



## 7 PM COMPILATION

**3<sup>rd</sup> and 4<sup>th</sup> Week June, 2025**

### Features of 7 PM compilation

- ❖ Comprehensive coverage of a given current topic
- ❖ Provide you all the information you need to frame a good answer
- ❖ Critical analysis, comparative analysis, legal/constitutional provisions, current issues and challenges and best practices around the world
- ❖ Written in lucid language and point format
- ❖ Wide use of charts, diagrams and info graphics
- ❖ Best-in class coverage, critically acclaimed by aspirants
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- ❖ Best cost-benefit ratio according to successful aspirants

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## Persons with Disabilities in India- Explained Pointwise

Persons with disabilities (PwD) face challenges on multiple fronts – one of them is related to lack of job opportunities. The private sector does not hire them because of their disabilities & Public Service Commissions are not only unfair towards them but also refuse to acknowledge the existence of certain disabilities.



In this article we will look at the status of persons with disabilities in India. We will also look at the provisions for disabled in India and the challenges faced by them. We will also delve into the way forward for their betterment. **Persons with Disabilities in India**

**Who are classified as Persons with Disabilities? What is the status of differently abled people in India?**

- **Persons with Disabilities:** According to **The United Nations Convention on the Rights of Persons with Disabilities** (UN CRPD), Persons with disabilities are the ones who have **long-term physical, mental, intellectual or sensory impairments**, which **hinder their full and effective participation in society** on an equal basis with others.
- **The Rights of Persons with Disabilities Act, 2016**, uses the same definition as the UN CRPD. It further defines '**Person with Benchmark Disability**' as '**A person with not less than 40% of a specified disability**'.
- **Expansion of Disabilities in India-** The Rights of Persons with Disabilities Act, 2016 has **expanded the types of disabilities** from **7** (under the Person with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995) to **21**. The act also provides the Union Government **the power to add more types of disabilities**.

## Types of Disabilities

### Physical Disability

- **Locomotor Disability**

- (i) Leprosy cured person; (ii) Cerebral Palsy; (iii) Dwarfism; (iv) Muscular Dystrophy; (v) Acid Attack Victims.

- **Visual Impairment**

- (i) Blindness; (ii) Low Vision.

- **Hearing Impairment**

- (i) Deaf; (ii) Hard of Hearing.

- **Speech and Language Disability.**

### Intellectual Disability

- (i) Specific Learning Disabilities; (ii) Autism Spectrum Disorder.

### Mental Illness

### Chronic Neurological Conditions

- (i) Multiple Sclerosis; (ii) Parkinson's Disease

### Blood Disorders

- (i) Haemophilia; (ii) Thalassemia; (iii) Sickle Cell Disease.

### Multiple Disabilities including Deaf-Blindness

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### Data on Disability in India:

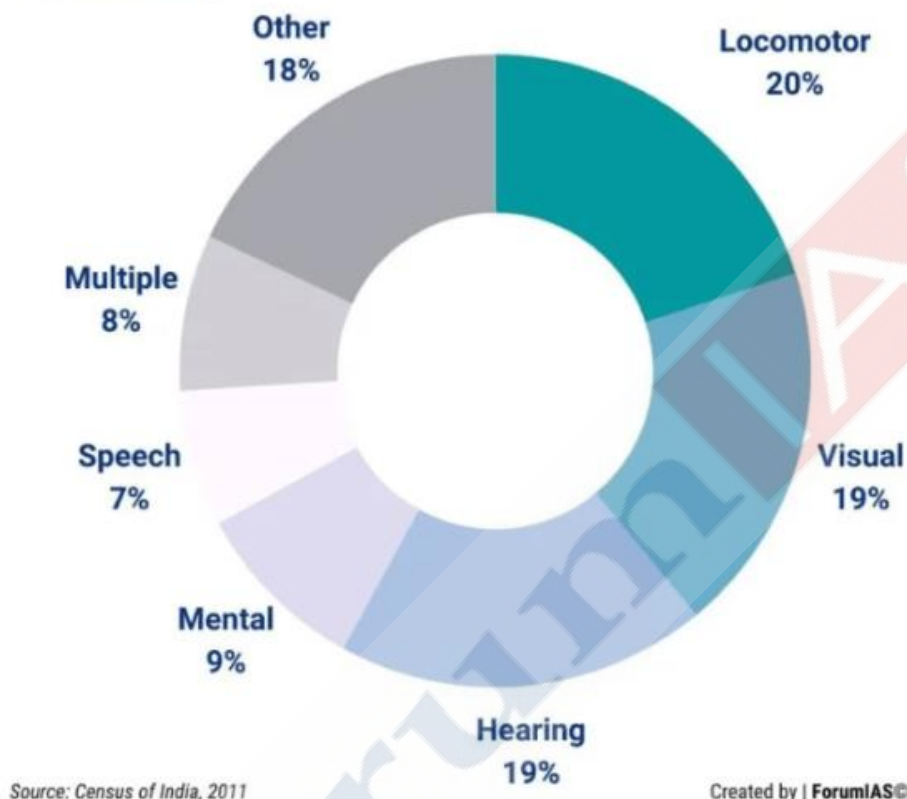
**a. Number of Persons with Disability in India:** In India, there are around **26.8 million** persons with disabilities. It constitutes around **2.21% of India's total population** (2011 Census). There are around **14.9 million men** (2.41% of men) and **11.9 million women** (2.01% of women) with disabilities. Disabilities are **highest** in the age group **10-19 years** (46.2 lakh people). **69%** (18 million) **of persons** with disabilities reside in rural areas.

However, a 2019 WHO survey found severe disability prevalence among Indian adults to be 16%.

**b. Disability % distribution:** **20%** of persons with disabilities in India have a **disability in movement**, **19%** have **visual impairment**, **19%** have a **hearing impairment** and **8%** have **multiple disabilities**.

## PwDs by Disability

Proportion of disabled Indian Population by type of disability



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### What are the provisions for accessibility of persons with disabilities in India?

India as a signatory to the United Nations Convention on Rights of Persons with Disabilities (CRPD)	<p><b>Article 9 of the CRPD</b> mandates measures to ensure equal access to physical spaces, transportation, communication, and public services.</p> <p>India, <b>as a signatory</b> to the United Nations Convention on Rights of Persons with Disabilities (CRPD), is <b>committed to promoting accessibility</b>.</p>
Rights of Persons with Disabilities (RPwD) Act 2016	<p>The RPwD Act aligns with the CRPD's objectives, and seeks to <b>ensure a dignified, discrimination-free, and equitable life for persons with disabilities</b>. The <b>RPwD Rules (2017)</b> were introduced to establish accessibility standards.</p>

### What other provisions have been made for persons with disabilities in India?

#### Constitutional Provisions:

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<b>Preamble</b>	The Preamble of the Indian Constitution seeks to secure <b>social, economic and political justice to all citizens (which includes persons with disabilities)</b> along with equality of status and of opportunity.
<b>Fundamental Rights</b>	Dignity of the individual is the fundamental notion behind all the fundamental rights guaranteed under the Constitution. <b>All fundamental rights are available to the persons with disabilities.</b>
<b>Directive Principles</b>	<p><b>Article 41</b> exhorts the State to make <b>effective provisions for securing the right to work, education and to public assistance</b> in case of unemployment, old age, sickness and disability.</p> <p><b>Article 46</b> provides that the State shall <b>promote educational and economic interests of the weaker sections</b> of the people and protect them social injustice and all forms of exploitation.</p>
<b>Schedules of the Constitution</b>	<p><b>'Relief of the Disabled'</b> is a <b>State Subject</b> (Entry 9 in List II) under the Seventh Schedule.</p> <p><b>'Welfare of the Disabled and mentally retarded'</b> is listed as <b>item 26 in the Eleventh Schedule</b> and <b>item 09 in the Twelfth Schedule.</b></p>

**Legal Provisions:**

<b>The Mental Health Act, 2017</b>	It replaced the Mental Health Act, 1987. It has been passed with the objective to provide for <b>mental healthcare and related services for persons with mental illness</b> and <b>to protect, promote and fulfill their rights.</b>
<b>The Rights of Persons with Disabilities (RPwD) Act, 2016</b>	<p>This Act came into force in April 2017, and <b>replaced the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995.</b> It fulfils the obligations to the <b>United National Convention on the Rights of Persons with Disabilities (UNCRPD).</b></p> <p>The Act has several provisions for the benefit of persons with disabilities.</p> <p>It has <b>increased the magnitude of reservation</b> for Persons with Disabilities from <b>3% to 4% in government jobs</b> and from <b>3% to 5% in higher education institutes.</b></p> <p>It stresses to <b>ensure accessibility in public buildings</b> in a prescribed time frame.</p>



<b>The Rehabilitation Council of India Act, 1992</b>	<p>It provided statutory status to the <b>Rehabilitation Council of India</b> (RCI, established in 1986). The mandate given to RCI is to:</p> <ol style="list-style-type: none"> <li><b>Regulate and monitor services</b> given to persons with disability.</li> <li><b>Standardize syllabi</b> and to maintain a <b>Central Rehabilitation Register</b> of all qualified professionals and personnel working in the field of Rehabilitation and Special Education.</li> </ol>
<b>The National Trust for the Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities Act, 1999</b>	<p>It has been enacted with the objective to provide for the constitution of a body at the National level for the <b>Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities</b>.</p> <p>The trust aims to <b>provide total care to persons</b> with <b>mental retardation</b> and <b>cerebral palsy</b> and also manage the properties bequeathed to the Trust.</p> <p>The Trust strives to enable persons with disability to live independently by:</p> <ol style="list-style-type: none"> <li><b>Promoting measures for their protection</b> in case of death of their parents.</li> <li><b>Evolving procedures for appointment</b> of their guardians and trustees.</li> <li>Facilitating equal opportunities in society.</li> </ol>

**Welfare Programmes:**

<b>Accessible India Campaign</b>	<p>It aims for creation of Accessible Environment for PwDs. The aim of the Campaign is to make a <b>barrier free</b> and <b>conducive environment for Persons with Disabilities</b> all over the country. The campaign targets three separate verticals for achieving universal accessibility (a) <b>Built up environment</b>; (b) <b>Transportation ecosystem</b>; (c) <b>Information &amp; Communication Technology (ICT) ecosystem</b>.</p>
<b>Deendayal Disabled Rehabilitation Scheme (DDRS)</b>	<p>DDRS aims to create an <b>enabling environment</b> to <b>ensure equal opportunities, equity, social justice</b> and <b>empowerment of persons with disabilities</b>. Under DDRS, NGOs are provided with financial assistance for running their projects for the rehabilitation of persons with disability.</p>
<b>Assistance to Disabled Persons for Purchase of Aids and Appliances (ADIP)</b>	<p>Its aim is to <b>assist the needy disabled persons</b> in procuring <b>durable</b> and <b>scientifically manufactured appliances</b>. It is implemented by <b>NGOs</b>, National Institutes under the Ministry of Social Justice &amp; Empowerment, and <b>ALIMCO</b> (a PSU that manufactures artificial limbs). It helps promote their <b>physical, social, and psychological rehabilitation</b> by reducing the effects of disabilities and enhancing their economic potential.</p>

<b>Indian Sign Language Research and Training Centre</b>	It promotes the use of sign language and also to develop human resources in the field.
<b>National Institute of Mental Health Rehabilitation (NIMHR)</b>	It aims to work towards <b>capacity building</b> in the field of <b>mental health rehabilitation</b> . It also aims to <b>develop community-based rehabilitation protocols</b> for mainstreaming persons with mental illness who have been successfully cured.
<b>Divyang Protocol and Mission Vatsalya of Haryana</b>	The Haryana Department of Women and Child Development implements the <b>Divyang Protocol</b> and <b>Mission Vatsalya</b> to promote disability inclusion.

### What are the Challenges faced by the people suffering from disability?

**1. Social Challenges:** The following are the challenges faced by the people suffering from disability in India:

- **Discrimination and Inequality:** They face several types of discrimination like reluctance to hire PwDs for employment.
- **Loss of Social Status:** Lack of opportunities results in lack of employment, money etc.
- **Inhuman Treatment:** People suffering from mental illness or mental retardation are subject to social exclusion
- **Loss of Identity:** The identity of PwDs becomes linked with their disability and become a subject of pity.

**2. Barriers to Education:** There is **lack of special schools** and **trained teachers** for children with learning disabilities. Persons with **visual impairment lack education materials** for their studies. Children with **learning disabilities** are shunned and not admitted to schools.

**3. Lack of adequate Healthcare facilities:** The persons with disabilities lack quality healthcare facilities which further marginalizes them.



## Barriers to Healthcare

According to WHO, people with disability encounter a range of barriers in accessing health care

### ✓ Attitudinal Barriers

- Prejudice, stigma, discrimination by health service providers.
- Service providers lack knowledge about needs of the disabled.
- Women with disability face barriers to sexual, reproductive health services and information.

### ✓ Physical Barriers

- Lack of appropriate infrastructure to access healthcare facilities like ramps to access passages, doorways, toilets on wheelchairs.
- Fixed-height furniture, including examination beds and chairs, can be difficult for people with disability to use.
- Lack of healthcare facilities in remote areas.

### ✓ Communication Barriers

- Limited availability of written material or sign language interpreters at health services for persons with hearing impairment.
- Lack of information and prescription in accessible formats, like Braille or large print for persons with vision impairment.

Source: WHO

### ✓ Financial Barriers

- Over half of all people with disability in low-income countries cannot afford proper health care.
- Inability to afford the costs associated with travelling to a health service and paying for medicine.

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**4. Prevalence of Unemployment:** Disabled persons have lower employment rates. Private sector is reluctant to hire PwDs due to stereotypes and stigma. It **impacts their ability to be financially independent and be self-sufficient.**

**5. Accessibility:** Lack of appropriate disabled-friendly physical infrastructure creates accessibility issues for persons suffering with disabilities. **For ex- PwDs find it difficult to commute in public transportation, or access buildings.**

### What are the key highlights of the SC ruling on accessibility for disabled?

The Supreme Court noted a lack of enforcement mechanisms under the RPwD rules. The SC held that the rules offered self-regulatory guidelines.

A report by the National Academy of Legal Studies and Research (NALSAR) has also highlighted the gaps in accessibility for persons with disabilities in India.

#### Highlights of the NALSAR Report

##### Lack of Transport accessibility

There is huge interstate variation in the transport accessibility in India. In Delhi, **3,775 low-floor CNG buses were available for accessible travel**, while Tamil Nadu lagged significantly, **with only 1,917 out of 21,669 buses accessible** for disabled travelling.

<b>Intersectionality of accessibility with other challenges</b>	The report noted that <b>accessibility challenges were compounded by factors such as caste, gender, and region</b> . For instance, job portals often exclude visually impaired users, and lack of sign language recognition is disadvantageous for individuals with hearing and speech impairments.
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The SC ruling on accessibility for the disabled stems from a **2005 writ petition filed by Rajive Raturi**, a visually impaired petitioner advocating for safety and accessibility in public spaces.

#### Key highlights of the ruling:

**a. Mandatory Rules to be drafted by the Central government:** The Court declared **Rule 15(1) of the RPwD Rules ultra vires**. The court held that the RPwD rules **only provided recommendatory guidelines**. It directed the Union government to **frame enforceable, “non-negotiable” standards within three months**.

**b. Stakeholder Consultation:** The government must consult stakeholders, including **NALSAR’s Centre for Disability Studies (CDS)**, while drafting the rules.

**c. Compliance and Penalties:** The SC has directed that **non-compliance with accessibility standards would be penalized**. The penalty will include withholding completion certificates and imposing fines.

#### What are the SC guidelines to prevent stereotyping and discrimination of Persons with Disabilities?

**1. Avoiding Derogatory Language:** The court has emphasized on avoiding words that cultivate institutional discrimination, such as ‘**cripple**’ and ‘**spastic**’. These words contribute to **negative self-image** and **perpetuate discriminatory attitudes**. Also, language and words that individualize the impairment and overlook disabling social barriers, like ‘**afflicted**’, ‘**suffering**’ and ‘**victim**’, should be avoided.

**2. Focus on Accurate Representation:** The court has held that stereotyping of differently abled persons in visual media and films must end. Creators must focus on providing an **accurate representation of disabilities** rather than mocking them. Creators should practice the principle of “**nothing about us, without us**,” and involve persons with disabilities in the **creation and assessment of visual media content**.

**3. Creative Freedom vs Marginalizing Portrayals:** The court has clarified that **creative freedom** of filmmakers **cannot include** the **freedom to lampoon, stereotype, misrepresent** or **disparage** marginalized communities. If the overall message of the content infringes with the rights of Persons with Disabilities (PwDs), then the right of creative freedom will not be protected.

**4. Collaboration with Disability Advocacy Groups:** The court has emphasized on **collaboration with disability advocacy groups** to gain insights and guidance on respectful and accurate portrayals. The **training programmes** for writers, directors, producers, and actors **must be developed** to emphasize the impact of portrayals on public perceptions and experiences of PwDs.

## SC Guidelines to prevent Stereotyping of persons with disabilities

Avoiding Derogatory Language	Words that cultivate institutional discrimination, such as "cripple" and "spastic", and words that individualizes the impairment such as "afflicted," "suffering" and "victim" should be avoided. These words contribute to negative self-image and perpetuate discriminatory attitudes.
Accurate Representation	Creators must provide an accurate representation of disabilities rather than mocking them. Creators should practice the principle of "nothing about us, without us," and involve persons with disabilities in the creation and assessment of visual media content.
Creative Freedom vs Marginalizing Portrayals	Creative freedom of filmmakers cannot include the freedom to lampoon, stereotype, misrepresent or disparage marginalized communities.
Collaboration with Disability Advocacy Groups	The film makers should collaborate with disability advocacy groups to gain insights and guidance on respectful and accurate portrayals. Training programmes for writers, directors, producers, and actors should be conducted for real portrayal of challenges of PwDs.

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### What Should be the Way Forward?

- 1. Accommodation and Inclusion:** There is a need to identify opportunities to better accommodate people with disabilities in Society- like providing better education, equal opportunity in job, and initiating them to take active part in social and political decision.
- 2. Greater Social Sensitization:** The focus must be on overcoming stigma is necessary in order to facilitate better integration of Persons with Disabilities into the mainstream. People need to be educated and be sensitized about the challenges faced by PwDs. For ex- Use of the term "Divyangjan" to address persons with disabilities.



**3. Preventive Measures for early prevention of disabilities:** Scaling up **The Comprehensive Newborn Screening (CNS) programme** under the **Rashtriya Bal Swasthya Karyakram** for early detection and prevention of disabilities.

**4. Interventions in Public Policy:** A larger portion of the budget should be allocated to the welfare of disabled people. There ought to be **budgeting for people with disabilities** in line with the **gender budget**.

**5. Appointments of the Commissioners of Disability:** Many States fail to appoint Commissioners on time, as highlighted in a 2021 writ petition (**Seema Girija Lal vs. Union of India**). The States must be proactive in appointment of the commissioners of disability. The States should appoint experts in law, human rights, social work, and NGOs, rather than civil servants.

**6. Proactive role of the Entertainment Sector:** The private entertainment sector must address the needs of persons with disabilities, ensuring **inclusive recreational spaces** and **opportunities**.

**7. Disability-inclusive reforms in Public Service Examination:**

- **True Physical Accessibility:** Go beyond just ramps. Ensure all exam centers (including state PSCs and SSC centers) have truly accessible toilets, adequate lighting, lifts, and clear pathways. The lack of accessible washrooms forces many PwDs to limit fluid intake, severely impacting their performance.
- **Accessible Study Materials:** Promote and incentivize the creation of accessible study materials (e.g., in Braille, large print, audio formats, digitally accessible PDFs) for public service exam aspirants. This requires collaboration with coaching institutes and publishers.
- **Contextualizing Aptitude Tests (e.g., CSAT):** As highlighted by PwBD aspirants, time-bound reasoning and numeracy questions (like in CSAT) can disproportionately impact those with certain disabilities, who may have had years of inaccessible education or cognitive processing differences.
- **Scribe Availability:** Ensure that UPSC/PSCs have a robust system to provide qualified scribes in all centers, especially for candidates who cannot arrange one independently.

**Read More:** [The Indian Express](#)

**UPSC Syllabus:** GS II, Welfare schemes for vulnerable sections of the population by the Centre and States and the performance of these schemes; Mechanisms, laws, institutions and Bodies constituted for the protection and betterment of these vulnerable sections.

### Water Crisis in India – Explained Pointwise

India is experiencing one of the most severe water crises in its history. With only 4% of the world's freshwater resources but home to nearly 18% of the global population, the country faces acute stress in meeting the water demands of its people, agriculture, and industry. By 2030, India's water demand is projected to be twice the available supply, risking severe shortages for millions and potentially impacting the nation's GDP.

#### What is Water Crisis? What is the situation in India?

**Water Crisis:** Water crisis refers to the situation where the available potable, safe water in a region is less than its demand. The World Bank refers to **water scarcity** as a condition when the **annual per-capita availability** is less than **1000 cubic metres**.

#### Water Crisis Situation in India:

<b>Water Crisis</b>	<ol style="list-style-type: none"> <li>1. India possesses only <b>4% of the world's freshwater resources</b>, despite supporting <b>17% of the world's population</b>.</li> <li>2. According to NITI Aayog's "<b>Composite Water Management Index (CWMI)</b>", report India is undergoing the worst water crisis in its history. Nearly <b>600 million people</b> were facing high to extreme water stress.</li> <li>3. India's <b>annual per capita availability</b> of <b>1,486 cubic meters in 2021</b> is in the <b>water stress category</b> (less than 1700 cubic meters). As per Govt estimates, this may reduce to <b>1,341 cubic metres by 2025</b> and <b>1,140 cubic metres by 2050</b>.</li> </ol>
<b>Lack of Access to Safe Drinking Water</b>	<p>According to <b>NITI Aayog CWMI Report</b>:</p> <ol style="list-style-type: none"> <li>a. <b>200,000 people</b> die every year due to inadequate access to safe water.</li> <li>b. <b>75% of the households</b> in the country do not have access to drinking water.</li> <li>c. <b>40% of India's population</b> will have <b>no access to drinking water</b> by 2030.</li> </ol>
<b>Overexploitation and pollution of Groundwater</b>	<ol style="list-style-type: none"> <li>1. India is the <b>largest groundwater user</b> in the world, with its total use exceeding 25% of the global usage.</li> <li>2. Nearly <b>70% of Ground water is contaminated</b>. India is placed at the rank of 120 among 122 countries in the water quality index.</li> </ol>

#### What are the reasons for the Water Crisis in India?

- 1. Rising water demand:** According to NITI Aayog, India's water demand is increasing at a rapid rate. **India's water demand** will be **twice** the **available supply by 2030**. Also, the **rate of depletion of groundwater** in India during **2041-2080** will be thrice the current rate.
- 2. Groundwater use for agriculture:** There is **high groundwater usage** in agriculture due to faulty cropping patterns. **For ex-** Water-intensive paddy cultivation in the states of **Punjab** and **Haryana**.
- 3. Encroachment of Natural Water Bodies:** There has been destruction of lakes and small ponds to meet the infrastructure needs of burgeoning populations. **For ex-** **Encroachment of lakes in Bengaluru**.
- 4. Climate Change:** Climate Change has led to **erratic monsoon** and **reduced water levels** in many rivers. This has induced water crisis in India.
- 5. Discharge of Pollutants:** There has been contamination of groundwater resources by the **discharge of industrial chemicals, sewers** and **improper mining activities**.
- 6. Lack of proactive management policies:** Water management policies in India have failed to keep pace with changing demands of time. **For ex-** **The Easement Act of 1882 granting groundwater ownership rights** to the landowner leading to indiscriminate use of water resources.
- 7. Governance issues:**

- **Water governance** in India has been **fragmented**. The Centre and the States have their respective departments for governing various issues related to water.
- There have been separate departments for surface water and groundwater. **Central Water Commission (for surface water)** and **Central Ground Water Board (for groundwater)**.
- **Politicization of inter-state disputes** by the political parties have hindered the quick resolution of disputes.

**8. Detached Citizens:** Since water is a free resource, it is not valued by the citizens. Citizens are completely detached from the water issues.

### What are the impacts of Water Crisis in India?

#### 1. Economic Impact:

- As per World Bank, **India's GDP** could **decline by as much as 6% by 2050** due to water scarcity.
- Water scarcity will result in **decline of food production**. This will hamper India's food security and have serious impacts on the livelihood of farmers and farm labourers.
- **Decline in industrial production** as Industrial sectors such as textiles, thermal power plants etc. may suffer due to water shortage.

#### 2. Ecological Impact:

- Water scarcity may lead to **extinction of flora and fauna**.
- **Heavy metal contamination** (Arsenic, cadmium, nickel etc.) and oil spills in rivers and oceans respectively may **threaten the marine biodiversity**.

#### 3. Social Impact:

- Deterioration of health of children due to **intake of contaminated water**. It leads to a reduction in human capital.
- The **increased out-of-pocket expenditure on medical expenses** adversely impacts the poorest and the most vulnerable sections.
- Increased hardships for women like school dropout, '**water wives**' to fetch water in **drought prone regions**.

#### 4. Federal Relations:

- Amplification of the existing **inter-state water disputes** like Kaveri, Krishna, Godavari. There will be emergence of new disputes in the future.
- There will be a rise in **parochial mindset** and **regionalism** among states and may hinder growth of national unity.

**5. International Relations:** Water scarcity can lead to conflict among nations to get control over the water bodies. **For ex- Impact on India-China relations due to Chinese building of dams over Brahmaputra river and India-Pakistan relations with India putting the Indus Water Treaty in abeyance.**



**Case Study = Bengaluru Water Crisis:**

- Water starved Bengaluru is facing the **looming threat of Day Zero** (when government will shut down water connections for homes and businesses).
- A **BBC report**, based on UN-projections, had listed **Bengaluru in the second position** after **Brazil's São Paulo** among the 11 global cities that are likely to run out of drinking water.



## Bengaluru Water Crisis

### WATER CRISIS IN INDIA

The World Bank refers to water scarcity as a condition when the **annual per-capita availability** is **less than 1000 cubic metres**.

According to **NITI Aayog's Composite Water Management Index report**, India is undergoing the worst water crisis in its history. Nearly **600 million people** are facing **high to extreme water stress**. About 200,000 people die every year due to inadequate access to safe water.

### REASONS BEHIND BENGALURU'S WATER CRISIS

1. **Reduced Rainfall leading to Empty Water Reservoirs**- Water levels in **Cauvery Basin reservoirs** like **Harangi, Hemavathi, and Kabini** are at **39%** of their total capacity as of 2024 due to **deficient North-East Monsoon**.
2. **Depletion of Groundwater**- **Excessive extraction** of groundwater by the bore wells and lack of proper implementation of rain water harvesting systems.
3. **Destruction of natural water bodies**- Concretisation and destruction of natural lakes has reduced their storage capacity from **35 tmcft** in **1800** to **2 tmcft**
4. **Mismanagement and Inequitable Distribution**- Inefficient water management practices, including **wastage, leakage, and unequal distribution of water resources**

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What are the government initiatives?

<b>Jal Shakti Abhiyan (JSA)</b>	It was started in 2019 as a movement for <b>water conservation</b> , <b>recharge</b> , and <b>rainwater harvesting</b> in 256 water-stressed districts. The JSA now covers all 740 districts in the country.
<b>Atal Bhujal Yojana</b>	The programme lays emphasis on the <b>recharge of groundwater resources</b> and <b>better exploitation</b> of the groundwater resources.
<b>Amrit Sarovars</b>	Centre has decided to build <b>50,000 water bodies</b> (Amrit Sarovar), with an approximate area of one acre, across the country for water conservation.
<b>Nal Se Jal Scheme</b>	The scheme 'Nal se Jal' was started to ensure <b>pipled drinking water</b> to every rural household by 2024.  It is a <b>component of the government's Jal Jivan Mission</b> . The nodal agency of the scheme will be Jal Shakti Ministry.
<b>Namami Gange Program</b>	It is a <b>comprehensive program</b> with twin objectives of <b>effective abatement of pollution in Ganga</b> (Nirmal Dhara), <b>conservation and rejuvenation of Ganga</b> (Aviral Dhara).
<b>Jal Shakti Ministry</b>	Jal Shakti Ministry has been formed by <b>merging the Ministry of Water Resources, River Development and Ganga Rejuvenation</b> and the <b>Ministry of Drinking Water and Sanitation</b> .  Its aim includes: Providing clean drinking water, implementing the Namami Ganga project, resolving the inter-state water disputes, cleaning Ganga.
<b>National Water Policy</b>	The policy focuses on the <b>conservation</b> , <b>promotion</b> and <b>protection</b> of water. It promotes measures like <b>rainwater harvesting</b> for meeting the demand of water.

### What should be the Way Forward?

**1. Promotion of Water Conservation:** Encouraging rainwater harvesting to capture monsoon run-off. Also, **traditional water conservation practices** like Kudimaramath practice (Tamil Nadu), Ahar Pynes (Bihar), Bamboo Drip irrigation System(North-East) **must be revived**.

**2. Demand-side Management:** States can adopt a participatory approach with the involvement of local communities. **For ex-** The **Swajal model adopted by Uttarakhand** focusing on community-based management of water resources. **Revival of Johads** in Rajasthan desert by Rajendra Singh (Waterman of India).

**3. Nature-Based Solutions:** **Nature-based solutions** refer to the **solutions that mimic natural processes** to provide **human, ecological and societal benefits**. **For ex-** **Artificial Floodplains** to increase water retention, **Forest management** to reduce sediment loadings.

**4. River Basin Management:** River basin management must be done through **hydrological-basin approach** rather than **administrative boundaries**. Also, steps must be taken to **promote interlinking of rivers**, while addressing its environmental concerns.

**5. Evidence-based policy-making:** We must create robust water data systems with real-time monitoring capabilities. **For ex-** Andhra Pradesh's online water dashboard for mapping of hydrological resources for better policymaking.

**6. Implementing the Mihir Shah Committee Report:** The Mihir Shah Committee recommendations must be implemented for restructuring the water governance in India:

- **Establishing National Water Commission** by merging Central Water Commission(CWC) and Central Groundwater Board(CGWB). It would ensure that the surface and the groundwater are taken as a single entity.
- **Focusing on management and maintenance of dams** rather than construction of dams.
- Adopting a **participatory approach** to water management.

#### Conclusion:

India's water crisis is a multifaceted challenge driven by overuse, pollution, mismanagement, and climate change. It threatens health, livelihoods, and the environment. While government schemes like Jal Jeevan Mission and Atal Bhujal Yojana are steps in the right direction, sustained efforts in conservation, efficient use, community participation, and robust governance are essential for a water-secure future.

**Read More:** [The Hindu](#)

**UPSC Syllabus GS 1: Issues related to water resources (Geography), GS 3- Environment**

### Global Supply chain and India- Explained Pointwise

There are arguments in favour as well as against greater integration of the domestic economy with Global Supply Chains. Some believe that higher global integration exposes a country to global volatility, which will negatively impact the economic growth of the country. Others believe that the positive impacts of being more integrated with the world outweighs & is longer lasting than the negative impacts of being exposed to global shocks.

India is generally considered as an inward-looking economy, however, India has shown a varying trend over the years when it comes to integration with the world.

**2000-2010**→ Period of rising global integration→ Resulting in higher share of global exports & higher GDP growth rate.

**2010-2020**→ Period of rising protectionism→ Fall in India's global export share & GDP growth rate.





### What are Global Supply Chains? What has been the history of its Evolution?

**Global Supply Chains:** Global supply chains represent the **different stages of production** of a product or service, which takes place in different regions of the globe. These supply chains **dictate the regions** for undertaking **design, assembly, or production**. The supply chain model has dominated industrial production since the 1980s.

<b>Examples of Industries with Global Supply Chains</b>	<b>Textiles:</b> Clothing production <b>Food processing:</b> Packaged foods manufacturing. <b>Complex Industries:</b> Cars, electronics, and pharmaceuticals.
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### Evolution of Design of Global Supply Chains:

1. From the 1980s to the 2010s, during the height of globalization, supply chains were designed for maximum efficiency (just in time). The products were assembled globally based on cost.
2. With the onset of Pandemic and the national security concerns, the priorities have changed from **efficiency** (just in time) to **resilience** (just in case) and **security** (just to be secure).

### New Approach towards design of new Global Supply Chains:

1. **Just to be Secure Approach:** The “**just to be secure**” approach should be applied to **high-risk sectors** like **communications** and **critical infrastructure**. It can be done through measures such as **audits, inspections, and adherence to security standards**.
2. **Zero Trust Approach:** A “**zero trust**” approach which assumes that all products are compromised should be used for the most sensitive technologies like military and advanced research. This should be done through strict verification during procurement and continuous monitoring.
3. **Just in Case Approach:** A “**just in case**” approach should be applied for **less critical technologies**. The focus should be on diversifying suppliers and friendshoring to address vulnerabilities.

### What are the reasons for the Shift in the Global Supply chains from China?

1. **Rising Labour Costs:** The significant increase in China’s labour costs has made it **less attractive for labor-intensive industries like textiles**. Countries such as **Vietnam, India, and Bangladesh** offer the advantage of **lower**

**wage rates** to companies. This has prompted companies to relocate production away from China in these regions.

**2. Supply Chain Resilience:** The COVID-19 pandemic exposed vulnerabilities in global supply chain's heavy dependence on China. Many firms are adopting strategies like **nearshoring** and **reshoring** to enhance resilience against these supply chain disruptions.

**3. Geopolitical Tensions:** The **U.S.-China trade war**, **tariff hikes** imposed on Chinese goods have led to the increased flight of firms from China. **For ex- Countries like Mexico have surpassed China** as the top trading partner for the U.S. in recent years.

**4. Strategic Realignments:** The formation of new trade alliances and partnerships such as **SCRI** (Supply Chain Resilience Initiative) and **IPEF** (Indo-Pacific Economic Framework) serve as alternatives to Chinese dominance of Global Supply Chains.

**5. Regulatory Challenges:** The growing apprehension about stricter oversight and rules for foreign companies in China, has also led to the shift of firms of global value chains from China.

### Why is India being seen as an alternative to China?

**1. Large Domestic Market:** India's vast consumer base (**approximately 1.3 billion people**) presents significant opportunities in sectors like **electronics** and **textiles**.

**2. Government Initiatives:** The launch of **Production-Linked Incentive (PLI) scheme**, which offers tax breaks and subsidies to foreign firms, has also helped in shifting production base from China to India.

**3. Improved Infrastructure:** Investments in infrastructure, such as the **development of new ports** and **logistics facilities**, have enhanced India's competitiveness in GVC. **For ex- Development of \$900 million container port in Kerala** which is expected to significantly improve product delivery times.

**4. Trade Agreements:** India's fresh push towards more **comprehensive FTA 2.0** like the **India-UAE CEPA**, **India-Australia CEPA** and **India-EFTA FTA** has helped in attracting greater FDI in India as part of the Global Value Chain investment.

**5. Service Sector Growth:** India's excellent growth in **IT**, **back-office work**, **financial services**, and **logistics**, has been propelling investor's to look at India as part of their **China+1 strategy**.

### What are the examples of rise of India in the GVC?

<b>Tech Transfers &amp; Manufacturing</b>	The production of <b>iPhones</b> in India, and an early technology transfer for the advanced <b>Mercedes-Benz EQS</b> .
<b>Growing Industries</b>	<b>Foxconn</b> is setting up a chip-making fabrication plant in Gujarat. Sectors like <b>automotives</b> and <b>pharmaceuticals</b> are flourishing with the establishment of new plants.
<b>Attractiveness to Foreign Investors</b>	WTO has listed India as the <b>fifth-largest importer of intermediate goods</b> , with a 5% share, by the end of 2022.

New trade deals	UAE-India FTA partnership and ongoing negotiations with the UK and EU, indicate deep economic integration of India in the GVC.
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### What should be the way forward for India?

- 1. Export-Oriented Approach:** India should promote export-oriented foreign direct investment to effectively join global supply chains.
- 2. Trade Liberalization:** Trade liberalisation measures, such as increase in the FDI limits for different sectors, will help in enhancing India's profile in Global Value Chains (GVCs).
- 3. Modern Special Economic Zones:** Modern SEZs in PPP mode should be set up to enhance the business environment.
- 4. Domestic Technological Investment:** India should invest in domestic technology to meet international standards in price, quality, and delivery.
- 5. Skill development:** India must invest in tertiary-level education, like STEM fields, for a skilled workforce.

### Conclusion:

The potential US tariffs ("Trump Tariffs") are creating ground for external reforms such as lowering of import tariffs levied by India on others, fast-tracking of trade deals etc, if some domestic reforms are also pursued, side by side, such as, deregulation by government, then it can lead to improve in the ease of doing business. Such reforms will not only lead to greater integration of Indian economy into Global Supply Chains, but also become its important node.

Read More: [The Indian Express](#)  
UPSC Syllabus GS 3: Economy

## G7 and India- Significance and Challenges- Explained Pointwise

India is not a member of the G7—a group comprising the US, UK, Germany, France, Italy, Canada, and Japan—but has become a regular and influential invitee to its outreach sessions. As of 2025, India has participated in twelve G7 Summit Outreach sessions, with Prime Minister Narendra Modi attending for the sixth consecutive time this year.

India is seen as a major emerging economy, a voice for the Global South, and a critical partner on issues like energy security, technology, climate change, and geopolitical stability. The host country invites India to ensure broader representation and to address global challenges that require cooperation beyond the G7's core membership.

### What is G-7? What are the achievements of the Grouping?

G-7 is a group of the most developed and advanced economies of the world. The members of the G7 group are France, Germany, Italy, the United Kingdom, Japan, the United States, and Canada. Summits are held annually and hosted on a rotation basis by the group's members.

### Origin:

- The G-7 originated from the Oil crisis of 1973 and the resulting financial crisis, which forced the leaders of 6 major industrial nations to convene a meeting in 1975.



- The participating countries were the **US, UK, France, West Germany, Japan, and Italy**. Canada joined in 1976, leading to the formation of the G-7.
- It was known as the '**G8**' for several years after the original seven were joined by Russia in 1997. However, it was renamed as **G-7 after Russia was expelled as a member in 2014** following its annexation of the Crimea region of Ukraine.

### What is the significance of G7?

**1. Grouping of advanced economies:** G7 members collectively represent a significant portion of global GDP and trade, giving the group substantial influence over international markets and economic policymaking. As of 2024, they comprise over 44% of world nominal GDP and about 30% of world GDP by purchasing power parity.

**2. Forum for Discussing Pressing Global Challenges:** While initially focused on economics, the G7's agenda has significantly expanded over the years to encompass a wide range of global issues. These include:

- **International peace and security:** Addressing geopolitical tensions, conflicts (e.g., Russia-Ukraine war), and terrorism.
- **Climate change and energy security:** Coordinating efforts on climate action, clean energy transition, and ensuring affordable and reliable energy access.
- **Global health:** Discussing responses to pandemics, health crises, and strengthening global health systems.
- **Technology and Artificial Intelligence:** Addressing the implications of emerging technologies, including their ethical use and governance.
- **Trade policies and supply chains:** Promoting free and fair trade and addressing disruptions.
- **Development and humanitarian aid:** Coordinating efforts to support developing countries and address humanitarian crises.

**3. Symbol of Multilateralism and Shared Values:** The G7 members are united by shared values of liberal democracy, pluralism, and free-market economies. The forum reinforces these principles and promotes a rules-based international order.

**4. Consensus-Building:** While it does not have a permanent secretariat or binding legal authority, the G7 operates by consensus. **Its gatherings are important because they embody the principles of multilateral cooperation and consensus-building among major powers.**

**5. Setting Norms and Agendas:** The G7 identifies global norms, elevates their importance, and often sets the agenda for broader discussions in other international bodies like the UN, IMF, World Bank, and WTO.

**6. Crisis Coordination Platform:** The G7 serves as a critical forum for coordinating international responses to global challenges, such as economic downturns, pandemics, wars, and geopolitical tensions.

### What are the Challenges faced by the G-7?

**1. G7 is not representative in current times:** In the initial years, it accounted for **2/3rd of global GDP**. However, the G-7 group now accounts **only for 1/3rd on PPP basis** and less than **50% on nominal basis (market prices)**. The emerging 7 (E7) economies of India, China, Indonesia, Brazil, Mexico, Russia, Turkey are not part of it.

**2. Failure in tackling Global issues:** While the G7 issues ambitious pledges and communiqués on various global challenges (climate change, development aid, pandemic preparedness), critics often point to

inconsistencies in the implementation of these pledges and a lack of accountability for commitments. For instance, progress on phasing out fossil fuels or delivering on climate finance pledges has been seen as slow.

**3. Historical Polluters:** G-7 accounts for **59% of historical CO2** emissions and pledged phase out fossil fuels. There has been no visible progress of the same and they **currently account for twice the CO2 emission** than African continent.

**4. Trade Conflicts:** Trade disputes among G7 members and with other countries disrupt global economic stability. **Weakening of rules based of trade regime through WTO** and trade wars has active role of G7 countries.

**5. Populism and Nationalism:** The rise of populist and nationalist movements **within G7 countries challenge multilateral cooperation** and the G-7 group's commitment to globalism and liberal democratic values e.g. 2025 G7 Summit in Canada highlight difficulties in reaching a joint statement on issues like the Russia-Ukraine war due to differing views, and the early departure of a key leader like the US President further hindered substantive discussions.

**6. Divergent National Interests:** While united by shared democratic values, G7 members often have differing national interests, particularly on trade, climate policy, and approaches to geopolitical challenges e.g., relations with China or Russia.

**7. Rise of the G20 and Other Forums:** The G20, which includes major emerging economies, has largely superseded the G7 as the premier forum for global economic governance. This broader representation makes the G20 better suited to address today's interconnected global economic challenges. The proliferation of various multilateral and **"minilateral"** forums means the G7 is no longer the sole or even primary platform for discussing all global issues.

#### 8. Geopolitical Challenges:

- **Russia's War in Ukraine:** While the G7 has shown remarkable unity in its response to Russia's aggression, sustaining this unity amidst economic pressures, energy concerns, and differing views on long-term strategies remains a challenge.
- **Relations with China:** Managing complex relations with China – balancing cooperation on global issues like climate change with concerns over trade practices, human rights, and geopolitical assertiveness – is a continuous challenge for the G7.
- **Middle East Instability:** At the recent summit in Canada, regional conflicts like the Israel-Iran tensions overshadowed other agenda items and highlight the G7's limitations in directly resolving such complex geopolitical crises without broader international involvement. Moreover, the rift between the Presidents of USA & France at the summit also depicted the group as divided & an ineffective force in resolving the regional conflicts. Eventually, G7 was unable to issue a joint statement in this summit on key issues & only a Chair's Summary was issued to deal with the crises at hand. Thus, many terming this year's summit as a **'Failed Summit'**.

#### What is the significance of India's association with G-7 Countries?

**1. India's Economic Significance:** According to the IMF, India is one of the fastest-growing economies in the world. India's economy is larger than **5 G-7 member countries – France, Italy, the UK, Canada & now even Japan**. India's abundant **young and skilled workforce**, coupled with its **market potential, low manufacturing costs**, and **favourable business climate**, makes it an attractive investment destination.

**2. India's growing strategic Importance in the Indo-Pacific:** India has emerged as a **major strategic partner for the Western G-7 countries**. This has helped in containing **China's expanding influence**, particularly in the Indian Ocean.

**3. Addressing Global Crises:** Whether it's the Russia-Ukraine conflict, Middle East tensions, or international terrorism, India's nuanced diplomatic approach and its influence among various global actors make it a valuable interlocutor and potential facilitator for conflict resolution and stability.

**4. Resilient Supply Chains:** As G7 nations seek to diversify and de-risk their global supply chains (especially post-COVID and amidst geopolitical tensions), India emerges as a viable and attractive alternative to China, particularly in manufacturing, electronics, and pharmaceuticals.

**5. Regulation of AI:** India's leadership in digital public infrastructure (like UPI and Aadhaar) is a model for inclusive digital transformation in developing countries. Its active participation in discussions on AI governance, responsible AI, and preventing deepfakes is highly significant for setting global norms in these rapidly evolving technological fields.

**6. Representation for Developing Nations (Voice of Global South):** The G7 has been criticized for being an exclusive "rich countries' club." India's consistent presence helps to bridge this gap, bringing the perspectives, challenges, and priorities of the Global South to the table. This is particularly vital for issues like climate finance, development aid, food security, and technology transfer.

### **What are the Challenges with India's further deepening of engagement with G-7 Countries?**

**1. Non-inclusion of India as a permanent member:** G-7 has an **obsolete membership structure** which **does not include the emerging economies like India**. India is always an "invitee" or "outreach partner," not a formal member. This means India doesn't have a permanent seat at the core decision-making table, nor does it participate in all G7 ministerial meetings or preparatory discussions throughout the year. Its influence is limited to the specific outreach sessions it's invited to.

**2. Climate Change Responsibilities:** While India is committed to climate action, it often pushes for common but differentiated responsibilities, emphasizing the historical emissions of developed nations and their obligation to provide finance and technology. G7 nations, while committed to climate goals, may face domestic political pressures regarding these commitments.

**3. Energy Transition vs. Energy Security:** India's immediate energy needs are massive, and while it's rapidly expanding renewables, it still relies heavily on fossil fuels. G7 nations often push for faster transitions, while India emphasizes the need for a just transition that balances energy security and affordability for its large population.

**4. Relations with Russia:** India maintains a neutral stance on the Russia-Ukraine war, advocating for dialogue and diplomacy, and continuing its economic ties with Russia (e.g., oil imports). This position often differs from the unified condemnation and sanctions approach of the G7. While the G7 might appreciate India's role as a bridge, it also puts India in a position where it may face subtle (or sometimes explicit) pressure to align more closely with the G7's stance.

**5. Bilateral Issues with G7 Members:** Recent G7 summits have highlighted specific bilateral tensions. For example, the **India-Canada relationship** has been strained due to issues like the Hardeep Singh Nijjar killing and concerns about pro-Khalistan elements in Canada. While the G7 summit offers a platform for dialogue, these bilateral issues can overshadow broader cooperation.

**6. Double standards of developed countries on terrorism:** Indian PM highlighted the double standards of developed countries on terrorism as, on one hand, they are quick to impose sanctions on certain countries based on their preferences, while on the other hand, they openly reward countries like Pakistan which promote cross-border terrorism.

### What Should be the Way Forward?

**1. Deepening Economic Ties:** Encouraging investment in sectors like **renewable energy**, **technology**, **infrastructure** and **enhancing trade liberalization efforts** can bolster economic relations between India and G-7 group.

**2. Strategic Collaborations:** Strengthening defense cooperation through **joint exercises**, **intelligence sharing**, and **technology transfers** can address common security challenges.

**3. Multilateral Engagement:** India's active participation in G7 forums can contribute to shaping inclusive global governance frameworks. **Joint efforts in climate action**, **focusing on sustainable development and green technologies**, can set benchmarks for global environmental policies.

**4. Technological Innovation:** Collaborative efforts in **digital infrastructure development**, **cybersecurity**, and **artificial intelligence** can drive the next wave of technological advancements. Joint research initiatives in fields like **biotechnology**, **space exploration**, and **renewable energy** can foster innovation.

**5. G7 Expansion (Long-Term):** While unlikely in the short term, India should continue to subtly advocate for a more representative G7 (or a G7+ model) that formally includes major emerging economies.

### Some Key Outcomes of G-7 Group Summit (2025):

**1. Critical Minerals Production Alliance:** A new Canada-led G7 initiative, the Critical Minerals Production Alliance, was launched. This aims to work with trusted international partners to guarantee supply for advanced manufacturing and defense, strengthening global critical mineral supply chains.

**2. Support for Ukraine:** G7 Leaders expressed support to achieve a just and lasting peace in Ukraine. They recognized Ukraine's commitment to an unconditional ceasefire and urged Russia to reciprocate.

**3. Middle East Stability:** Leaders reiterated their commitment to peace and stability in the Middle East, discussing the evolving situation between Israel and Iran, the need for unhindered humanitarian aid to Gaza, the release of all hostages, and an immediate and permanent ceasefire. They called Iran the "principal source of regional instability."

**4. Indo-Pacific:** The G7 highlighted the importance of a free, open, prosperous, and secure Indo-Pacific based on the rule of law. They stressed the importance of constructive and stable relations with China while calling on China to refrain from market distortions and harmful overcapacity. Concerns were also expressed about China's destabilizing activities in the East and South China Seas and the importance of peace and stability across the Taiwan Strait.

**5. AI Adoption and Governance:** The G7 agreed to drive secure, responsible, and trustworthy AI adoption across public and private sectors. Canada initiated the **G7 GovAI Grand Challenge** to develop scalable solutions for AI adoption in the public sector and to bridge digital divides. The summit reaffirmed commitments to international AI ethics frameworks.



**6. Wildfire Resilience:** Following a year of devastating wildfires globally, a multilateral effort was agreed upon to better prevent, fight, and recover from wildfires. This included initiatives like expanding Canada's WildFireSat mission to monitor global wildfires and sharing data. India also endorsed the **Kananaskis Wildfire Charter**.

### Conclusion:

India's evolving relationship with the G7 signifies its growing importance in global economic and strategic affairs. The synergies between India and G7 nations, driven by shared values and mutual interests, present vast opportunities for collaborative growth. As India continues to rise on the global stage, its partnership with the G7 will play a pivotal role in shaping a balanced and inclusive world order.

**Read More: The Hindu**

**UPSC Syllabus- GS Paper 2- Important International Organisations**

## Critical Mineral Mission of India- Significance and Challenges- Explained Pointwise

Metals & minerals have played a very important role in the evolution of the human civilisation that lead to the naming of important eras on the name of metals like Bronze Age & Iron Age. Similarly, the minerals have also been central to the development of our economy & society for e.g. coal powered the 1st Industrial Revolution in 19th & 20th century, oil fueled the 2nd Industrial Revolution in second half of 20th century & now critical minerals are believed to be driver of 21st century. **Critical Mineral Mission of India**

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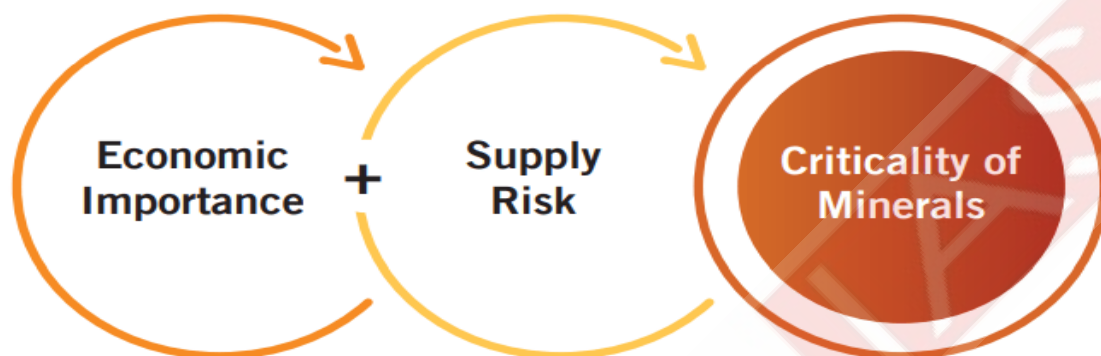
**What are Critical Minerals? What is the classification criterion and identified list of Critical Minerals in India?**

**Critical Minerals:** Critical minerals are a category of non-fuel minerals and elements which satisfy 2 conditions:

1. **Economic development & National Security** = **Essential for economic development** and **national security** as they are vital for development of materials for defense, aerospace, nuclear, and space applications.

2. **Supply chain vulnerability** = There are associated risk of supply chain vulnerability and disruption with these minerals, due to their lack of availability, and concentration of existence, extraction or processing of these minerals in few geographical locations.

**Factors Affecting Criticality:**



Source- Ministry of Mines

Economic Importance (EI)	Supply Risk (SR)
1. Disruption Potential 2. Substitutability Index (SI) 3. GVA Multiplier Score 4. Cross-Cutting Index (CCI)	1. Governance-weighted Material Concentration 2. End-of-life Recycling Rates (EOL-RR) 3. Import Reliance (IR) and Self-Sufficiency (SS) 4. Substitutability Index (SR)

**Critical Minerals identified in India:** Government of India identified 30 minerals as Critical in July 2023.

Antimony	Lithium	Strontium
Beryllium	Molybdenum	Tantalum
Bismuth	Niobium	Tellurium
Cobalt	Nickel	Tin
Copper	PGE	Titanium
Gallium	Phosphorous	Tungsten
Germanium	Potash	Vanadium
Graphite	REE	Zirconium



Hafnium	Rhenium	Selenium
Indium	Silicon	Cadmium

Critical minerals have strategic importance in sectors like defence, agriculture, energy, pharmaceutical, telecom. However, these minerals **face supply chain vulnerabilities**, due to their lack of availability and concentration in a few geographical locations. Hence, India has been focusing on securing the supplies of critical minerals.

### What is the Importance of Critical Minerals for India?

**1. Push to India's Economic Development:** These Minerals give a push to India's economic development as industries such as **high-tech electronics, telecommunications, transport, and defense** rely heavily on these minerals. Their growth can lead to job creation, income generation, and innovation in these sectors. **For ex-India's push to become semiconductor manufacturing hub rests on the availability of these minerals.**

**2. Energy transition towards Net-zero Emissions:** These minerals are the foundation of modern technologies like **solar panels, wind turbines and advanced batteries**, which will help in energy transition and would give a push to India's goal of **net-zero emission by 2070**.

**3. Competitive Value chain establishment in India:** The discovery of critical mineral wealth and identification of areas of their potential use in advanced technologies will help in establishing competitive value chain in India. This would help in attracting **foreign direct investments** from countries like UK, USA as part of their **China+1 strategy**.

**4. National Security:** These minerals are **vital for defense, aerospace, nuclear, and space applications** due to their usage in development of high-quality and reliable materials capable of withstanding extreme conditions and performing complex functions. These would in turn help in bolstering India's national security.

**5. Reducing India's import Bill:** Currently most of the critical minerals are imported in India. The exploration and increased production of these minerals would help in **reducing India's import burden** and Current Account Deficit.

Sl. No.	Critical Mineral	Percentage (2020)	Major Import Sources (2020)
1.	Lithium	100%	Chile, Russia, China, Ireland, Belgium
2.	Cobalt	100%	China, Belgium, Netherlands, US, Japan
3.	Nickel	100%	Sweden, China, Indonesia, Japan, Philippines
4.	Vanadium	100%	Kuwait, Germany, South Africa, Brazil, Thailand
5.	Niobium	100%	Brazil, Australia, Canada, South Africa, Indonesia
6.	Germanium	100%	China, South Africa, Australia, France, US
7.	Rhenium	100%	Russia, UK, Netherlands, South Africa, China
8.	Beryllium	100%	Russia, UK, Netherlands, South Africa, China
9.	Tantalum	100%	Australia, Indonesia, South Africa, Malaysia, US
10.	Strontium	100%	China, US, Russia, Estonia, Slovenia
11.	Zirconium(zircon)	80%	Australia, Indonesia, South Africa, Malaysia, US
12.	Graphite(natural)	60%	China, Madagascar, Mozambique, Vietnam, Tanzania
13.	Manganese	50%	South Africa, Gabon, Australia, Brazil, China
14.	Chromium	2.5%	South Africa, Mozambique, Oman, Switzerland, Turkey
15.	Silicon	<1%	China, Malaysia, Norway, Bhutan, Netherlands

Table.1 The net import reliance for critical minerals of India (2020) (Source: A report on 'Unlocking Australia-India Critical Minerals Partnership Potential' by Australian Trade and Investment Commission, July 2021)

Source- Ministry of Mines

### What are the Challenges with Critical Minerals?

**1. Geopolitical and oligopolistic monopoly:** The concentration of critical minerals in few countries, has led to geopolitical monopoly with only a few countries dominating these mineral resources. This leads to **oligopolistic** (domination by a few large firms) markets. **For ex-** Australia controls 55% of lithium reserves, and China has 60% of rare earths.

**2. China's dominance in the processing and refining sector:** China is a central player in the global critical mineral supply chains, particularly in processing and refining. It **accounts for about 60% of worldwide production** and **85% of processing capacity**. China's dominance leads to political leverage over other countries. It alone can bring global EV industry to a halt by restricting the supply of rare earths – which is happening right now.

**3. Geopolitical Risks:** The **geographical concentration of these minerals** makes them vulnerable to geopolitical risks. Geopolitical tensions, conflicts, trade disputes, or sudden policy changes in those regions can impact their supply. **For ex-** The **civil war in Democratic Republic of the Congo**, has affected the global supply chain of cobalt, as 70% of the world's reserves of cobalt are located in DRC.

**4. Resource Nationalism:** The geographical concentration of these minerals has led to resource conflicts. This has increased resource nationalism, and trade fragmentation. **For ex-** **Rising resource nationalism in Africa**.

**5. Price Volatility:** Unlike oil, most critical materials are not widely traded on exchanges, and this limits opportunities to hedge against price volatility. Further, **insufficient data on consumption, production, and trade of minerals** causes uncertainty, price volatility and delays in investments.

**6. Rising Import Bill:** Between FY22 and FY23, there has been a **34% rise in imports of critical minerals**, totaling nearly Rs. 91,000 crore. India's heavy reliance on imports for these minerals, poses a risk to its industrial and energy security.

**7. Environmental Concerns:** Mining activities of these can lead to biodiversity loss, land use change, water depletion and pollution, waste contamination, and air pollution. **For ex- Lithium mining in the fragile landscapes of the Chilean Atacama desert is water-intensive.**

**8. Long Gestation Period for Alternatives:** Development of alternative sources and processing capabilities of critical minerals, like India's plans with Australia, can take over 15 years, delaying self-reliance.

Read More- [Critical Minerals Summit](#)

#### What initiatives have been taken by the Government for Critical minerals in India?

<b>Amendment to Mines and Minerals (Development and Regulation) Act, 1957</b>	Through the MMDR Amendment Act, 2023, the Central Government is empowered to auction blocks of 30 critical minerals. The amendment permits private sector entry through auctions.
<b>FDI liberalisation</b>	In 2019, <b>India has allowed 100% foreign direct investment.</b>  Certain minerals which were previously classified as atomic have been reclassified, facilitating private-sector mining.
<b>International Collaboration</b>	India joined the <b>Mineral Security Partnership</b> , which is a US led initiative involving 13 countries and the EU.  <b>Khanij Bidesh India Ltd (KABIL)</b> is assisting Argentina in lithium exploration and discussing lithium and cobalt blocks in Australia.
<b>Institutional Initiatives</b>	The <b>Geological Survey of India</b> has initiated over <b>250 projects</b> to explore deep-seated critical minerals.  India has <b>launched startup challenges</b> to develop advanced processing technologies.
<b>Budgetary Support</b>	<b>Customs Duty Removal:</b> <b>Customs duties on 25 critical minerals</b> , such as lithium, nickel, copper, and cobalt, <b>have been removed</b> to enhance domestic manufacturing of advanced technologies like electric vehicles (EVs) and energy storage systems.

	<b>Concessional Customs Duty Extension:</b> The concessional customs duty of 5% on lithium-ion cells has been extended until March 2026.
<b>Critical Mineral Mission</b>	In the Budget 2024, Critical Mineral Mission has been announced to give a <b>boost to India's critical minerals Sector</b> . Through this mission, India aims to <b>boost the domestic output</b> and <b>recycling of critical minerals</b> like copper and lithium.

### Significance of Critical Mineral Mission:

1. Promotion of domestic production and recycling of critical minerals by increasing the capacities of India in terms of refining and processing.
2. Identification of minerals which are critical, which will help the country to plan for the acquisition and preservation of such mineral assets taking into account the long term need of the country.
3. Reduction of India's import dependency as India is 100% import dependent for certain elements.
4. Expedited exploration, overseas mineral acquisition, resource efficiency, recycling of minerals, and finding substitutes through suitable R&D.



Source- Ministry of Mines

### What Should be the Way Forward?



**1. Implementation of the recommendations of expert committee on critical minerals:** Setting up of the **Centre of Excellence for Critical Minerals (CECM)** as a dedicated wing in the Ministry of Mines. This can be on the lines of **CSIRO which is an Australian government corporate entity**. The centre of excellence can collaborate with international agencies or Khanij Bidesh India Ltd (KABIL) for the strategic acquisition of foreign assets of these minerals.

**2. Push for expansion of Mineral Security Partnership (MSP):** Along with India, more countries in the Global South can be part of the alliance, especially critical mineral-rich African countries. The **MSP can become an international platform** that reports on the status and future of critical mineral markets.

**3. Encourage FDI in domestic mining:** Rising Foreign Direct Investment (FDI) will not just support businesses like battery and EV manufacturing. It will also bring the expertise of international mining firms to aid in exploring critical minerals for the country's benefit.

**4. Investment in beneficiation and processing facilities:** India should **invest in beneficiation and processing facilities in Africa** to promote local economies and sustainable relationships.

**5. Path to global leadership:** India can emulate **Indonesia's success in nickel** to become a global leader in these minerals, utilizing access to both domestic and international raw materials.

**6. Alignment of mineral incentives:** The Production-Linked Incentive (PLI) scheme for minerals **should align with global aspirations**, creating employment opportunities.

#### Conclusion:

Critical minerals are the bedrock of the modern technological and sustainable future. Securing their supply is no longer just an economic concern but a fundamental matter of national security. If India is to become a serious player in manufacturing, then it can no longer depend upon mineral supply chains from overseas. As a country which is geologically rich, India has to develop its domestic capabilities to extract minerals – especially critical minerals.

Read More: [The Indian Express](#)

UPSC Syllabus- GS Paper-3- Infrastructure: Energy, Ports, Roads, Airports, Railways etc.

### India-UK Relations- Significance, Challenges and The way ahead- Explained Pointwise



The India-UK relationship, rooted in historical ties, has transformed into a **comprehensive strategic partnership**, with both nations striving for deeper collaboration across various sectors. While there's a strong emphasis on trade and security, the relationship is multi-faceted, encompassing defense, technology, education, and robust people-to-people connections.



Source- The Indian Express

### What has been the history of India-UK relations?

India and the United Kingdom share a long and complex history of relations that spans centuries.

<b>Colonial Era (1858-1947)</b>	After the rebellion in 1857, India <b>came under direct British rule in 1858</b> . The British monarch became the <b>Empress/Emperor of India</b> .
<b>After Independence</b>	India <b>decided to remain in the Commonwealth of Nations</b> after becoming a Republic in 1950.
<b>Phase of Strained Relationship</b>	India-UK Relations were strained during the Cold War era. India <b>pursued a non-aligned foreign policy</b> while the <b>UK was a NATO ally of the US</b> . The UK opposed India's wars with Pakistan and India's nuclear tests.
<b>Phase of Improvement</b>	With the end of the Cold War and economic reforms in the 1990s, UK became more eager to build economic relations with India. This started a <b>phase of improvement in India-UK relations</b> .



<b>Phase of Strategic Partnership</b>	The India-UK relationship was upgraded to a <b>Strategic Partnership in 2004</b> . <b>Regular high-level visits and dialogues</b> have strengthened cooperation in areas like trade, investment, defence, and people-to-people links.
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Today, India and the UK enjoy a modern partnership bound by strong historical ties and a shared membership in the Commonwealth. The two countries collaborate extensively across a wide range of areas and are **working to establish a comprehensive strategic partnership by 2030**.

### What are the areas of cooperation between India-UK?

**1. Geo Political Cooperation:** UK supports India's proposal for **permanent membership** of the **UNSC**. The UK is also an **important interlocutor** for India in the EU, G7, G20 and global forums. India-UK political cooperation deepens through institutions and fora such as **India-UK Disarmament and Non-Proliferation Dialogue**, **India-UK JWG on Counter-terrorism** and **India-UK Foreign Office Consultations**.

**2. Economic Cooperation:** After the establishment of **Joint Economic and Trade Committee (JETCO)** in 2005, the India-UK economic relations has further deepened:

- The trade between India and the UK has "**more than doubled**" between 2007 and 2019. The India-UK bilateral trade has **increased to USD 20.36 billion** in 2022-23.
- In 2022, India was the **UK's twelfth largest trading partner**, accounting for 2% of the UK's total trade.
- India has invested in **120 projects and created over 5,000 jobs in the UK** to become their **second-largest source of foreign direct investment (FDI)** only behind the United States.
- Ratification of **India-UK FTA** in May 2025.

**3. Defense and Security:** India and the UK signed the **Defence and International Security Partnership (DISP)** in November 2015. It provides a **strategic roadmap and direction** to the **evolving India-UK Defence Relations**. At present, **some 70 companies in the UK supply goods for aircraft and related equipment** besides supporting platforms like the Jaguar, Mirage and Kiran aircraft.

**4. Nuclear Cooperation:** India and UK have signed a **Civil Nuclear Cooperation Declaration** in 2010 for the promotion and facilitation of cooperation in the nuclear field. In 2015, a **Nuclear Collaboration Agreement** was signed between the two countries as part of a comprehensive package of collaboration on energy and climate change.

**5. Education:** India and UK have been closely collaborating in the field of education. This is evident in the following cases:

- The launch of '**UKEIRI Mobility Programme: Study in India**' in 2019. Under this Britain's universities collaborate with Indian partners and send UK students to India.
- UK is among the most favoured destinations for Indian students to pursue higher education, with **around 50,000 Indian students currently studying in UK**.

**6. Health:** India and UK have been **closely cooperating in the field of healthcare management**. The close collaboration and association are mentioned below:

- The **successful partnership** between **Oxford University, AstraZeneca** and **SII on COVID-19 vaccine** has **demonstrated the potential of Indian and UK expertise** working together to solve international healthcare challenges.
- The two sides are also working on pandemic preparedness, Antimicrobial Resistance (AMR), digital health, Ayurveda and alternative medicines, as well as health worker mobility.

**7. Climate and Environment:** **India-UK Green Growth Equity Fund** has been established, which helps in the **mobilization of institutional investments** in the renewable energy, waste management, electric mobility and environment sub-sectors in India.

**8. Cultural Cooperation:** India and UK have signed a Memorandum of Understanding on Cultural Cooperation in 2010. **The Nehru Centre (TNC)**, established in 1992 in London, is the **cultural outreach** of the **High Commission of India in UK**.

**9. Diaspora Collaboration:** Around **1.5 million people of Indian origin live** in Britain. Indian diaspora are making significant contributions to the British Society. **The representation of people from Indian Origin has increased in the British Parliament.** The last PM of UK was also of the Indian Origin.

**10. Cultural Cooperation:** Signing of **Programme of Cultural Cooperation (POCC)** by India & UK. This landmark agreement promises to light up the cultural corridor between the 2 nations, reaffirming their shared creative spirit. The agreement also signals a shared commitment to cross-cultural collaboration & economic growth.

#### **What is the Significance of the close India-UK relations?**

**1. Geo-Strategic:** Deepening of engagement with UK **can help India to counter China's rise** in the Indian Ocean Region. The **UK can use India** as an alternative destination to China and its companies can invest in India as part of '**China plus one strategy**'. (**China Plus One Strategy:** It is the business strategy to avoid investing only in China and diversify business into other countries).

**2. Geo-Political:** A healthy relationship between the two is **imperative for enhancing cooperation** in the **Indo-Pacific, Afghanistan, UNSC, G20 and Commonwealth**. For ex- India welcoming the **UK's accession in the Indo-Pacific Ocean's Initiative** under the Maritime Security pillar.

**3. Economic:** The India-UK FTA will give a further boost to India's labour-intensive sectors, increase Indian service exports, and diversify Indian trade partners. The FTA will boost **UK's beverage and automobile industry** and **UK's investment in India**.

**Read More- [India-UK FTA- Explained Pointwise](#)**

**4. Climate Change:** The deepened India-UK relations **will be helpful to achieve the goals of the Paris Agreement** and **to implement the Glasgow Climate Pact**. **For ex-** India and UK have agreed to work for **early operationalisation** of the **Global Green Grids-One Sun One World One Grid Initiative (OSOWOG)** under **ISA**.

#### **What are the Challenges in the relations?**

**1. Different stands on Russia Ukraine conflict-** The U.K **has openly criticized** the Russian invasion while the same has not yet been done by India. This may **emerge as a potential bottleneck in future**.

**2. UK's closeness to Pakistan and China-** The **UK's ties with Pakistan** complicate the process of building a closer defence and security with India. U.K. governments have simultaneously supplied India and Pakistan with weapons or curbed weapons exports.

**UK and India** have also **sometimes diverged** in their **positions towards China's role** in the Indian Ocean. While India has been concerned with **China's growing influence** in the Indo-Pacific region through the **Belt and Road Initiative project**, the UK by contrast has engaged **substantially with Belt and Road**.

**3. Khalistan Issue:** The allegations regarding **UK harbouring the issues surrounding Khalistan** and **Sikh separatism** remain as a formidable challenge for deepening of India-UK relations.

**4. Slow progress in deepening of Defence Ties:** The UK has been slow to adapt to the Indian government's increasingly preferred method of acquisition- through **Government-to-Government (G2G)** agreements or Foreign Military Sales (FMS) for deals.

**5. Extradition Rigidities:** Both the countries have an extradition treaty between them. However, **speedy expedition is still a far-fetched dream**. India has not been able to extradite Vijay Mallya, Nirav Modi and other fugitives from London.

**6. Illegal Migrants:** There are more than 1 lakh of illegal Indian immigrants in the UK. The UK government has put pressure to send them back but both the countries have not yet signed the migration and mobility agreement.

**7. Anti-colonial resentment against Britain:** India still suffers from the legacy of Partition like the **problem with Pakistan** and **the issue of Kashmir**.

#### What Should be the Way Forward?

**1. Jointly reviving multilateralism and multilateral institutions:** India and UK must shed their differences in the stand in the **multilateral bodies** like **WTO** and **UNFCCC**. UK government should stand with the causes of the underdeveloped and developing countries instead of siding with the developed countries.

**2. Agreement on "migration and mobility":** India and Britain should explore an agreement on "migration and mobility" to **facilitate the legal movement of Indians into Britain**.

**3. Streamlining the extradition process:** UK should live up to its commitment to the extradition of Indian fugitives. **For ex- Nirav Modi should be extradited** as his extradition process is almost completed.

**4. Deeper defence and security engagement:** The UK and India's convergence of interests in the Indian Ocean region offers an important opportunity to increase engagement on defence and security. Hence, both nations **should promote standards of transparency and sustainability for infrastructure projects** in the **Indian Ocean region**.

**6. Better balancing of relations:** The UK should take care for ensuring **stronger ties with China and Pakistan** are **not at the expense of a deeper partnership with India**. This will improve India UK relations further.

#### Conclusion:

The India-UK relationship in 2025 stands at a historic high, driven by the new Free Trade Agreement, expanding strategic cooperation, and shared global interests. Both nations are leveraging their partnership to foster innovation, create economic opportunities, and address global challenges, setting the stage for a more integrated and vibrant bilateral future

Read More: [The Hindu](#)

UPSC Syllabus- GS 2- India's relation with the developed nations

### Farm Subsidies in India-Explained Pointwise



**Farm Subsidies** are **financial assistance or support** provided by the government to farmers/agri-businesses /agricultural organizations to supplement their income to **reduce their input cost, stabilise prices**, ensure **food security** & protect them from **unpredictable market & weather conditions**. Farm subsidies constitute about 2% of India's GDP. Total subsidy to farmers amount to 21% percent of their farm income, according to Ministry of Agriculture and Farmer Welfare. **Farm Subsidies in India**

#### What is the RATIONALE behind Farm Subsidies?

**1. Food security:** This is often the primary driver. Governments aim to ensure a stable, adequate, and affordable supply of essential food items for their population, especially in countries with large populations like India. Subsidies can encourage farmers to produce sufficient quantities of staple crops, reducing reliance on imports and safeguarding against global food price volatility or supply shocks (e.g., during pandemics or conflicts).

**2. Supporting Farmers' Income and Livelihoods:** Farming is inherently risky due to unpredictable factors like weather (droughts, floods), pests, diseases, and market price fluctuations. Subsidies provide a safety net, stabilizing farmers' incomes and protecting them from severe financial distress, crop failures, or sudden price crashes.



**3. Addressing Input Costs:** Subsidies on inputs like fertilizers, seeds, electricity for irrigation, and credit help reduce the overall cost of cultivation for farmers, making farming more financially viable, especially for small and marginal farmers.

**4. Promoting Agricultural Productivity and Modernization:** Subsidies can incentivize farmers to adopt modern agricultural practices, high-yielding seed varieties (HYVs), mechanization (tractors, tillers), and efficient irrigation techniques (drip irrigation, sprinklers). This is crucial for increasing overall agricultural productivity and efficiency. Some subsidies or related schemes encourage farmers to invest in on-farm infrastructure like borewells, storage facilities, or cold chains.

**5. Price Stabilization and Consumer Welfare:** By supporting farmers and ensuring stable production, subsidies can help keep consumer food prices stable and affordable, particularly for low-income households. This is often linked to public distribution systems (PDS) that provide subsidized food grains.

**6. Sustainable Practices:** Subsidies can be designed to encourage environmentally friendly farming practices, such as organic farming, precision agriculture, water conservation, soil health management (e.g., Soil Health Card scheme), and crop diversification (e.g., promoting millets).

**7. Rural Development and Employment:** Agriculture is a major source of employment in rural areas. Subsidies help sustain rural economies, create jobs (both on-farm and in allied sectors), and slow down distress migration to urban centers.

#### What are the TYPES of Farm Subsidies?

<b>Direct Subsidy</b>	<p>Direct subsidies involve <b>direct cash payments or income transfers</b> to farmers.</p> <p>Example: <b>Pradhan Mantri Kisan Samman Nidhi (PM-KISAN)</b>: A flagship scheme providing an income support of ₹6,000 per year to eligible farmer families in three equal installments.</p>
<b>Indirect Subsidy</b>	<p>Indirect subsidies reduce the cost of farming inputs or services, or influence output prices, without direct cash payments to farmers. The government typically bears a portion of the cost, making the inputs/services cheaper for farmers.</p> <p>Example: <b>Fertilizer Subsidy</b>: The government pays the difference between the actual cost of fertilizer (production/import) and the subsidized price at which it's sold to farmers.</p>
<b>Output Subsidy</b>	<p>This subsidy provides support to farmers on their outputs.</p> <p>Example: <b>Minimum Support Price (MSP)</b>: The government announces a guaranteed minimum price for certain crops (e.g., wheat, rice, pulses). If market prices fall below MSP, government agencies procure the crops at the MSP, providing a price floor and income assurance to farmers.</p>

#### What are the BENEFITS of Farm Subsidies?

- **Support Farm Income:** Farm subsidies provide assured income and increase the purchasing power of farmers.

- **Food Security:** The farm subsidies assure adequate food supply and reduce the chances of food shortage and food inflation.
- **Improvement in HDI:** Improved farm incomes and food security aids in addressing issues like malnutrition, improving overall living standard.
- **Crop diversification:** Incentivising “less focussed” crops where subsidies on the crops having nutritional and environmental benefits are promoted. For example, boost to millet production.
- **Bridge the Income Divide:** According to [FAO](#), 70% of Indian rural households rely mostly on agriculture for a living. Income support for small and marginal farmers bridges the income gap.
- **Technology:** Increased usage of technology and better infrastructure in agricultural activities lead to increased efficiency, increased profitability and reduce distressed migration.
- **Achieve National Goals:** Farm subsidies are crucial levers in the achievement of goals such as achieving the US\$ 5 trillion economy status, Sustainable Development Goals (SDG). For example, KUSUM programme (subsidy for solar pumps)

#### What are the CONCERNS related to Farm Subsidies?

- **Fiscal Burden:** Farm subsidies form about 2% of India's GDP. High amount of farm subsidies, farm loan waivers put excessive burden on Government finances reducing space for capital expenditure.
- **Resource Wastage:** It results in overuse and wastage of resources e.g., subsidized electricity for farms can be misused for personal use.
- **Environmental Degradation:** Fertilizer subsidies have resulted in overuse of Urea and DAP. Overuse of fertilizers leads to eutrophication, water pollution and soil erosion.
- **Increase Inequalities:** Indirect subsidies more beneficial for already rich farmers due to poor targeting.
- **Distorted Cropping Pattern:** Farm subsidies especially the MSP has led to distortion in crop pattern e.g., predominance of wheat and paddy in Punjab/Haryana at the cost of pulses, maize, vegetables etc.
- **Corruption and Leakages:** Farm subsidies are susceptible to corruption and leakages. This leads to welfare loss and additional fiscal burden. Urea meant for farms is diverted to industrial usage or smuggled to neighbouring countries.
- **WTO Concerns:** India's farm subsidies are questioned by the developed nations at the WTO. MSP is considered trade distortionary and breaches the Aggregate Measures of Support (AMS) level limited by the WTO norms.

#### What can be the WAY FORWARD for Farm Subsidies?

- **Rationalisation:** Farm subsidies should be rationalised according to the demand of programmes based on marketability, affordability and input cost and according to different income groups.
- **Investments:** There is a need to invest more in agriculture R&D, build better infrastructure to create efficient value chains bringing farmer producer organisations (FPO).
- **Incentivise Long-term Capital Formation:** **Kelkar Committee** recommended the phased elimination of subsidies and convert them to capital investments.
- **Credit Eligibility Certificates:** These certificates would enable landless tenant cultivators to obtain agricultural credit.
- **Technology:** Technological improvement like Aadhaar, direct benefit transfer can be used to eliminate inclusion and exclusion errors. The third party verifications of beneficiary will help in eliminating the free riders and leakages.

- **Legislative Measures:** Contract Farming Act, APMC reforms to reduce dependence on the government.
- **International Measures:** Under the WTO's Nairobi package, developed and developing nations have committed to phase-off export subsidies. Rather than limiting the total agricultural value production, subsidies should be limited depending on individual products such as cotton, wool.

### Conclusion:

Farm subsidies have proven to be vital in supporting agriculture and providing income security to farmers. The Government should take steps to rationalize farm subsidies and invest more on capital formation, R&D in agriculture. This will improve agriculture productivity and make agriculture more remunerative.

**Read More: [The Indian Express](#), [Wikipedia](#)**  
**UPSC GS3: Agriculture**

## Food Processing Sector-Significance and Challenges- Explained Pointwise

India with its agricultural tradition and diverse climate, holds **immense potential for the food processing sector**. This industry is not only a cornerstone for the country's economic growth but is also pivotal for ensuring food security, reducing wastage, enhancing farmers' incomes and providing employment opportunities. In order to achieve a developed nation status in the next 25 years, the food processing sector would be **crucial in transforming India's primary agriculture sector** with enhanced productivity and profitability while ensuring sustainability and resilience. **Growth of Food Processing Sector.**



Source- Yojana

## What is Food Processing? What are the reasons behind its growing Demand in India?



**Food Processing** involves transforming raw agricultural products into consumable food items, adding value and extending shelf life. Food processing sector has been recognised as a '**sunrise sector**' and a key priority industry under the '**Make in India**' initiative.

**Type of Food Processing:** The can be categorized into **primary** and **secondary** products:

1. **Primary products** are made from processed raw materials, like **fruits** and **vegetables**.
2. **Secondary products** are created by processing primary food items into new products, such as **jams**, **saucers**, and **butter**.

**Main reasons behind the Growth of Food Processing sector in India:**

1. **Changing lifestyle** and **food preferences** as a result of increasing disposable income. Rising health consciousness among consumers is driving demand for processed and packaged foods that are safe and nutritive.
2. **High level of agricultural output:** India is the world's largest producer of milk, pulses, and jute. It is also the second largest producer of essential crops such as rice, wheat, sugarcane, groundnut, vegetables, fruits, and cotton.
3. **Export opportunities** such as proximity to key export destinations, increasing connectivity with the global economy.
4. Proactive government policy & assistance with government interventions like **Mega Food Park Scheme**.

**What is the significance of the Food Processing Sector?**

1. **Increased Contribution to GDP:** The food processing sector has emerged as an **important segment of the Indian economy in terms of its contribution to GDP**. During the last 5 years the sector had grown at an **average annual growth rate of around 8.3%** as compared to around **4.87% in the agriculture and allied sectors** (at 2011-12 prices).

**Table 1: GVA by Food Processing Industries (FPI) at Constant Prices (2011-12)**

(₹ lakh cr.)

Sr.	Economic activity	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1	GVA-All India	85.46	90.64	97.12	104.92	113.28	120.34	127.34	132.19	125.85
2	GVA Manufacturing	14.87	15.61	16.84	19.04	20.55	22.09	23.29	22.61	22.48
3	GVA-Agriculture, Forestry, Fishing	15.24	16.09	16.06	16.16	17.26	18.40	18.79	19.82	20.48
4	GVA-FPI	1.30	1.30	1.34	1.61	1.79	1.93	2.36	2.26	2.37

Source: Annual Report 2022-23, MoFPI, GoI

Source- Yojana

2. **Employment Generation:** This sector is a major employment generator in the country. As per the latest **Annual Survey of Industries (ASI)** for 2019-20, the total number of persons engaged in the registered food processing sector was **20.32 lakhs**. Moreover as per the NSSO 73rd Round, 2015-16, the unregistered units of the sector supported employment for 51.11 lakh workers and constituted 14.18% of employment in the unregistered manufacturing sector.



Table 4: Number of Persons Engaged in Food Processing Sector

(lakh persons)

Sector	Food Processing Industry*	All Industries	(%) Share of FP sector
Registered (2019-2020)	20.32 lakh	166.21 lakh	12.22
Un-incorporated	51.11 lakh	360.41 lakh	14.18

Source: Annual Report- FY 2022-23, MoFPI, GoI, \*includes food products and beverage segments

Source- Yojana

**3. Large FDI inflow and market size:** FDI equity inflows into the food processing sector reached \$3.28 billion between 2019-2022. It is the fifth largest sector of the country's economy.

**4. Promotes balanced regional development:** This industry is a sunrise industry with a consistent demand for locally processed food. This promotes balanced regional development in the country.

**5. Women entrepreneurship:** The sector provides employment opportunities to rural women in India and also serves as a platform for entrepreneurship. For ex- Lijjat papad venture.

**6. Nutritional Improvement:** Processed foods can be fortified with essential vitamins and minerals, thereby addressing malnutrition and improving public health outcomes.

#### What are the Government schemes and initiatives for promotion of Food Processing Sector in India?

<b>Pradhan Mantri Kisan Sampada Yojana (PMKSY)</b>	<p>This Central Sector Scheme is being implemented across the country to facilitate the creation of modern infrastructure with efficient supply chain management from farm gate to retail outlet for promotion.</p> <p>Under PMKSY, 1,604 projects have been sanctioned, leading to creation of over 250 lakh metric tonnes of annual processing &amp; preservation capacity &amp; more than Rs 22,000cr in private investment.</p> <p>It has directly benefitted over 53 lakh farmers &amp; &gt;7.6 lakh employment opportunities have been created.</p>
<b>Pradhan Mantri Formalisation of Food Processing Enterprises (PM-FME)</b>	<p>It was launched in June 2020 under Atmanirbhar Bharat Abhiyaan to encourage 'Vocal for Local' in the sector with a total outlay of Rs. 10,000 crore during the period 2020-2025.</p> <p>The scheme aims to enhance the competitiveness of individual microenterprises in the unorganised segment of the food processing industry and promote formalisation of the sector.</p> <p>This is the first ever Government scheme for Micro Food Processing enterprises and is targeted to benefit 2 lakh enterprises through credit linked subsidies and adopting the approach of 'One District One Product'.</p>

<b>Food Processing Fund</b>	The Government of India instituted the Food Processing Fund (FPF) in NABARD during 2014-15, with a corpus of Rs. 2,000 crore, with the objective of providing <b>affordable credit to public and private players</b> for setting up of Designated Food Parks (DFPs)
<b>Warehouse Corpus Fund</b>	The fund was set up corpus of <b>Rs. 5000 crore to support State governments</b> , State-owned agencies, and Corporates for the creation of scientific warehouse capacity through financial support.
<b>Production Linked Incentive Scheme</b>	PLI scheme for Food Processing Sector was launched with the aim to generate employment for approximately 2.5 lakh persons in formal sector.  The scheme has led to the creation of 3.3 lakh jobs & added more than 67 lakh metric tonnes of processing capacity.
<b>Mega Food Park Scheme</b>	Mega Food Parks are built on a 'cluster' strategy and focus on the development of cutting-edge support infrastructure in a well-defined agri/horticultural zone for the establishment of <b>modern food processing units</b> .
<b>Union Budget 2024-25</b>	Announced the establishment of 50 <b>multi-product irradiation units</b> to reduce post-harvest losses & enhance shelf life, <b>100 NABL-accredited food testing laboratories</b> to strengthen quality assurance across the value chain & establishment of <b>National Makhana Board</b> – aimed at boosting value addition, branding, and global positioning of Makhana from India.

### What are the Challenges faced by the Sector In India?

- 1. Low GVA despite high demand:** Despite the increasing demand for processed food and ready-to-eat food in India, the share of the sector in overall GVA has only been **1.88%** (2020-21) **as against the share of manufacturing at 17.86%** and the share of GVA in agriculture at **16.26%**.
- 2. Lack of skilled manpower and modern technology:** The availability of skilled manpower has been identified as one of the major challenges facing the industry in India. Many processing facilities use outdated technologies, reducing efficiency and product quality.
- 3. Infrastructure Bottlenecks:** Inadequate cold storage facilities, transportation systems, and processing infrastructure result in **post-harvest losses exceeding 30% of produce**. The NITI Aayog estimates annual post-harvest losses close to Rs 90,000 crore.

**4. Informalization and Unorganized Segments:** The sector has a **high concentration of unorganized segments**, representing almost **75% across product categories**. This causes inefficiencies in the production system.

**5. Supply Chain Inefficiencies:** Fragmented supply chains with multiple stakeholders and poor coordination lead to delays, waste, and low quality products. **For ex-** Broken supply chain in the agricultural hinterland of Bihar.

**6. Regulatory Challenges:** Stringent sanitary and phytosanitary (SPS) measures in export markets impede Indian processed food exports. **For ex-** **Rejection of Indian processed exports by the EU.**

Read More- [\[Kurukshetra Feb 2024 Summary\] Food Storage Infrastructure- Explained Pointwise](#)

### What Should be the Way Forward?

**1. Use of Smart technologies:** Internet of Things (IoT), Artificial Intelligence (AI) Applications, **Robotics** and Automation should be used in the food processing sector to increase productivity and decrease wastage.

**2. Focus on horticulture and animal products:** Special focus must be put on making India a market leader in global trade for at least five value chains- **processed fruits and vegetables, processed fish and sea food, meat, dairy products, poultry and eggs** by 2047.

**3. Skilled Manpower:** The food sector must employ more professionals **trained in food technology, quality control, processing methods, and food safety management.**

**4. Better health markers:** It must involve better health markers on the packets. The regulatory mechanism governing food safety must be strengthened and properly governed.

**5. Tapping the popularity of agricultural products:** There is also a need to tap the popularity of various food grains and **coarse grains like millets** which are gaining increasing importance due to their nutritional benefits and adaptability to various climatic conditions.

### Conclusion:

The food processing sector is pivotal for India's economic transformation, farmer income enhancement, reduction of food waste, and rural employment generation. It has the most profound impact on the rural economy. With sustained focus on infrastructure, technology, formalization, and market linkages, India is well-positioned to unlock the full potential of this "sunrise industry" and emerge as a global food processing hub.

Read More- [The Indian Express](#), [Wikipedia](#)  
Yojana articles Covered- Article 1, 3, 4, 6, and 7  
UPSC Syllabus- GS 3- Indian Agriculture

### 50 years after the 1975 emergency – Lessons and Way forward – Explained Pointwise

This year marks the beginning of the 50th year since the imposition of Emergency on June 25, 1975. The 21 months period of emergency is considered to be the darkest chapters in the democratic history of Indian republic, saw the suspension of civil liberties, curtailment of press freedom, mass arrests, cancellations of elections, and rule by decree.



Source- The Indian Express

### What are the constitutional provisions behind the imposition of Emergency?

The **emergency provisions** are contained in **Part XVIII of the Constitution of India**, from **Article 352 to 360**. These provisions enable the Central government to meet any abnormal situation effectively.

The Constitution stipulates three types of emergencies-

1. National Emergency
2. Constitutional Emergency
3. Financial Emergency

The state of national emergency had been imposed thrice since Independence-

1. During the **wars with China in 1962**.
2. During the war with Pakistan in 1971.
3. Emergency imposed in 1975.

It was the imposition of National Emergency by Indira Gandhi in 1975, that is considered to be the most infamous in the annals of our democracy. '**Internal disturbances**' was cited as a major reason by **President Fakhruddin Ali Ahmed** to **impose the Emergency under Article 352 of the Constitution**.

### Important constitutional amendments enacted during Emergency:

- **38th Amendment Act, 1975** made the President's declaration of Emergency non-justiciable. The amendment barred judicial review of proclamations of emergency made by the President, whether to meet external, internal, or financial threats (under Article 360). The amendment **codified and enlarged the state's power** to remove fundamental rights from citizens during states of emergency
- **42nd Amendment Act, 1976** was the most significant amendment enacted during the Emergency imposed by Indira Gandhi. It **attempted to reduce the power of the Supreme Court and High Courts** to pronounce upon the constitutional validity of laws. It **gave Parliament unrestrained power to amend**



any parts of the Constitution, without judicial review. After the Janata Party came to power in 1977, they brought the 43rd and 44th Amendments to partially restore the pre-Emergency position.

### What is the rationale behind imposition of emergency in India? What are the famous Supreme Court judgements regarding emergency in India?

The rationale behind the incorporation of emergency provisions in the Indian Constitution is to:

- Safeguard the sovereignty, unity, integrity and security of the country.
- The democratic political system and the Constitution itself.

**Article 356** (Constitutional emergency) was introduced to ensure safety against extreme emergencies and protect legislative processes.

**Article 360** (Financial emergency) was added to cushion the country's drastically falling financial position and foreign currency reserves.

### Supreme Court judgements on emergency:

<b>Minerva Mills Ltd. vs Union of India (1980)</b>	The Supreme Court held that the power of judicial review cannot be suspended even during an emergency. The basic structure of the Constitution, including the power of judicial review, cannot be abrogated.
<b>S.R. Bommai vs Union of India (1994)</b>	The Supreme Court held that the imposition of President's Rule under Article 356 is subject to judicial review. The Court laid down guidelines and limitations on the use of Article 356.
<b>Bhup Nath Mete vs State of West Bengal (1974)</b>	The Court held that the suspension of fundamental rights under Article 359 does not mean that all legal remedies are barred. Writs can still be filed on grounds of non-compliance with statutory provisions.

These judgments highlight the Supreme Court's evolving stance on balancing the need for strong central authority during emergencies with the protection of individual rights and the rule of law. The Court has sought to limit the misuse of emergency powers while upholding their constitutional validity.

### What reasons were given by the government for the imposition of emergency of 1975?

**1. Economic crisis:** There was a prevailing situation of economic crisis like high unemployment, sluggish industrial growth, rising prices of essential commodities, and a general environment of discontent among the people. This was translating into major disenchantment with the government.

**2. Student unrest in Gujarat and Bihar:** Agitations against rising prices and corruption was started by the students in Gujarat in 1974. The unrest and protest subsequently spread to Bihar. The defeat of the Congress party in Gujarat was an alarm for the government regarding its unpopularity.

**3. JP movement:** The JP movement, led by Jayaprakash Narayan, gained national appeal and demanded the dismissal of the Congress government in Bihar. It was supported by opposition parties like the Jan Sangh and

**Bhartiya Lok Dal.** This movement galvanized the masses against the regime which was becoming unpopular. *"Sinhasan Khali Karo, Ke Janta Aati hai"* was JP's rallying call during his rallies.

**4. Railway strike:** The railway employees strike **led by George Fernandes in 1974**, paralyzed the nation. The strike demanded better service conditions and raised workers' rights issues.

**5. Conflict with the judiciary:** There was a persistent conflict between the government and judiciary over **fundamental rights, the basic structure of the Constitution, and the appointment of the Chief Justice**. This languishing conflict between govt and judiciary led to a stalemate.

**6. Lack of Internal Democracy:** **Concentration of power** in the hands of one leader, **lack of respect for democratic functioning**, a culture of sycophancy, corruption in the vital organs of the state also pushed the country towards emergency.

**7. Allahabad High Court verdict:** The judgment of the **Allahabad High Court on June 12, 1975, nullified the election to the Lok Sabha of the then Prime Minister in 1971** on the grounds of abusing official machinery for electoral gains. This judgment served as the final straw and Emergency was proclaimed two weeks later.

### **What was the effect of the imposition of emergency of 1975?**

The imposition of the Emergency by Indira Gandhi in 1975 had significant and far-reaching effects on India. Some of the effect are mentioned below:

**1. Suspension of civil liberties:** The Emergency allowed the government to suspend fundamental rights enshrined in the Constitution, such as the **rights to freedom of speech, assembly, and movement**. This led to a brutal crackdown on political opposition and dissent.

**2. Arrest of opposition leaders:** Prominent opposition leaders like **Jayaprakash Narayan, Morarji Desai, Atal Bihari Vajpayee, and L.K. Advani** were arrested and jailed under draconian laws like the **Maintenance of Internal Security Act (MISA)**. According to some estimates, over 1 lakh people were arrested or detained during the Emergency under draconian laws like MISA, COFEPOSA (Conservation of Foreign Exchange & Prevention of Smuggling Activities Act) & DISIR (Defence of India Act & Defence of India Rules).

**3. Censorship of the media:** The media was heavily censored, with the government clearing all news reports before publication. This led to a **complete breakdown of press freedom**. **For ex-** The Indian Express publishing a blank editorial in protest.

**4. Constitutional amendments curtailing powers of judiciary:** The 38th and the 42nd Amendment were passed. These **reduced the power of the judiciary to review constitutional validity of laws**. It also expanded the powers of the central government at the expense of states.

**5. Forced sterilization program:** The government launched a **coercive family planning program that involved forced mass sterilizations**, leading to widespread public resentment.

**6. Economic impact:** The **strikes, protests, and political instability** during the Emergency severely damaged the Indian economy. This led to high inflation, slow growth, and a decline in living standards.

**7. Political backlash:** The excesses of the Emergency led to a **massive public backlash, resulting in the Congress party's defeat in the 1977 elections**. This marked the first time the ruling party had lost power since independence.

### **What are the judgements and the reports that have criticized emergency in India?**

Several key judgments and commissions have criticized the imposition of Emergency in India by Indira Gandhi in 1975.

<b>ADM Jabalpur v. Shivkant Shukla (1976)</b>	This controversial Supreme Court judgment during the Emergency, by a 4:1 majority, upheld the government's position that the right to life and personal liberty could be suspended during an Emergency. The sole dissenting judge was Justice H.R. Khanna, who was later superseded for the position of Chief Justice. The judgment was widely criticized for reducing the importance of fundamental rights.
<b>Puttaswamy v. Union of India (2017)</b>	In this landmark judgment, a 9-judge bench of the Supreme Court unanimously overruled the ADM Jabalpur judgment. The court ruled that the right to life and personal liberty is an inalienable human right that existed even before the Constitution, and cannot be suspended even during an Emergency.

**Shah Commission Report (1978):** The Shah Commission, headed by Justice J.C. Shah, was set up after the Emergency to inquire into "excesses" committed during that period. The commission's report was highly critical of the government's actions, including the mass arrest of opposition leaders, censorship of the media, and the forced sterilization program.

#### What lessons can be drawn from the emergency which will ensure thriving democracy in India?

- 1. Avoiding despotism:** Our Constitution mandates democratic governance based on people's participation, wider consultations and consensus, conformity with the spirit and provisions of the Constitution and compliance with the laws made by the legislature. Despotism has no place in democracy. An elected ruler must rule within the constitutional framework, avoiding personal interest and aggrandizement.
- 2. Avoid conflict with Judiciary:** The executive must not conflict with judiciary. The judgements must be interpreted by the executive from a larger lens. Judgement like the Golaknath, Keshvananda Bharati and Allahabad High Court judgment were viewed from a narrow prismatic lens by the executive.
- 3. Protecting the fundamental rights of the people:** The govt must value and protect the fundamental right to freedom of speech, right to life. Any infringement on fundamental rights guaranteed by the Constitution, is fiercely contested by the people of India through their ballot verdict.
- 4. Greater Responsibility of Media and civil society:** It was famously remarked by L.K. Advani about the media in the period of emergency- "You were asked only to bend, yet you crawled". Hence the civil society and media must play a more responsible role to avoid another emergency in future.

#### Conclusion:

The period of emergency is considered to be a phase when India's democracy was put on pause & hence, serves as a reminder of the need to protect the rights and freedoms of individuals.

Read More: [The Indian Express](#), [Wikipedia](#)

UPSC Syllabus: GS 1- Post Independence History

### India-West Asia Relations- Significance & Challenges-Explained Pointwise

West Asia is in the immediate neighbourhood of India & is a very critical region for the development & security of our country. However, the region has historically been a flash point because of conflict between several state & non-state actors from the region as well as involvement of superpowers in the region. The recent war between Israel & Iran and the bombing of Iran's main nuclear sites (**Fordow, Natanz & Isfahan**) by the USA again put the region to the boiling point and has the potential of spilling over of the conflict to other countries in the region (Iran's missile attack on USA's base in Qatar).

### What is the SIGNIFICANCE of West Asia for India & vice-versa?

Significance of West Asia for India:

#### 1. Energy Security:

- West Asia is the most crucial region for India's energy security, supplying over 50% of its crude oil imports and a substantial portion of its natural gas (e.g., Qatar supplies over 40% of India's natural gas).
- The secure passage through critical maritime chokepoints like the **Strait of Hormuz** and **Bab el-Mandeb** (connecting the Persian Gulf and Red Sea) is vital for India's energy and trade flows. Any instability in these regions directly threatens India's economic stability.

#### 2. Economic and Trade Ties:

- **Major Trading Partner:** West Asia is a vital trading partner for India, collectively accounting for a significant portion of India's total bilateral merchandise trade (over one-sixth). The UAE is India's third-largest trading partner globally, and Saudi Arabia is fourth.
- **FTAs & Investment:** The India-UAE Comprehensive Economic Partnership Agreement (CEPA) aims to significantly boost non-oil trade. India is also actively pursuing a broader Free Trade Agreement (FTA) with the Gulf Cooperation Council (GCC) as a whole.
- **Market for Indian Goods & Services:** The region is a key market for a wide range of Indian commodities, from agricultural products (like basmati rice, tea) to textiles, electronics, engineering goods, and services (especially IT and healthcare).

#### 3. Large Indian Diaspora and Remittances:

- **Largest Overseas Indian Community:** West Asia hosts the largest concentration of the Indian diaspora, numbering over 9 million. This community plays a crucial role in the region's economy.
- **Vital Remittances:** These expatriates send home billions of dollars annually (accounting for over 55% of India's total remittance inflows), which significantly boosts India's foreign exchange reserves and contributes to household incomes.

**4. Connectivity and Geostrategic Importance:** West Asia serves as a crucial land bridge for India to access Central Asia, Afghanistan, and potentially Europe.

**5. Security and Counter-Terrorism Cooperation:** India and many West Asian nations share concerns about radicalization, terrorism, and extremist ideologies. There's increasing intelligence sharing and cooperation on counter-terrorism with countries like Saudi Arabia and the UAE. Joint exercises and task forces have been established to address regional security concerns.

Significance of India for West Asia:



**1. Economic Diversification and Investment:** Many West Asian countries (especially the GCC states) are actively pursuing economic diversification away from hydrocarbon dependence, investing heavily in non-oil sectors like technology, infrastructure, tourism, and financial services. India, with its large and growing market, skilled workforce, and tech prowess, is an attractive partner for this diversification. India's massive infrastructure push, growing manufacturing sector, and vibrant startup ecosystem offer lucrative investment opportunities for West Asian sovereign wealth funds.

**2. Food Security for West Asia:** India can be a reliable source of food products for the arid West Asian nations, contributing to their food security.

**3. Skilled Workforce:** India provides a vast pool of skilled, semi-skilled, and unskilled labor that is crucial for the infrastructure development, service sectors, and energy industries of West Asian countries.

**4. Balancing Influence:** India's growing geopolitical weight offers West Asian countries an opportunity to diversify their strategic partnerships and potentially balance the influence of other major powers (e.g., China).

**5. Digital Transformation:** India's expertise in digital public infrastructure and its rapidly evolving tech ecosystem can offer solutions and partnerships for West Asian countries embarking on their own digital transformation journeys.

**6. Tourism:** India is a significant source of tourists for West Asian countries, contributing to their growing tourism sectors.

### What are the CHALLENGES of the region?

#### 1. Geopolitical Conflicts and Instability:

- **Israeli-Palestinian Conflict:** This remains the core and most enduring source of instability, with profound political, religious, and territorial disputes. Recent escalations (like the Israel-Hamas war and Israeli-Iran direct confrontations) continue to fuel regional tensions and humanitarian crises.
- **Sectarian Divides and Proxy Conflicts:** The historical Sunni-Shia divide, primarily between Saudi Arabia (and its allies) and Iran (and its proxies), fuels numerous proxy wars across the region (e.g., Yemen, Syria, Iraq, Lebanon). These conflicts often involve external powers, exacerbating their intensity and prolonging instability.
- **Great Power Competition:** The region is a theatre for competition between global powers (US, China, Russia) vying for influence, energy resources, and strategic alliances. This often complicates regional dynamics and can prolong conflicts.
- **Non-State Actors:** The rise and persistence of powerful non-state armed groups (e.g., ISIS, Al-Qaeda, Hezbollah, various militias) challenge state sovereignty, contribute to violence, and foster extremism.
- **Nuclear Ambitions:** Concerns about Iran's nuclear program remain a significant source of regional and international tension, raising fears of a regional arms race if other states feel compelled to develop their own nuclear capabilities.

**2. External Interference and Influence (Intervention by Global Powers):** The military, economic, and diplomatic involvement of major global powers (US, China, Russia, European powers) often complicates regional power dynamics and can exacerbate existing tensions.

#### 3. Safety and Welfare of the Indian Diaspora:

- **Vulnerability to Conflict:** West Asia hosts the largest concentration of the Indian diaspora, numbering over 9 million. Their safety and well-being are paramount for India. Escalating violence or political

instability directly threatens the safety of these workers, potentially necessitating large-scale and complex evacuation operations (e.g., **Operation Ajay** during the Israel-Hamas conflict, the 1990-91 Gulf War evacuation, **Operation Sindhu** (2025) launched to evacuate Indians from Iran).

- **Labor Exploitation & Welfare:** Despite India's efforts, migrant workers can sometimes face challenges related to labor laws, working conditions, wage disputes, or even legal issues in some West Asian countries.

**4. Disruptions to Trade Routes and Supply Chains (Critical SLOCs):** The Red Sea, Gulf of Aden, and Persian Gulf are vital Sea Lines of Communication (SLOCs) for India's trade with Europe, Africa, and West Asia itself. Recent attacks on commercial shipping in the Red Sea by Houthi rebels have disrupted vital global trade routes, leading to increased freight and shipping costs, which impact global supply chains and regional economies.

**5. Infrastructure Project Delays:** Instability can hamper the progress of crucial connectivity projects that India is investing in, such as:

- **Chabahar Port (Iran):** Delays due to regional tensions and the risk of U.S. sanctions affecting partners can impede India's access to Afghanistan and Central Asia.
- **IMEC (India-Middle East-Europe Economic Corridor):** The ongoing Israel-Gaza conflict has notably slowed down this ambitious project, impacting India's plans for new trade corridors.

**6. Pakistan factor:** India as well as West Asian countries viewing each other through the prism of Pakistan. Pakistan claims to represent the South Asian Muslims & has blocked India's entry into OIC and use it for propaganda purposes.

**7. China factor:** The growing influence of China in West Asia (e.g., China brokering the Saudi-Iran peace deal) presents a challenge to India's strategic space and requires India to reassess its regional engagements to protect its interests.

**What have been the various INITIATIVES by India for boosting ties with West Asia?**

**1. LOOK WEST POLICY:** Adopted in 2005 with the aim to take the relationship beyond just *shared past* to *shared challenges* in the present & a *shared future*. It is complemented by GCC's **Look East Policy** for India.

**2. "De-hyphenation":** A key aspect of India's approach towards West Asia is the policy of "de-hyphenation," particularly concerning Israel and Palestine. India now pursues strong, independent bilateral relations with both countries based on their individual merits, without letting one relationship be held hostage by the other. This allows India to maintain its traditional support for the Palestinian cause (**2-State Solution**) while simultaneously deepening its strategic partnership with Israel. Simultaneously, India maintains good relations with Iran as well as Saudi Arabia & other Gulf countries – which are important poles in the region.

**3. Strategic Partnership Councils/Agreements:**

- **UAE:** The **India-UAE Comprehensive Economic Partnership Agreement (CEPA)** signed in 2022 is a landmark achievement, aiming to increase non-oil bilateral trade to \$100 billion by 2030. This is complemented by a broader Strategic Partnership.
- **Saudi Arabia:** The establishment of the **Strategic Partnership Council** in 2019 signifies a holistic approach covering political, economic, security, and cultural cooperation.
- **Iran:** India has signed **Tehran Declaration & New Delhi Declaration** for cooperation in political, economic & connectivity projects.

#### 4. Connectivity and Infrastructure Projects:

- **International North-South Transport Corridor (INSTC):** India has heavily invested in the **Chabahar Port in Iran**, which is a crucial gateway for the INSTC. This multimodal corridor aims to connect India to Central Asia, Afghanistan, and potentially Europe, bypassing Pakistan. India recently signed a long-term agreement (10 years) for the operation of Chabahar Port in May 2024, showing its commitment despite challenges.
- **India-Middle East-Europe Economic Corridor (IMEC):** Announced at the G20 Summit in 2023, IMEC is a transformative initiative connecting India to Europe via the UAE, Saudi Arabia, Jordan, and Israel through a network of shipping lanes, railways, and road routes. It is seen as a major counter to China's Belt and Road Initiative and a significant step towards deeper economic integration.
- **Ashgabat Agreement:** India joined this multimodal transport agreement in 2018, further enhancing its connectivity options with Central Asia and the Persian Gulf.

#### 5. Defence and Security Cooperation:

- **Joint Military Exercises:** Regular joint exercises (e.g., naval, air force, special forces) with countries like Oman, UAE, and Saudi Arabia enhance interoperability and build trust.
- **Maritime Security:** India actively cooperates with West Asian navies to ensure the safety of Sea Lanes of Communication (SLOCs) in the Arabian Sea and Indian Ocean, vital for its energy and trade flows. India has secured access to strategic ports like **Port of Duqm in Oman** for logistical support and military use.
- **Counter-Terrorism and Intelligence Sharing:** Given shared concerns about radicalization and extremism, India has enhanced intelligence sharing and counter-terrorism cooperation with several West Asian states (e.g., Saudi Arabia, UAE).

**6. People-to-People and Cultural Initiatives:** Promoting Indian culture through Indian Cultural Centres, Yoga Day celebrations, and cultural festivals. The inauguration of the **first Hindu stone temple in Abu Dhabi (BAPS Mandir)** in February 2024 is a significant symbol of tolerance and cultural exchange, reflecting the UAE's openness and India's soft power.

#### 7. Multilateral and New Groupings:

- **I2U2 Grouping:** The formation of the "I2U2" (India, Israel, UAE, USA) in 2022 is a significant strategic development, focusing on joint investments in areas like water, energy, transportation, space, health, and food security. It signifies a new geo-economic and strategic alignment.
- **G20 Engagement:** India's G20 Presidency in 2023 allowed it to engage closely with West Asian members (Saudi Arabia, Turkey) and invitees (UAE) on global issues, further deepening collaboration.
- **BRICS Expansion:** India supported the inclusion of Saudi Arabia, UAE, and Iran into BRICS+, reflecting its interest in strengthening multilateral platforms with key West Asian partners.

#### What can be the WAY FORWARD?

**1. Unlock Investment Potential:** Proactively engage with West Asian Sovereign Wealth Funds (SWFs) and private investors, offering well-defined, de-risked investment opportunities in India's infrastructure, logistics, digital economy, manufacturing (especially semiconductors, electronics), and startup ecosystem.

#### 2. Enhancing Connectivity and Geostrategic Reach:

- **Prioritize IMEC Implementation:** While the Israel-Gaza conflict has posed challenges, India must work with partners (US, UAE, Saudi Arabia, EU) to keep the IMEC project alive. This involves active diplomatic engagement to de-escalate regional tensions and find pragmatic solutions for its multi-modal components.
- **Optimize INSTC via Chabahar:** Ensure the full operationalization of Chabahar Port and its integration into the INSTC network. Address remaining logistical bottlenecks and explore ways to mitigate the impact of external sanctions on the project.

**3. Sustained “De-hyphenation”:** Continue India’s policy of engaging deeply and independently with all key players – Saudi Arabia, Iran, UAE, Israel, Qatar, Oman, Egypt, etc. Avoid taking sides in intra-regional rivalries. Position India as a trusted dialogue partner for de-escalation and potential mediation efforts in regional conflicts, given its strong relationships across the spectrum.

**4. Countering External Influence:** Offer compelling alternatives and partnerships that are transparent, sustainable, and mutually beneficial to counter the growing influence of other global powers (e.g., China’s Belt and Road Initiative). Highlight India’s model of development, democracy, and technological innovation as a reliable and democratic alternative for regional partners.

**5. Deepening People-to-People and Cultural Ties:**

- **Indian workers:** Ensure prompt and effective consular support and welfare measures for the large Indian diaspora. Collaborate with West Asian countries on skill development programs tailored to their evolving labor market needs, ensuring Indian workers remain competitive.
- **Soft Power Diplomacy:** Continue leveraging Bollywood, Yoga, and diverse Indian cultural forms. Promote educational and academic exchanges, student mobility, and research collaborations.

**6. Strengthen Food Security Corridors:** Position India as a stable and long-term supplier of food products (grains, fruits, vegetables, meat) to West Asian nations, aligning with their food security initiatives. Encourage West Asian investments in India’s agricultural and **food processing sectors**, creating value chains that benefit both sides.

**Conclusion:**

India needs to pursue a strategy of “**multi-vector engagement with strategic depth**” when it comes to its relationship with West Asia. This involves balancing traditional interests with new opportunities, navigating geopolitical rivalries with diplomatic agility, and leveraging India’s growing economic and technological prowess to forge partnerships that are not just transactional but truly strategic and mutually beneficial in the long term.

Read More: [Indian Express](#), [Wikipedia](#)

UPSC GS-2: International Relations

## SCO (Shanghai Cooperation Organisation) – Significance & Challenges – Explained Pointwise

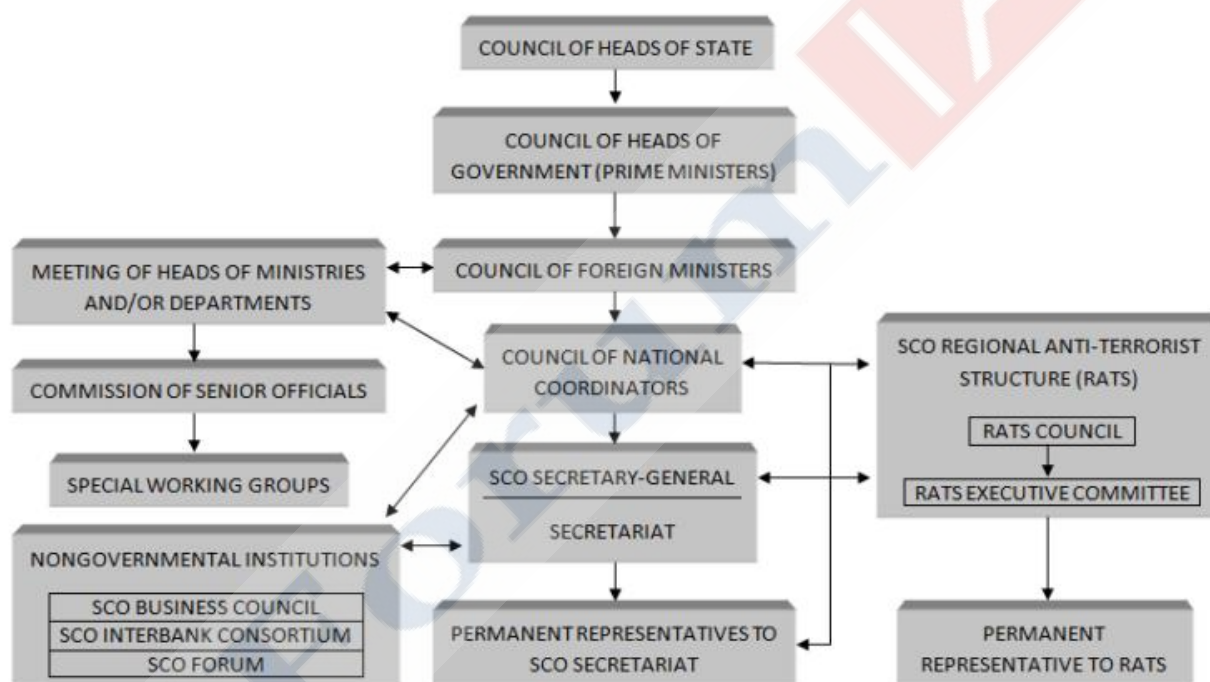
In the recently held meeting of SCO Defence Ministers in Qingdao in China, Indian Defence Minister declined to sign the draft statement due to lack of reference to cross-border terrorism & Pahalgam terror attack in J&K. As a result, no joint statement has been issued.



## What is SCO?

- **Shanghai Cooperation Organization (SCO)** is a Eurasian political, economic, international security, and defense organization. It was established on June 15, 2001, in Shanghai, China.
- SCO's roots lie in the **"Shanghai Five"** formed in 1996, consisting of **China, Russia, Kazakhstan, Kyrgyzstan, and Tajikistan**. This group was initially created to address security concerns and manage border issues after the dissolution of the Soviet Union. With the admission of **Uzbekistan** in 2001, the "Shanghai Five" was officially transformed into the SCO.
- At present, SCO comprise of 10 members: **People's Republic of China, Kazakhstan, Kyrgyzstan, Russia, and Tajikistan, Uzbekistan, India and Pakistan** (both joined in 2017), **Iran** (joined the in 2023), and **Belarus** (joined in 2024).

## THE STRUCTURE OF THE SHANGHAI COOPERATION ORGANISATION



## What is the SIGNIFICANCE of SCO?

### 1. Geopolitical and Strategic Influence:

- The SCO is the world's largest regional organization in terms of geographic scope and population. It covers approximately 80% of the Eurasian landmass and about 40% of the world's population.
- Its members range from nuclear powers (Russia, China, India, Pakistan, and now Iran) to resource-rich Central Asian states. This diversity of political systems, economies, and cultures makes it a unique platform for dialogue.

### 2. Economic and Connectivity Potential:

- SCO member states collectively account for about 30% of global GDP. The inclusion of major economies like India and resource-rich nations like Iran further enhances its economic weight.

- With the inclusion of Iran, the SCO members control a significant percentage of the world's oil (20%) and natural gas (44%) reserves. The **SCO Energy Club** promotes cooperation between major energy producers and consumers within the bloc.
- SCO emphasizes promoting connectivity and infrastructure development across Eurasia. It aligns significantly with China's Belt and Road Initiative (BRI) (though India has concerns about BRI), promoting projects that enhance trade networks and transportation routes, such as the Central Asia–China Gas Pipeline.

**3. Counter-Terrorism and Security:** A primary and highly successful initiative of the SCO is its focus on combating terrorism, separatism, and extremism. The **Regional Anti-Terrorist Structure (RATS)** based in Tashkent facilitates intelligence sharing and coordinated efforts against these threats, making it the primary security organization in Central Asia.

**4. Regional Stability in Eurasia:** The SCO plays a crucial role in maintaining peace, security, and stability across the vast Eurasian region, particularly in Central Asia, which is strategically vital. While not always directly intervening, the SCO provides a platform for its members to discuss and coordinate approaches to regional issues, including the instability in Afghanistan.

**5. Platform for Dialogue:** The SCO provides a crucial platform for high-level political and security dialogue among its diverse members, including those with bilateral tensions (e.g., India-China, India-Pakistan). This can help in de-escalating tensions and fostering understanding.

**6. Consensus-Based Decision Making:** While dominated by China and Russia, the SCO's consensus-based decision-making process means that all members (including India) have a voice, even if it sometimes leads to slower action.

**7. Quad vs. SCO:** India's membership in the Quadrilateral Security Dialogue (Quad) with the US, Japan, and Australia, which is often seen as a grouping to counter China's influence, creates a delicate balancing act. Thus, India maintains its strategic autonomy by being part of both "pro-Western" and "non-Western" blocs.

### What are the LIMITATIONS/CHALLENGES of SCO?

#### 1. Internal Conflicts and Bilateral Tensions:

- **India-China Border Disputes:** Ongoing border disputes and geopolitical tensions between India and China (e.g., the Ladakh standoff) frequently spill over into SCO discussions, making it difficult for the two major powers to fully cooperate on broader issues.
- **India-Pakistan Animosity:** The historical animosity and persistent issues between India and Pakistan create a challenging environment for consensus-building. India often expresses concerns about cross-border terrorism emanating from Pakistan, which Pakistan may try to deflect or downplay within the SCO forum.
- **Central Asian Border Disputes:** Conflicts and border disputes between Central Asian member states (e.g., Kyrgyzstan-Tajikistan) can also affect regional stability and divert the SCO's focus.
- **Lack of Conflict Resolution Mechanism:** The SCO lacks a formal and effective mechanism for resolving disputes between its member states, which means bilateral tensions often fester and can impede collective action.

**2. Dominance of China and Russia:** There is an inherent power imbalance within the organization, with China and Russia being the dominant players. This can lead to concerns among other members about

disproportionate influence and decision-making, particularly from China due to its growing economic might e.g. The official languages of SCO are Russian & Chinese.

**3. Lack of a Free Trade Area:** Despite discussions, the SCO does not have a comprehensive free trade agreement among its members. This limits its potential for deep economic integration compared to other blocs like ASEAN or the EU.

**4. “Anti-Western” Perception:** Despite its claims of being an open and non-aligned organization, the SCO is often perceived by Western countries as a grouping aimed at challenging the US-led global order and a potential counter to NATO. This perception can limit its ability to engage with Western partners on global issues.

**5. BRI Concerns:** China’s Belt and Road Initiative (BRI), particularly the China-Pakistan Economic Corridor (CPEC) which passes through Pakistan-Occupied Kashmir (PoK), remains a major sovereignty concern for India. While all other SCO members endorse BRI, India remains isolated in its opposition, which limits its participation in some economic connectivity initiatives within the SCO framework.

**6. Limited Mandate:** While expanding, the SCO’s primary focus remains on security (the “three evils” of terrorism, separatism, extremism). This strong emphasis sometimes overshadows other crucial areas like economic and cultural cooperation, which could offer broader benefits.

### What can be the WAY FORWARD?

**1. Strengthening Trust and Dialogue:** While the SCO is a multilateral forum, its most immediate utility for managing internal tensions often lies in providing opportunities for high-level bilateral meetings on its sidelines (e.g., India-China, India-Pakistan). These informal channels can be crucial for de-escalation and addressing specific grievances.

#### 2. Unified Stance on Terrorism:

- **Zero Tolerance, No Double Standards:** The SCO must unequivocally condemn terrorism in all its forms and manifestations, without any justifications or differentiation between “good” and “bad” terrorists.
- **Actionable intelligence sharing:** SCO needs to actively utilize the **Regional Anti-Terrorist Structure (RATS)** for intelligence sharing, capacity building, and joint exercises & also push for RATS to be more effective and less susceptible to political maneuvering by individual members.

#### 3. Deepening Economic and Connectivity Initiatives:

- Identify specific sectors for enhanced cooperation, such as energy (including renewables), agriculture (food security), pharmaceuticals, and digital technology, where members have complementary strengths.
- **Leverage Existing Corridors:** Fully utilize and expand existing and nascent corridors like INSTC, promoting their integration with regional transport networks.
- **Digital Connectivity:** Emphasize digital infrastructure development, cross-border e-commerce, and digital payment systems to foster seamless economic interaction e.g., sharing India’s UPI success, digital public infrastructure models.

#### 4. Non-Traditional Security Threats:

- **Counter-Narcotics:** Enhance cooperation through RATS to combat illicit drug trafficking, which often funds terrorism and organized crime in the region.

- **Cyber Security:** Push for joint initiatives and capacity building in cybersecurity, a growing threat to all member states.
- **Disaster Management:** Promote cooperation in disaster response and humanitarian assistance, drawing on India's expertise and resources.
- **Climate Change:** Advocate for greater cooperation on climate change mitigation and adaptation strategies, particularly given the shared environmental challenges like water scarcity and desertification in the region.

### Conclusion:

For India, the SCO remains a platform of both opportunities and constraints. Thus, India needs to devise a strategy that is **assertive on core national interests (like terrorism and sovereignty)**, **pragmatic in economic engagement**, and **diplomatically nimble in balancing competing geopolitical currents**.

Read more: [The Indian Express](#), [Wikipedia](#)  
UPSC GS Paper-2: International Relations

### Poverty Line Estimation – Explained Pointwise

Recently, the World Bank has announced a major revision to global poverty estimates, raising the **International Poverty Line (IPL)**. It raised the IPL from **\$2.15/day (2017 PPP)** to **\$3.00/day (2021 PPP)** (which at PPP-Exchange Rate for Indian Rupee in 2025 is Rs 20.6), thus, it comes out to be **Rs 62/day** for India. While the change led to a global increase in the count of extreme poverty by **125 million**, **India emerged as a statistical outlier in a positive direction**. Based on this update, it is now stated that only 5.75% Indians live under extreme poverty (down from 27% in 2011-12).

### What is a POVERTY LINE?

- A **poverty line** is a defined threshold that determines the minimum level of income or consumption necessary for an individual or household to meet basic living needs such as food, shelter, and clothing. Those whose income or consumption falls below this line are considered to be living in poverty.
- The poverty line defines the minimum income or consumption level required to sustain a decent standard of living. It helps classify people as poor or non-poor and guides efforts to improve living conditions and eradicate poverty.
- The poverty line may be based on **absolute measures** (fixed minimum needed for survival, e.g., the World Bank's \$1.90 per day) or **relative measures** (defined in relation to the median income or living standards within a society).

### India's Poverty Line Analysis:

<b>Alagh Committee (1979)</b>	Developed the poverty lines for rural and urban areas based on <b>nutritional requirements</b> (2400 kcal for rural, 2100 kcal for urban). These calorie norms were subsequently accepted by the Planning Commission.
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<b>Lakdawala Committee (1993)</b>	Recommended using <b>Consumer Price Index for Agricultural Labourers (CPI-AL)</b> for rural areas and <b>Consumer Price Index for Industrial Workers (CPI-IW)</b> for urban areas to update state-specific poverty lines. It emphasized that poverty estimates should be based on consumption expenditure surveys conducted by the National Sample Survey Organization (NSSO).
<b>Tendulkar Committee (2009)</b>	<p>It moved away from a solely calorie-based model and recommended a more comprehensive "Poverty Line Basket" that included <b>private expenditure on health and education</b>, in addition to food and other basic necessities.</p> <p>It also recommended a uniform poverty line basket across rural and urban areas, though with different monetary values.</p> <p>Based on its methodology, the Tendulkar Committee estimated the poverty line for 2011-12 at:</p> <ul style="list-style-type: none"> <li>₹816 per capita per month for rural areas (~₹27.2 per day)</li> <li>₹1,000 per capita per month for urban areas (~₹33.3 per day)</li> </ul> <p>Using this line, India's poverty rate was estimated at <b>21.9%</b> (25.7% rural, 13.7% urban), meaning approximately 26.93 crore people were below the poverty line.</p>
<b>Rangarajan Committee (2014)</b>	<p>Constituted to review the Tendulkar methodology, this committee proposed higher poverty lines, considering a slightly different consumption basket.</p> <p>Poverty Line:</p> <ul style="list-style-type: none"> <li>₹972 per capita per month for rural areas (~₹32.4 per day)</li> <li>₹1,407 per capita per month for urban areas (~₹46.9 per day)</li> </ul> <p>Based on these lines, the Rangarajan Committee estimated India's poverty rate to be <b>29.5%</b> for 2011-12, significantly higher than the Tendulkar Committee's estimate. However, the Indian government did not officially adopt the Rangarajan Committee's recommendations, meaning the Tendulkar Committee's estimates (for 2011-12) remained the last official poverty figures for a long time.</p>
<b>World Bank</b>	<p>The World Bank's current extreme poverty line is <b>\$2.15 per day (2017 PPP)</b>.</p> <p>Recently, the World Bank announced a revision to <b>\$3.00 per day (2021 PPP)</b>. At the 2025 PPP rate, this translates to roughly <b>₹62 per day</b> for India.</p> <p>Using the World Bank's updated line, about <b>5.75% of Indians live in extreme poverty</b> as of 2025, a sharp decline from 27% in 2011-12.</p>

NITI Aayog	<p><b>National Multidimensional Poverty Index (MPI):</b></p> <p>Unlike a purely income/consumption-based poverty line, the MPI measures poverty across multiple dimensions (health, education, and living standards) using 12 indicators (e.g., nutrition, schooling, cooking fuel, sanitation, electricity, housing, assets, bank accounts). NITI Aayog's recent reports (based on NFHS data) show a significant reduction in multidimensional poverty in India:</p> <ul style="list-style-type: none"> <li>From <b>29.17% in 2013-14 to 11.28% in 2022-23</b>, with approximately 24.82 crore people escaping multidimensional poverty in 9 years.</li> <li>Rural poverty showed a larger decline than urban poverty in this period.</li> <li>This provides a more holistic picture of deprivation beyond just monetary income.</li> </ul>
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**TABLE 1****VARYING ESTIMATES OF INDIA'S POVERTY RATE (IN %)**

METHOD	2011-12	2022-23
Tendulkar methodology@	21.90	9.9*
World Bank's latest poverty line for lower middle-income countries [ int-\$4.2 a day (Rs 87 a day)]#	57.70	23.90
World Bank's latest poverty line for upper middle-income countries [ int-\$8.30 a day (Rs 171 a day)]#	92.50	82.10
Bhalla and Bhasin (using World Bank's int-\$1.9 a day poverty line)^	12.20	2.00

@ The last officially recognised methodology on poverty estimates (2009) | # 2021 PPP estimates | ^2017 PPP estimates **Note:** In purchasing power parity terms, 1 international dollar is equal to Rs 20.6

**Source:** World Bank, Bhalla et al (2024), Indian Express Research

**TABLE 2****INDIA'S POVERTY LINE (PER PERSON PER DAY), IN CONTEXT**

₹62	World Bank's poverty line for abject poverty in India. In 2022-23, 7.5 crore Indians (5.25% of total population) lived at this level or less
₹63	Price of a litre of Amul milk in 2022
₹87	World Bank's poverty line for "lower middle-income" countries, such as India. In 2022-23, 34.23 crore Indians (that is, 23.89% of all Indians) lived below this daily expenditure level
₹171	This is the World Bank's poverty line for "upper middle-income" countries. In 2022-23, 117.57 crore (or 82.7% of India's population) lived below this daily expenditure level

Source – Indian Express

**What is the IMPORTANCE of Poverty Line?**

**1. Quantifying the Problem:** The primary importance of a poverty line is to provide a quantifiable measure of poverty. It helps answer the fundamental question: “How many people are poor in India?” This headcount ratio is crucial for understanding the scale of the challenge.

**2. Tracking Progress:** By establishing a benchmark, the poverty line allows the government and researchers to monitor the effectiveness of various development programs and policies over time. A decline in the percentage of people below the poverty line indicates progress in poverty alleviation efforts.

**3. Targeting Welfare Schemes:** This is perhaps the most direct and critical function of the poverty line. A vast array of government welfare programs are specifically designed to benefit households identified as **Below Poverty Line (BPL)**. These include:

- **Public Distribution System (PDS):** Providing subsidized food grains (rice, wheat) through ration cards to BPL families under the National Food Security Act (NFSA).
- **Housing Schemes:** Programs like Pradhan Mantri Awas Yojana (PMAY) for both rural and urban areas aim to provide affordable housing to the poor.
- **Employment Guarantee Schemes:** While MGNREGA is universal, the poverty line can still inform the identification of most vulnerable households within villages.
- **Social Security Pensions:** Schemes like the National Social Assistance Programme (NSAP) provide pensions to the elderly, widows, and disabled persons identified as BPL.
- **Health Schemes:** Ayushman Bharat – PM Jan Aarogya Yojana provides health insurance coverage to the poorest and most vulnerable families.

**4. Evaluating Economic Growth:** The poverty line helps assess whether economic growth is “inclusive” or “pro-poor.” If GDP is rising but the poverty rate is stagnant or increasing, it signals that the benefits of growth are not reaching the most vulnerable sections of society.

**5. Constitutional and Legal Mandates:** The Indian Constitution enshrines the goal of a just and equitable society. While not explicitly mentioning a “poverty line,” the efforts to define it align with the Directive Principles of State Policy, which call upon the state to promote the welfare of the people by securing a social order in which justice, social, economic, and political, shall inform all the institutions of national life. Poverty estimation helps in fulfilling this mandate.

**6. International Comparisons:** While India has its own methodologies, international poverty lines (like the World Bank’s \$2.15/day PPP) allow for global comparisons, showing India’s relative standing in poverty reduction efforts compared to other developing nations.

### What are the CHALLENGES related to Poverty Line?

**1. Defining “Basic Needs”:** What constitutes “basic needs” is inherently subjective and changes with societal development, expectations, and inflation. The monetary value chosen for the poverty line can seem arbitrary, and even small changes to the line can drastically alter the number of people classified as poor.

**2. Exclusion of Essential Non-Food Items:** Earlier poverty lines were heavily weighted towards food. While later committees (like Tendulkar and Rangarajan) included health and education, critics argue that the allocation for these vital services often remains insufficient, assuming the state provides most of it for free, which isn’t always the case or of adequate quality. Also, what was considered essential years ago (e.g., specific food items) might change, and new necessities (e.g., mobile phones, basic internet access for education/work) might emerge. Updating these baskets is a complex and politically charged exercise.

**3. Lack of Official Poverty Line Updates:** The government has not officially updated or declared new poverty lines based on a domestic methodology since the Tendulkar Committee's 2011-12 figures. This has created a vacuum. The Household Consumption Expenditure Survey (HCES), conducted by NSSO, is crucial for updating poverty estimates. The 2017-18 HCES data was withheld due to "data quality issues". The latest HCES (2022-23/2023-24) has been released, providing updated consumption expenditure data, but official poverty lines based on this are yet to be finalized.

**4. Debate Over Actual Poverty Trends:** There's ongoing debate among economists and researchers about whether poverty has truly declined as rapidly as some estimates suggest. Factors like demonetization, the COVID-19 pandemic, and concerns about unemployment and real wage stagnation have led some to argue that progress might have slowed or even reversed for some sections.

**5. Regional Disparities:** India is a vast country with enormous variations in prices, living costs, and access to public services across states and between rural and urban areas. A single national poverty line (or even state-specific lines adjusted by a national index) may not accurately reflect the ground reality in diverse regions.

### What can be the WAY FORWARD?

**1. Mandate for a Modern Basket:** The government should immediately constitute a new expert committee, similar to the Tendulkar and Rangarajan committees, but with a broader and more contemporary mandate. This committee should define a "Poverty Line Basket" (PLB) that truly reflects the minimum requirements for a dignified life in 21st-century India. The committee should recommend a mechanism for **periodic revision and updating** of the poverty line (e.g., every 3-5 years) to account for inflation, changes in consumption patterns, and evolving societal standards.

**2. Leverage the Latest HCES Data (2022-23):** The HCES data should be fully utilized to derive poverty lines and estimates at **state-specific, rural-urban, and potentially even sub-state levels**, reflecting the vast economic and cost-of-living disparities across India.

**3. Embrace a Multi-Tiered Approach to Poverty Measurement:** India should move beyond the debate of a single poverty line. A multi-tiered framework would be more appropriate:

- **Extreme Poverty Line:** Aligned with the World Bank's international poverty lines (e.g., the revised \$3.00/day PPP) for international comparisons and to track progress on SDG 1.
- **National Poverty Line:** A domestically derived, consumption-based line reflecting the minimum for a dignified life. This could be akin to a "basic needs" poverty line.
- **Vulnerability Line/Near-Poor Line:** A line slightly above the national poverty line to identify households that are not officially "poor" but are highly vulnerable to falling into poverty due to economic shocks (e.g., illness, job loss, climate events). This group also needs policy attention.

**4. Strengthen Multidimensional Poverty Index (MPI):** The MPI should be officially recognized as a primary and **complementary** tool for poverty measurement, not a replacement for a consumption-based line. Use MPI to identify specific deprivations (e.g., sanitation, cooking fuel, education access) at granular levels (district, block) to design targeted, multi-sectoral interventions. Continuously improve the data sources and frequency for MPI calculation (e.g., by integrating HCES data with NFHS and other administrative data).

### Conclusion:

By establishing a robust, multi-tiered poverty measurement framework, leveraging new data and technology, and ensuring transparency in the process, India can refine its understanding of poverty, strengthen its welfare programs, and accelerate its journey towards becoming a truly inclusive and developed nation.



Read More: [The Indian Express](#), [Wikipedia](#)  
UPSC GS-2: Poverty

### Fertiliser Sector in India – Significance & Challenges – Explained Pointwise

Diammonium Phosphate (DAP) is a critical fertiliser containing Phosphorus which is required by the crops during early stages of root & shoot development. Farmers usually apply at the time of sowing, along with the seeds. China has been the top supplier of DAP to India, however, it has recently put restrictions on its exports, thus triggering a shortage of DAP in India.

Fertilizers are essential for India's agricultural productivity, helping to sustain high crop yields for a large and growing population. India is one of the world's largest producer, consumer & importer of fertilisers in the world. This article explores the role of the fertiliser sector, its associated challenges, and the policy reforms required to address these critical issues.



Source- PSU Watch

#### What is the SIGNIFICANCE of fertiliser sector in India?

**1. Ensure the availability of essential soil nutrients:** The fertiliser sector has played a crucial role in sustaining India's agricultural output by ensuring the timely availability of essential nutrients such as **nitrogen (N)**, **phosphate (P)**, and **potash (K)** through both domestic production and imports. According to recent reports Indian soils **suffer from acute deficiencies in essential nutrients** which are listed below. These nutrient deficiencies severely affect soil fertility and crop yields:

<b>Nitrogen Deficiency</b>	Less than 5% of Indian soils have adequate nitrogen levels, essential for healthy plant growth.
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<b>Phosphate Deficiency</b>	Only 40% of soils are sufficient in phosphate, an important nutrient for root development and flowering.
<b>Potash Deficiency</b>	32% of soils are deficient in potash, which is crucial for plant disease resistance and overall growth.
<b>Organic Carbon Deficiency</b>	Just 20% of soils have adequate organic carbon, which is necessary for improving soil structure and water retention.
<b>Micronutrient Deficiencies</b>	Soils in India also suffer from deficiencies of micronutrients such as <b>Zinc, Iron, Sulphur, and Boron</b> , which are critical for optimal plant growth.

**2. Driving India's Agricultural Dominance:** The efforts of the fertiliser industry in supplying critical nutrients have helped India maintain its status as a global agricultural powerhouse. **Between 2020-21 and 2022-23, the country exported 85 million tonnes of cereals while providing near-free grain to over 813 million people during the pandemic.**

**3. Sustainability Initiatives:** The fertiliser sector encourages the use of advanced products like **slow-release fertilisers** and those fortified with micronutrients to enhance efficiency and reduce environmental impact.

**4. Education and Awareness:** The sector works closely with farmers to educate them about proper fertiliser application techniques, soil testing (**Soil Health Card**), and nutrient management for maintaining soil vitality.

### What are the CHALLENGES related to fertilisers in India?

**1. Imbalanced Fertiliser Use:** A major issue in Indian agriculture is the **overuse of nitrogen (N) fertilisers, especially urea**, while other essential nutrients like phosphorus (P) and potassium (K) are underused. **For e.g. in Punjab, nitrogen use is 61% higher than recommended, but under uses potash by 89% and phosphate by 8%.** This imbalance results in green fields but lower crop yields, as plants need all three nutrients for optimal growth.

**2. Low Nutrient Use Efficiency (NUE):** The efficiency of fertiliser use in India is very low, with **only 35-40% of fertilisers being absorbed by crops**. The **rest is wasted or lost to the environment**, such as nitrogen escaping as nitrous oxide, a harmful greenhouse gas. This inefficiency leads to higher costs for farmers and environmental harm.

### 3. Issues related with fertiliser subsidy:

- **Nutrient Imbalance:** By focusing heavily on urea, the subsidy system has encouraged an imbalanced use of fertilisers, with nitrogen being overused and phosphate and potash underused. This imbalance harms soil health and reduces agricultural productivity in the long run.
- **Financial Strain on the Government:** Fertiliser subsidies are a significant financial burden on the government, **amounting to ₹1.88 lakh crore, or nearly 4% of the Union budget**. This high expenditure diverts resources away from other critical sectors, such as health and education.

**4. Environmental Harm:** Excessive and imbalanced fertilizer use has severe environmental consequences:

- **Groundwater Contamination:** Leaching of excess nitrates into groundwater, posing health risks (e.g. “blue baby syndrome”).
- **Water Body Eutrophication:** Runoff of nitrogen and phosphorus into surface water bodies (lakes, rivers) leads to algal blooms, depleting oxygen and harming aquatic life.
- **Greenhouse Gas Emissions:** Nitrous oxide ( $\text{N}_2\text{O}$ ), a potent greenhouse gas, is emitted from agricultural soils due to nitrogenous fertilizer use, contributing to climate change. Ammonia volatilization also contributes to air pollution and acid rain.
- **Soil Degradation:** Long-term overuse of chemical fertilizers can alter soil pH, increase salinity in some areas, and negatively impact soil microbiology and structure.

**5. Fertiliser Diversion and Smuggling:** A significant portion (20-25%) of subsidised urea is diverted for non-agricultural uses or smuggled out of the country. This deprives farmers of necessary fertilisers and strains government finances.

**6. Neglect of Micronutrients:** Micronutrients like zinc, boron, and iron are often overlooked, despite their crucial role in plant growth. Their deficiency is widespread and contributes to the decline in soil health and agricultural productivity.

**7. High import dependency & Global volatility =** India does not produce enough fertilizers or their raw materials to meet its domestic demand:

- **DAP:** DAP is India's 2nd most consumed fertiliser (Annual avg sale = 103.4 lt). A significant portion of the consumption comes from imports (57 lt) (because India has limited rock phosphate deposits). China has been one of the top supplier of phosphate fertiliser to India. However, China has put curbs on its exports – to ensure that its farmers has access to the product first & also to meet the growing demand for phosphate in production of EV batteries. It resulted into shortage of key fertiliser DAP in India.
- **MOP (Muriate of Potash):** India is 100% dependent on imports for MOP, as there are no domestic potash reserves. Similarly, India imports about 90% of its phosphatic fertilizers.
- **Vulnerability to Global Price Fluctuations:** This heavy import dependence makes India highly vulnerable to geopolitical events (like the Ukraine-Russia conflict, Gaza crisis), supply chain disruptions, and fluctuations in international prices of fertilizers and their raw materials (e.g., natural gas, phosphoric acid, rock phosphate). This directly impacts the cost of fertilizers for farmers and the government's subsidy bill.

**What are the various GOVERNMENT INITIATIVES related to fertilisers in India?**

**1. Fertiliser Subsidy:** The government provides a subsidy to fertiliser producers so farmers can buy fertilisers at lower prices. The subsidy covers the difference between the cost of making or importing the fertiliser and the price farmers pay. Subsidy on 3 basic fertilisers in India- Urea, DAP and Muriate of Potash (MOP) is discussed below:

- **Subsidy on Urea:** Urea is the most widely produced and used fertiliser in India. It is subsidised only for agricultural use. The government pays a subsidy based on the cost of production at each plant, and urea is sold at a fixed Maximum Retail Price (MRP). The subsidized MRP of 45 kg bag of urea is Rs.242 per bag (exclusive of charges towards neem coating and taxes applicable).
- **Subsidy on Non-Urea Fertilisers:** Non-urea fertilisers, such as DAP and MOP, are generally sold at market prices, but the government has recently regulated them due to global price increases

(especially after the Russia-Ukraine war). These fertilisers are **covered under the Nutrient-Based Subsidy (NBS) Scheme**. The MoP is being sold at Rs 1,500-1,600 per bag, while the **price of DAP is Rs 1,350 per bag**.

#### Fertiliser subsidy schemes:

<b>Urea Subsidy Scheme</b>	<p><b>a.</b> Under the Urea Subsidy Scheme, urea is sold at a statutorily notified uniform MRP (Maximum Retail Price). Farmers pay a subsidised price of ₹242 per 45 kg bag of urea, significantly lower than the market price.</p> <p><b>b.</b> The difference between the cost of production/importation and the retail price is paid to the urea manufacturer/importer by the government as a subsidy</p>
<b>Nutrient-Based Subsidy (NBS) Scheme</b>	<p><b>a.</b> The NBS scheme was <b>introduced in 2010</b> to address the nutrient imbalance in Indian agriculture.</p> <p><b>b.</b> Under this scheme, fertilisers are provided at subsidised rates based on the nutrients they contain, namely nitrogen, phosphate, potash, and Sulphur.</p> <p><b>c.</b> <b>Fertilisers fortified with secondary and micronutrients are also given additional subsidies.</b> However, <b>urea is excluded from the NBS scheme.</b></p>

**2. Direct Benefit Transfer (DBT) of Fertilizer Subsidy:** 100% subsidy on various fertilizer grades is released to fertilizer companies **after actual sales are made to farmers** by retailers through Point of Sale (PoS) machines. Farmers are identified through their Aadhaar card at the retail outlet. The aim is to improve transparency, reduce diversion, ensure the subsidy reaches the intended beneficiaries, and track real-time sales data.

#### 3. Boosting Domestic Production and Self-Sufficiency:

- **Revival of Closed Fertilizer Units:** A major focus has been on reviving defunct or sick urea fertilizer plants to increase domestic production capacity and reduce import reliance for e.g. Hindustan Urvarak & Rasayan Limited (HURL), Ramagundam Fertilizers and Chemicals Ltd (RFCL), Talcher Fertilizers Limited (TFL).
- **New Urea Policy (NUP) – 2015:** For existing gas-based urea units, this policy aimed at maximizing indigenous urea production, promoting energy efficiency, and rationalizing the subsidy burden. It has led to a significant increase in indigenous urea production.
- **Potash Derived from Molasses (PDM):** To reduce 100% import dependence for Potash, indigenous production of Potash Derived from Molasses has been encouraged and included under the NBS scheme.

#### 4. Promoting Balanced Fertilizer Use and Soil Health:

- **Neem-Coated Urea (NCU):** The government mandated 100% neem-coating of all indigenously produced and imported urea.
- **Soil Health Card (SHC) Scheme:** Promotes soil test-based and balanced use of fertilizers, reduce overuse of chemical fertilizers, save costs for farmers, and improve soil health and productivity.



- **Promotion of Bio-fertilizers and Organic Manures:** Schemes like **Paramparagat Krishi Vikas Yojana (PKVY)**, **National Project on Organic Farming (NPOF)**, **Mission Organic Value Chain Development for North-Eastern Region (MOVCDNER)**, and **Bhartiya Prakritik Krishi Padhati (BPKP)** provide assistance and promote the use of organic fertilizers and bio-fertilizers.

**5. PM Programme for Restoration, Awareness Generation, Nourishment, and Amelioration of Mother-Earth (PM-PRANAM):** States/UTs receive a grant equivalent to 50% of the fertilizer subsidy saved by reducing chemical fertilizer consumption (Urea, DAP, NPK, MOP) compared to the average of the previous three years. This grant is to be used by states to promote alternative fertilizers and related assets.

**6. One Nation, One Fertilizer (ONOF) / Pradhan Mantri Bhartiya Jan Urvarak Pariyojana (PMBJP):** Standardize fertilizer brands, reduce farmer confusion, reduce criss-cross movement of fertilizers (thus saving freight subsidies), and ensure a uniform appearance and quality perception for subsidized fertilizers.

**7. Nano Fertilizers:** The government is actively promoting the adoption of nano-fertilizers, particularly Nano Urea Liquid e.g. IFFCO Nano Urea Liquid.

#### **What can be the WAY FORWARD?**

**1. Rationalizing the Subsidies:** The government should **bring urea under the Nutrient-Based Subsidy (NBS) scheme** to balance the prices of nitrogen, phosphate, and potash. This will encourage balanced fertiliser use and reduce reliance on urea.

**2. Deregulating Fertiliser Prices:** **Allowing market forces to set fertiliser prices can remove distortions caused by price controls.** Farmers should receive direct income support, such as digital coupons or cash transfers, to purchase fertilisers based on their needs.

**3. Promoting Micronutrient Use:** To address micronutrient deficiencies, the government should promote fertilisers enriched with micronutrients. Encouraging balanced fertiliser use, including micronutrients, is crucial for better soil health and crop yields.

**4. Improving Nutrient Use Efficiency (NUE):** Improving NUE is essential, which can be achieved through **precision farming, better soil testing**, and using technology to apply fertilisers more efficiently.

**5. Direct Income Support to Farmers:** Explore replacing product-specific subsidies with a system of direct income support to farmers (like PM-KISAN, but specifically tied to fertilizer use or nutrient management). This would empower farmers to choose the right fertilizers based on their soil needs, reduce distortions, and prevent diversion.

**6. Diversify Import Sources:** Reduce over-reliance on a few countries for raw materials (rock phosphate, phosphoric acid) and finished fertilizers (MOP, DAP). Forge long-term agreements and joint ventures with resource-rich countries beyond traditional partners, including those in West Asia, Africa, Latin America, and other regions.

**7. Integrated Nutrient Management (INM):** Vigorously promote INM, which combines chemical fertilizers with organic manures, bio-fertilizers, and green manures, to improve soil health and reduce reliance on synthetic inputs.

#### **CONCLUSION:**

India needs to build a fertilizer sector that is not only robust and self-sufficient but also environmentally

responsible, fiscally sustainable, and ultimately contributes to long-term agricultural prosperity and food security.

Read more- [Indian Express](#), [Wikipedia](#)  
UPSC Syllabus- GS 3- Agriculture

