but **also a number of services that the government provides** to meet its constitutional obligations (**Directive Principles of State Policy**) towards citizens like **Public Distribution System (PDS)**, **Free Covid Vaccine** and **Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).**

  ❍ The '**Mid-day Meal Scheme'** was first introduced in 1956 by **Tamil Nadu's Chief Minister K. Kamaraj** and then it was **adopted as a national programme** a decade later.

  ❍ NT Rama Rao's promise of rice at Rs. 2 per kg in **Andhra Pradesh** is the **original avatar** of the current day **National Food Security Programme.**

  ❍ **Rythu Bandhu** of Telangana and **Kalia** of Odisha were **forerunners** of what is now **Kisan Samman Nidhi.**

➢ **Upliftment of Lower Class:** As the **states with comparatively lower levels of development** have a greater percentage of their population living in **poverty**, such **freebies become** more **useful for upliftment of lower strata in these states**.

What are the Negative Impacts of Freebies?

➢ **Drain on Public Spending**: Most of the times, f**reebies ultimately lead to an excessive and unnecessary drain on public spending**, and adds economic burden on states as most Indian states suffer from a poor financial condition and have limited revenue resources.

➢ **Revdi (Freebies) for One, Disaster for Other:** As a result of reducing prices for consumers beneficiaries, the government **overcharge industrial and commercial contracts in order to maintain the internal fiscal balance**. Subsequently the competitiveness of growing industries is reduced, which results in slower industrial growth and commercial price hike.

  ❍ Therefore, it is not how cheap the freebies are for the beneficiaries, but how expensive they are for the economy, life quality and social cohesion in the long run.

➢ **Increased Fiscal Deficit**: Subsidies and freebies creates **pressure on government revenues**, leading to an **increased fiscal deficit** and **increased interest payments.**

➢ **Distort Informed Decision Making of Voters:** **Unregulated populism by** offering and distributing **'irrational freebies'** during election campaigns often **create bias in the minds of voters, specially the unprivileged class** as they are **easily swayed by**

freebies and impact the informed decision making to choose their representative.

➢ **Temporary Nature:** Freebies sometimes suffer negative transitions **from universal, then optional**, then a halfway house through surcharges, these promises are **only valid till incumbents face fiscal constraints** and are forced to withdraw benefits.

➢ **Private Goods- Based Freebies:** Freebies on **Private goods** and services do not lead to a **tangible social benefit.**

  ❍ For example, **free distribution of electricity does not provide any collective social benefits** thus can be **contemplated as Private Goods.**

Public Goods v/s Merit Goods v/s Private Goods

In **Economics** the products or services are of three types:

➢ **Public Goods:** These are **non-excludable and non-rival in consumption** like **national defense**, **food control system, railways, highway** and information on **Covid** etc.

  ❍ Such services are difficult to be owned by the individuals even if they are willing to pay for these and are **necessarily to be provided by the governments.**

➢ **Merit Goods**: In contrast to pure public goods, merit goods are, **provided through the market,** but **not necessarily in sufficient quantities** to maximize social welfare like **education**, **health care**, **welfare services**, housing, fire-protection, refuse collection and public parks.

  ❍ These **can be acquired by the individuals at a personal level** and can provide certain benefits to the larger society.

  ❍ For example, an individual can buy a mask which would prevent Covid from infecting others and promote social good. Therefore, **the government is justified in undertaking free distribution of masks.**

➢ **Private Goods:** A product or service **produced by a privately owned business** and purchased to **increase the utility, or satisfaction, of the buyer.**

  ❍ The **majority of the goods and services consumed in a market economy are private goods** and their prices are determined to some degree by the market forces of supply and demand.

    ● These **can be acquired at the individual level** and also provide most **benefits to the individual** and **do not lead to a tangible social benefit.**

➢ The **distinction between merit and private goods** is laid bare by comparing the sanitization movement in the country with the free or subsidized distribution of electricity.

What Should be the Way Forward?

➤ **Drawing a Line Between Welfare and Freebie**: Freebies must be understood from an economic perspective and **connected to taxpayers' money.**

○ **Differences between subsidy and freebie are also essential** since subsidies are justified and specially targeted benefits meant to meet specific demands. The freebies, on the other hand, are quite different.

➤ **Clear Rationale and Indication of Funds**: Governments and states should have the capacity to create subsidy programs to assist the needy, but such programs must provide a **clear rationale for investing more in basic amenities** and have a **clear indication of the funds to sustain the state's economic health.**

➤ **Voter Awareness:** In a democracy, the **power to block or allow the march of freebies rests with the voters**. There is a need for **consensus between regulating the irrational freebies and making sure voters don't get swayed** by the irrational promises.

○ All of this requires **eternal vigilance on the part of the voting class.**

➤ **Strengthening Cooperative Federalism: Cooperative federalism will facilitate the c**oordination between the Center and States to look forward to the **National Development Agenda** between the **Center and States** can **reduce the need for glorifying and irrational political agendas to some extent** and lead to **collective growth of the nation as a whole.**

➤ **Judicial Intervention:** A **constructive debate and discussion in parliament is difficult since the freebie culture has an impact on every political party**, whether directly or indirectly. Therefore, judicial involvement is required in order to propose measures.

○ The **Supreme Court** has recently recommended creating an apex authority to provide recommendations on how to regulate gifts given out by political parties.

➤ **Strengthening ECI Model Code of Conduct:** The **Election Commission of India** can anticipate enforcing the **Model Code of Conduct For Guidance of Political Parties and Candidates** effectively to regulate **election manifestos** in order to **prevent the manipulation of informed voter behavior.**

➤ **Focus on Skill Development Rather than Freebies:** Give a man a fish and you feed him for a day, teach a man to fish and you feed him for a lifetime. It is always better to provide useful skills to the people than to give them freebies.

○ The subsidies in basic necessities such as **giving free education to younger children** and **offering free meals at schools** are rathe**r positive approaches.**

○ **If the political parties go for effective economic policies** where the welfare schemes have good reach to the targeted population, then **infrastructure and development will take care of itself** and the **people will not require such kinds of freebies.**

■■■

Indian Himalayan Region

This editorial is based on "Policies and People / Don't destroy the Himalayas for tourism gains" which was published in Hindustan Times on 06/08/2022. It talks about the Indian Himalayan Region and issues associated with unsustainable tourism.

Tags: Biodiversity & Environment, GS Paper- 3, Environmental Pollution & Degradation, Geographical Features and their Location, Physical Geography

With its **towering peaks, majestic landscapes, rich biodiversity and cultural heritage**, the **Indian Himalayan Region (IHR)** has long drawn visitors and pilgrims from the **Indian sub-continent** and across the world.

These dynamics have turned **tourism** into a **key driver of socioeconomic development.** For local mountain people, tourism provides valuable **economic and business opportunities**, and for state governments and private entrepreneurs **it brings revenues and profits.**

But the **prevailing model of tourism in the IHR is viewed as a source of environmental damage and pollution,** a **threat to socio-cultural heritage,** a heavy use of scarce resources, and potential **cause of negative externalities in society.**

What is the Significance of Himalayas for India?

➤ **Source of Rivers:** Abundant rainfall and vast snow-fields as well as large glaciers in Himalayas are the **feeding grounds of the mighty rivers of India**.

○ The great rivers and their tributaries carry enormous quantities of **alluvium** while descending from the Himalayas.

● This is deposited in the **Great Plain of North India** in the **form of fertile soil**, making the plain **one of the most fertile lands of the world.**

➤ **Critical for India's Energy Security:** Almost **33% of the country's thermal electricity** and **52% of its hydropower** is **dependent on river waters originating in the Himalayas.**

○ These rivers receive a significant part of their water from the melting of glaciers, making them a critical component of **India's energy security** and its water security needs.

➢ **Sustaining the Monsoon**: The Himalayas play a very significant role in **influencing the climate of India.** By virtue of their high altitude, length and direction, they effectively **intercept the summer monsoons** coming from the **Bay of Bengal** and **Arabian Sea** and **cause precipitation in the form of rain or snow.**

○ Besides, they **prevent the cold continental air masses of Central Asia** from entering into India.

➢ **Forest Wealth:** The Himalayan ranges are very rich in forest resources. In their altitude, the Himalayan ranges show a succession of vegetal cover from the **tropical to the Alpine.**

○ The Himalayan forests provide **fuel wood and a large variety of raw materials** for forest based industries. Besides, many medicinal plants grow in the Himalayan region.

➢ **Tourism:** By virtue of their **scenic beauty** and **healthy environment**, the Himalayan ranges have developed a large number of **tourist spots**.

○ The hilly areas in the Himalayas offer cool and comfortable climate when the neighboring plains are reeling under the **scorching heat** of the summer season.

What are the Challenges Associated With Himalayas in India?

➢ **No Proper Waste Management**: The cities of the Himalayas are growing and beginning to see the same root as the cities of the plains from **mountains of garbage and plastic**, **untreated sewage, unplanned urban growth** and even local **air pollution** because of vehicles.

○ Most mountain villages have **no local, decentralized facility to dispose of the junk safely**. So, they either burn or dump the junk on the slopes.

➢ **Unsustainable Tourism:** Unfortunately, our mountains are **treated only as tourist destinations** without realizing that **over draining resources beyond a point can be disastrous.**

○ Also, mountains also have their own **microclimate.** Its unique fauna and flora have a **short reproductive time frame** and are **sensitive to disturbance. Unsustainable tourism** can **upset the natural balance.**

➢ **Climate Change**: Melting ice and snow due to climate change **form new glacial lakes**, as well as **increase the volumes of existing ones**. This could raise the threat of **glacial-lake outburst floods.**

○ Some **8,800 glacial lakes in the Himalayas are spread across nations**, and more than **200 of these have been classified as dangerous**.

➢ **Faulty Infrastructure Projects:** The development of hydroelectricity is important as it provides the country with a renewable source of energy and is a revenue source for the state.

○ But it is also clear that the impact of the flood is exacerbated because of the **number and poor construction of the hydropower projects**.

What is Char Dham Highway Development Project?

➢ **Char Dham Highway Development Project** is a central highway expansion project, envisaged in 2016, to **widen 889 km of hill roads to provide all-weather connectivity** in the **Char Dham circuit**, covering Uttarakhand's four major shrines- **Badrinath, Kedarnath, Gangotri and Yamunotri** in the upper Himalayas.

➢ While **conceived primarily to facilitate the Char Dham yatras (pilgrimage)** and to **boost tourism,** the project also has a **strategic angle** to it as the highways would facilitate **troop movement to areas closer to the China border**.

○ In conclusion, a **road that is disaster-resilient is much more important than a wider road prone to frequent blocks, landslides, and slope failures,** which suggests a **middle width for Himalayan highways** that is more **judicious for pilgrimage as well as country's defence needs.**

What Should be Our Approach Forward?

➢ **Environmental Impact Assessment**: The state should encourage tourism, but the goal should be **responsible tourism,** which means that before opening up new tourism areas, an **assessment of the effect** of such endeavors must be conducted.

➢ **Pan-Himalayan Strategy**: There is a need to think about a **pan-Himalayan strategy** so that **states can evolve common policies** and not follow the race to the bottom.

○ These strategies **should also take into account the region's natural resources,** including **forests, water, biodiversity, organic and specialty foods, nature tourism**, as well as address specific threats so that **growth does not lead to environmental degradation.**

○ **National Mission on Sustaining Himalayan Ecosystem** is a good step in this direction.

➢ **Sustainable Infrastructure Projects:** The **building design of towns** associated with the Himalayan region **must reflect the local ecosystem** while incorporating **seismic fragility** and **aesthetics**. Unmanaged and unchecked urban growth should not be permitted. All this will require **strong regulatory institutions** in these towns.

❍ Also, there is a need to **design sustainable hydropower projects to maximize the use** of available water for energy generation.

● **Rivers cannot and must not be re-engineered**, but **dams can be re-engineered** to maximize use of available water.

● Locals should also benefit from **projects** through **interactive grids.**

➤ **Revisiting the Policies:** A common policy should be developed to improve forest value in Himalayan states by discussing agriculture practices in hilly regions.

❍ For instance, **Sikkim has promoted organic cardamom crop**, **but finds that forest laws do not allow it to take benefit of cultivation on these lands**, which is done without destroying forests.

➤ **Sustainable Tourism:** Appropriate mechanisms should be devised to help achieve **tourism growth in the landscape in a sustainable manner having minimal impact on biodiversity,** while providing sustainable livelihood options for the local community.

❍ The **Uttarakhand Flood 2013** teaches us that we must learn to build **sustainable models for pilgrim-based tourism** in the fragile hills.

❍ The move towards **ecotourism** needs to be promoted carefully so that best practices can be learnt and disseminated.

➤ **Vigilance and Regular Patrolling**: **Protected areas** in Himalayan region like **Hemis National Park** and **Karakoram Sanctuary** in **Ladakh** require **vigilance and regular patrolling** to **reduce unwanted wildlife-tourist interaction** as well as habitat destruction due to off-road driving and encroachment.

➤ **International Collaboration: Himalayan countries** need to build an **international network that will monitor risks such as those from glacial lakes**, and give early warning of hazards **similar to the tsunami warning systems installed around the Indian Ocean** over the past decade.

∎∎∎

Blue-Green Infrastructure

This editorial is based on "Why Delhi must invest in blue-green infrastructure" which was published in Hindustan Times on 06/08/2022. It talks about the Blue-Green Infrastructure and its applications.

Tags: Biodiversity and Environment, GS Paper- 3, Infrastructure, Urbanization, Environmental Pollution & Degradation, GS Paper-2, Government Policies & Interventions

Urbanisation is intrinsic to development and often serves as a **major driver of economic growth**. India is at the tipping point of transitioning from a **rural to an urban society**, so it is critical that the **economic** and **social infrastructure** are in good shape.
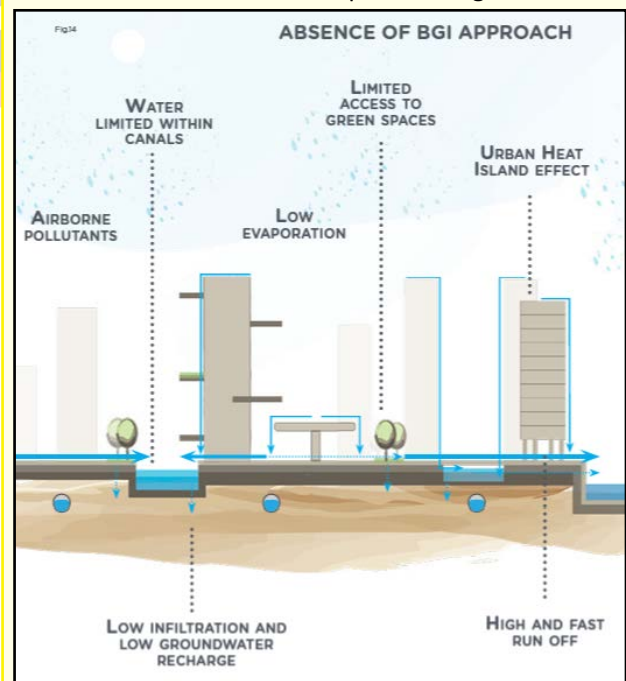
Cities are like living organisms. Our cities **occupy just 3% of the nation's land,** but their **contribution to the Gross Domestic Product (GDP)** is a whopping around **65%**.

Cities are also a key contributor to **climate change**. The inability to **effectively streamline**, **regulate and monitor urbanisation processe**s is inadvertently **responsible for this vast environmental loss.**

The need of the hour is **incisive, insightful planning** and **nature-driven solutions** as a counter to conventional infrastructure practices in cities by harnessing **Blue-Green Infrastructure.**

What is Blue-Green Infrastructure?

➤ **Blue-Green Infrastructure** refers to a network that provides the **"ingredients"** for solving urban and climatic challenges by a combination of **infrastructure**, **ecological restoration** and urban design **to connect people with nature.**

❍ **Blue** indicates water bodies such as rivers and tanks

❍ **Green** indicates trees, parks, and gardens.

What are the Advantages of Blue-Green Infrastructure?

➤ **Environmental benefits:**Utilising blue-green infrastructure in sectors such as **transportation, water, and housing** can **improve ecosystem health,** thereby improving **human health** and the environment.

○ Incorporating green infrastructure in the city will not **only benefit humans but also nature.**

➤ **Social benefits: The** design and beauty of the landscape can contribute to the **identity of the city's character.** Green streetscapes and landscapes enhance aesthetic and ethical qualities

  ○ Blue-green infrastructure can **provide shelter in public spaces** and reduce the urban temperature and increase outdoor activities which **encourage more social gatherings.**

➤ **Economic benefits:** Implementing blue-green projects in the city may also help the citizens economically. Due to l**ow temperature on building surfaces,** it **diminishes the cooling demand** which results in **decreasing energy needs.**

  ○ The **life expectancy of the building increases as green infrastructure will protect it from high temperatures**, help in lowering maintenance costs, etc.

What are the Challenges Associated with the Implementation?

➤ **Recognition of Urban Areas:** Around **8000** towns are counted as urban for population estimation under the **Census of India (2011),** however, half of them, known as **census towns**, are **still administratively 'rural'.**

  ○ The **lack of 'urban' status poses an institutional challenge** in terms of **planning and management** of these settlements that have already attained the urban characteristics.

➤ **Lack of Active Master Plan for Cities:** In the present scenario, about **52% of the statutory towns** and **76% of the census towns do not have any Master Plans** to guide their spatial growth and infrastructural investments.

  ○ It would be difficult to integrate blue-green projects in these cities.

➤ **Lack of Adequate and Technically Qualified Planners in the Public Sector:** It is alarming to find that there is not even one planner per urban centre in India.

  ○ According to **NITI Aayog** indicates that over **12000 posts for town planners are required in the country.**

➤ **Disconnect between Urban Planning and Urban Land Records:** A city is a **'system of systems'**. City planning cannot be done without good maps with clarity of land titles and ownership.

  ○ **Accurate and usable maps of many of the major cities in India do not exist** with their functionaries or in the public domain.

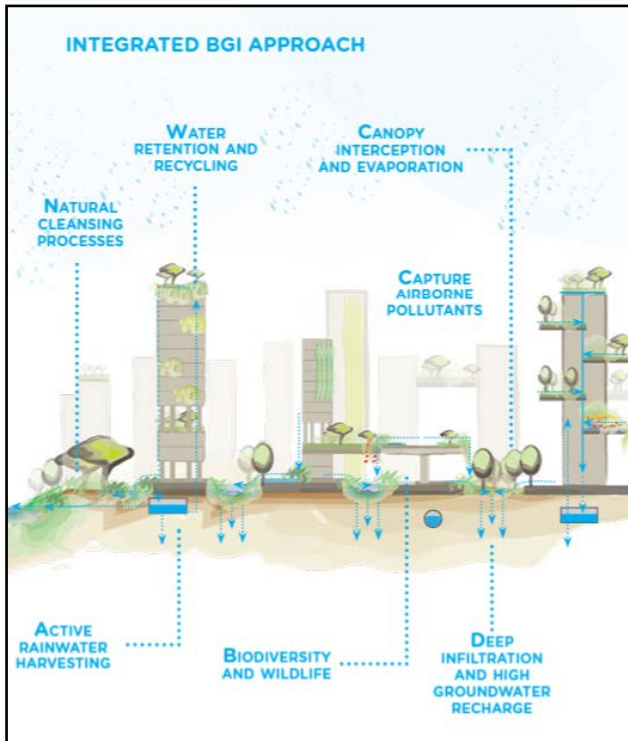**What is the Current Blue-Green Infrastructure Projects Across the Globe?**

➤ Active, Beautiful, Clean Waters Programme - Singapore

➤ Grey to Green Initiative - Portland, Oregon, United States

➤ Rain City Strategy - Canada

➤ Sponge City Programme - China

What Should be the Way Forward?

➤ **Towards Nature Based Solutions:** Infrastructure planning must become more sensitive to **ecological considerations** by developing and adapting **nature-based solutions** to meet climate and sustainability goals, a purpose served by blue-green infrastructure.

  ○ **Smart Cities Mission** and **Atal Mission for Rejuvenation and Urban Transformation (AMRUT)** are some good steps in this direction.

➤ **Institutionalising a Blue-Green Urban Framework:** An overarching framework should be established to define the national vision and determine guiding principles for such projects.

  ○ For instance**, guidelines on tackling uncertainties** in terms of designing new **water systems** can aid quick decision-making at the **local level.**

➤ **Bottom-Up Approach**: Many Indian cities release **annual environmental status reports**, with details on **natural features** and **pollution indicators.**

  ○ Such activities can be integrated with an **annual blue-green auditfor all cities** and be accompanied by **demographic data** to better understand the **social challenges** and to **develop realistic policy solutions.**

    ● **Delhi is one of the first cities in India to include a blue-green infrastructure** focus in its **2041** masterplan.

➤ **Multi Stakeholder- Multilevel Participation:** By encouraging **community involvement** and active interaction with government, planners, policymakers, and other political representatives, **blue-green projects will become more understood and the citizens will be more likely to take part in planning, formulation, implementation and monitoring of them.**

  ○ In India, initiatives in **Bengaluru and Madurai** have also included considerable citizen involvement.

➤ **Fast-Tracking Sustainable Development Goals:** The **COVID-19 pandemic** has **impacted global and domestic funding capacity** for projects related to the **UN's Sustainable Development Goals (SDGs).**

❍ Blue-green infrastructure has the potential to fulfil multiple targets outlined in the SDGs, such as those related to **water** (**SDG 6 and SDG 14**), **land** (**SDG 15**) and **climate change** (**SDG 13**).

- It can also accelerate progress on **green employment prospects (SDG 1)**.

➢ **Integrated- BGI Approach:**

∎∎∎

Open Network for Digital Commerce (ONDC)

This editorial is based on "How India is shaping the future of e-commerce", which was published in Hindustan Times on 07/08/2022. It talks about the Open Network for Digital Commerce (ONDC) and its applications.

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

The future of Open Retail is taking shape in India as the nation rolls out the **Open Network for Digital Commerce (ONDC)** in pursuit of **increasing E-commerce penetration in India to 25%** of consumer purchases in the next two years.

ONDC will provide a **common digital space for buyers and sellers** with the goal of **democratising e-commerce** by transforming it **from a platform-centric paradigm to an open network** for buying and selling goods and services, **ONDC** can certainly **transform India's E-commerce sector.** However, there are a few grey areas that still need to be clarified.

What Benefits Does the Open Network for Digital Commerce Offer?

➢ **Level Playing Field**: ONDC is keen to **level the playing field** for e-commerce operators and widen the digital market access for **Micro, Small and Medium Enterprises (MSMEs)** and **small traders** in the country.

❍ Additionally, it will help **new entrants** by bringing **discoverability, interoperability, and inclusivity.**

➢ **Competitive and Innovative Ecosystem**: Existing e-commerce platforms operate in compartments and are strictly regulated.

❍ ONDC will empower suppliers and consumers by **breaking the monopoly of giant platforms** to drive innovation and transform businesses in sectors like **retail, food, and mobility.**

➢ **Freedom of Choice for Consumers**: Consumers can potentially **discover any seller, product or service** in a common platform, thus **increasing freedom of choice for consumers.**

❍ It will enable the consumers to match demand with the **nearest available supply.** This would also give **consumers the liberty to choose their preferred local businesses.**

➢ **Neutral and Regulated Platform:** ONDC aims at **fostering open networks developed** on **open-sourced methodology**, using open specifications and network protocols, and **independent of any specific platform.**

❍ It will set protocols for **cataloguing, vendor match, and price discovery** on an **open source**-basis, like the **Unified Payments Interface (UPI).**

❍ **Snapdeal** is the first E-commerce platform to get on the open network.

What is Open Source?

➢ Open source implies that the **technology or code** deployed for the process is **freely made available for everyone to use, redistribute, and modify.**

➢ For instance, the operating system of **iOS is closed source**, it cannot be legally modified or used.

❍ Whereas, the **android operating system is open source**, making it possible for smartphone manufacturers, such as Samsung, Nokia, Xiaomi, etc., to modify it for their respective hardware.

What are the Grey Areas Related to ONDC?

➢ **Match-Up Concern**: **Smaller businesses with low volumes** may lack the resources to **match the discounts offered** by heavyweights like **Amazon and Flipkart.**

  ○ These two global giants poured a combined **USD 24 billion** into India and **captured 80% of the online retail market** with **aggressive discounts** and **promotion of preferred sellers.**

➢ **Payment Methods**: It is certain that there might be a **mismatch in payment gateway compatibility** between the different platforms.

  ○ The goal of a **seamless transaction** may be **compromised** if different e-commerce platforms **do not accept all modes of payment.**

➢ **Answerability Concern:** As it remains **unclear as to how various e-commerce norms will apply to ONDC**, and how **ONDC fits into the entire legal landscape** of e-commerce in India.

  ○ **The question arises about liability** in case of a consumer facing any issue regarding the transaction or the quality of products or services delivered.

What Should be the Way Forward?

➢ **Digital Infrastructure and Literacy**: The government needs to build a better **digital space** for e-commerce to outdo the dominant e-commerce platforms.

  ○ Along with this, it's important to **create a proper digital education policy that takes into account various languages** and **user-friendly interface** for the benefit of the consumers as well as sellers.

➢ **Awareness Campaign**: Bringing the tens of millions of existing kirana stores onto the platform will require a massive, **well-funded adoption campaign.**

➢ Thrust to Existing Schemes through ONDC: ONDC can enhance the implementation of variou schemes like **Pradhan Mantri Van Dhan Yojana.**

  ○ **PMVDY** scheme aims for enhancing the **livelihood off orest-dependent tribes** through aggregation, processing and **forward sales of forest produce.**

    ● The tribal communities **neither** enjoy the benefits of **price realisation nor** do they get sufficiently **exposed to the market.**

    ● The scheme has been operating since 2018 but a **bulk of sales still take place at local haat bazaars or village mandis** and are restricted to local traders.

  ○ **ONDC can provide them the reach on scale** enjoyed by any other big brand.

    ● Such an integration would also add significant value to customer choices marching towards **healthy and sustainable options.**

➢ **Proper Grievance Redressal Mechanism:** There should be a **secured single window** to navigate both the **demand and supply-side** problems like **information asymmetry**, **opaque pricing**, **quality and product concerns** and **buyer-seller conflict.**

■■■

ISRO's Small Satellite Launch Vehicle Mission

*This editorial is based on "Space to learn | On the failure of ISRO's maiden small satellite launch vehicle mission", which was published in The Hindu on 10/08/2022. It talks about the **ISRO's maiden small satellite launch vehicle mission.***

Tags: Science & Technology, GS Paper- 3, Space Technology, Achievements of Indians in Science & Technology

The **Indian Space Research Organisation (ISRO)** launched the first flight of its new satellite launcher, **Small Satellite Launch Vehicle** from the **Satish Dhawan Space Centre** in Sriharikota, Andhra Pradesh carrying two satellites- **Earth Observation Satellite-2 (EOS-2)** and **AzadiSAT.**

Satellites carried by the vehicle, however, **failed to reach the desired orbit** due to an **error in the terminal stage.**

What was the Purpose of the Mission?

➢ The purpose of this mission was to place the two satellites in circular low-earth orbits at a height of about **350 km** above the Equator.

  ○ **EOS-2**: An **optical remote sensing satellite** designed and developed by ISRO.

  ○ **AzadiSAT** : Array of **75 tiny payloads** integrated by students, to measure the **ionising radiation,** integrated by the student team of **Space Kidz India.**

    ● It is **ISRO's attempt at popularising Science Technology Engineering Mathematics (STEM) among girl students at the school** level as it pushes for further exploration of the cosmos.

What went Wrong During the Satellite Launch?

➢ The **SSLV was composed of three stages with velocity trimming modules** powered by **solid fuels** and **these three performed their function as planned.**

➢ The **problem appeared to be the SSLV's terminal stage,** called the **velocity trimming module** (VTM).

  ○ According to the launch profile, the **VTM was supposed to have burned for 20 seconds.**

  ○ However, **it burnt for only 0.1 seconds**, denying the rocket of the requisite altitude boost.

➢ According to **ISRO**, the **malfunctioning of a sensor** resulted in **placing the satellites in an elliptical orbit**, **rather than a circular orbit.**

What is the Difference Between Circular and Elliptical Orbits?

➢ **Orbit:** An orbit is a **regular, repeating path** that one object in space takes around another one.
  ○ **Elliptical**: When an object moves around another object in an **oval-shaped path.**
    ● **Most planets in our solar system have elliptical orbits** rather than circularorbits due to the **gravitational interactions** of other planets and stars.
  ○ **Circular**: A circular orbit is an orbit with a **fixed distance around the barycenter**, in the shape of a circle.
    ● Artificial **satellites** that orbit the Earth are mostly placed in **circular orbits.**

➢ Circular path is favourable for artificial satellites because **it is easier to image the Earth if the satellite is at a fixed distance** from it.
  ○ If the distance keeps changing as in an elliptical orbit, keeping the cameras focussed can become complicated.

How is SSLV Different From PSLV?

➢ **Cost-effective and Payload Capacity:** SSLV has been designed to launch a **500-kilogram payload** into a **500-kilometre planar orbit** plus it is **less expensive** than PSLV.
  ○ As the **PSLV (Polar Satellite Launch Vehicle)** can carry huge loads, **small projects don't have a high cost-benefit ratio.**

➢ **Solid Propellant**: The **SSLV uses solid propellants** and this is more economical and easier to handle than the **liquid propellant stages of the PSLV.**

➢ **Faster Launch on Demand Service**: PSLV's long turnaround time (**over 60 days)** makes scaling up launch on demand launches difficult.
  ○ The **SSLV has the flexibility to launch multiple satellites**. Ithas a low turnaround time **(72 hours)** and can be assembled within a fortnight, allowing the space agency to provide **launch on demand service** in the **fast growing low earth orbit launch sector.**

What are the Upcoming Projects of ISRO?

➢ **Gaganyaan**- Indian Human Spaceflight Programme.

➢ **Aditya-L1**: To Study the Sun's atmosphere.

➢ **NASA-ISRO Synthetic Aperture Radar Mission**: To study hazards and global environmental change.

➢ **Shukrayaan-1:** Orbiter to Venus.

What are the Future Potentials?

➢ **Doorway Commercial Satellite Launch Market:** The **SSLV** is India's official doorway into the commercial small satellite launch market around the world.
  ○ The rocket is expected to be operated by **New Space India Limited (NSIL),** India's commercial space operations arm.
    ● Attractive for commercial earth observation and communication.

➢ **Launch of the SSLV from Pole to Pole**: ISRO intends to launch the SSLV in future from its **upcoming spaceport in Kulasekarapattinam** in Tamil Nadu.
  ○ Doing so would allow SSLV to enter into a **pole-to-pole**, or polar orbit around the Earth.
    ● The **SSLV will take off over the Lakshadweep Seawithout manoeuvring around Sri Lanka, saving fuel and payload capacity.**

➢ **Towards Nano-Satellites Launch Vehicle:** With the advancement of technology, the size of satellites has come down significantly with **Cube Sats** and **nano-satellites** becoming the norm of the day.
  ○ **ISRO has the opportunity to lead** the development of cost-effective **nano-satellite launch vehicles.**

■■■

Education Technology in India

This editorial is based on "The Indian edtech industry is taking India to the world", which was published in Livemint on 10/08/2022. It talks about the Education Technology in India and challenges related to it.

Tags: Science & Technology, GS Paper- 2, Education, Government Policies & Interventions, Issues Relating to Development

In the last few years, the **Edtech (Education+ Technology) Industry** in India has **grown exponentially**, especially at the time of **Covid-19 pandemic.**

The **one-size-fits-all conventional model of education** has long been a thorn in **teachers, parents, and students' sides**, however **Edtech provides individualised classes** and brings to students a host of options for interactive learning.

But **only 1 in 4 students in India has access to digital learning**. Though **edtech solutions** for virtual learning are growing, they are **still out of reach for the millions of families** due to various reasons.

What is the Significance of EdTech for India?

➢ **Interactive and Innovative Learning**: Learning online with lectures, **multimedia graphics, and interactive**

elements makes learning more **engaging**, and reinforces learning concepts with a visual approach.

- ○ India's edtech boom also stems from facts like the **prevalence of enthusiastic entrepreneurs adopting a multicultural approach to suit the needs of a diverse country,** developing innovative products and approaches.

➢ **Need of On-Demand Learning**: Students who were not compatible with the **traditional school system's rigid timetables** can get access to quality education from their home. **Especially competitive exam candidates** often juggle **work and studies simultaneously.**

- ○ It is not often that classroom timings are aligned to their work schedule. On-demand training turns the table in students' favour **enabling them to access courses and study materials on demand anywhere, anytime** and **through any medium**.

➢ **Educators Availability**: In the past, a single professor could handle at most a batch of 100 students.

- ○ EdTech enables educators to make themselves **available to a huge population of students.**
  - • The **need for a physical space** where students and teachers can assemble for classroom sessions is **no longer needed.**

➢ **Personalized Evaluation**: Students receive **personalized recommendations** based on data on their previous learning patterns and performance.

- ○ **Students who need extra support** and benefit from a slower learning pace could **receive the appropriate care.**

➢ **Remove Age Barriers**: Online programs and courses allow people of **any age group to learn at their own pace,** without inhibitions, and without compromising on their other commitments, **which were not available at their time.**

➢ **Equitable Chances and Reduced Pay-Wall:** India's edtech industry could slowly **bridge the education-quality gap between the rich and the poor**, giving Indians from all backgrounds more equitable chances of success.

- ○ The **cost-effectiveness of edtech allows students to overcome the paywall between them and premium educators**, and the virtual nature of this learning erases geographical constraints.

What are the Challenges Associated with Ed Tech?

➢ **Limited Practical Attachment to Learning**: Subjects of Science and technology include **hands-on laboratory**

sessions, **dissertation projects** and **field trips** to complement theoretical studies.

- ○ This aspect of learning is severely limited in online education.

➢ **Limited Social Skill Enhancement: Education is not just about subject knowledge but also about developing social skills and sportsmanship** among the students, which is built over the years.

- ○ Relying solely on online education may **hinder the holistic development** of children, and many may underperform later in their professional and personal lives.

➢ **Lack of Digital Infrastructure**: While India enjoys a wide geographic and cultural diversity, it also suffers from a huge **socio-economic divide**, including **non-uniformity of digital infrastructure facilities.**

- ○ **Interrupted power supply and weak or non-existent internet connectivity** are major challenges **hindering the percolation of online education at the grassroot.**

➢ **Widening Gender Inequality:** Online education may lead to a wider **gender gap.**

- ○ In a recent survey of 733 students studying in government schools in Bihar, **only 28% of the girls had smartphones in their homes**, **in contrast to 36% of the boys.**
  - • However, **girls were found to spend a disproportionately longer time on household chores than boys,** which often overlapped with the time of telecast of these lessons.

➢ **Business Malpractice**: With the **growing market for digital education,** Edtech companies are likely to engage in various forms of business malpractice **to attract consumers.**

- ○ Most recently, issues of **misleading advertisements** and unfair trade practices have come to light.
- ○ **The Department of School Education and Literacy** stated that ed-tech companies are luring parents in the garb of offering free services and getting the **Electronic Fund Transfer (EFT)** Mandate signed or **activating the auto-debit feature,** especially targeting vulnerable families.

➢ **Educator-Learner Adaptability Concern**: Using the internet for entertainment is common, but for online lessons is a big challenge.

- ○ **Teachers may not be well-versed with creating digital content,** and conveying it effectively online.
- ○ Similarly, a sudden expectation from them to upgrade, and from students to adapt, is unfair.

What are the Recent Grassroot Innovative EdTech Programmes in India?

➢ **Assam's online career guidance portal** is strengthening school-to-work and higher-education transition for students in grades 9 to 12.

➢ **Jharkhand's DigiSAT** is spearheading behaviour change by establishing stronger parent-teacher-student linkages;

➢ **Himachal Pradesh's HarGharPathshala** is providing digital education for children with special needs.

➢ **Madhya Pradesh's DigiLEP** is delivering content for learning enhancement through a well-structured mechanism with over 50,000 WhatsApp groups covering all clusters and secondary schools.

➢ **Kerala's Aksharavriksham initiative** is focusing on digital "edutainment" to support learning and skill development via games and activities.

What Should be the Way Forward?

➢ **Bridging the Digital Divide**: It is essential to bridge the existing **digital divide** in India in order to expand online learning.

○ The **Government School Transformation ProgrammeOdisha** under the **5T** initiative (**Transparency, Teamwork, Technology, and Timeliness leading to Transformation**) of the **Odisha government** is a good step in this direction.

➢ **Inclusive Education Policy**: There is a global recognition of the need for inclusive education policies during the pandemic.

○ The **development of online resources, training programs, and innovative schemes** is essential for making online education more effective, accessible, and safe.

● The teaching community has come together to form a nationwide informal and voluntary network of teachers, called the **Discussion Forum of Online Teaching (DFOT) is a good step in this direction.**

➢ **Utilisation of Cutting-Edge Technologies**: Cutting-edge technologies like **artificial intelligence (AI)** could open new possibilities for **innovative and personalised approaches** catering to different learning abilities.

○ **IIT Kharagpur** has collaborated with **Amazon Web Services** to develop the **National AI Resource Platform (NAIRP),** the future possibilities of which include **monitoring eye movement, motion and other parameters for better teaching** and learning.

➢ **Towards** - **"What is Told is What is Sold"**: Apart from stressing on transparency and warning against

misleading ads of edtech companies, there is need for **a proper mechanism for monitoring malpractices** and **time bound grievance redressal.**

➢ **Hybrid Mode of Learning: Edtech is not a magic wand** that can solve the learning crisis in India. **Neither is it a replacement for teachers in schools**, **both online and offline learning should be balanced.**

○ Major online players like **Byju's** and**Unacademy** have forayedoffline or **hybrid learning models.**

Conclusion

Despite the fact that online education opens many possibilities for both students and teachers, it can also widen social inequalities in India. With regard to online education, we must ensure that all our policies and interventions are **inclusive**. India will lead the way ahead with **good vision** and **sincere efforts**.

■■■

Regulating FinTechs

This editorial is based on "Regulate FinTechs, but not with a Bludgeon" which was published in The Hindu BusinessLine on 11/08/2022. It talks about the current status of regulation of Fintechs in India and the right approach to regulate them.

Tags: Indian Economy, GS Paper 3, Capital Market, IT & Computers, Scientific Innovations & Discoveries, Growth & Development, Banking Sector & NBFCs

FinTech is **amongst the most thriving sectors** at present in terms of both business growth and employment generation. To name a few, FinTech includes different sectors and industries such as **education, retail banking, fundraising and nonprofit, and investment management.**

India's FinTech space is touted as **one of the most disruptive, innovative and mature in the world**. The valuations for Indian FinTech players have been skyrocketing, primarily due to the immense potential the market has to offer.

However, along with the deepening of technology and digital services, there's been a **rise in digital fraud and consumer dissatisfaction**. This has triggered the **need to take a closer look at the operation of the FinTechs**, resulting in the **introduction of certain supervisory steps** to address the risks emanating from their activities.

What is Understood by FinTech?

➢ **About:** Originally, FinTech referred to the technology applied to the back-end of established consumer and trade financial institutions.

○ However, in the past few years, the term has expanded to include **any technological innovation in the financial sector** (**financial literacy and education**, **retail banking**, **investment** and even **crypto-currencies** (Decentralised Finance (DeFi)).

○ FinTech is any technology that seeks to improve and automate the delivery and use of financial services.

➢ **Significance:**

○ FinTechs are an essential part of the Indian financial ecosystem; though they have been around for decades, their **importance is pronounced post demonetisation**, with the **Covid-19pandemic further intensifying their significance**.

○ FinTech is redefining financial services for the common man and woman; the use of **big data for small credit** through smart analytics and algorithms has vastly **expanded the pool of eligible borrowers in India.**

○ FinTech has **brought down the cost of doing business** drastically. The cost of a digital transaction like payments, credit assessment and fraud check is a fraction of the amount spent on physical processes.

○ Fintech is **breaking geographical barriers** and shrinking the country into the palm of the hand. It is **opening doors to a large number of underserved yet economically viable customers**.

➢ **Growth of FinTech in India:** India is the **global FinTech superpower** with the **highest FinTech adoption rate** in the world. In 2020, **India overtook China** as Asia's top FinTech market.

○ As per the government of India estimates, the **Indian FinTech ecosystem is expected to reach $150 billion by 2025** from its present level of $50 billion.

What About the Regulation of FinTechs?

➢ **Types of Regulation:** Worldwide, FinTech firms are subject to three types of regulations:

○ **Activity-based regulation**, in which identical actions are **regulated equally regardless of the legal status** or type of the entity doing the activity.

○ **Entity-based regulation**, which requires laws to be **applied to licenced firms** engaged in comparable and specified activities, such as deposit taking, payment facilitation, lending, and securities underwriting, among others.

○ **Outcome-based regulation**, where firms are required to **ensure certain fundamental, common, and technology related aspects.**

➢ **India's Initiatives for Regulating Fintechs:**

○ Although there is **no direct intervention by the RBI to regulate FinTech** companies and mitigate the risks they pose to the financial ecosystem, there have been a few initiatives to embrace them.

● One such example is the **RBI's FinTech Regulatory Sandbox** – established in 2018 with the primary objective of being a controlled regulatory environment for testing FinTech products.

● Another initiative by the RBI to bring a section of FinTechs under their purview was the introduction of the **Payment System Operators license.**

○ **FinTechs operating as Peer to Peer (P2P) lenders**, alternative credit scoring platforms and crowdsourcing platforms are **being slowly brought under the regulatory ambit.**

○ More recently, the RBI has notified that it has firmed up a regulatory **framework to support orderly growth of credit delivery through digital lending.**

● The framework is based on the principle that lending business can be carried out only by entities that are either regulated by the central bank or entities permitted to do so under any other law.

➢ **Concerns Related to Regulation of FinTechs in India:**

○ Regulation is a major problem in the emerging world of FinTech, **especially cryptocurrencies.** In most countries, they are unregulated and have become **fertile ground for scams and frauds.**

○ Due to the **diversity of offerings in FinTech**, it is **difficult to formulate a single and comprehensive approach** to these problems.

● Regulatory uncertainty in the FinTech sector is making things complicated for both FinTech service providers and consumers.

○ The absence of an overarching regulatory framework for FinTechs have created **multiple points of ambiguity in the system for companies, investors and consumers.**

○ Being away from the radar of the regulator, a number of **unethical practices in lending** have also been reported.

● **Brutal collection methods,opaque lending** practices, **mis-selling of products,customer harassment**, etc. are some of the instances.

What would be the Right Approach to Regulate Fintechs?

➢ **Comprehensive Regulatory Framework:** A **sensible regulation with transparency** will strengthen the sector

in the long run and facilitate the Indian economy in growing at its potential rate by allowing its growth drivers to **fuel the engine of economic advancement.**

- ○ A more constructive approach from RBI would be to **recognize the part FinTechs play in India's financial inclusion agenda** and establish a regulatory **framework that will remove the current ambiguities** while **giving FinTech's sufficient flexibility** to ideate and innovate new propositions.

➢ **Bringing Bigtechs in Regulatory Ambit:** The real challenge for FinTech comes from **Bigtechs, which have primary businesses in non-financial sectors** such as social media, telecommunications, Internet search and e-commerce.

- ○ They are **well-positioned** to acquire a major part of the financial services sector.
- ○ It is important for the policymakers to **focus on Bigtechs and ensure a level-playing field between Bigtechs and banks,** considering the former's wide customer base, access to information and broad-ranging business models.

➢ **Prioritising Consumer Protection:** Trying to find the **right balance between consumer protection and product innovation** has been a struggle for regulators when looking to govern the FinTech space.

- ○ RBI shall prioritise consumer protection in FinTech regulation and this needs to be **manifested through the final laws on cryptocurrency and digital lending.**

➢ **Compatible Policy:** Policies that **target both FinTech firms and traditional banks proportionately** are needed. This way, the opportunities that FinTech offers will be fostered, while risks will be contained.

- ○ For **neobanks**, this means stronger capital, liquidity, and risk-management requirements **commensurate with their risks**.
- ○ For **incumbent banks** and other established entities, prudential supervision may need **greater focus on the health of less technologically advanced banks,** as their existing business models may be less sustainable over the long term.

➢ **Provisions for DeFi:** The absence of governing entities mean DeFi is a challenge for effective regulation and supervision.

- ○ The regulation should focus on the entities that are accelerating the rapid growth of DeFi.
- ○ **Supervisory authorities should also encourage robust governance**, including **industry codes and self-regulatory organizations**.
- ○ These entities could provide an effective conduit for regulatory oversight.

■■■

India's Demography

This editorial is based on "Moving Policy Away from Population Control" which was published in The Hindu on 13/08/2022. It talks about the changes in India's demography since Independence and the measures that can be taken to take advantage of those changes to the fullest.

Tags: Indian Society, GS Paper 1, GS Paper 2, Population and Associated Issues, Human Resource, Issues Arising Out of Design & Implementation of Policies, Salient Features of Indian Society

Since its Independence, India has witnessed a huge change in its demographic structure. It has gone through **population explosion** (Census 1951) and has also witnessed decline in **total fertility rate**.

On the plus side, there have been improvements in various mortality indicators, but there also exist certain impediments to reaping the demographic dividend in terms of improving living standards, providing skill and training and generating employment.

India's large population is one of the upper hands that India may have over the rest of the world. What is needed is the steps in the right direction to harness the potential of the demographic dividend to its fullest.

What Demographic Changes has India gone through in Time?

➢ **Population Growth:** The **UN World Population Prospects (WPP), 2022**, forecasts India becoming the most populous country by 2023, surpassing China, with a 140 crore population. 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).
- ○ India is projected to reach **150 crore by 2030 and 166 crore by 2050.**

➢ **Decline in India's TFR:** In 2021, India's **Total Fertility Rate (TFR) slipped below the replacement level fertility** (which is 2.1 children per woman) to two. Post-Independence, in the **1950s, India had a TFR of six**.

- ○ Several States have reached a TFR of two except for Bihar, UP, Jharkhand, Manipur and Meghalaya.
  - The main causes for this include **high illiteracy levels**, **rampant child marriage**, high levels of **under-five mortality rates**, a **low workforce participation of women**, lower **contraceptive usage** and a **lack of economic and decisive say** among women.

➢ **Improvement in Mortality Indicators: Life expectancy at birth** saw a remarkable recovery graph from 32 years in 1947 to **70 years in 2019.**

○ The **infant mortality rate** declined from 133 in 1951 (for the big States) to **27 in 2020.**

○ The **under-five mortality rate** fell from **250 to 41**, and the **maternal mortality ratio** dropped from 2,000 in the 1940s to **103 in 2019.**

What is the Significance of Population Growth?

➤ A larger population is perceived to mean **greater human capital, higher economic growth and improved standards of living.**

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

➤ In the last seven decades, the share of the working age population has grown from 50% to 65%, resulting in a **remarkable decline in the dependency ratio** (number of children and elderly persons per working age population).

➤ As per the WPP 2022, India will have **one of the largest workforces globally.**

○ In the next 25 years, one in five working-age group persons will be living in India.

What are the Bottlenecks in Reaping the Demographic Dividend?

➤ **Concerns regarding Labour Force:** India's labour force is constrained by the absence of women from the workforce; **only a fourth of women are employed**.

○ The **quality of educational attainments is not up to the mark,** and the country's **workforce lacks the basic skills** required for the modernised job market.

○ India will be having the largest population but its **employment rates are still one of the lowest.**

➤ **Sex Ratio still Disappointing:** Another demographic concern of independent India is the **male-dominant sex ratio**.

○ In 1951, the country had a sex ratio of 946 females per 1,000 males.

○ In 2011, the sex ratio was 943 females per 1,000 males and by 2022, it is expected to be approximately 950 females per 1,000 males.

○ Even now, **one in three girls missing globally due to sex selection** (both pre-and post-natal), **is from India.**

➤ **Hunger: Every other woman in the reproductive age** group in India is **anaemic**, and **every third child below five is stunted.**

○ **India stands 101 out of 116 nations in the Global Hunger Index** which is pretty daunting for a country which has one of the most extensive welfare programmes for food security through the **Public Distribution System** and the **Midday Meals Scheme**.

➤ **Health Disease Burden:** The disease pattern in the country has also seen a tremendous shift in these 75 years: while India was fighting communicable diseases post-Independence, there has been a **transition towards non-communicable diseases (NCDs)**, the **cause of more than 62% of total deaths**.

○ India is a **global disease burden leader** as the share of NCDs has almost doubled since the 1990s.

● India is home to over eight crore people with diabetes.

● More than a quarter of global **deaths due to air pollution** occur in India alone.

○ India's **health-care infrastructure is also highly inadequate** and inefficient. Additionally, India's **public health financing is low**, varying between 1% and 1.5% of GDP, which is among the lowest percentages in the world.

What should be the Way Forward?

➤ **Focus on Elderly Population:** India is currently a young nation but the **share of its elderly population is increasing** and is expected to be 12% by 2050.

○ So, advance investments in the development of a **robust social, financial and healthcare support system for old people** is the need of the hour.

○ The focus of action should be on **extensive investment in human capital**, on **older adults living with dignity**, and on **healthy population ageing.**

○ Steps should be taken to adapt public programmes to the growing proportion of older persons such as by **improving the sustainability of social security and pension systems**.

➤ **Efforts for Better Living Standards:** There needs to be preparedness with **suitable infrastructure, conducive social welfare schemes** and massive **investment in quality education and health.**

○ To maximize the potential benefits of a favourable age distribution, countries need to invest in the further development of their human capital and **promote opportunities for productive employment and decent work.**

○ The **focus should not be on population control** as it is not a severe problem now. Instead, an **augmentation of the quality of life** should be the priority.

➤ **Skilling:** For those already in the 25-64 age bracket, there is a need for skilling, which is the only way to ensure they are more productive and have better incomes.

○ Irrespective of rural or urban setting, the **public school system must ensure** that every child completes high school education, and is **pushed into appropriate skilling, training and vocational education** in line with market demand.

➢ **Bridging Gender Gaps in Workforce:** New skills and opportunities for women and girls befitting their participation in a **3 trillion dollar economy** is urgently needed. This can be done by:

○ **Legally compulsory gender budgeting** to analyse gender disaggregated data and its impact on policies

○ Increasing childcare benefits

○ Boosting tax incentives for part-time work

■■■

Integration of North-Eastern States

This editorial is based on "India at 75/The fragility of the Northeast's integration" which was published in The Hindu on 16/08/2022. It traces the journey of integration of North East India since Independence.
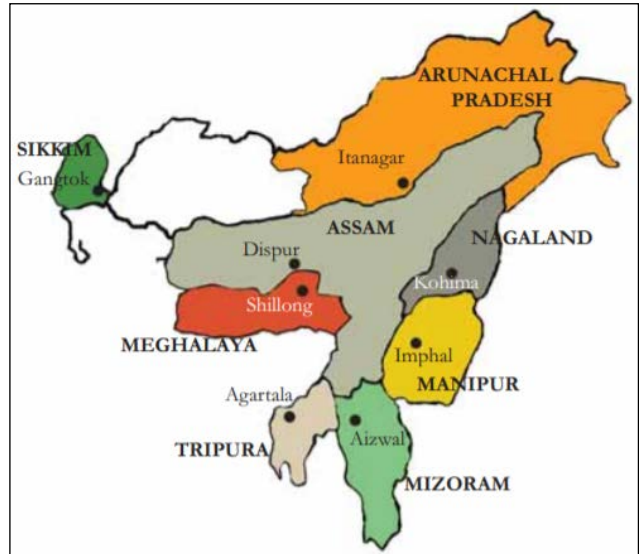
Tags: Governance, GS Paper - 3, Infrastructure, Growth & Development, Inclusive Growth, GS Paper - 2, Government Policies & Interventions

North-East India, fondly called the **land of seven sisters**, represents both a geographic and political administrative division of the country. Northeastern Indian States are blessed with a wide range of **physiographic and ecoclimatic conditions** and the **geographical 'gateway'** for much of India's **endemic flora** and **fauna.**

Sixth Schedule of the Indian Constitution deals with the provisions for the administration of **tribal areas** in the states of **North-Eastern states**: **Assam, Meghalaya, Tripura, and Mizoram**, in accordance with **Article 244** of the Indian Constitution.

North-East is home **to 3.8% of the national population** and occupies about 8% of India's total geographical area. **Siliguri corridor**, a narrow strip of land in **West Bengal**, popularly known as **"chicken's neck"connects this region to the rest of mainland India.**

The **integration of Northeast India** into mainstream Indian life has been on the national agenda from the very start of India's journey as an independent nation. In these areas, **cultural and demographic integrity is a major concern**that does not receive enough attention in terms of **political, economic, social and technological** advancements.

What is the Significance of North East for India?

➢ **Strategic Significance**: North-East India is the gateway to **South-East Asia** and beyond. It is **India's land-bridge to Myanmar**.

○ **India's Act East Policy** places the northeastern states on the territorial frontier of India's eastward engagement.

➢ **Cultural Significance:** North East India is one of the most culturally diverse areas of the world. It is home to **over 200 tribes.** Popular festivals include the **Hornbill Festival of Nagaland**, **Pang Lhabsol of Sikkim**, etc.

○ North-east India is a **Dowry**-Free Zone.

○ The rich tapestry of cultures of Northeast is reflected in its highly developed **classical dance forms** like **Bihu** (Assam).

○ **Manipur** has a tradition of **worshipping nature** in sacred groves, called **UmangLai.**

➢ **Economic Significance**: Economically, the Region is **rich in natural resources** of **"TOT" (Tea, Oil, and Timber).**

○ It is a veritable powerhouse with a potential of **50000 MW of hydroelectric power** and an abundant **reserve of fossil fuels.**

➢ **Ecological Significance**: North East is a part of **Indo-Burma biodiversity hotspot**. It represents one of the highest avian and plant biodiversity of the Indian subcontinent.

○ This area has the prestige of **having all the bear species present in India.**

What are Current Challenges Pertaining to North-East India?

➢ **Isolation From the Rest of India**: The region's **accessibility has always remained weak due to**

geographical reasons and underdeveloped transport links with the rest of India.

○ The physical location of northeastern states makes it imperative that they develop in consonance with their neighbours.

○ Also, as the region witnesses floods and landslides in the **Brahmaputra** and **Barak Valleys** of Assam, considerable strain is exerted on the economy of not only Assam but other North-Eastern states too.

➢ **Lack of Efficient Infrastructure**: Infrastructure i.e. **physical (like roadways, waterways, energy** and so on) as well as **social infrastructure (for instance educational institutions, health facilities)** plays an important role in human development and economic growth of any region

○ One of the reasons for the economic backwardness of the North-Eastern states is the **poor state of basic infrastructural facilities.**

○ The prominent indicators of shortfalls in infrastructure in this region are: **increasingly congested roads, power failures, shortage of drinking water** etc.

➢ **Slow pace of industrial growth**: North-East India has remained historically underdeveloped in terms of **industrial growth.**

○ **Post Independence,** due to the partition of India, the industrial sector in the Northeast received a serious setback as its **trade routes were cut-off with the rest of the country.**

● This in turn hindered economic integration with other parts of India and also **reduced the attractiveness of the region as a destination of investment.**

➢ **Territorial Conflicts**: There are existing **inter-state and international territorial conflicts** within the Northeast that are often based on **historical border disputes** and differing ethnic, tribal or cultural affinities. Example: **Assam-Mizoram Border Dispute.**

○ **With its proactive plans to increase its influence in the region, China remains a major source of concern.** The vulnerability of the **Siliguri Corridor** is a case in point.

➢ **Insurgency and Political Issues**: Insurgency or terrorism is a political weapon and is often the result of accumulated anger due to political, economic and social causes.

○ The **North-Eastern states have witnessed a rise of insurgent activities** and regional movements with a **feeling of exploitation and alienation from other Indian states.**

● Some of the insurgent groups are **United Liberation Front of Assam** (ULFA), People's

Liberation Army, National Socialist Council of Nagaland, **All Tripura Tiger Force (ATTF).**

What are the Recent Government Initiatives for the Development of the North-East?

➢ **Infrastructure:**
○ **Bharatmala Pariyojana**
○ **Regional Connectivity Scheme (RCS)-UDAN**

➢ **Connectivity:**
○ **Kaladan Multi-Modal Transit Project**
○ **India-Myanmar-Thailand Trilateral Highway**

➢ **Tourism:**
○ **Swadesh Darshan Scheme**

➢ **Other:**
○ **Digital North East Vision 2022**
○ **National Bamboo Mission**

What Should be the Way Forward?

➢ **Act-East from Northeast**: Comprehensive implementation of **Act East policy is** relevant to the entire country but **particularly important for the long term growth of the North East**.

○ The agenda for its implementation must be prepared in **active association with the State Governments of North Eastern States.**

➢ **Potential Powerhouse of India**: Its **geo-strategic location** and natural resources also makes it a **potential powerhouse of India** for development and progress.

○ A comprehensive framework needs to be developed to make the region a **preferred investment location.**

● To improve the limited entrepreneurial base, a **major capacity building exercise for local entrepreneurs should be taken up.**

➢ **Development of Tourism:** A key aspect of the development of the North East is tourism, which has the **potential to channel the region into mainstream development.**

○ Some of the famous tourism sites are: **Kaziranga National Park** famous for the **one horned rhinoceros**, **Dibru Saikhowa in Assam**, **Namdapha in Arunachal Pradesh.**

➢ **Enhancing Connectivity**: **Connectivity drives commerce**, air links to the Northeastern states should be a priority. The development of road and railway projects should be in accordance with **disaster-resilient measures.**

○ **Japan** has emerged as a major partner in our efforts for the development of the North-East and **connectivity to ASEAN (Association of Southeast Asian Nations).**

➢ **Political and Social Awareness:** It is necessary to **foster inclusivity** and drive awareness campaigns to **change the perceptions from being a neglected, misgoverned, tribal region into a veritable soft power.**

➢ **Development of Physical and Social Infrastructure:** To **support road and bridge construction activities,** a separate unit should be established for **physical infrastructure viability research.**

     ○ Due t**o lack of higher educational infrastructure in the North East,** a very large number of students **migrate** to other parts of the country for education leading to a drain of both manpower and financial resources.

        ● This re-emphasises the **need for setting up centres of excellence** for professional and higher education in the North East.

     ○ Furthermore, there is a need to **extend digital connectivity** and move towards **digital inclusion in the North East**.

➢ **Land Record Management:** The system of maintenance of formal land records in the North East is weak and **practically absent in tribal areas.**

     ○ This **prevents landholders from securing loans** and also leads to a number of **land-related disputes.**

     ○ It is **necessary to evolve a credible system of maintenance of land records**.

➢ **Northeast- Growing Sports Powerhouse:** North East is emerging as a **sports and sporting powerhouse of India that** drives some of the best sportspersons who go onto becoming icons.

     ○ When **Mary Kom (Manipur)** won bronze medal at the **2012 Olympics** in London and **inspired countless girls to take to combat sports,** and this year it was **Mirabai Chanu (Manipur)** bagged silver **Tokyo Olympics 2020.**

■■■

Future of Ethanol Blending in India

This editorial is based on "Understanding ethanol blending" which was published in The Hindu on 16/08/2022. It talks about the future of ethanol blending in India and related challenges.

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

The **energy demand in our country is rising due to an expanding economy, growing population**, increasing **urbanisation**, evolving lifestyles and rising spending power. About **98% of the fuel requirement** in the road transportation sector is currently met by **fossil fuels** and the **remaining 2% by biofuels.**

The **National Policy on Biofuels 2018,** provides an indicative target of **20% ethanol blending** under the **Ethanol Blended Petrol (EBP) Programme** by **2025.**

Achieving **energy security** and the transitioning to a thriving low carbon economy is critical for a growing nation like India. Blending locally produced ethanol with petrol will help India strengthen its energy security, **enable local enterprises and farmers to participate in the energy economy** and reduce vehicular emissions.

While ethanol blending **can reduce CO_2 emissions**, **inefficient land and water use** for ethanol extraction as well as **food security** concerns still remain.

What do We Understand by Ethanol Blending?

➢ Ethanol is an **agricultural by-product** which is mainly obtained from the **processing of sugar from sugarcane,** but also from other sources such as rice husk or **maize**.

     ○ **Blending ethanol with petrol to burn less fossil fuel** while running vehicles is called **Ethanol Blending**.

➢ Currently, **Ethanol makes up 10% of the petrol** we use in our vehicles.

     ○ The **original target for India was to raise this ratio to 20% by 2030**, but that deadline was pushed back to 2025 when the **NITI Aayog** released its **ethanol roadmap in 2021.**

What is the Significance of Ethanol Blending for India?

➢ **India has adopted ethanol blending in petrol** in order to **reduce vehicle exhaust emissions**.

     ○ India's net import of petroleum was 185 million tons in 2020-21. Most of the petroleum is used by vehicles and therefore a **successful 20% ethanol blending programme can save the country 4 billion dollars per annum**.

➢ The renewable ethanol content is **expected to result in a net reduction in the emission of carbon dioxide, carbon monoxide (CO) and hydrocarbons (HC).**

     ○ **Ethanol itself burns cleaner** and burns more completely than petrol it is blended into.

➢ Ethanol blending will help **bring down our share of oil imports** on which India spends a considerable amount of precious **foreign exchange.**

     ○ It is estimated that a **5% blending** (105 crore litres) **can result in replacement of around 1.8 million barrels of crude oil.**

➤ More ethanol produced from farm residue will **boost farmers' income** and **minimise air pollution** by reducing the amount of **stubble burned.**

What are the Challenges Associated with Ethanol Blending?

➤ **Shift Towards Sugarcane Production**: In order to achieve a 20% blend rate, almost **one-tenth of the existing net sown area will have to be diverted for sugarcane production**.

  ○ Any such land requirement is likely to put a **stress on other crops** and has the **potential to increase food prices.**

  ○ There are already **indications that more sugarcane is being grown** and that the Government of India **encouraged more corn production** at the **India Maize Summit** in May 2022.

➤ **Storage Constraint:** Annual capacity of required bio-refineries is stipulated to be 300-400 million litres, which is still **not enough to meet the 5% petrol-ethanol blending requirement.**

  ○ Storage is going to be the main concern, for if **E10** supply has to continue in tandem with **E20** supply, **storage would have to be separate** which then **raises costs.**

    ● **E10 fuel** is **90 % petrol** mixed with **10% ethanol.**

    ● **E20 fuel** is **80 % petrol** mixed with **20 % ethanol.**

➤ **Food Insecurity:** Sugar and cane production that end up in the petrol tank cannot also appear on the dinner plate, in animal fodder, be stored in warehouses, or be exported.

  ○ India may not find it easy to simultaneously **strengthen domestic food supply systems, maintain an export market for grains,** and **divert grain to ethanol** at the expected rate in coming years, and this is an issue that **warrants continued monitoring,**

➤ **Instability of Ethanol Movement Between States:** There are restrictions on inter-state movement of ethanol due to **non-implementation of the amended provisions of Industries (Development & Regulation) Act, 1951** by all the States.

  ○ **Ethanol blending has not been taken up in North-East states** due to non-availability of feedstock or industries.

  ○ In order to develop Ethanol Blended fuels and vehicles on a pan-Indian scale, this concern must be addressed.

➤ **No Reduction in Emission of Nitrous Oxide:** Because ethanol burns more completely than petrol, it avoids emissions such as **carbon monoxide.** However, **there is no reduction in nitrous oxides**, one of the major environmental pollutants.

> **What are the Recent Government Initiatives to Promote Ethanol Blending in India?**
> ➤ **National Policy on Biofuels 2018**
> ➤ **E100 Pilot project**
> ➤ **Pradhan Mantri JI-VAN Yojana 2019**
> ➤ **Repurpose Used Cooking Oil (RUCO)**

What Should be the Way Forward?

➤ **Ensuring Uniform Availability of Ethanol Blends**: To enable a pan-Indian roll-out, ethanol would need to be **supplied from surplus to deficit states** as per requirements so as to ensure uniform availability of ethanol blends in the country.

➤ **Promoting Advanced Biofuels:** Technology for production of ethanol from non-food feedstock, called "**Advanced Biofuels**" Including **second generation (2G)** should be promoted so as to tap this abundantly available resource **without causing any tradeoff with the food production system.**

  ○ Ethanol produced from **rice straw, wheat straw, corn cobs** and other such materials falls under the category of **second generation (2G) ethanol.**

➤ **Supply Enrichment:** Schemes for ethanol production from different feedstocks and encouragement to **augment bio-refineries** and **their capacities.**

  ○ For better implementation, it is necessary to **optimise engines for higher ethanol blends** and ensure durability test mechanisms.

➤ **Single Window for Clearances**: A system for single window clearances should be formulated to accord **speedy clearances for new and expansion projects** for ethanol production.

➤ **Setting a Floor Price for Ethanol:** In order to bring predictability and to encourage investment by entrepreneurs in **expansion / new ethanol capacities**, the government may devise a floor price of ethanol for a few years with an escalation clause for purchase by **oil marketing companies.**

  ○ Special efforts are needed to attract investors to the **North East India.**

➤ **Balance between Food Security and Ethanol Blending:** India's biofuel policy stipulates that fuel requirements must not compete with food requirements and that **only surplus food crops should beused for fuel production**.

  ○ **Producing ethanol from crop residue** will then be a good alternative.

■■■

India's Foreign Policy

This editorial is based on "It can address this challenge by reclaiming its moral leadership in the region as well as the world at large" which was published in Livemint on 18/08/2022. It talks about India's foreign policy driven by active national interest and necessity of morality in International Relations.

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

At 75, **India- a younger state and an older nation** stands at a critical juncture in its relationship with the world.

Since **India gained independence in 1947**, the world has changed beyond recognition. From the **bipolar world of the U.S. and Soviet Union** to a brief **unipolar period when American hegemony reigned**, to one where **China and the United States are moving toward another bipolar competition**, distracted by multipolar illusions.

In today's chaotic world, India faces the challenge of defining its unique **foreign policy** identity, and shaping the **contours of its engagement to balance the national interest with moral values.**

What is the Difference Between State and Nation?
- ➤ A **State** consists of four elements - **population, territory, government, and sovereignty.**
  - ❍ While a **Nation is a community** based on **shared ethnicity, history, traditions, and aspirations.**
- ➤ As a **legal entity**, the **State** is responsible for the security and **welfare of its people**, and it is concerned with external human actions.
  - ❍ Whereas Nations are a unit of people who are united **emotionally, spiritually, and psychologically.**
- ➤ The **territory is also an essential part of the State**, because it is the physical substance of the State.
  - ❍ But for a nation, the territory is not an essential part of the nation. A **nation can survive without a fixed territory.**
- ➤ In some countries, such as **America, Australia and Canada**, the state comprises many nations, and they are **'multinational societies'**.

How does India's Foreign Policy Reflect Its Active National Interest?

- ➤ **India First Policy**: With 75 years of independence, the country has a greater sense of confidence and optimism in articulating an "**India First" foreign policy.** India decides for itself, and its independent foreign policy cannot be subject to intimidations.

- ❍ **With one-fifth of the world's population**, India has the right to have its own side and to **weigh its own interests.**
  - ● It is certainly a basic tenet of international relations that **national interests are paramount,** and India too, like other nations, has pursued its interests when it comes to foreign and **national security** policies.
- ➤ **Realistic Diplomacy: Today's self-confident India** has a new voice in the global firmament, rooted in its **domestic realities** and civilizational ethos, as well as firm in the pursuit of its vital interests.
  - ❍ As the Indian Foreign Minister remarked at **Raisina Dialogue, "It is better to engage with the world on the basis of "who we are" rather than try and please the world**. India is confident about its identity and priorities, the world will engage with India on its terms.**
- ➤ **Maintaining Balance of Power to its Advantage**: From being the **only global power to challenge China's Belt and Road Initiative** as far back as 2014 to **responding to Chinese military aggression with a strong military pushback**.
  - ❍ On the other hand**, working with the US without entering the full embrace of a formal alliance** and **engaging the West to build domestic capacities.**
    - ● India has been pragmatic to the core and **willing to use the extant balance of power to its advantage.**
- ➤ **Growing Economic Ties**: Since India's **economic interdependence** with the rest of the world deepens, it has become more observant of markets for its products, **sources of raw materials,** and potential recipients of its expanding foreign aid.
- ➤ **Multi Aligned Approach:** From the **Quadrilateral Security Dialogue (the Quad)** to the **BRICS,** there is a long list of memberships that India holds.
  - ❍ Often this is seen as old-style meandering. India, however, is increasingly articulating and promoting its priorities in a much more direct manner.
- ➤ Intervention over Interference: India does not believe in interference in the internal affairs of other countries.
  - ❍ However, if an act - innocent or deliberate - by any country has the potential of impinging upon India's national interests, **India does not hesitate in quick and timely intervention.**

What are the Moral Aspects of India's Foreign Policy?

- ➤ **Panchsheel (Five Virtues)**: They were formally **enunciated in the Agreement on Trade between the**

Tibet region of China and India signed on April 29, 1954 and later evolved to act as the basis of conduct of international relations globally.

- ○ These **Five Principles** are:
  - Mutual respect for each other's territorial integrity and sovereignty
  - Mutual non-aggression
  - Mutual non-interference
  - Equality and mutual benefit
  - Peaceful co-existence

➢ **VasudhaivaKutumbakam (The World is One Family)**: It is based on the concept of **SabkaSaath, Sabka Vikas, Sabka Vishwas.**

- ○ In other words, India views the entire world community as a single large global family, where members live in harmony, work and grow together, and have trust in one another.

➢ **Proactive and Impartial Assistance**: India does not hesitate in promoting democracy wherever potential exists.

- ○ This is done by proactively providing assistance in **capacity building** and strengthening the institutions of democracy, albeit with the explicit consent of the concerned Government. **(Ex. Afghanistan).**

➢ **Global Problem Solving Approach**: India advocates a global debate and global consensus on issues of global dimensions such as world trade regime, climate change, terrorism, intellectual property rights, global governance, health hazards.

- ○ Under the **Vaccine diplomacy initiative**, India exported 60 million doses, half on commercial terms and 10 million as grants.

What are the Current Challenges to India's Foreign Policy?

➢ **Russia Ukraine Issue**: It is certainly a complex international political issue when countries like India find it difficult to choose between politics and moral imperative.

- ○ **Russia is a trade partne**r, and it has leverage in the Eurasian region, and by going directly against Russia, India will jeopardise its interests in the region.
  - As realist prudence demands, India cannot simply **undertake a moralist standpoint on Russia-Ukraine Conflict and ignore the dictates of politics.**

➢ **Internal Challenges**: A country cannot be powerful abroad if it is weak at home.

- ○ India's soft power assets make sense when they are supported by its hard power.

- Former **President of India, A. P. J. Abdul Kalam** repeatedly made the case that **India can play an effective role on the world stage when it is strong internally as well as externally.**

➢ **Refugee Crisis:** In spite of not being a party to the **1951 Refugee Convention** and its **1967 Protocol**, India has been one of the largest recipients of refugees in the world.

- ○ The challenge here is to balance protection of human rights and national interest. As the Rohingya crisis unfolds, there is still a lot that India can do to facilitate the finding of long-term solutions.
- ○ These actions will be key in determining **India's regional and global standing on human rights.**

What Should the Way Forward?

➢ **Collective Approach to Tackle Environmental Issues:** India has the potential to take the **lead in tackling global environmental challenges** reflected in its **goal of reaching net zero by 2070** (**26th United Nations Conference on Climate Change in 2021**)

- ○ Environmental problems are intertwined with social processes. There is a need for achieving **sustainability at social, economic as well as ecological level** as highlighted in **Sustainable Developement Goals.**

➢ **Balancing Internal and External Development:** India should look forward to creating an external environment which is conducive for an **inclusive development** of India so that the benefits of growth can reach the poorest of the poor in the country.

- ○ And ensure that India's voice is heard on global forums and that India is able to influence world opinion on issues of global dimensions such as **terrorism, climate change,** disarmament, reforms of institutions of global governance.

➢ **Pouring Ethical Values in Foreign Policy**: As rightly said by **Mahatma Gandhi, politics without principles and ethics would be disastrous**. India should move towards **collective development with an ethical persuasion** reclaiming its moral leadership in the world at large.

➢ **Policy Evolution Along with Maintaining Basic Principles:** We are living in a dynamic world. India's foreign policy is therefore geared up to be proactive, flexible as well as pragmatic so as to make quick adjustments to respond to evolving situations.

- ○ In the **implementation of its foreign policy India**, however, invariably adheres to a set of basic principles on which no compromise is made securing:

- National Beliefs & Values
- National Interests
- National Strategy

➢ **Shaping the Global Agenda: It is important for India to trace the role** of a **"leading power"** in the international system, **one that shapes global norms and institutional architecture, rather than these being shaped by others.**

  ❍ To this is linked the aspiration to be a **Permanent Member of the expanded UN Security Council** for which a large number of countries have already pledged support.

➢ **Diplomacy for Development**: In order to sustain its growth trajectory, India needs substantial external inputs.

  ❍ To succeed, our on-going programmes such as **Make in India, Skill India,** Smart Cities, infrastructure development, **Digital India, Clean India** etc. need foreign partners, **Foreign Direct Investments,** financial assistance and transfer of technology.

    ● India's foreign policy should add focus on this aspect of **Diplomacy For Development** by **integrating economic diplomacy with political diplomacy.**

■■■

Status of Women in India

This editorial is based on "Is moral policing the newest deterrent to female labour force participation?" which was published in Hindustan Times on 19/08/2022. It talks about the current status of Women in India and their workforce participation.

Tags: Social Justice, GS Paper-1, Role of Women, Social Empowerment, Issues Related to Women

The form and extent of **work, political participation, levels of education, state of health, representation in decision making bodies, access to property** etc. are some relevant indicators of status of the individual members in a society. However, not all members of a society, especially **women**, have equal access to the factors which constitute these indicators of status.

Patriarchal norms restrict Indian women's **education and employment choices**, from the choice to acquire education to the entry into the workforce and to the nature of work.

Let us understand where women, who constitute almost half of the country's citizenry, stand today in the fight for **freedom, dignity, equality and representation.**

What Does the Constitution Say About Women Empowerment?

➢ The **principle of gender equality** is enshrined in the Indian Constitution.

  ❍ The Constitution not only guarantees **equality** to women, but also provides the **State with the power to take measures of positive discrimination in favor of women** in order to mitigate their cumulative socio-economic and political disadvantages.

➢ Women have fundamental rights to not be discriminated on the grounds of sex **(Article 15)** and get equal protection under the law. **(Article 14)**

➢ It also imposes a **fundamental duty** on every citizen to renounce the practices derogatory to the dignity of women.

What are the Areas Where Women have Done Exceptionally Well in India?

➢ For years, women have suffered the injustice and prejudice of society. But today, with the changing times, **they have made a name for themselves**. They have **broken the shackles of gender stereotypes** and stood to achieve their dreams and goals. For instance:

  ❍ **Social Activist:**

    ● **SindhutaiSapkal** (Padma Shri 2021)- Raising Orphaned Children

  ❍ **Environmentalist:**

    ● **TulsiGodwa (**Padma Shri 2021) - Encyclopaedia of Forest

  ❍ **Defence:**

    ● **Avani Chaturvedi -** First Indian Woman to fly a solo fighter aircraft (**MiG-21 Bison**)

  ❍ **Sports**:

    ● **Mary Kom** - First woman from the country to win a medal in boxing at the Olympics.

    ● **PV Sindhu -** First Indian woman to claim two Olympic medals (Bronze- Tokyo 2020) and (Silver- Rio 2016).

    ● **Indian Women's Cricket Team** - Finalist**,** Commonwealth Games 2022

  ❍ **International Organisations**:

    ● **Gita Gopinath** - First Woman Chief Economist at the **IMF** (International Monetary Fund).

  ❍ **Space Technology:**

    ● **Tessy Thomas** - Missile Woman of India (**Agni-V missile** project)

  ❍ **Education**:

    ● **Shakuntala Devi -** Guinness World Record for Fastest Human Computation.

- **Shanan Dhaka - AIR 1** National Defence Academy Entrance Examination (**1st Women's Batch of NDA**)
- **Top 3 All India Ranks** were achieved by female candidates in **UPSC Civil Services Examination 2021.**

What are the Current Areas of Concern Related to Women in India?

- ➢ **Gap in Male Female Literacy Rate**: Despite the government's effort to ensure equality of opportunity for education for both men and women in our society, the **literacy rate** of women in India, **especially in rural areas**, still remains very poor.
  - ○ **Schools in rural India are at considerable distances** and in absence of strong local law and order, women find it unsafe to travel long distances for schooling.
  - ○ Traditional practices like **female infanticide, dowry, and early marriage** have also contributed to the problem as many families find it economically unviable to educate the girl child.
- ➢ **Role Stereotyping:** Still a large section of our Indian Society considered the **roles of men as taking all the financial responsibilities and work outside.**
  - ○ **Gender role stereotyping** attributed to women have generally led to prejudice and **discrimination against women.**
    - For example, women may be considered to be less reliable as workers because of their **child-rearing functions.**
- ➢ **Differentiation in the Socialisation Process:** In many parts of India, especially in rural regions, there are still different **socialisation norms** for men and women.
  - ○ Women are expected to be soft-spoken, calm, and quiet. They should walk, talk, sit and behave in a certain manner. Whereas men ought to be confident, loud, and could display any behaviour as per their wish.
- ➢ **Representation of Women in Legislature:** The **representation of women in different legislative bodies** remains low across India.
  - ○ According to the report of **Inter-Parliamentary Union (IPU) and UN Women,** India ranks **148 out of 193 countries** in the number of elected female representatives in parliament.
- ➢ **Safety Concern**: In India, despite of continuous efforts in the field of Safety, women are threatened by various acts via **feticides, domestic violence, rape, trafficking, forced prostitution, honour killings, sexual harassment at workplace** etc.

- ➢ **Period Poverty**: a lack of access to **sanitary products, menstrual education** and hygiene and sanitation facilities necessary to properly manage menstruation.
  - ○ According to a **United Nations Children's Fund (UNICEF)** study conducted in 2011 only **13% of girls in India are aware of menstruation before menarche.**
- ➢ **Glass Ceiling:** Women not only in India but across the globe face a social barrier preventing women from being promoted to top jobs in management.

What are the Recent Government Schemes Related to WomenEmpowerment?
- ➢ **Beti Bachao Beti Padhao Scheme**
- ➢ **UjjawalaYojna**
- ➢ **SwadharGreh**
- ➢ **Pradhan Mantri Matru Vandana Yojana**
- ➢ **Pradhan Mantri Mahila Shakti Kendra Scheme**
- ➢ **One Stop Centre**

What Should be the Way Forward?

- ➢ **Better Education Opportunities**: **Giving education to women means giving education to the whole family.** Education plays an important role in building self-confidence among women.
  - ○ It also enables people to change she/her status in society. **Education enables and builds confidence to make decisions in a better way.**
  - ○ The **Education policy needs to be more inclusive** to ensure girls right to education and their right to be free from discrimination within educational institutions.
    - Also, **education policy should target young men and boys to positively change their attitudes towards girls and women.**
- ➢ **Skilling and Micro Financing**: Skilling and **micro financing** can get women financially stable and therefore she is no longer dependent upon others in the society.
  - ○ Training women in non-traditional skills with market demand, creating more public and private sector jobs for women is important for **financial empowerment.**
- ➢ **Women's Safety:** A multi-sectoral strategy to **raise awareness among women** about the current government initiatives and mechanisms should be devised to ensure the safety of women throughout the country.
  - ○ **Panic Button, Nirbhaya Police Squad** are some good steps in the direction of women's safety.

- ❍ The **Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013** was enacted to ensure safe working spaces for women and to build an enabling environment that respects women's right of equality of status and opportunity.

- ➢ **Specified Actions at the Lowest Level of Governance:** There is a need to **devise, support and promote projects at the lowest level of governance**, to bring more inclusivity in governance and improve the status of women in India. For instance:

  - ❍ **Swagatam Nandini (Katni, Madhya Pradesh)**: This initiative was launched with an objective of celebrating the birth of girls.

    - ● With a small procession to celebrate the arrival of the daughter, parents of new-born baby girls are felicitated with baby kits under the **Ladli Lakshmi Scheme.**

  - ❍ **NanheChinh (Panchkula, Haryana):** Encouraged by **Anganwadi Workers** (AWWs), baby girls are brought to local AWCs by their families.

    - ● Their **footprints are outlined on a chart paper and are put up on the wall of the AWC** with the mother's and baby girls' names.

- ➢ **Incentives in Education**: In order to curb **higher dropout rate among girls**, there is a **need for providing relatively higher financial incentives for higher education.**

  - ❍ **Reward should be given to villages/districts that are able to attain equal child sex ratio** through education, information and communication campaigns.

  - ❍ Additional emphasis should be laid on **e-governance** so that there is a timely check on the expenditure released by the centre and various state governments for scholarships for girl students.

- ➢ **Improvement in Basic Amenities at Rural Level:** Improvement in basic infrastructure can reduce domestic work burdens.

  - ❍ For instance, domestic work for rural women often includes arduous tasks such as fetching water and fuelwood. **Piped drinking water and clean natural gas (already improving) will reduce this load**.

- ➢ **From Women Development to Women Led Development:** Women should be **reimagined as architects of India's progress and development**, rather than being passive recipients of the fruits of development.

  - ❍ The ripple effects of **Women Led Development** are undeniable as an educated and empowered woman will ensure education and empowerment for future generations.

■■■

India's Labour Reforms

This editorial is based on "Hard truths about India's labour reforms" which was published in The Hindu on 19/08/2022. It talks about the Labour Reforms in India and related challenges.

Tags: Governance, GS Paper- 2, Centre-State Relations, Government Policies & Interventions, Welfare Schemes, Transparency & Accountability, GS Paper- 3, Planning Employment, Inclusive Growth

---

Work is part of everyone's daily life and is crucial to one's dignity, well-being and development as a human being. Economic development means not only creation of jobs but also working conditions in which one can work in **freedom, safety and dignity.**

In **2020,** there were around **501 million workers in India**, the second largest after **China**. Out of which, agriculture industry consists of 41.19%, industry sector consists of 26.18% and service sector consists of 32.33% of total **labour force.**

Labour force in India can be divided into organised and unorganised sectors. The **major socio-economic problem of India is that the majority of its citizens are struggling to earn a good living.**

It is not just employment that causes their problems, but the **poor quality of that employment: insufficient and uncertain incomes, and poor working conditions,** regardless of where they work.

What is the Difference Between Organised and Unorganised Sector?

- ➢ **Organised sector** or formal sector in India refers to **licensed organisations**, that is, those who are **registered and pay Goods and Service Tax.**

  - ❍ These include the publicly traded companies, incorporated or formally registered entities, corporations, factories and large businesses.

- ➢ **Unorganised sector,** also known as own **account enterprises,** refers to all **unlicensed**, self-employed or unregistered economic activity such as owner manned general stores, handicrafts and **handloom workers**, rural traders, farmers, etc.

What is the Framework Regarding Labours in India?

- ➢ **Constitutional Framework**: Under the **Constitution of India**, **Labour as a subject is in the Concurrent List** and, therefore, both the **Central and the State governments are competent to enact legislations** subject to certain matters being reserved for the Centre.

- ➢ **Judicial Interpretation:** In the case of **Randhir Singh vs Union of India**, the **Supreme Court** stated that "Even though the principle o**f 'Equal pay for Equal work'** is not defined in the Constitution of India, it is a goal which is to be achieved through Article **14,16 and 39 (c)** of the Constitution of India.
  - ○ **Article 14**: It provides for equality before the law or equal protection of the laws within the territory of India.
  - ○ **Article 16**: It talks about the right of equal opportunity in the matters of public employment.
  - ○ **Article 39(c):** It specifies that the economic system should not result in the concentration of wealth and means of production to the detriment of the entire society.
- ➢ **Legislative Framework:** There have been several legislative and administrative initiatives taken by the government to improve working conditions and simplify labour laws. Most recent is the consolidated sets of **4 labour codes** which are yet to be implemented.
  - ○ **Labour Codes**:
    - ● **Code of Wages, 2019**
    - ● **Industrial Relations Code, 2020**
    - ● **Social Security Code, 2020**
    - ● **Occupational Safety, Health and Working Conditions Code, 2020**
  - ○ The **implementation process is delayed as states are yet to finalise their rules under these codes.**

What are the Benefits of Labour Codes?

- ➢ **Simplification of the Complex laws**: The Labour Codes simplify labour laws by consolidating **29 central laws** that have been on the table for at least 17 years.
  - ○ It will provide a big boost to industry & employment and will **reduce multiplicity of definition and authority for businesses.**
- ➢ **Easier Dispute Resolution:** The codes simplify archaic labour laws and **revamp adjudication processes,** which will lead to quicker **dispute resolution.**
- ➢ **Ease of Doing Business**: Several economists and industry experts say these reforms will **boost investment and make doing business easier**.
  - ○ They predict that these reforms will reduce internal contradictions, **increase flexibility, and modernise safety** and working conditions regulations.
- ➢ **Gender Parity:** All **sectors must allow women to work at night**, but employers must ensure that security arrangements are made for them, and women must consent before working at night.

What are the Grey Areas Related to the Current Labour Reforms?

- ➢ **Inspector cum Facilitator:** The new codes have thrown light on the role of an **"Inspector-cum-Facilitator"** who has the responsibility of checking for compliance as well as facilitating businesses in achieving that compliance
  - ○ The "facilitator" role seems to be a new element and this role could clash with the traditional responsibilities of an "inspector".
- ➢ **Lack of Clarity in Defining Workers and Employees:** More clarity was needed regarding matters such as the distinction between workers and employees, overtime compensation (**particularly in light of Covid's remote working policies)** and the **relationship between organisations and the gig workers.**
- ➢ **Small Startups and Informal Sector Left-out From Social Security Coverage:** There are no specific provisions for social security of employees in small startups, **Micro, Small and Medium Enterprises** or workers in small establishments having less than 300 workers.
  - ○ **Migrant workers, self-employed workers, home-based workers, and other vulnerable groups** in rural areas are not covered under social security benefits.
  - ○ This would enable companies to introduce arbitrary service conditions for their workers.
- ➢ **Non-Inclusion of Charitable or Non-Profit Based Establishments:** Code on Occupational Safety, Health and Working Conditions does not include charitable or **non-profit based establishments.**
  - ○ In fact, there is **no central legislation which lays down the law governing charity or charitable organisations in India.**
- ➢ **No Recognition for Invisible Labour:** Invisible labour is the part that goes unnoticed and unrecognised and is thus unregulated.
  - ○ Generally, **unpaid work is called Invisible labour.**
    - ● **Childcare, household work, looking after the elderly** are some examples of unpaid work and constitute invisible labour.
  - ○ A **majority of invisible workers are women**, and they have the most tedious work schedules with **no weekends off, no working hours, no vacations, no recognition, thankless chores.**
  - ○ With the introduction of the four new codes, **none of the new codes talk about invisible labour.** Invisible labour has the most tedious work profile with no weekend offs, no working hours, no vacations, no recognition, thankless chores, and of course are unpaid too.

What Should be the Way Forward?

➤ **Vocational Training**: Establish recognising/accrediting agencies for vocational training institutes is necessary to optimise and empower India's labour workforce.

  ❍ There is a need to develop a framework to **interlink vocational training and academic education** in order to **facilitate inter-stream movement of students and vocational trainees.**

➤ **Social Security**: State governments should enact legislation for the welfare of unorganised workers, which should clearly identify the resources to be raised, benefits to be given as well as the institutional mechanism.

  ❍ There is also a need for **welfare services to the unorganised workers** such as compensation for accidents at work, death, and old age pension in the **'risk cover mode'.**

➤ **Employment Information Service**: To support the new initiatives to provide employment guarantees in backward districts, **employment information services need to be provided through e-governance.**

  ❍ Information regarding employment opportunities should percolate to the lowest level from both private and public sectors.

➤ **Integrating Problem Solving with Forward Looking Approach: Most of the provisions of the Codes address the past demands and discrepancies,** acting as restorative justice for the past harms.

  ❍ It is also essential that we adopt a futuristic approach when it comes to protecting workers and handling disputes regarding **Automation and Robotics, AI-powered workforces,** and **bioengineering**, which may hamper workers' rights in the future.

■■■

Solar Energy in Agriculture

This editorial is based on "Solar energy: For Amrit Kaal in agriculture" which was published in The Indian Express on 22/08/2022. It talks about boundless potential of Solar Energy in India's Agriculture Sector.

Tags: Agriculture, GS Paper-3, Government Policies & Interventions, Mineral & Energy Resources, Irrigation, Growth & Development, Irrigation

Renewable energy has started playing an increasingly important role for augmentation of **grid power,** providing energy access, reducing consumption of **fossil fuels** and helping India pursue its **low carbon** development path.
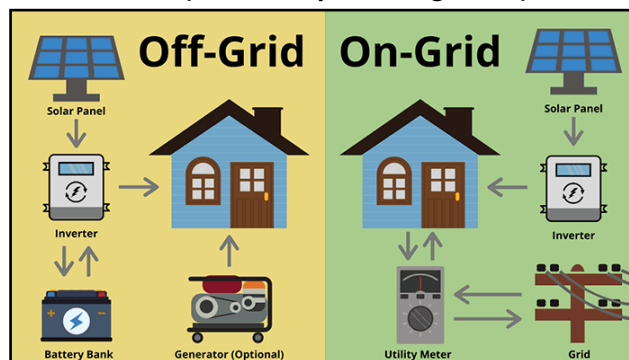
India has set a target to increase the country's share of **non-fossil-based installed electric capacity** to **40% by 2030.**

India has been playing a leadership role in encouraging the establishment of a **solar based economy** across the globe. India, in partnership with France, promoted the establishment of the **International Solar Alliance (ISA) in 2015**. In **2018**, ISA was transformed into a **treaty-based organisation headquartered in India**.

Solar power is one of the most versatile forms of energy, with **boundless potential, if tapped wisely.** Solar Energy can be a game changer for the **Agricultural Sector in India,** saving precious water resources, reducing dependency on the **grid**, and even becoming an additional revenue stream for farmers.

What is Off Grid and On Grid Solar Energy?

➤ **On-grid** means the **solar system that is tied to the local utility's grid or utility company.**

  ❍ **Utility system acts as the battery space for Solar Energy Users.** It means that the surplus energy that is produced by the solar panels is sent to the grid's power company, and in exchange a credit is generated that one can cash out at the end of the year.

    ● Being grid-tied is **beneficial because there is no requirement of an expensive battery back-up system** to store any excess energy.

➤ **Off-grid means** there is **no connection to the grid's power system** or utility company.

  ❍ This is appealing because of **100% self-sustaining energy** use.

    ● However, there are disadvantages because off-grid systems require a **back-up battery which can be expensive, bulky, and not very environmentally friendly** which **defeats the purpose of going solar (save money and live greener).**

What is the Potential of Solar Energy in Agriculture?

➤ Solar energy can easily fulfil energy provision and supply at agriculture farms. Various solar energy absorbing

devices and systems have been developed and are in the works for agricultural applications. This includes:

- ○ **Solar Pumping System:** It is quite helpful to operate the already burdened irrigation system in India.
  - Specifically, solar pumps can be useful as **water lifting devices in irrigation canals**and also to **evenly distribute water in those areas where traditional water systems could not have access**, such as in the elevated hilly lands.
- ○ **Solar Crop Drying:** Different types of solar dryers are available for various applications, which can be used for drying of agricultural products like **potatoes, grains, carrots and mushrooms.**
- ○ **Solar Spraying:** The solar pesticides sprayer machine can improve their productivity for small farmers.
  - Most pesticide spraying activity is done in the daytime, so these **spray machines could be used by directly capturing solar energy,** which prevents the installation of batteries in these machines.
- ○ **Solar Powered Tractors:** Tractor **converted agriculture farming into agro-industry** by performing a lot of functions with the help of a variety of tools and equipment.
  - Usually**, tractors consume oil to run and work, which increases the budget of farming and also causes the pollution** in the atmosphere by producing **carbon dioxide** during combustion.
    - Solar powered tractors became a good option which could work directly under the sun by consuming solar energy in daytime and also could continue working in night time with the help of energy stored in batteries.

What are the Challenges of Integrating Solar Energy with India's Agriculture Sector?

- ➢ **Land Scarcity**: Per capita land availability is very low in India. **Land is already a scarce resource in India**, with its demand ranging from **farmers, industries, commercial and service institutions and the Government.**
  - ○ Dedication of land area near substations for exclusive installation of solar cells might have to compete with other necessities that require land.
- ➢ **Export Driven Market**: Manufacturers are mostly focused on export markets that buy Solar cells and **modules at higher prices** thereby increasing their profits.
  - ○ Many new suppliers have tie-ups with foreign players in Europe and the United States, thereby **prioritising export demand**. This could result in reduced supplies for the fast-growing local market in India.

- ➢ **Grid Integration:** The biggest challenge for the solar sector is **grid integration to the length and breadth of the country** followed by poor financial condition of **Distribution Companies (DISCOMs).**
- ➢ **Absence of Solar Waste Management Policy: India does not have a solar waste management policy** to complement ambitious solar power installation targets.
  - ○ **Solar waste is the electronic waste generated by discarded solar panels**. It can increase by at least **four-five-fold by the next decade**.
- ➢ **Commercial Viability and Utility**: The solar energy production technique is yet to be improvised in to make it commercially viable in India.
  - ○ **Topographically or climatically** also, sun rays are uniformly not available at any particular place throughout the year.
  - ○ Besides, people, especially farmers in general are yet to be educated and convinced about its uses and utilities.
    - Unlike **thermal power plants**, Solar Power is **consumer dominated** and therefore, **peoples' participation and acceptance are critical issues for its success.**

What are the Related Government Schemes to Enhance Solar Energy Production in India?

- ➢ **International Solar Alliance**
- ➢ **National Solar Mission**
- ➢ **Kisan Urja Suraksha evamUtthaanMahabhiyan (PM-KUSUM)**
- ➢ **One Sun, One World, One Grid (OSOWOG)**

What Should be the Way Forward?

- ➢ **Incentive-Based Expansion Policies:** Transforming from a **non-renewable energy**-based system to a **renewable-based agriculture** system imposes several challenges.
  - ○ RE transition should be **immediate but orderly** and must be **backed withincentive-based policies** to expand the solar network in the country.
- ➢ **Solar Energy- Multi-potential Candidate for Development:** Solar energy is an attractive candidate to fulfil the electricity needs for domestic utility as well as to run **electric vehicles,** also fulfilling the **cooling and heating requirements** in future.
- ➢ **Better Financing and Training**: India demands better financing infrastructure, models and arrangements to spur the Solar industry at the village level.
  - ○ It is crucial to train and develop human resources, as well as impart **skill development to rural**

youth, so that villages can become self-sufficient in managing the solar devices.

➢ **Consumer Awareness**: There is a need to build consumer awareness about the technology, its economics and right usage.

❍ **"Solar Mascot for Har Khet Main Saur Urja" can be introduced in rural areas** to spread awareness about the potentials of Solar Energy in agriculture and **energy management.**

➢ **Linking Solar Energy Targets with the Current Missions**: Missions like **'Make in India', 'Smart city mission'** and **'Digital India'** can be integrated with the **off-grid systems** that can lead to **'Grid ready India'.**

❍ If these initiatives are executed as envisaged, it is only a matter before India becomes one of the world leaders in **Solar Energy.**

➢ **Agriculture in Line with Solar Production:** There should be acombined **agricultural use of land with the production of electric energy by solar energy**.

❍ It provides solutions for the production of food crops and, at the same time, electricity generation under consideration of soil protection and water savings.

● This can **increase the sustainability of food, water, energy, and climate at the same time meeting the various Sustainable DevelopementGoals** of the United Nations.

∎∎∎

Refugee Crisis in India

This editorial is based on "Rohingya row shows why we need a national refugee law" which was published in Hindustan Times on 22/08/2022. It talks about status of Refugees in India and current Rohingya Crisis.

Tags: Internal Security, GS Paper – 3, India and its Neighbourhood, GS Paper – 2, Effect of Policies & Politics of Countries on India's Interests

The **refugee influx** began with the **partition of India in 1947**, and by the start of 2010, the country had hosted nearly 450,000 refugees from within and outside the region.

India is not a signatory to the 1951 Refugee Conference nor to its 1967 protocol on the repute of **refugees**. Given that **no refugee law exists in India**, there is no uniformity in the treatment of refugees in the country.

However, **refugee law has become inextricably linked with the larger question of human rights and humanitarian law,** as well as other fields of international law, such as State responsibility and peace maintenance.

What is the Current Legislative Framework in India to Handle Refugees?

➢ India treats all foreigners whether illegal immigrants, refugees/asylum seekers or those overstaying visa permits under

❍ **Foreigners Act of 1946:** Under **Section 3**, the Central government is empowered to **detect, detain and deport illegal foreign nationals.**

❍ **Passport (Entry into India) Act, 1920**: Under Section 5, **authorities can remove an illegal foreigner by force** under **Article 258(1) of the Constitution of India.**

❍ **Registration of Foreigners Act of 1939:** Under this, there is a mandatory requirement under which all foreign nationals (excluding **overseas citizens of India**) visiting India on a long-term visa (more than 180 days) is required to register themselves with a Registration Officer within 14 days of arriving in India.

❍ **Citizenship Act, 1955:**It provided provisions for renunciation, termination, and deprivation of citizenship.

❍ Further, **Citizenship Amendment Act, 2019 (CAA)** seeks to provide citizenship only to **Hindu, Christian, Jain, Parsi, Sikh, and Buddhist** immigrants persecuted in **Bangladesh, Pakistan, and Afghanistan.**

➢ India issued a **Standard Operating Procedure (SOP)** to be followed by all concerned agencies while **dealing with foreign nationals who claim to be refugees.**

➢ The Constitution of India also respects the **life, liberty, and dignity of human beings.**

❍ The Supreme Court in the **National Human Rights Commission vs. State of Arunachal Pradesh (1996)** held that while all rights are available to citizens, persons including foreign citizens are entitled to the **right to equality** and the **right to life.**

What is the Status of Refugees in India?

➢ Since its independence, India has accepted various groups of refugees from neighbouring countries, including:

❍ **Partition refugees** from **Pakistan** in 1947.

❍ **Tibetan refugees** that arrived in 1959.

❍ **Chakma and Hajong** from present day Bangladesh in early 1960s.

● Other Bangladeshi refugees in 1965 and 1971.

❍ **Sri Lankan Tamil refugees** from the 1980s.

❍ Most recently **Rohingya refugees** from Myanmar, 2022.

What is the Difference Between Refugees and Migrants?

➢ Refugees are **people outside their countries of origin** who are in need of **international protection because of a serious threat to their life**, physical integrity or freedom in their country of origin as a result of persecution, armed conflict, violence or serious public disorder.

 ❍ **Migrants** leave their country **because they want to work, study or join a family.**

➢ There are well-defined and specific grounds, which have to be satisfied before a person can qualify to be a 'refugee'

 ❍ There is **no internationally accepted legal definition of a migrant.**

Why is India Not Signing the 1951 Refugee Convention?

➢ **Issue with Definition of Refugee**: According to the 1951 convention, refugees are defined as people who have been deprived of their civil and political rights, but **not their economic rights.**

 ❍ If the violation of economic rights were to be included in the definition of a refugee, it would clearly pose a major burden on the developed world.

➢ **Eurocentrism:** India feels the **1951 convention is mostly eurocentric** and does not bother about the South Asian countries. Also, it will also affect India's safety and home laws.

What are the Challenges Faced by Refugees in India?

➢ **Fear and Insecurity:** Refugees are not given much importance in society. They are not treated well by the local residents and they develop a sense of fear and insecurity.

 ❍ They are often **exploited physically and emotionally** by the local residents only on the grounds of not being citizens of the same soil.

➢ **Deprived of Basic Amenities**: They face the problem of getting basic life necessities such as food, shelter and employment.

 ❍ They are **forced to work at low wages** with no high status or privileges.

➢ **Lack of Well-Defined Framework for their Protection:** India's **ad hoc administrative policy on refugees** has created an atmosphere of confusion.

 ❍ **Lack of awareness and misinformation cause insecurity and exclusiveness** among the refugee communities.

➢ **Time Consuming Process of Identification: United Nations High Commissioner for Refugees** issues a **refugee card** through the refugee status determination process, but this process is time consuming and **can take up to 20 months for evaluation.**

 ❍ Within that period of time if someone is caught by the police, they will be arrested, detained and deported without even getting access to the UNHCR.

➢ **Misidentified as Immigrants**: Over the past few decades, many people from neighbouring countries have **illegally immigrated to India**, not because of state persecution, but to take advantage of better economic opportunities**.**

 ❍ For instance, **98% of all Mexican emigrants reside in the United States**, which are **more than 10.9 million (documented and undocumented) migrants**.

 ❍ It is true that much of the **debate in the India is about illegal immigrants, not refugees,** but the **two categories tend to get grouped together.**

What Should be the Way Forward?

➢ **Equitable and Effective Registration Procedure:** Procedures for determining status should be made more equitable and effective while enhancing or **maintaining standards in registration and identification.**

➢ **Improving Basic Facilities**: Essential services and requirements should be made available.

 ❍ These include improving access to **education**, bolstering programmes for those with **special needs,** and maintaining **health** facilities.

➢ **Awareness to Local Residents:** Ensuring Community participation through awareness programmes in **providing shelter to refugees** and improving their self-reliance capacity by providing them temporary livelihood.

➢ **Ensuring Safety of Women and Children**: Protection of women and child refugees from violence and harassment by authorities or local residents in consonance with **Fundamental Duty enshrined in our Constitution.**

 ❍ **Article 51A (e)** enjoins upon every citizen to **renounce practices derogatory to the dignity of women.**

➢ **Emotional Support:** A person becomes a refugee because of circumstances which are beyond that person's control.

 ❍ He/She flees from **human rights violations, socio-economic and political insecurity,** all leading to fear of persecution. In this instance, **we should aim for providing inclusivity and emotional support** in addition to financial support.

■■■

Chabahar Port

This editorial is based on "Reinvigorating the Chabahar port" which was published in The Hindu on 23/08/2022. It talks about India's strategic and economic vision for the Development of Chabahar Port in India.

Tags: International Relations, GS Paper – 2, Effect of Policies & Politics of Countries on India's Interests, Regional Groupings

The port of **Chabahar** is located in **Southeastern Iran in the Gulf of Oman**. It is the only Iranian port with direct access to the ocean.

It is considered a **gateway to golden opportunities** for trade by **India, Iran and Afghanistan** with **Central Asian countries.**

The Chabahar port actually contains two separate ports called **Shahid Kalantari** and **Shahid Beheshti**. Indian firm **India Ports Global Limited** took over operations at the **Shaheed Beheshti Port**. The port development should not be viewed in isolation but also from the prism of other opportunities which India can derive from this venture.

However, **India-Iran bilateral relations are complex,** and a variety of additional variables need to be considered in order to predict the viability of Chabahar Port from an Indian perspective.

What is the Significance of Chabahar Port for India?

➢ **Direct Route to Afghanistan:** It will ensure the establishment of a **politically sustainable connectivity** between **India and Afghanistan.** This will, in turn, lead to better economic ties between the two countries.

   ❍ Pakistan denies the use of its territory by Indian trucks bound to Afghanistan.

   ❍ Chabahar Port will also help Afghanistan for its trade with other countries.

      ● The result will be **less Afghan dependence on Pakistan** and, hence, **less Pakistani influence** over Afghan domestic politics, which will **benefit India strategically.**

➢ **Countering China:** Chabahar port will be beneficial to India in countering **China Pakistan Economic Corridor (CPEC)** as well as Chinese presence in the Arabian Sea which China is trying to ensure by helping Pakistan to develop the **Gwadar port.**

   ❍ Gwadar Port is just **72 km** away from Chabahar Port.

➢ **Trade and Commerce**: With Chabahar port becoming functional, there will be a significant boost in the import of iron ore, sugar and rice to India.

   ❍ **The import cost of oil to India will also see a considerable decline**.

      ● According to the Ministry of Commerce, Chabahar port, along with INSTC, offers **30% cheaper imports** than the **Mediterranean-Suez route.**

      ● **Natural gas from Central Asia** can be exported to India via the Chabahar port. India is already a part of projects like **Turkmenistan, Afghanistan, Pakistan, and India (TAPI) pipeline.**

      ● Also, India has already increased its crude purchase from Iran since the **West imposed ban on Iran was lifted.**

➢ **Humanitarian Operations:** From a diplomatic perspective, **Chabahar port** can be used by India as a point from were **humanitarian operations** in Central and South Asia can be coordinated.

➢ **Link to International North-South Transport Corridor:** Chabahar port will boost India's access to Iran, the key gateway to the **International North-South Transport Corridor** that has sea, rail and road routes between **India, Russia, Iran, Europe and Central Asia.**

What is the International North-South Transport Corridor?

➢ It is a **7,200-kilometre multi-modal transport corridor** that combines **road, rail and maritime routes**, connecting **Saint Petersburg (Russia) to Mumbai.**

➢ International North-South Transport Corridor offers a **platform for India to collaborate with Russia, Iran, and the Central Asian Republics** towards fostering a Eurasian Free Trade Area.

➢ Once fully operational, INSTC is **expected to reduce freight costs by 30%** and the journey time by 40% compared to the deep-sea route via the **Suez Canal.**

What are the Roadblocks in India's Endeavour Towards Development of Chabahar Port?

➢ **Growing Iran-China Ties:** Iran has moved closer to China in recent times.

○ China is also developing relations with Iran, as evidenced by the Chinese President's 2016 visit to Iran, dubbed the **'Comprehensive Plan for Cooperation between Iran and China'.**

○ Iranian approval of the much-hyped **draft strategic partnership with China**, whereby both countries propose to take their **long-term partnership** to a new level through the **USD 400 billion agreement.**

➢ **Iran-US Conflict:** Progress in Chabahar may depend on which way relations develop between Iran and the United States.

○ As **India seeks to revitalise its relations with Iran**, it **also needs the US' support on the international stage**, including its membership bid in the **NSG (Nuclear Suppliers' Group).**

○ **Balancing Relations with Middle Eastern Countries**: Development of Chabahar port depends on **healthy India-Iran relations.**

○ India's relations with Iran will require a **delicate balancing** act on India's part, given its own relations with countries such as **Saudi Arabia, the United Arab Emirates, and Israel**, which has a **fraught history with Iran**.

What Should be the Way Forward?

➢ **G20 in 2023:** By holding the **G20 presidency in 2023**, India will have the opportunity to weave **geoeconomic themes with its geopolitical interests.**

○ Until now, India has been regarded as an emerging power attempting to become a global power.

○ In 2023, India will have the opportunity to articulate the significance of Chabahar Port in improving the **North-South transit.**

➢ **Chabahar - Ticket to India's Global Presence:** India cannot confine itself to South Asia and has a lot to gain from an **extended neighbourhood (Iran-Afghanistan)**, which not only contributes to trade and energy security, but also plays a crucial role in Indian aspirations to become a **superpower.**

➢ **Enhancing India-Iran Bilateral Relations:** For smooth development of Chabahar port and economic prosperity for both countries,**strong bilateral political and economic ties between India and Iran** will be critical.

○ India is currently using the port to ship **pesticides to help Iran counter a locust invasion is a good step in this direction.**

➢ **Balancing ties with Iran and US:** India can play a balancing act between the two countries and take **proactive measures to promote global peace as a peace stabiliser** in line with its **firm national interest.**

∎∎∎

Universal Basic Income

This editorial is based on "Making out a case for the other UBI in India" which was published in The Hindu on 25/08/2022. It talks about scope of Universal Basic Income(UBI) in India and its alternatives.

Tags: Indian Economy, GS Paper – 3, Employment, Government Policies & Interventions

Today, disruptive technologies like **Artificial Intelligence** are ushering in productivity gains that we have never seen before. They are also steadil**y reducing human capital requirements,** making **jobs a premium.**

Universal basic income (UBI) is considered a **solution to the looming crisis of decreasing job opportunities** and an effective tool for **eradicating poverty**. The idea of UBI has gained popularity, especially **in light of the Covid-19 pandemic**.

India's rapid expansion of **direct cash transfers** linked to the **national biometric database** and **small experiments with basic income** have sparked the debate about **universal basic income (UBI).**

The supporters believe that **no-strings-attached payments** can help India's **underperforming antipoverty programs** and **distorted subsidies**, but critics fear that they will undermine an already fragile **social security system**, cause workers to leave the workforce, and encourage **wasteful spending.**

What is Universal Basic Income?

➢ **Universal basic income (UBI)** is a **socio-political financial transfer policy proposal** in which all citizens of a given country receive a **legally stipulated and equally set financial grant** paid by the government.

○ A basic income can be implemented **nationally, regionally, or locally.**

➢ A Universal Basic Income is **unconditional.** It requires that every person should have a right to a **basic income to cover their needs, just by virtue of being citizens.**

➢ In **2016**, the idea of a Universal Basic Income in India made huge news by taking up over 40 pages in the **2016-2017 Economic Survey of India** as a serious and feasible solution to India's poverty and a hope for the healthy economy as a whole.

○ **Economic Survey of India 2016-17** highlighted that **"UBI liberates citizens from paternalistic and clientelist relationships with the state"**

➢ **UBI has mainly 4 components:**

○ **Universality:** It is universal in nature.

○ **Periodic:** Payments at regular intervals (not one-off grants)

- ❍ **Individuality:** Payments to individuals
- ❍ **Unconditionality:** No preconditions attached with the cash transfer

Why is There a Growing Debate Over UBI in India?

➤ India has **depended on subsidies and transfer payments to help those at the bottom of society.**
  - ❍ Various programmes sponsored by the **Central government** account for a large chunk of budgetary allocation.
➤ A large number of these programmes are fragmented and **plagued by administrative leakages.** Taxpayers' money often ends up lining the pockets of middlemen.
➤ Additionally, subsidising essential consumer goods, including food and fuel, compels the poor to consume those goods, regardless of quality or costs.
  - ❍ **Corruption** and Waste in India's **Public Distribution System** is endemic.
➤ Replacing these **subsidies with cash transfers would ensure, at the very least, that the recipients are getting the intended monetary benefit** as well as freedom of choice.

What are the Arguments in Favour of UBI in India?

➤ **Social Justice: No society can be just or stable if it does not give all members of the society a stake.** A Universal Basic Income promotes many of the basic values of a society which respects all individuals as free and equal.
  - ❍ UBI is a radical and compelling paradigm shift in **thinking about both social justice and a productive economy.**
➤ **Administrative Efficiency**: A UBI will **reduce the burden of financing a plethora of separate government schemes** and administrative burden of implementation.
  - ❍ The UBI, by design, should effectively tackle issues related to **misallocation and leakage** because transfers are directed straight to the beneficiaries' bank accounts.
  - ❍ Finally, given the fewer avenues for leakages, **monitoring a UBI would be easier than many other schemes.**
➤ **Employment:** UBI is an acknowledgement of the **government's duty to guarantee a minimum living standard** (**Article 43 of Indian Constitution**) is even more urgent in an era of uncertain employment generation.
  - ❍ Moreover, UBI could also **open up new possibilities for labour market.**

- ❍ They allow for more **non-exploitative bargaining** since individuals will no longer be forced to accept any working conditions, just so that they can subsist.
➤ **Insurance Against Shocks:** Poor households often face multiple shocks such as **bad health, job loss** or aggregate shocks such as **crop loss, water borne diseases, loss of property** and **natural disasters.**
  - ❍ The UBI **income floor** will provide a safety net against health, income and other shocks.
➤ **Freedom of Choice:** A **UBI treats beneficiaries as agents** and entrusts citizens with the responsibility of using welfare spending as they see best, this may not be the case with in-kind transfers.
➤ **Improvement in Financial Inclusion:** Payment transfers will encourage **greater usage of bank accounts,** leading to higher profits for banking correspondents (BC) and an endogenous improvement in **financial inclusion.**
  - ❍ Credit increased income will release the constraints on access to credit for those with low income levels.
➤ **Women Empowerment:** In 2011, a pilot study of Universal Basic Income was conducted in 8 villages of Madhya Pradesh for 18 months.
  - ❍ Reviewing the UBI trial in India (2013-2014), **SEWA Bharat** and **UNICEF** concluded that **"women's empowerment was one of the more important outcomes of this experiment,"**
    - Women receiving UBI participated more in household decision making, and benefited from **improved access to food, healthcare, and education.**

What are the Arguments Against UBI in India?

➤ **Higher Government Expenditure:** If UBI is universal, which means **all citizens, regardless of their financial capacity, are by default beneficiaries** will widen the existing rich-poor gap in India.
  - ❍ Adopting a universal approach in India would result in **higher government expenditure** as it will have to ensure that no citizens are excluded.
  - ❍ Once introduced, it may become difficult for the government to wind up a UBI in case of failure.
➤ **Conspicuous Spending**: UBI is not tied to the recipients' behaviour, and they are free to spend the money as they wish. **Households with lack of awareness about fiscal management may spend on wasteful activities**.
  - ❍ There is no guarantee that the given cash will be spent on productive activities, **health & education,** etc. It may be spent on tobacco, alcohol, drugs, and other luxury goods etc.

➤ **Reduction in Labour Force**: A minimum guaranteed income might make people **lazy** and opt out of the labour market.

　○ In the absence of any reciprocal exchange, **UBI in India may easily turn into a scheme that renders the working age adults as supplicants** and without any real purpose or direction in their lives.

➤ **Increase the Rate of Inflation**: Replacing things like food programmes with UBI might expose the population to more market risks and **inflation.**

　○ **Price fluctuation will affect the purchasing power of the consumers**.

➤ **Lack of Connectivity Channel Between Government and Beneficiary:** In India, the poorest live in mostly remote areas and lack recourse to banking and often mobile phones is a major concern.

　○ **Not all habitations have been covered by the banks** and a lot of time and energy is spent in accessing banking services physically.

　　● **Economic survey** also points to **JAM (Jan Dhan, Aadhar and Mobile)** system as a prerequisite for a successful UBI implementation.

➤ **Federal Challenge:Centre-State negotiations** on cost sharing for the programme could delay its implementation.

　○ Since **Indian states are at different levels of development**, maintaining a uniform financial transfer will be challenging.

What should be the Way Forward?

➤ **Food for Thought:** UBI is a powerful idea whose time, even if not ripe for implementation, is ripe for serious discussion.

　○ Many pilot projects on UBI across the world including the one in **Madhya Pradesh** have shown positive results and highlighted the benefits of direct income transfer in improving the welfare of poor people.

　　● This can be a **matter of scrutiny before reaching any conclusion.**

➤ **Quasi-Universal Basic Income**: It would be more **prudent to take a middle road.** The **government should retain existing in-kind programs that deliver necessities** and enhance one's quality of life, such as food security, healthcare, sanitation, and education.

　○ Once it demonstrates, over time, that **it has built a stable system for income transfers, it could revisit the policies towards UBI.**

➤ **Future of UBI Across the Globe:** UBI envisages a**n uncompromised social safety net** that seeks to assure a dignified life for everyone, a concept that is **expected to gain traction in a global economy** buffeted by **globalisation,** technological change, and **automation.**

➤ **Universal Basic Infrastructure/Insurance:** Rather than jumping to UBI, focus should be on improving **basic infrastructure and accessibility to insurance.**

　○ **"If you give a man a fish, you feed him for a day. If you teach a man to fish, you feed him for a lifetime".** Effective education system will produce skilled youth and eliminate the need for UBI.

∎∎∎

Rainbow of Hope: LGBTQIA+

This editorial is based on "Rainbow of hope: On Tamil Nadu's glossary of terms to address LGBTQIA+ community" which was published in The Hindu on 26/08/2022. It talks about recognition of LGBTQIA+ community that needs more than words to live with dignity.

Tags: Social Justice, GS Paper - 2, Issues Related to Transgenders, Welfare Schemes, Gender, Government Policies & Interventions

In recent years, several countries, including **India,** have **legally recognized third sex and homosexuals as equal citizens,** after a long struggle of several different movements and protests around the world.
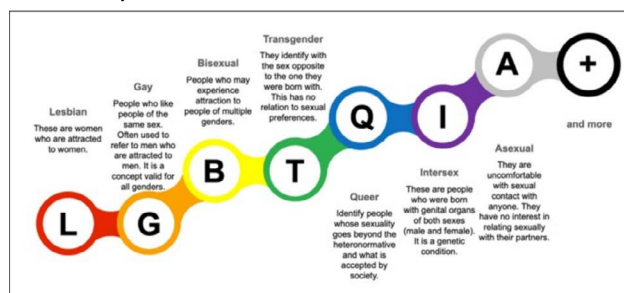
The **Preamble of Indian Constitution** recognises its citizens impartially as "**We the people of India**" and ensures **justice-social, economic, and political.**

In **September 2018,** in the review of **Section 377 of Indian Penal Code**, the **Supreme Court** gave the **judgment to decriminalize adult consensual same-sex marriages.** This decision is considered a landmark, both in terms of its **expansive interpretation of constitutional rights** and in terms of **empowering LGBTQIA+ community.**

While it was a big achievement, **it does not mean that LGBTQIA+peoplein India are absolutely free or treated equally to their fellow citizens**. It undermines the amount of work that remains to be done in India and around the globe.

What does LGBTQIA + Stands For?

➤ While no term can fully capture the spectrums of genders and sexual identities in the world. LGBTIQ+ mainly stands for:

What is the History of Recognition of LGBTQIA+ In India?

➤ **Ancient India was about acceptance and celebration of all forms of love** and neutrality to the idea of homosexuality.

   ○ Visual example is the **Khajuraho Temple of Madhya Pradesh,** showcasing the existence of **sexual fluidity between homosexuals.**

➤ In **1861,** Britishers considered sexual activities **"against the order of nature"** including all **homosexual activities were criminalized under section 377** of the **Indian Penal Code.**

➤ In **1977, Shakuntala Devi** published the first study of homosexuality in India, called **"The World of Homosexuals"**.

   ○ It called for "full and complete acceptance and not just tolerance and sympathy".

➤ In **1994**, they were **legally granted voting rights** as a **third sex.**

➤ In **2014**, the **Supreme Court of India** ruled that transgender people should be treated as the **third category of gender.**

➤ In **2017**, the **Supreme Court** gave the country's LGBTQ community the **freedom to safely express their sexual orientation.**

   ○ An individual's sexual orientation was protected by the **Right to Privacy.**

➤ On **6 September 2018,** the **Supreme Court struck down the part of Section 377 which criminalized consensual homosexual activities**.

➤ In **2019,** Parliament enacted **Transgender Persons (Protection of Rights) Act** with an objective to provide for **protection of rights** of transgender people, their **welfare,** and other related matters.

Which Cases have Helped the LGBTQIA+ Community Get Their Rights Acknowledged?

➤ **Navtej Singh Johar Vs. Union of India:** The SC held that **Article 14 of the Constitution guarantees equality before law** and this applies to all classes of citizens.

   ○ It restores **'inclusiveness'** of LGBTQ Community and **homosexuality was decriminalised.**

➤ **Shafin Jahan Vs. Asokan K.M. and Others (2018):** In this case, the SC observed that **choice of a partner is a person's fundamental right,** and it can be a same-sex partner.

➤ **National Legal Services Authority Vs. Union of India (2014):** The SC observed that **"recognition of transgenders as a third gender is not a social or medical issue, but a human rights issue".**

What are the Problems Faced by LGBTQIA+ Communities in India?

➤ **Marginalisation**: LGBTQIA+ individuals may experience multiple forms of marginalisation-such as **racism, sexism, poverty** or other factors – alongside **homophobia or transphobia** that negatively impact their mental health.

   ○ Often, such marginalisation leaves LGBTQIA+ people **without access to the basic services** such as **medical care, justice and legal services, and education.**

➤ **Impact of Family Reactions on LGBT Children:** Rejection and serious negative reactions kept many LGBTQIA+ youngsters from telling their parents about their feelings.

   ○ In a society **bound by a rigid set of social and cultural norms** that dictate the **terms and conditions of education, career and marriage,** the lack of family support can prove to be a big blow to the **mental and physical health of LGBTQIA+ people.**

➤ **Unheard Rural Voices:** The **voices of urban LGBTQIA+ people are heard through several online and real-world platform**s.

   ○ Whereas rural LGBTQIA+ people often suppress their feelings due to a **lack of exposure, comfort and internet connectivity** in their area because their **refusal to marry brings more physical abuse.**

➤ **Homelessness:** Most of the homeless LGBTQIA+ youth are **thrown out of their homes** for being queer, or they **ran away to escape an abusive situation**.

   ○ They **miss out on education and social support during critical formative years**.

      ● And without any economic support, they often engage in **drug use** and risky sexual behaviors.

➤ **Problems of Terminology:** LGBTQIA+ people are **labelled with negative stereotypes** and made fun of, thereby **robbing them of their goal of getting recognition** and making them feel socially excluded.

➤ **Socially Unrecognised:** School uniforms, dress code and appearance**,** access points for travel (including ticket booking forms, security screening and toilets) are often gendered.

   ○ Frequently, LGBTQIA+ individuals are **forced to negotiate their gender identity** in public while on public transportation.

➤ **Lack of Employment Opportunities**: Difficulties in obtaining accurate gender identity documents, including school records, adversely affect employment prospects.

   ○ **Discriminatory eligibility requirements** place **gender restrictions** on some jobs, which effectively exclude transgender and gender non-binary persons from getting the job.

What Should be the Way Forward?

➢ **Changing Social Attitude Toward LGBTQIA+ People:** As TV and movies are accessible to rural populations where social media has not yet penetrated, they are likely to be the **best tools for redefining family roles and attitudes through programs and stories** that **educate and enlighten**, as well as relay LGBTQIA+ experiences in authentic and diverse ways

  ○ Movies like **Badhaai Do, Shubh Mangal Zyada Saavdhan, Aligarh** can play a big role in changing the negative attitude of society towards LGBTQIA+ Community.

➢ **From Special Treatment to Equal Treatment: LGBTQIA + people don't seem to be aliens,** they're **not sick** and **their sexual preference is innate** and **being homosexual is a normal phenomenon and not a disease.**

  ○ **They deserve to be treated equally, not specially** and once they are included in Indian society as equals, they will get fully blended in collective development.

➢ **Gender Neutrality:** There is a need to **treat all genders as equal** with none discrimination.

  ○ It conjointly means **policies, language, associated social behaviour** should avoid characteristic roles per an individual's gender.

➢ **Towards Better Parenting:** Fundamental responsibility of any parent to accept their children's identity.

  ○ It is by accepting the child that they will transform society into one that values diversity and **accepts the uniqueness of each individual.**

➢ **Awaring and Empowering LGBTQIA+ Youth:** An open and accessible forum is needed so they feel recognized and comfortable sharing their feelings.

  ○ Platforms like **Gaysi and Gaylaxy** have helped carve out spaces for LGBT people to interact, share and collaborate.

  ○ **The Pride Month and Pride Parade Initiative** is also a good step in this direction.

■■■

Climate Change: A Roadblock to Economic Growth

This editorial is based on "Inclusion of climate change in policy is crucial for a strong economy" which was published in The Indian Express on 27/08/2022. It talks about the impacts of climate change on the Indian Economy.

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

There is a mounting global consensus that **climate change** **is putting a stress on the growth trajectory of nations worldwide**, with evident economic, social and environmental implications.

According to the **World Economic Forum's Global Risks Report 2020,** the **top 5 risks** over the coming decade, in terms of likelihood, are all **Climate-related** including **human-made environmental disasters**, **climate action failure**, **natural disasters**, **biodiversity loss** and **extreme weather**.

The **Nobel Prize for Economics in 2018** (**William D. Nordhaus and Paul Rome**r) was awarded for **integrating climate change into long-term macroeconomic analysis**.

While the world is grappling with the challenges posed by climate change, **developing economies like India are particularly vulnerable.** Thus, climate risk as a material aspect is going to play a critical role in charting out national-level policies, business strategies and reorientation of finance in an emerging economy like India.

What is Climate Change?

➢ Climate change refers to **long-term shifts in temperatures and weather patterns.** These shifts may be natural, such as through variations in the **solar cycle.**

➢ But since the **1800s, human activities have been the main driver of climate change**, primarily due to burning fossil fuels like coal, oil and gas.

  ○ **Burning fossil fuels** generates greenhouse gas emissions that act like a **blanket wrapped around the Earth**, trapping the sun's heat and raising temperatures.

➢ Increasing temperatures caused by climate change are **accelerating the melting of ice,** which raises sea levels and leads to **flooding** and **erosion.**

How Climate Change is Relevant for Indian Economy?

➢ The **climate of India is quite diversified in nature,** from the **Himalayan crown to the flat beaches**, a significant transition in climate is visible.

  ○ The climate varies from the **freezing temperatures of the Himalayan Mountains** to the **tropical climatic conditions of Southern India**.

  ○ The **North-Eastern states received the maximum rainfall** while the **North-Western states dried of water** make up the arid deserts of **Thar** and **Great Indian Desert.**

➢ Such a vastness of climatic conditions has always benefited India. **India has one of the highest densities**

of economic activity in the world, and a large section of population **rely on the natural resource base for their livelihood**s, with a high dependence on **rainfall.**

➤ **Climate change can make weather patterns less predictable.** These unforeseen weather patterns can make it difficult to maintain and grow crops In an agricultural economy like India where rainfall is so vital, **climate change has an immediate impact** on the **Indian economy.**

What are the Impacts of Climate Change on the Indian Economy?

➤ **Lower Crop Yield: Climate change can make weather patterns less predictable.Uncertainties about monsoonal** changes **affect farmers' choices about which crops to plant** and the timing of planting, consequently reducing productivity.

   ○ In addition, **earlier seasonal snowmelt** and depleting glaciers will **reduce river flow needed for irrigation.**

➤ **Impact on Livestock: India has the largest livestock population in the world**, with animals used as milk producers, manure and seeding and as **household capital,** particularly in landless households.

   ○ **Heat stress reduces feed and fodder and** increases conditions favourable to disease.

➤ **Reduced Labour Workforce:** Workers' productivity tends to be lower on days with extreme heat which leads to **lower industrial yields, leading to decreased exports, and resulting in lower national income** and indirectly affecting world trade.

   ○ Climate change **reduces cognitive performance** and decreases work hours in sectors that require heavy outdoor activity like **construction.**

➤ **Energy Crisis:** According to the **The International Energy Agency (IEA),** India's primary **energy demand will double by 2030**.

   ○ Energy and climate share a distinctive relationship such that **rising temperature demand a surge in energy usage** to **assist the process of mitigating the heat effects.**

   ○ Also, the rising energy demands often clash with climate-change policies.

➤ **Impact on Infrastructure:** A good and sound infrastructure contributes a great deal to the economy of a nation. Increased extremes of **natural calamity** as an outcome of climate change have deeply affected the infrastructure.

   ○ For instance, India spent **3 billion dollars of economic damage caused by floods** in the last decade which is **10% of the global economic loss.**

   ○ In 2020**, cyclone Amphan** distressed around 13 million people in India.

➤ **Impact on Drainage System:** India withdraws 34 percent of its available water annually with **Indo-Gangetic Plain as the "breadbasket"**.Increasing temperatures and increased seasonal variability cause **Himalayan glaciers to melt more** and more quickly.

   ○ If the rate increases**, glacial lakes burst out of their natural bounds and flooding is likely in river valleys fed by these glaciers,** followed by diminished flows, resulting in **water scarcity.**

➤ **Exacerbation of Inequality:** Adaptive capacity in India varies by state, geographical region, and socioeconomic status. **Families with low income are more vulnerable to climate change-related economic losses**, as they are directly impacted by **rising cereal prices and declining agricultural wages.**

   ○ Thus, for the welfare of those who have limited means to adapt to climate change can result in a **tightened budget** and low economic growth.

What Should be the Way Forward?

➤ **Mitigation:**

   ○ **Towards Nature-Based-Solutions**: The development of **clean and green energy** can help **divert the burden of fossil fuels** and lower **air pollution.**

      ● Developing new transit systems and extending the existing ones can also result in a **boom in employment**.

      ● The **Nationally Determined Contribution (NDC)** report of India aims at **40% of energy generation from clean energy by 2030.**

   ○ **Environment-Friendly Policies: Economy and Environment go hand in hand.** A planned approach to development which ensures **uncompromised growth prospects especially for the rural economy in India** is needed to address climate change challenges effectively.

      ● Climate Change also **presents an opportunity to adopt a cautious yet sustainable approach to development.**

   ○ **Forests and Wetland Conservation:** Forests are known for regulating rainfall and temperature. **Conservation and enhancement of forests and wetlands** will support agricultural productivity, **sequester CO_2 emissions** and enhance resilience to environmental shocks as **Frontline Warriors.**

   ○ **Proper Waste Management**: The **mismanagement of waste** adds to climate change by adding a variety of pollutants to the atmosphere.

- The **development of waste-selective management** plants like **waste gasification** will tackle this problem.
  - Building the infrastructure of these plants and future maintenance will **open new employment opportunities** for both skilled and unskilled labourers.
- ➢ **Adaptation:** Planned adaptation assumes the importance in building adaptive capacity.
  - ○ **Passive Cooling Technology**: For residential and commercial buildings, **passive cooling technology** offers a viable alternative to **reduce urban heat islands.**
    - The **Intergovernmental Panel on Climate Change (IPCC) report cites ancient Indian building designs** that utilised this technology, which could be used in modern facilities.
  - ○ **Better Farming Practices: Crop diversification, irrigation-based farming**, which reduces dependence on rainfall, and other practices can be considered to address climate change challenges.
  - ○ **Disaster Resilient Infrastructure:** It includes development of **disaster resilient infrastructure** through shelter houses, **coastal embankments**, and the construction of **flood-resistant buildings** and **roads.**
    - It is also important to develop more accurate and timely **weather forecasts** and **early warning systems.**

■■■

Menace of Manual Scavenging

This editorial is based on "Murder in the sewer: on deaths during manual cleaning of sewage" which was published in The Hindu on 27/08/2022. It talks about the menace of Manual Scavenging in India and related challenges.

Tags: Social Justice, GS Paper- 2, Government Policies & Interventions, Issues Related to SCs & STs

The **occupation of sanitation work in India is intrinsically linked with the system of hierarchy and exclusion: The Caste System**. As **B R Ambedkar** pointed out, caste leads not only to the division of labour but of labourers as well.

All cleaning jobs are viewed as lowly and are assigned to people from the lowest rung of the social hierarchy. **Dalits** are mainly employed as sanitation workers – **manual scavengers,** drain cleaners, garbage collectors, and road sweepers.

As per recent data by the government, **97 percent of manual scavengers in India are Dalits**.

Although the practice of manual scavenging is banned under the **Prohibition of Employment of Manual Scavengers Act, 2013,** the inhumane exercise continues.

Why is Manual Scavenging Still Prevalent in India?

- ➢ **Inefficient Sewage Management System:** In India, **most municipalities do not have the latest machines for cleaning the sewage systems** and thus sewage workers are required to enter the underground sewerage lines through **manholes**.
  - ○ The **unskilled labourers,** meanwhile, are much **cheaper to hire** and contractors illegally employ them at a daily wage.
- ➢ **Ineffective Implementation of Policies:** Government programmes have majorly **emphasised the financial aspect of rehabilitation** and failed to address the **caste-based oppression** and related social conditions that have perpetuated this practice for centuries.
  - ○ Also, there are **no proper strategies put forward that liberate manual scavengers psychologically**. This pushes those in the practice to get even deeper into the practice of manual scavenging.
- ➢ **Lack of Social Mobility:** Due to **lack of basic amenities, education, and employment** opportunities, manual scavengers are compelled to their job, and even society does not accept them for community activities.
  - ○ No one offers them a job and landlords forbid them from renting their houses. This leaves them vulnerable and **prevents them from moving upward in the strata.**

What are the Effects of Manual Scavenging?

- ➢ **Social Discrimination:** Most manual scavengers are stigmatised by the community due to the nature of their job.
  - ○ They are **regarded as untouchable** and they are forced to accept their condition.
  - ○ This problem is much deeper as **their children are also discriminated** against and forced to occupy the same work as their parents.
- ➢ **Caste Based Inequalities:** The caste is still regarded as a lower class and is excluded from moving to a better occupation.
  - ○ As a result, the **scavenging work is seen as part of their natural occupation**.
  - ○ Also, the marginal caste from rural areas moving to urban areas to seek a better livelihood always end up in the same occupation.

➢ **Health-Related Problems**: The scavengers are exposed to gases such as **carbon dioxide, ammonia and methane.** Long exposure to these gases may lead to serious health diseases or even death.

　○ They are also **exposed to various infections** in the sewer, which is also common due to the numerous bacteria residing in the sewers.

　○ As per the **National Commission for Safai Karamcharis (NCSK)** database, 608 manual scavengers have died between 2013 and 2017 while cleaning septic tanks.

What are the Steps taken to tackle the Menace of Manual Scavenging?

➢ **The Prohibition of Employment as Manual Scavengers and their Rehabilitation (Amendment) Bill 2020**

➢ **The Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013**

➢ **The Building and Maintenance of Insanitary Latrines Act of 2013**

➢ **Prevention of Atrocities Act, 1989**

➢ **Safaimitra Suraksha Challenge**

➢ **Swachhta Abhiyan App**

How can India Curb Manual Scavenging?

➢ **Proper Identification:** Manual scavenging is both a **violation of human rights** and a **disgrace to humanity at large**. State governments should therefore identify the workers who clean toxic sludge on a priority basis to ensure effective policy implementation.

➢ **Proactive Involvement of Stakeholders:** In order to tackle this problem it would be necessary to involve all the major skateholders involved.

　○ They include the **District Administrative Officers, Chief Medical Officer, NGOs** and **Municipal Corporation** among other relevant officials.

　○ The inclusion of the community around the areas that are most affected into the program is also of equal importance.

　○ Seeking information from officials and the community will help in coming up with an informed decision on the best way to proceed with the initiative.

➢ **Mass Awareness:** Conducting a workshop with locals would assist the officials in spreading awareness regarding the legal implications that are related to engaging in scavenging and having dry toilets as well as **understanding the cause of the practice**.

　○ The **awareness campaigns should not only address the dangers of scavenging** but also **give** the community affected an alternative method of making money.

　○ Locals can also be allowed to suggest solutions they feel comfortable with.

➢ **Rehabilitation and Compensation of Manual Scavengers**: Creation of more employment is one of the most important rehabilitation processes.

　○ The jobs created would aim to offer equal opportunities to the locals. The jobs created also act as a means to assimilate manual scavengers into the community.

　○ **In 2014, a Supreme Court** order made it mandatory for the government to identify all those who died in sewage work since 1993 and provide **Rs. 10 lakh each as compensation to their families.**

➢ **Investing in Proper Human Waste Management:** Solving **solid and liquid waste segregation** problems, as well as **bio composting at Municipal level**, are some of the ways through which we can utilise waste for the **benefit of humanity.**

　○ By **treating waste as an asset, rather than a liability**, manual scavenging will be reduced in the future making a way to **Swacch Bharat and Swasth Bharat.**

➢ **Robotic Scavenging:** With the help of robotics and artificial intelligence, machines can be devised that can replace humans in manual labour.

　○ **Bandicoot** is one such robotic machine that is engineered for cleaning any type of sewer manholes

➢ **Towards Social Integration:** The scavenging work generates little money that is not enough to educate a child. The child ends up **droppi**ng out and joining their parents in the same line of work.

　○ **Implementation of schemes that would help these children finish their studies** would be an effective strategy in discarding the theories and myths associated with manual scavenging.

■■■

Global Discourse on Nuclear Weapons

This editorial is based on "The Return of Nuclear Weapons" which was published in Indian Express on 30/08/2022. It talks about the failure of the recently held NPT Review Conference in creating a consensus and the implications of the same on India's nuclear developments.

Tags: International Relations, GS Paper 2, International Treaties & Agreements, Effect of Policies and Politics of Countries on India's interests

Recently the **tenth international conference to review the Nuclear Non-Proliferation Treaty (NPT)** concluded at the **United Nations** in New York. The conference, however, **ended without a consensus document** which was quite unexpected in present times when several major powers are in conflict.

Another disappointing fact is that India, despite being one of the nuclear powers, has shown **little interest in NPT review.** What the need of the hour is for **India to pay a lot more attention to the international nuclear discourse** that is acquiring new dimensions and **take a relook at its own civilian and military nuclear programmes.**

What are the Important Points about the NPT?

➢ **About Nuclear Non-Proliferation Treaty:** The NPT is an international treaty whose **objective is to prevent the spread of nuclear weapons** and weapons technology, to **foster the peaceful uses of nuclear energy**, and to further the goal of disarmament.

　❍ It was **signed in 1968 and entered into force in 1970**. Presently, it has **191 member states.**

　　● India is not a member.

　❍ The treaty requires countries to give up any present or future plans to build nuclear weapons in return for access to peaceful uses of nuclear energy.

　　● It represents the **only binding commitment** in a multilateral treaty to the goal of disarmament by the **nuclear-weapon States (NWS)** (those who manufactured/exploded a nuclear weapon or other nuclear explosive devices before 1st January, 1967).

➢ **NPT Review Conference:** The parties to the NPT, which came into force in 1970, undertake a **review of the treaty's implementation every five years.**

　❍ The Tenth Review Conference, scheduled for 2020, was delayed because of the Covid-19 pandemic.

What about India's Nuclear Developments?

➢ **Historical Background:** Nuclear programme of India was **initiated in the late 1940s** under the guidance of **Homi J. Bhabha.**

　❍ The **first nuclear explosion** undertaken by India in **May 1974.**

　❍ India conducted a **series of nuclear tests in May 1998**, demonstrating its capacity to use nuclear energy for military purposes.

　　● After the 1998 tests, India enunciated a **doctrine of 'No First Use' (NFU)** of nuclear weapons which was formally adopted in January, 2003.

　● It says that **nuclear weapons will only be used in retaliation against a nuclear attack** on Indian territory or on Indian forces anywhere.

➢ **Major Obstruction:** In the immediate aftermath of the **Cold War,** the US attempted to roll back India's nuclear and missile programmes which generated serious concerns in the latter.

　❍ After the nuclear tests in May 1998, **India also faced economic sanctions from the US.**

➢ **India-US Nuclear Deal:** Few years after the sanctions, the historic **India-US civil nuclear initiative** in 2005 produced a framework that ended India's extended conflict with the NPT system.

　❍ The deal resulted in the **separation of India's civil and military nuclear programmes.**

　❍ It was after a few years of this deal when **India regained the freedom to develop its nuclear arsenal** and **resume civilian nuclear cooperation with the rest of the world** (which was blocked since India's first nuclear test in May 1974).

➢ **Current Scenario:** In 2018, **India completed its Nuclear Triad** as stated in its Nuclear Doctrine.

　❍ A Nuclear triad is a three-sided military-force structure consisting of land-launched nuclear missiles, nuclear-missile-armed submarines, and strategic aircraft with nuclear bombs and missiles.

　❍ However, it needs to be noted that even about a decade-and-a-half since the Indo-US Nuclear deal, **India has not bought a single nuclear reactor from the US.**

What are the Issues Related to the Failure of NPT Review Conference?

➢ **Deepening Divide among Powers:** The failure of the 10th Review Conference reveals a deepening **divide between the main sponsors of the NPT – the US and Russia**; a strong support for the NPT, even at the peak of the Cold War, was one **major area of cooperation between the US and the erstwhile Soviet Union.**

　❍ In the conference, **Russia objected to critical references to its military control over** the **Zaporizhzhia nuclear power plant** in Ukraine.

　❍ The **nuclear problems of the Middle East** involving Israel and Iran have also **prevented successful outcomes** at the NPT review conferences.

　　● The 9th Review conference in 2015 ended without an agreement due to major differences over establishing a **Middle East zone free of weapons of mass destruction.**

➤ **Apprehensions of Non-Nuclear State Parties:** These parties have usually complained about the **lack of progress in implementing the disarmament provisions** of the NPT. The **absence of any dialogue on the arms control** by the nuclear powers has only worsened the situation.

  ❍ The NWS, rather than reducing the salience of nuclear weapons, have started **putting greater emphasis on their strategic utility.**

  ❍ Moreover, the **invasion of Ukraine**, a non-nuclear weapon state byRussia, a nuclear weapon power, further exacerbated the threat that non-nuclear states face.

    ● The **Russian President threatened the use of nuclear weapons** on Ukraine.

➤ **China as a Special Threat:** For the countries in Asia, **China's growing assertiveness** is a similar concern. The fear that **China might use its nuclear strength to seize the territories** of its neighbours, is real.

  ❍ China is **also critical of the southeast Asian countries approving of the AUKUS grouping** and claims it as **violative of the provisions of the NPT.**

    ● In the 10th Review conference, **Indonesia and Malaysia too raised concerns** about the implications of the AUKUS deal for the NPT.

What should the Current Global Nuclear Discourse Result in?

➤ Rising energy demands have led to a growing number of countries pursuing nuclear energy, and many countries wish to be energy-independent, in order to ensure a sustainable and dependable domestic energy supply.

  ❍ Thus, the **international community should focus on reconciling the states'** desire for energy independence with their desire to both reduce the intrusiveness of **International Atomic Energy Agency (IAEA)** safeguards and **diminish the possibility of proliferation.**

➤ Although the non-nuclear weapon states (NNWS) welcome **New START** and other initiatives, they are **willing to see more concrete actions** on **reducing the role of nuclear weapons in national security doctrines**, reducing alert levels, and **increasing transparency**.

➤ More regions in the world, preferably comprising NWS, should enter into an **arrangement of establishing Nuclear-weapon-free zones.**

What should be the Key Areas of Focus for India?

➤ **Enhancing Nuclear Power:** India must **recognise and adapt to the changing global nuclear discourse** as major instruments of great power military strategy.

It must also **examine the potential** of its nuclear weapons; **if it is capable of deterring the expanding atomic arsenal of its rivals.**

  ❍ After 1998, India premised its strategy on building **"credible minimum deterrence".**

    ● The time has come to reflect on the "credible" side of that strategy and redefine what the 'minimum' might be.

  ❍ Also, India must **gradually revise its posture of 'active deterrence' to 'dissuasive deterrence'** by building up its infrastructure along the border and improving the surveillance and warning capabilities among other things.

➤ **Enhancing Nuclear Energy Potential:** India, which commissioned Asia's first nuclear power station more than 50 years ago, is currently stuck with a total generating capacity of barely 7,000 MW.

  ❍ **India must find ways to end the current dormancyin its civilian nuclear power generation**, especially at a time when it has outlined an ambitious programme to reduce the share of fossil fuels in its energy consumption.

➤ **Revisiting Civil Nuclear Liability Act:** India's civil nuclear initiative was meant to **open up international collaboration to boost the production** of atomic electric power.

  ❍ However, the **Civil Liability for Nuclear Damage Act of 2010 made it impossible for private players — internal and external — to contribute** to the programme.

  ❍ **Revisiting that law is an urgent imperative** for any Indian strategy to rapidly raise the contribution of nuclear power to India's energy mix.

■■■
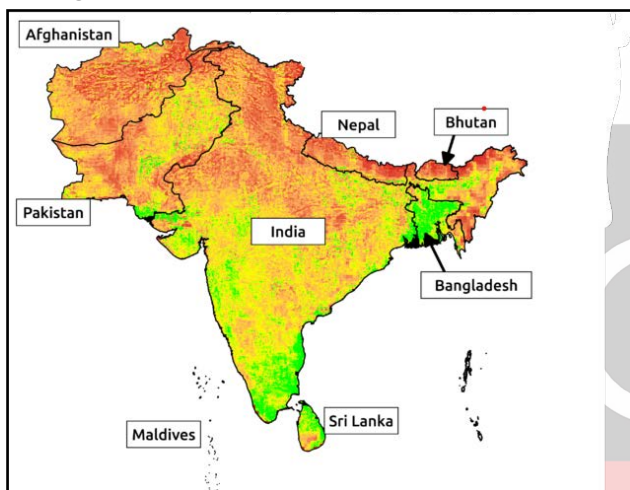
Climate and Cooperation Crisis in South Asia

This editorial is based on "Floods in Pakistan bear similarities to those in India. It's time for a collaborative mechanism to deal with extreme weather events" which was published in Indian Express on 31/08/2022. It talks about the devastating flood in Pakistan and collaborative mechanism to deal with extreme weather events.

Tags: Biodiversity & Environment, GS Paper – 3, Government Policies & Interventions, Environmental Pollution & Degradation, GS Paper – 2, India and its Neighbourhood, Groupings & Agreements Involving India and/or Affecting India's Interests, Disaster Management

South Asian is a geographical as well as ethno-cultural entity consists of the countriesof **Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka.**

The mighty **Himalayas** in the North and the vast **Indian Ocean** in the South. The **Arabian Sea** to its West and the **Bay of Bengal** in East **provide a natural insularity to the region** covering climatic zones as diverse as its physical landscape.

Abnormal monsoon patterns induced by **climate change** has impacted South Asia in recent years including events like glacial lake outburst, forest fires, **mountain and coastal soil erosion** and most recently **flooding (Pakistan) presenting opportunities for cooperation among South Asian nations.**

What are the Reasons for the Climate Crisis in South Asia?

➢ **Rise in Temperature:** The **Indian Ocean** has seen an increase in **sea surface temperatures (SST)** of approximately 1° C (global average 0.7° C) in recent decades, a warmer atmosphere can hold more water vapour which has **increased humidity** and **higher rainfall in South Asia.**

  ○ Higher than normal rainfall also tends to occur during a **La Nina** event which results in an increased occurrence of floods in South Asia.

➢ **Heat Waves:** A prolonged and deadly **heatwave** has hit large swaths of India and Pakistan affecting hundreds of millions of people and sparking the glacial melting and **glacial lake outburst events** with food and **energy shortage.**

➢ **Jet Stream Meandering**: **Jet streams** are like rivers of wind high above in the atmosphere. These slim strips of strong winds have a huge influence on climate, as they can push air masses around and affect weather patterns.

  ○ Because of **global warming**, jet streams **meander (curvy path)**,changing atmospheric circulation by mixing cold polar air with hot tropic air, causing **extreme weather events.**

How the Climate Crisis is Impacting South Asian Countries?

➢ **India:** Temperature rises on the **Tibetan Plateau** are causing **Himalayan glaciers** to retreat, threatening the flow rate of the Ganges, Brahmaputra, Yamuna and other major rivers.

  ○ **Heat waves' frequency** is increasing in India because of climate change.

  ○ Severe **landslides** and **floods** are projected to become increasingly common in such states as **Assam.**

➢ **Afghanistan:** Since 1950, **temperatures in Afghanistan have risen by 1.8°C.**

  ○ This leads and will lead to **massive droughts**. As a result of these increased droughts due to global warming, Afghanistan might face **desertification** and **land degradation** in the upcoming future.

➢ **Bangladesh**: Bangladesh's vulnerability to climate change impacts is due to a combination of geographical factors, such as its **flat, low-lying, and delta-exposed topography** and socio-economic factors, including its high population density.

  ○ **Asian Development Bank** estimated that Bangladesh may experience a **2% GDP annual loss by 2050 because of climate change.**

➢ **Bhutan:** Tangible climate change has resulted in the warming and recession of many of **Bhutan's glaciers,** increasing the frequency and severity of **glacial lake outburst floods (GLOFs).**

➢ **Maldives:** Many low-lying islands in the **Maldives** are **threatened by sea level rise,** with some predictions suggesting the nation will become **uninhabitable in the upcoming years if proper measures are not taken into account.**

➢ **Nepal:** Climate change is causing greater variations in weather patterns and more extreme weather events in Nepal, like the **drought that contributed to the exceptional number of wildfires** that raged across Nepal during **2016's pre-monsoon season.**

➢ **Pakistan**: In addition to increased heat, melting of glaciers in the Himalayas have impacted some of the **major rivers of Pakistan.**

  ○ Between 1999 and 2018, **Pakistan was ranked the 5th most affected country in terms of extreme climate caused by climate change**.

○ Currently Pakistan is facing a serious **climate catastrophe**, as **early monsoon rains have caused devastating floods in Pakistan**

➢ The ecological and climate continuities in South Asia make the case for **regionalcooperation on climate-related matters compelling.**

What are the Roadblocks to Regional Cooperation to Tackle the Climate Crisis in South Asia?

➢ **Power Asymmetry and Geography:** The **smaller South Asian states tend to lookoutwards**, away from the region, to form a counterweight against India's dominance.

○ Also, In South Asia, all countries except Sri Lanka and Maldives share a common border with India. This geographical dependency affects these countries' internal and external decision-making capabilities

○ This becomes a **hard gap to fill when it comes to regional cooperation** over important issues like climate change.

➢ **Challenges of Geopolitics**: In recent years, geopolitics has undermined the very idea of South Asia.

○ **China's economic dominance** and new alliances in the region have exacerbated tensions between the neighbouring countries of **India, Pakistan, Bangladesh, and Nepal**. The **South Asian Association for Regional Cooperation** also seems to be at a crossroads.

➢ **Territorial Issues: Since national borders are arbitrary, climate change** is difficult to tackle. They are governed by politics and often neglect **ecological boundaries and corridors.**

○ **Diplomatic bitterness** has impacted regional cooperation to a large extent.

○ The rigid borders of South Asia, hastily established in the middle of the 20th century, are **ill-equipped to deal with the challenges of the 21st century.**

What Should be the Way Forward?

➢ **Optimum Utilisation of Resources:** Himalayan countries of **Afghanistan, Bhutan, India, Nepal, and Pakistan** have large, unutilised hydropower resources.

○ Collaboration on technologies and finances, and the development of a **common South Asian power market** can lead to increased **energy security** while reducing power costs and **greenhouse gas emission.**

● India's lead on **solar power** can help other countries develop this renewable resource as a cheap and principal energy source.

➢ **Leading from the Front Opportunity for India:** India has the opportunity to act as the **Voice of South Asia in global forums** as well as provide timely humanitarian assistance to its neighbours as part of its **Neighbourhood First policy.**

○ In addition, India has a rich experience in developing economically productive and sustainable cities to share with other south Asian nations, including programmes like the **Smart Cities Mission and the Atal Mission for Urban Transformation.**

➢ **Learning from One Another:** Along with collective focus on innovation, **technology transfer, knowledge exchange,** and capacity building. There are existing initiatives that have lessons for all countries of South Asia to tackle climate change and grow as a unit.

○ **It includes:**

● **Adaptation strategies of Bangladesh** (including its **Delta Plan 2100)**

● Sustainable Management of forests by Bhutan

● **Fisheries management by Bangladesh and India**

● **Micro-hydropower in Nepal**

● **Ecotourism in Maldives and Sri Lanka**

● Climate-smart agriculture in Bangladesh, India and Pakistan.

○ Data sharing mechanisms on **river flows, flood alert systems, even a common renewable energy-dominated electricity grid**, could substantially reduce the climate vulnerability in South Asia.

➢ **Creation of South Asia Association for Regional Cooperation Climate Fund:** A South Asia Association for Regional Cooperation Climate Fund can be established by South Asian countries to help with adaptation and mitigation measures especially in **disaster-prone areas.**

➢ **The World Bank Group's South Asia Climate Roadmap:** The **South Asia Climate Roadmap** will support the development of **key cutting-edge analytical tools for climate-resilient planning** and development strategies in South Asia with key areas:

○ The Agriculture, Food, Water, and Land Systems Transition

○ The Energy and Transport Transition

○ The Urban Transition

■■■

Drishti Mains Questions

1. What are the major roadblocks for the development of the Industrial Sector in India. How Gati Shakti National Master Plan can help India to improve its core sector.

2. Discuss the impacts of feminization of agriculture on women. How Women's Participation in Natural Farming can be a Win-Win Situation?

3. "India's foreign policy is shifting from non-alignment to multi alignment approach". Comment.

4. Separating Taiwan's relationship from mainland China could be India's way of reversing the One China Policy. Explain with suitable arguments.

5. "Freebie culture is not a road to prosperity, but a quick passport to fiscal disaster." Comment.

6. Discuss the challenges associated with Himalayas in India. What role can Environmental Impact Assessment play in reducing the prevailing environmental issues in the Indian Himalayas?

7. "Harnessing Nature-Based Solutions to meet climate and sustainability goals is a purpose served by Blue-Green Infrastructure." Explain

8. Explain how Open Network for Digital Commerce can transform platform-centric paradigm to an open network for E-commerce in India. Highlight the major operational challenges in its implementation

9. Explain how Small Satellite Launch Vehicle is different from other launch vehicles.

10. "Despite the fact that online education opens many possibilities for both students and teachers, it can also widen social inequalities in India." Explain.

11. "India's FinTech space is touted as one of the most disruptive, innovative and mature in the world. However, the absence of a regulatory framework for FinTechs poses grave challenges to India's financial ecosystem." Comment.

12. Discuss the key challenges in reaping the demographic dividend of India and suggest appropriate measures that can be taken in this regard.

13. "The simmering North East India has awaited a healing touch since Independence". Explain.

14. Explain the role of Ethanol Blending in achieving energy security in India and discuss major challenges in its implementation.

15. India should shape the contours of its internationalengagement to balance the national interest with moral values. Comment.

16. What are the roadblocks in improving the status of women in India? Highlight some major government initiatives related to Women Empowerment.

17. "Economic development means not only creation of jobs but also developing healthy working conditions." Discuss the statement in the light of Labour Codes in India.

18. "Solar Energy can be a game changer for the Agricultural Sector in India". Comment.

19. "Refugees in India have become inextricably linked with the larger question of human rights and humanitarian law." Discuss.

20. "The Chabahar Port should not be viewed in isolation but also from the prism of other opportunities which India can derive from this venture."Discuss

21. Can Universal basic income (UBI) be an effective tool for eradicating poverty from India? Critically analyse.

22. Discuss the status of LGBTQIA+ community in India in light of cases that helped them to get their rights acknowledged.

23. Economy, development and climate change often cross each other's paths resulting in increased risk and vulnerability. Discuss.

24. Although the practice of manual scavenging is bannedin India, the inhumane exercise continues. Critically analyse.

25. The current global stand for the non-proliferation of nuclear weapons is gradually changing. Discuss the key areas on which India should focus to adapt to this change.

26. Describe how abnormal monsoon patterns are exacerbating natural disasters and climate change impacts in South Asia. Discuss how South Asian nations can collaborate to mitigate them.