# Forum AS

# **7 PM COMPILATION**

## 1<sup>st</sup> and 2<sup>nd</sup> week Aug, 2024

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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#### Wayanad Landslide- Causes, impact and management of Landslides in India- Explained **Pointwise**

The calamitous Wayanad landslide on July 30, has wreaked havoc in Kerala and resulted in the loss of lives of more than 250 people. According to experts, it is the biggest landslide-related disaster in the state in terms of casualities. This catastrophe has again put the spotlight on the reports of the Madhav Gadgil Committee (2011) and the K Kasturirangan-led High Level Working Group (2013), which had recommended these areas to be demarcated as Ecologically Sensitive Areas. However, these were met with resistance and never implemented.

## Vayanad Landslide Causes



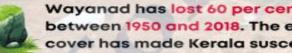
140 mm rainfall in 24 hours, with some areas receiving more than 300 mm. This was about 5 times more than predicted by IMD.

Fast waters of the Chaliyar river swept relatively more sediment downstream

Weakening of force that binds the soil with the rocks due to heavy rainfall and moisturized soil layer



Quarrying, linear infrastructure development, construction activities, and monocropping. These have compromised Wayanad ecosystems' ability to cope with changing natural conditions.



Wayanad has lost 60 per cent of its forests between 1950 and 2018. The erosion of the green cover has made Kerala susceptible to landslides

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#### Factors behind the Wayanad Landslide

**1.** Wayanad witnessed **140mm of rainfall**, with some areas reporting more than **300 mm of rainfall**. This rainfall was about five times more than India Meteorological Department's (IMD) projections. **2. Overflow in the Chaliyar river** swept more sediment downstream. This was due to the fact that heavy rains in 2020 had caused the Chaliyar to strip swaths of its upstream areas of plant cover. This left more rocks and humus vulnerable to being displaced.

3. The heavy rainfall has saturated with moisture. The water reaches the rocks by flowing between the soil and the rock layers. This weakens the force that binds the soil to the rocks and triggers the movement.

4. Quarrying, linear infrastructure development, and construction activities have compromised ecosystems' ability to cope with changing natural conditions.

**5.** Monocropping, has resulted in the cut down of large, native trees, which serve to hold the topsoil to the bedrock. The replacement of these native trees with big plantation crops, such as tea and coffee having



shallow roots, has increased the vulnerability.

**6.** According to a study by the International Journal of Environment and Public Health, Wayanad has lost 60 per cent of its forests between 1950 and 2018. The erosion of the green cover has made Kerala susceptible to landslides.

**7.** Climate Change has been leading to gradual warming of the Arabian Sea leading to the formation of a deep cloud system over parts of the Western Ghats.

What are landslides? What is the status of India's Vulnerability to Landslides?

**Landslide-** It is a natural phenomenon which is **usually observed** in steep mountainous regions where large quantities of material, composed of rock, boulders, loose mud, soil and debris, are driven down the slope with force.

#### **Types of Landslides**

## Landslide Classification

#### Types of Movement

Falls: Falls are rapid movements of rocks and boulders detached from steep slopes or cliffs along fractures, joints, and bedding planes.

**Topple:** It is the forward rotation of a mass of debris or rock out of a slope. The slope failure generally occurs at point near the base of the block of rock.

Slides: A slide is a downslope movement of material that occurs along a slip surface.

Rotational slide: In this slide the slide movement is roughly rotational about an axis which is parallel to the ground surface and transverse across the slide.

Translational slide: In this slide the landslide mass moves along a planar surface with rotation or backward tilting

#### Types of Materials

Rock: hard or firm mass.

Debris: 20% to 80% of the particles are larger than 2mm, and the remainder is less than 2mm".

Earth: material in which 80% or more of the particles are smaller than 2mm.

Soil: an aggregate of solid particles, generally of minerals and rocks.

Mud: material in which 80% or more of the particles are smaller than 0.06mm.

#### Types of flows

Debris flow: It is a form of rapid mass movement in which a combination of loose soil, rock, organic matter, slurry that flows downslope. They are commonly caused by intense precipitation or rapid snow melt.

Earth flow: It is down slope viscous flow of fine grained material saturated with water.

Mudflow: A mudflow is wet or viscous fluid mass of fine and coarse grained material flows rapidly along drainage channels.

Creep: Creep is the slow, steady, downward movement of material under gravity occurs in large area.

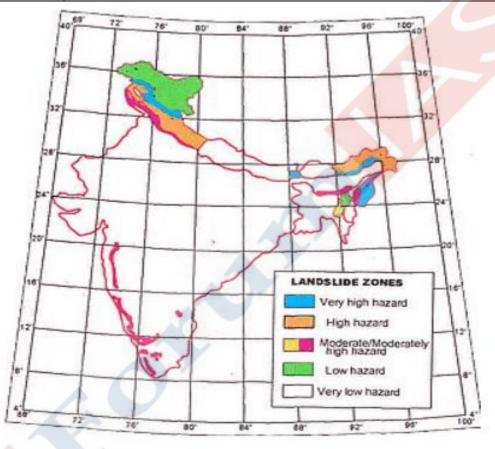
Lateral Spreads: It is the lateral movement usually occur on very gentle slopes or flat terrain. The failure is caused by liquefaction due to earthquake.

#### Source- ISRO Landslide Atlas of India



#### **Vulnerability of India to Landslides**

ISRO's Landslide Atlas of India	According to ISRO's Landslide Atlas of India, India is among the top four countries with highest landslide risk. It has been estimated that loss of life per 100 km2 is greater than one.
India Landslide	India accounts for about 8 per cent of global fatalities due to landslides. 13.17 per
Susceptibility Map	cent of the country is susceptible to landslides, and 4.75 per cent is 'very highly
(ILSM) by IIT	susceptible'. Kerala is the most vulnerable state with over 14 per cent of its land
Madras	mass in the 'very high susceptibility' category.



Source-NDMA

**Recent Incidents in India-** Some other incidents in india include the following- Kerala (2018), Himachal Pradesh (2018), Uttarakhand (2018), Tamenglong-Manipur (2018), and Kalikhola, Manipur (June 2017).

Read More- National Landslide Susceptibility Map

What are the causes of landslides in India?

#### **Natural causes**

**1. Heavy Rainfall-** The occurrence of heavy or continuous rainfall may lead to heavy landslides in the areas of steep slopes. Water works as a lubricating agent and loosens up the material. **For ex-** The 2013 Uttarakhand Cloudburst brought immense landslides in the region.



**2.** Earthquakes- The sudden shaking of earth's crust creates stress on materials resulting in their flow downwards. For ex- Tectonically active Himalayas enhance the probability of earthquakes, resulting in an increased vulnerability.

**3. Nature of Rivers-** The youthful and mighty rivers in increase the downcutting of earth on the mountain slopes. **For ex-** The increased flow in the Chaliyar river resulted in heavy sediment erosion, resulting in the Wayanad landslide catastrophe.

#### Anthropogenic causes

**1. Heavy Infrastructure Development-** The creation of roads, railways, dams, linear infrastructure development in the mountainous region, has resulted in increased landslides. **For ex-** The development of Konkan Railways in western ghats is considered a significant reason behind the frequent occurrences of the disaster in the region.

**2. Mining activities-** It involves removal of the surface of the earth for mineral exploration, which loosens the grip of material. **For ex-** Iron ore, bauxite, manganese, chromite, and limestone mining in the western ghats has increased the risks of this disaster.

**3. Increased Deforestation-** The cutting down of trees for agricultural and industrial activities, loosens the soil grip and makes the region more vulnerable to landslides. **For ex-** Plantation agriculture in Western ghats has resulted in loss of native trees and increased the disaster risk.

**4. Unsustainable Tourism-** The rising tourist influx in the Himalayan region and Western Ghats puts greater pressure on land, as more infrastructure and amenities are needed to accommodate them. This leads to more construction and greater landslide risks.

**5. Climate change-** Anthropogenic activities has accelerated the climate change events, leading to increased glacial melts and rainfall. **For ex-** Warming of Arabian sea has resulted in increased rainfall in the Western Ghats region, leading to enhanced landslides.

#### What are the Impacts of Landslides in India?

**1. Loss of Lives-** The most traumatizing impact of a landslide is the loss of precious human and animal lives. In the recent Wayanad case, already more than 250 deaths have been reported.

**2. Economic Losses-** These lead to enhanced economic losses as, significant amount is spent on reconstructing the lost infrastructure, rehabilitating the masses, and providing relief support to the impacted people.

**3. Infrastructural Damage and restricted Movement-** The mud, rocks, and debris moving down the slope result in infrastructural damage to houses, buildings, roads and create a barrier on critical transportation routes. This restricts the movement of goods and people.

**4. Jeopardized Water Availability-** The accumulated mass of debris results in the blockage of a river by creating a Landslide dam. It impairs the availability of water for nearby people.

**5. Displacement and Migration-** It forces communities to evacuate and migrate. This leads to social disruption and psychological stress among affected populations

#### What initiatives have been taken by the Government to mitigate the risks due to landslides?

National Landslide	Geological Survey of India initiated the National Landslide Susceptibility Mapping
Susceptibility	(NLSM) program in 2014 to map the landslide areas on a Macro Scale (1:50,000).
Mapping (NLSM)	The goal is to map the 0.42 million sq. km landslide-prone areas across the country.



National Landslide Risk Management Strategy (2019)	It addresses all the components of landslide disaster risk reduction and management, which includes – a. Hazard mapping, monitoring, and early warning system, awareness programs, b. Capacity building, training, regulations, and policies, stabilization and mitigation
NationalDisasterManagementAuthority(NDMA)GuidelinesonLandslideHazardManagement(2009)	It proposes measures that should be taken to avoid or mitigate the risk posed by landslide hazards. Some of the guidelines are as follows– a. Delineating areas susceptible to landslide hazards b. Encouraging implementation of successful remediation and mitigation technologies. c. Developing institutional capacity and training for geoscientists, engineers, and planners is necessary for the effective management.
National Institute of Disaster	It is a premier institute that provides Capacity Building support to various National and State level agencies in the field of Disaster Management & Disaster Risk
Management (NIDM)	Reduction.

What are the challenges in implementation of measures proposed for landslide Mitigation?

**1. Non implementation of Gadgil and Kasturirangan committee reports-** The Gadgil committee report proposed to regulate developmental activities in the entire 1,60,000 sq km stretch of the Western Ghats. K Kasturirangan report recommended demarcation of 37 per cent of the Western Ghats as an ecologically sensitive area (ESA) and complete ban on mining and quarrying in these protected zones. These reports have not been implemented with resistance by all states and parties across the political spectrum in the biodiverse region.

**2. Lack of landslide mitigation plan-** Many States vulnerable to landslides including Kerala lack landslide mitigation plan. These maps and plans help to explain the route a landslide can take once it has been triggered.

**3. Insufficient Monitoring Systems-** Many regions lack effective monitoring and early warning systems, which are crucial for timely evacuation and disaster preparedness. The absence of real-time data lead to increased casualties and damage during landslide events.

**4. Policy and Regulatory Gaps-** Weak enforcement of land-use regulations and building codes often exacerbates vulnerability to landslides.

**5. Low Community Awareness and Participation-** Low levels of public awareness regarding landslide risks and preparedness measures impede community involvement in disaster management.

#### What Should be the Way Forward?

**1. Drawing up of Route Maps-** Route maps help in marking out areas which should be out of bounds for settlements or any activities. These maps also map out the routes that landslides are likely to take after they have been triggered. The route maps need to be drawn at the earliest to complement the susceptibility maps.

**2. Proper Environment Impact Assessment-** Proper implementation of Environmental impact assessment norms must be carried out before initiating mining or dam construction, in the ecologically fragile mountainous regions.

**3. Demarcation of ecologically sensitive areas in Western Ghats-** The panel headed by Sanjay Kumar must finalise the draft notification on ecologically sensitive areas for the western Ghats. This will help in reducing engineering projects in ecologically sensitive areas.



**4. Landslide Micro-zoning procedure-** There must be adoption of landslide micro zoning procedures for mountainous and other highly vulnerable regions. This will help the states in restoring denuded flora and soil cover.

**5. Involvement of locally trained manpower-** There should be involvement of locally available trained manpower to intensify the hazard reduction and public awareness programs.

Read More- The Indian Express UPSC Syllabus- GS 3- Disaster and its Management

#### SC verdict allowing for Sub-Classification of SCs and STs- Explained Pointwise

The seven-judge bench of the SC headed by the Chief Justice of India, with a 6:1 ruling has allowed for subclassification of SCs and STs. The ruling has permitted the states to create sub-classifications within the SC and ST categories for the purpose of according wider protections in public employment and education. This verdict overturns the previous 2004 ruling in the case of E.V. Chinnaiah vs. State of Andhra Pradesh, which had prohibited such sub-classifications.

#### SC Verdict on Sub-Classification of SCs and STs

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**1.** Permission for Sub-Classification- The Court has ruled that states can create subclassifications within SCs and STs to better target support for the most disadvantaged groups. This will allow for separate quotas within the existing 15% reservation for SCs. It is aimed at addressing varying levels of backwardness among these communities.

2. Sub-classification on an Empirical Basis- The ruling emphasizes that any subclassification must be based on empirical data and historical evidence of systemic discrimination, rather than arbitrary or politically motivated reasons. The Court has stressed the need for states to substantiate their classifications with quantifiable data.

3. Extension of Creamy Layer Principle to SCs and STs- The Court has extended the 'creamy layer' principle previously applied to Other Backward Classes (OBCs) (as highlighted in Indra Sawhney Case), to SCs and STs. States must identify and exclude more affluent individuals within these groups from receiving reservation benefits, ensuring that assistance reaches those who are truly disadvantaged.

4. Sub-classification decisions subject to Judicial Review- The SC has highlighted that decisions made by states regarding sub-classification are subject to judicial review to prevent potential misuse for political gain.

**5. Generational Limit to availing reservation-** The Court noted that reservation benefits should be limited to the first generation of beneficiaries. If any family member has already availed of these benefits and achieved a higher social status, subsequent generations may not qualify for availing reservation.

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#### What is the SC Verdict on Sub-Classification of SCs and STs?

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#### What are the roots of the case demanding sub-classification of SCs and STs?

#### State Government's Efforts for Sub-classification of SCs and STs

1975	Punjab Government issued a notification that divided the 25% SC reservation into categories.
1975	A portion was specifically reserved for the Balmiki and Mazhabi Sikh communities.
	Andhra Pradesh Scheduled Castes (Rationalisation of Reservations) Act, 2000 provided an
2000	expansive list of Scheduled Caste communities in the state and the quota of reservation
	benefits provided to each of them.

#### SC and HC intervention and striking down of Sub-classification

	The 5 Judge SC bench stuck down the Andhra Pradesh Scheduled Castes		
	(Rationalisation of Reservations) Act, 2000. The Court declared that SCs constitute a		
E.V. Chinnaiah	homogenous group and that sub-classification within this group was unconstitutional.		
Case (2004)	This decision was based on the interpretation of Article 341 of the Constitution, which		
	empowers the President to notify SCs. The SC suggested that any sub-classification		
	attempt would violate the right to equality under Article 14.		
Dr. Kishan Pal v.	The Punjab & Haryana High Court in Dr. Kishan Pal v. State of Punjab struck down the		
State of Punjab			
(2006)	1975 notification.		

#### Calls for reassessment

Over the years, various states like Punjab have argued that certain groups within the SC category were underrepresented and required additional support (Davinder Singh v State of Punjab). This led to calls for the Supreme Court to reassess the E.V.Chinnaiah ruling 2004. In 2020, a Constitution Bench acknowledged the need to revisit the 2004 decision.



**Judicial Review of the E.V.Chinnaiah and New Ruling-** The Supreme Court's recent ruling on August 1, 2024, by a 6-1 majority, allows states to sub-classify SCs and STs, overturning the precedent set in the E.V. Chinnaiah case. The ruling clarifies that while Article 341 provides a framework for identifying SCs, it does not create a homogenous class devoid of internal differences.

The Court's decision allows for a nuanced understanding of social backwardness, enabling states to implement specific measures that address the unique challenges faced by different sub-groups.

#### What is the Significance of the Verdict?

**1. Enhanced Social Justice by targeted Reservations-** The Court aims to ensure that the most marginalized groups within the SC and ST categories receive appropriate support by allowing sub-classification. This can lead to more effective reservation policies that address the unique challenges faced by different sub-groups, ultimately promoting greater social equity.

**2. Constitutional Validation-** The verdict asserts that sub-classification does not violate Articles 14 (right to equality) or Article 341 (definition of SCs) of the Constitution. The Court has clarified that states have the constitutional authority to identify different degrees of social backwardness and provide targeted reservations accordingly.

**3.** Acknowledgement of social reality- The Verdict acknowledges that the Scheduled Caste or Scheduled Tribe are very large baskets that contain social groups of different status, based on different traditional occupations. They vary in their degrees of disadvantage and are unequally placed to receive the benefits of reservation.

**For ex-** According to the recently concluded caste survey of Bihar, out of every 10,000 persons, 124 Dhobis had decent (PG or professional) higher education degrees, while this number was 45 for the Dusadh community and just one for the most disadvantaged Musahar community.

**4. Need for Data-Driven Policies-** The Court's verdict has emphasized that any sub-classification must be backed by quantifiable and demonstrable data, preventing arbitrary or politically motivated decisions. This would ensure that any classifications for affirmative actions have to be empirically determined and demonstrated.

**5. Precedent for Future Cases-** The verdict sets a new legal precedent for administering reservations in India. It opens the door for states to implement sub-classification policies, potentially leading to more effective and equitable reservation strategies in the future.

Read More- Panel submits report on sub-categorisation of OBCs after 6 years

What are the Challenges in ensuring Sub-Classification?

**1.** Empirical Data Collection for Sub-classification- Gathering quantifiable and demonstrable data, and conducting comprehensive surveys and studies to collect reliable data on the socio-economic conditions of different sub-castes is a resource-intensive and time-consuming process.

**2. Criteria for Sub-Classification-** Determining the specific parameters, appropriate criteria and thresholds to measure backwardness, such as educational attainment, income levels, representation in government jobs, and access to basic amenities, is a complex task.

**3. Influence of political considerations-** There are concerns that sub-classification criterion can be misused for electoral gains. States can use it as a **tool of political expediency**.

**4. Social Tensions-** Sub-classification might exacerbate existing social tensions within SC/ST communities, leading to intra-community conflicts and divisions.

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**5.** Administrative Burden- The process of creating, managing, and updating sub-categories would add a significant administrative burden on government agencies.

#### What Should be the Way Forward?

**1. Concensus Building-** Building consensus among various stakeholders, including political parties, community leaders, and civil society organizations, is essential to ensure the successful implementation of sub-classification policies.

**2. Effective monitoring mechanisms and grievance redressal systems-** States must put in place effective monitoring mechanisms and grievance redressal systems to prevent leakage and ensure that the most disadvantaged sub-groups receive adequate support.

**3. Maintaining social harmony-** Addressing the concerns of other marginalized communities who may feel left out or threatened by sub-classification is crucial to maintain social harmony and prevent conflicts.

**4. Strengthening the administrative and institutional capacity of states-** Strengthening the administrative and institutional capacity of states to implement sub-classification policies effectively is essential. This includes training personnel, developing data management systems, and establishing dedicated agencies to oversee the implementation process.

**5.** Adequate Financial resources- Adequate financial resources must be provided to states for conducting surveys, implementing sub-classification policies, and monitoring their impact is crucial for the success of this initiative

Read More- The Indian Express UPSC Syllabus- GS 2- Indian Constitution (Fundamental Rights)

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

India has announced a **Critical Mineral Mission** as part of **Budget 2024-25**. Through this mission, India aims to boost the domestic output and recycling of critical minerals like copper and lithium. These 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 are Critical Minerals? What is the classification criterion and identified list of critical Minerals in India?

**Critical Minerals-** These minerals are essential for economic development and national security as they are used vital for development of materials for defense, aerospace, nuclear, and space applications. 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-



1st AND 2nd WEEK AUGUST, 2024



Source- Ministry of Mines

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

**Critical Minerals Identified in India-** The 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

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.

SI. 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.

**3. Geopolitical Risks-** The geographical concentration of the 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?

Amendment to Mines and Minerals (Development and Regulation) Act, 1957	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.	
FDI liberalisationIn 2019, India has allowed 100% foreign direct investment. minerals which were previously classified as atomic have reclassified, facilitating private-sector mining.		
International Collaboration	India joined the Mineral Security Partnership, which is a US led initiative involving 13 countries and the EU. Khanij Bidesh India is assisting Argentina in lithium exploration and discussing lithium and cobalt blocks in Australia.	
Institutional Initiatives	The Geological Survey of India has initiated over 250 projects to explore deep-seated critical minerals. India has launched startup challenges to develop advanced processing technologies.	
Budgetary Support 2024	<ul> <li>Customs Duty Removal- Customs duties on 25 critical minerals, such as lithium, nickel, copper, and cobalt, have been removed to enhance domestic manufacturing of advanced technologies like electric vehicles (EVs) and energy storage systems.</li> <li>Concessional Customs Duty Extension- The concessional customs duty of 5% on lithium-ion cells has been extended until March 2026.</li> </ul>	
Critical Mineral Mission	al Mission In the Budget 2024, Critical Mineral Mission has been announced to give a boost to India's critical minerals Sector.	

#### **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

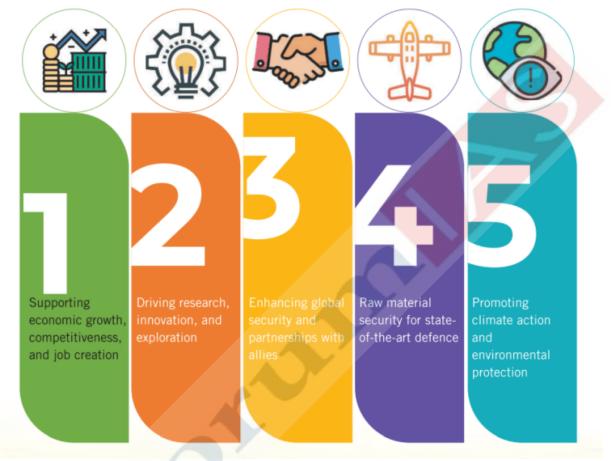


#### 1st AND 2nd WEEK AUGUST, 2024

#### **7 PM COMPILATION**

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 scheme for minerals **should align with global aspirations**, creating employment opportunities.

Read More- The Hindu Businessline

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

#### 5 years after abrogation of Article 370- Explained Pointwise

August 5, 2024, marks the 5 years after the abrogation of Article 370. On August 5, 2019, Prime Minister Narendra Modi announced the abrogation of Article 370 and the end of special status for the state of Jammu and Kashmir. Subsequently, Parliament used its powers under Article 3 of the Constitution, for the first time, to withdraw statehood and create two Union Territories. The Supreme Court in a 5-0 unanimous ruling upheld the Centre's abrogation of Article 370 of the Constitution.

Since, 5 years have passed after the abrogation of Art 370, there is a need of introspection of the achievement of stated objectives of removal of Art 370 and the challenges ahead.

#### What was Article 370 of the constitution? How was it removed?

**Article 370-** Article 370, was added to the Indian constitution, as a 'temporary provision', on October 17, 1949. It permitted the state of J&K to draft its own Constitution. The Constituent Assembly of Jammu & Kashmir was empowered to recommend which articles of the Indian Constitution should apply to the state. It restricted the Indian Parliament's legislative powers in the state.

**Article 35A-** Clause 3 of the Article 370 gave the President of India the power to amend its provisions and scope. Article 35A stemmed from Article 370 and was introduced through a Presidential Order in 1954, on the recommendation of the J&K Constituent Assembly. Article 35A empowered the Jammu & Kashmir legislature to define the permanent residents of the state, and their special rights and privileges.

**Presidential Proclamation Abrogating Article 370-** On 5th August 2019, President of India in the exercise of the powers conferred by Clause (1) of Article 370 of the Constitution had issued the Constitution (Application to Jammu and Kashmir) Order, 2019. The laws of the Parliament will now be applicable to the state of Jammu and Kashmir.

#### What was the rationale for the abrogation of Article 370?

**1. Promotion of National Integration**- Article 370 allowed a separate constitution, flag and powers to Jammu and Kashmir, which created a sense of separate identity among the people of the state. This was used to misguide youth and created a demand of separatism among them. A rationale was provided that the abrogation of Article 370 was a means to promote national integration.

**2. Aid in the fight against Terrorism-** Owing to cross border terrorism, around **42** thousand people had lost lives in the state of Jammu and Kashmir. The special status accorded to Jammu and Kashmir, due to Article 370, was considered an **impediment in fight against terrorism**. It was reasoned that abrogation of Article 370 allowed for the application of stringent anti-terror laws like UAPA.

**3. Reduction of Corruption and graft-** Article 370 resulted in poor anti-graft architecture in the state of Jammu and Kashmir. Anti-corruption agencies could not enter the state, which resulted in massive corruption, Created with love ♥ by ForumIAS- the knowledge network for civil services.

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money laundering and hawala transactions. It was reasoned that abrogation of Article 370, allowed for the stringent application of the PMLA and FEMA Act.

**4. Promotion of economic development-** Due to the application of Article 370, the land in the state could only be sold and bought by the permanent residents of the state. As a result, large businesses houses did not invest in the region owing to land concerns. It was reasoned that repeal of Article 370, would allow greater investment in the state of J&K.

**5.** Effective implementation of affirmative policies- Various affirmative legislations such as Right to Education, Right to Information were not available to the citizens of Jammu and Kashmir. Also, the reservations benefits, to OBCs, SCs, STs were not available to the marginalized sections of the state. It was reasoned that abrogation of Article 370 would allow for effective implementation of affirmative policies.

#### What have been the positive developments post abrogation of Article 370?

**1. Improvement in Governance-** There have been substantial gains on the governance front, with the improvement in the last-mile delivery of services, digitisation of 1000 public utilities, near completion of major projects in the PM's development package.

**2. Improved economic situation of J&K-** The abrogation of Article 370 and the improved governance has helped in attracting Rs 6,000-crore worth of investments. The number of tourists visiting the UT went up from 3.4 million in 2020 to 21.1 million in 2023.

**3. Increased trust in the Political and electoral System-** Despite the detention of several elected leaders in August 2019 during abrogation of Article 370, the people of J&K have shown their faith in the ballot. The 2024 general election was an incident-free poll, with voter turnout at 58.6 percent, the highest in 35 years.

**4. Absence of a counter-hegemonic view on Kashmir-** There has been an emergence of consensus across political parties on the abrogation of Article 370. The customary call for boycott, bandhs, civil unrest and stone pelting incidents, have stopped since the abrogation of Article 370 in Kashmir.

**5. Social Stability-** With the decline in violence and the restoration of normalcy, public and social life in the Jammu and Kashmir region has returned to a more stable state. Events promoting peace and development are now being held in areas that were previously considered no-go zones.

#### What are the prevailing challenges after the abrogation of Article 370?

**1. Changing theater and character of conflict-** The infiltrators from across the border have become more active in the Jammu sector. Pakistan, its partnership with China and its sponsorship of terror has increased in the region. **For ex-** Increased terror attacks on civilians and army personnel in Jammu region.

**2. Erosion of social capital-** The constitutional amendments, followed by legislative changes, executive fiats and administrative orders have eroded the social capital of Kashmir. There has been concentration of power in the region.

**3. Political Challenges-** The abrogation has marginalized traditional political entities, causing a vacuum in local governance and representation. Mainstream political parties, such as the National Conference and the Peoples Democratic Party, have struggled to regain their footing in the Jammu and Kashmir region.

**4. Social and Human Rights Concerns-** Post-abrogation, there have been widespread reports of human rights violations, including restrictions on civil liberties, internet blackouts, and the detention of political leaders and activists.



**5. Diplomatic Challenges-** Internationally, the abrogation of Article 370 has complicated India's diplomatic relations, particularly with Pakistan.

Read more- SC Verdict on Article 370- Explained Pointwise+ Infographic

#### What Should be the Way Forward?

**1. Restoration of Political Engagement-** There is a need to reintegrate local political parties into the governance process. This can be achieved by facilitating dialogue between the central government and regional political leaders to address their grievances. **For ex- Regular meeting between LG and heads of political parties**.

**2. Enhancing Security and Community Trust-** Building trust between security forces and local communities is necessary for restoration of normalcy in J&K. Initiatives that promote community policing can help in reducing tensions and fostering a cooperative environment.

**3. Cultural and Educational Programs-** Initiatives that promote cultural exchange and education can help bridge divides between different communities within J&K. This includes support for local arts, crafts, and educational institutions that foster a sense of unity.

**4. Addressing Human Rights Concerns-** The government should be transparent in its actions and responsive to the concerns of the local population regarding security measures and civil rights.

Read More- The Indian Express UPSC Syllabus- GS 2- Indian Constitution—Historical Underpinnings, Evolution, Features, Amendments, Significant Provisions and Basic Structure.

#### Sheikh Hasina's Exit and India Bangladesh Relations- Explained Pointwise

In a shocking turn of events, Sheikh Hasina resigned as the Prime Minister of Bangladesh and has left the country. Sheikh Hasina's exit brought an abrupt end to her 15-year reign. The old order in Bangladesh with Sheikh Hasina at the helm has changed irreversibly, and India will have to adjust to the change. The Political vacuum and ouster of Sheikh Hasina would have serious implications for India-Bangladesh Relations.

#### **Reasons Behind Sheikh Hasina's Exit**

**1. Peaceful Student demonstration evolving into a nationwide movement-** The peaceful student protest against the freedom fighter reservation of 30% in civil services, galvanized into a nationwide movement due to Government's heavy-handed approach. The attack on students by Awami League's student wing, Bangladesh Chhatra League, imposition of a strict curfew with a 'shoot-on-sight' order and labelling the demonstrators as 'Razakars' (a term associated with collaborators during the 1971 war) further inflamed tensions.

**2. Slowing down of economic Growth-** Bangladesh made rapid economic progress under Sheikh Hasina's regime. The country's per capita income tripled in a decade, with the World Bank estimating that over 25 million people were lifted out of poverty in the last 20 years. However, the pandemic in 2020 and a slowing global economy, thereafter, hit the garment industry badly. This increased unemployment, inflation in the economy and discontent of Bangladeshi Population.

3. Eroding democratic values- The Parliamentary elections in 2014, 2018, and 2024 were controversial and non-participative as they were marred by low turnout, violence, and boycotts by opposition parties.
4. Reliance on Hard Power to maintain Control- Hasina's government increasingly relied on hard power to maintain control. This created a climate of fear and repression. For ex- The Digital Security Act 2018,



became a potent weapon for the government and ruling party activists to silence critics and stifle freedom of online expression.

**5. Increasing economic inequality-** The proliferation of Bank scams and an expanding list of defaulters, coupled with rampant corruption, fuelled public discontent despite the overall economic progress. **For ex**–Companies like **CLC Power**, **Western Marine Shipyard**, and **Remex Footwear** topped the list of defaulters, with bad loans ranging from 965 crore to 1,649 crore Bangladeshi Taka.

How did India- Bangladesh Relations prosper Under Sheikh Hasina's Regime?

Sheikh Hasina's tenure has fostered a healthy relationship between New Delhi and Dhaka. The India-Bangladesh relations deepened during her 15 years in power.

**1. Eradication of anti-India Terror Groups-** The anti-India terror groups and their benefactor, the Jamaat-e-Islami Bangladesh, which operated out of safe havens in Bangladesh during the BNP-Jamaat rule in 2001-06 were eradicated after Sheikh Hasina's return to power.

**2. Increase in Bilateral Trade-** India-Bangladesh bilateral trade relations deepened during Sheikh Hasina's regime. India-Bangladesh bilateral trade in FY 2023–24 amounts to \$13 billion, with Bangladesh being India's biggest trade partner in the subcontinent, and India being Bangladesh's second-biggest partner in Asia after China. India provided duty-free quota access to Bangladesh on all tariff lines, except tobacco and alcohol, under South Asian Free Trade Area (SAFTA) since 2011.

**3. Increased Connectivity projects-** India and Bangladesh developed a slew of infrastructure and connectivity projects during the Sheikh Hasina's regime. Some of the completed ones are-

a. Inaguration of the Akhaura-Agartala cross-border rail link and Khulna-Mongla Port rail line in November 2023.

b. Five operational bus routes between India and Bangladesh, including connections from Kolkata, Agartala and Guwahati to Dhaka.

c. Agreement for the usage of the Chittagong and Mongla ports to ease the movement of cargo between mainland India and the Northeast.

d. India's extension of three lines of credit to Bangladesh since 2016 amounting to \$8 billion for the development of road, rail, shipping and port infrastructure.

**4. Discussions on FTA-** India and Bangladesh had begun negotiations for a free trade agreement which would be beneficial for both the countries under Sheikh Hasina's regime. An FTA would reduce or eliminate customs duties on goods traded between India and Bangladesh, and ease norms to help promote further trade and investments.

**5. Land Boundary Agreement (2015)-** India and Bangladesh **swapped the disputed islands** and allowed the inhabitants to choose their country of residence. This solved a major long-standing dispute between India and Bangladesh.

**6. Energy cooperation-** The energy cooperation between India and Bangladesh deepened during Sheikh Hasina's regime. Bangladesh nearly imports 2,000 megawatts of electricity from India. The India-Bangladesh Friendship Pipeline, connecting Siliguri in West Bengal and Parbatipur in Bangladesh, will transport one million Metric Tonnes Per Annum (MMTPA) of High-Speed Diesel to Bangladesh.

**7. Defence Cooperation-** India- Bangladesh border of 4096.7 km is the longest land boundary that India shares with any of its neighbours. India and Bangladesh conduct Joint Exercises like Exercise Sampriti (Army) and Exercise Bongosagar (Navy).

**8. Tourism sector-** Bangladeshis make up a large portion of tourists in India. In 2017, the number of tourists from Bangladesh outnumbered all the tourists arriving from Western Europe.

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**9. Medical Cooperation-** Bangladesh accounts for more than 35% of India's international medical patients and contributes to more than 50% of India's revenue from medical tourism.

#### What is the significance of Bangladesh for India?

**1. Geo-strategic-** Bangladesh holds significant geostrategic importance for India as India's eastern neighbour. Bangladesh provides India with access to the Bay of Bengal and an important route for trade and connectivity with Southeast Asia.

2. **Geo-political-** A stable and friendly Bangladesh is crucial for India's security. Geo-political cooperation on issues such as **counter-terrorism** and **border security** is vital for maintaining peace in the South Asian region. Support of Bangladesh is crucial in India's bid for **UNSC permanent membership**.

3. **Economic-** Bangladesh is a critical economy for India's exports and bilateral trade. Deepening of India-Bangladesh economic relationship is crucial for India achieving its goal under the new foreign trade policy and of becoming a \$5 trillion economy.

4. **Cultural and civilisational-** Bangladesh has large number of Hindu Bengali population and has large number of religious-cultural sites associated with India such as **Ranir Bunglow Temple**, **Bhoj Vihara**.

5. **International cooperation**- Active cooperation between India and Bangladesh is crucial to success of regional forums such as the **BIMSTEC** (Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation), **SAARC** (South Asian Association for Regional Cooperation) and **COPs to UNFCCC**.

#### What challenges does the exit of Sheikh Hasina create in the India-Bangladesh Relations?

**1. Resurfacing of security challenges-** The are risks of emergence of security challenges by the anti-India groups as encountered during the earlier BNP-Jamaat years. With the continuing tensions on the border with Pakistan, Indian Army's long standoff with the PLA in eastern Ladakh, this can create a security-nightmare for India.

**2. Threat to India's connectivity with the North-east-** A disruption in Indo-Bangladesh ties **can restrict India's access to the Northeast.** This region's connection to mainland India will only remain through the narrow "**Chicken's Neck**". With the Myanmar border remaining extremely volatile, the source of unrest in India's Northeast will increase.

**3. Jeopardized the Bilateral trade and FTA-** Sheikh Hasina's exit could jeopardize the growing bilateral trade ties between India and Bangladesh. There are also chances of stagnation of the potential free trade agreement (FTA) between the two countries.

**4. Deterioration of people-people ties-** There are real risk of blowback from the Bangladeshi people and the new power centres in Dhaka- some of whom will carry past grudges against India.

**5. Geopolitical challenges-** Pakistan and China will see the political change in Bangladesh as an opportunity to challenge India's presence in the country and try to tar it with a pro-Hasina brush.

#### What are the other Challenges in India-Bangladesh Relations?

**1. Sharing of Transboundary River Waters-** India and Bangladesh share 54 common rivers, but only two transboundary river water sharing treaties have been signed, so far- Ganga Waters Treaty and The Kushiyara River Treaty. **For Ex-** Major point of contention is the **Teesta river water dispute**. Bangladesh seeks equitable distribution of Teesta waters, which has not been agreed by India and its state of West Bengal.



**2. Deportation of Rohingyas-** India and Bangladesh have mutual but conflicting interests in deportation of Rohingyas to mainland Myanmar. India seeks to give primacy to deportation from its mainland first and then later facilitate deportation from Bangladesh to Myanmar.

**3. Cross-Border terrorism and infiltration-** Cross-border terrorism and infiltration through the Bangladesh border have raised additional threats to internal security of India. Armed Dacoity in border districts, fake money transfer, cattle smuggling and prostitution have also raised internal security concerns in India.

**4. Drug Smuggling & Trafficking-** According to 2007 International Narcotics Control Board (INCB) report, the drugs trafficking through India from Bangladesh, remains a prime transit point of trafficking heroin from South Asia to Europe.

**5. Growing Chinese Influence in Bangladesh**– Bangladesh is an active partner in the Belt and Road Initiative (BRI). China has made substantial investments in Bangladeshi infrastructure by building 12 highways, 21 bridges and 27 power and energy projects. China's increasing involvement with Bangladesh potentially undermines India's regional standing and impede its strategic aspirations.

**6.** Attacks on minorities across both the borders- The ethnic attacks on Bangla-speaking Hindus in Bangladesh and the attacks on Bangladeshi's in India have strained the India-Bangladesh P2P and cultural relation.

#### What Should be India's approcah to deal with the Bangladesh Crisis?

**1. Support to popular expression-** India as a vibrant multi-party democracy, should be seen as supporting the expression of popular will in a sensitive neighbouring country. For ex- India's support to people's movement in Nepal in 2006 against the dictatorial monarchical rule and restoration of multi-party democracy.

**2. Expression of readiness to expand the bilateral ties-** India should express its readiness to expand the bilateral economic engagement with a successor government. The temptation to brand the ongoing political change as anti-India or anti-Hindu should be avoided.

**3. Cautiounness and Discreteness-** India should be cautious and discreet in its reactions. India should keep the door open for the continuance of close and mutually beneficial ties, as India has adopted in the case of hostile regime in Maldives under Mohamed Muizzu.

**4. Establishment of Joint Task Forces and Smart Border Management-** There is a need to establish joint task forces comprising law enforcement agencies from both countries to effectively combat cross-border drug smuggling, human trafficking and Illegal immigration.

**5. Establishment Digital Connectivity Corridor-** There is a need to establish a digital connectivity corridor between the two countries, focusing on high-speed internet connectivity, digital services, and e-commerce. This can create new avenues for trade, collaboration, and technological exchange.

**6. Early conclusion of India-Bangladesh Free Trade Agreement (FTA)-** Bangladesh is set to lose its Least Developed Country (LDC) status after 2026, thereby losing its duty-free and quota-free market access in India. Hence India finalise a Free Trade Agreement (FTA) with Bangladesh at the earliest. India must also ensure that the FTA is not misuded by China to dump goods in India through RCEP agreement (Bangladesh is also a member of RCEP agreement).

The resignation of Sheikh Hasina serves as a lesson that resonates not only in Bangladesh but across the globe, highlighting the delicate balance between socio-economic progress and democratic values, that matter no less to people for whom these have never been mutually exclusive.



**Read More- The Indian Express** 

UPSC Syllabus- GS 2- India and its neighbourhood Relations

#### Disaster Management Act 2005- Significance and Challenges- Explained Pointwise

Recently, the Government of India introduced a bill proposing several amendments to the Disaster Management Act 2005. These amendments to the act mainly aim at improving the operational efficiencies in responding to a natural disaster. Though the Bill seeks to significantly expand the role and responsibilities of the National Disaster Management Authority (NDMA), however, it misses the opportunity to upgrade and strengthen the institutional status of NDMA.

Establishment of Urban	The amendment Bill seeks to establish an Urban Disaster Management
	Authority headed by the Municipal commissioner for large metropolitan cities,
Disaster Management Authorities	which often comprise many districts. This can help in having a unified and
Authornues	coordinated approach towards city-level disasters such as urban flooding.
	The Disaster Management Act 2005, did not make it mandatory for the states to
Mandatory for the	raise State Disaster Response Force (SDRF). The size and capacity of the SDRFs
States to raise SDRF	in the states vary significantly. The Bill proposes to make it mandatory for every
	state to raise and maintain an SDRF.
Legal Status to National	The amendment Bill gives legal status to the NCMC. It makes NCMC the nodal
Crisis Management	
Committee (NCMC)	body to deal with disasters with 'serious or national ramifications.'
Enhanced role of NDMA	The Bill proposes to significantly expand the role and responsibilities of the
	NDMA. It will take stock of the entire range of disaster risks to the country,
	including risks from emerging disasters.
	The National Disaster Management Authority (NDMA) and State Disaster

#### Important Changes introduced in the Disaster Management (Amendment) Bill 2024

Shift of responsibilities in the preparation of Disaster Plans	The National Disaster Management Authority (NDMA) and State Disaster Management Authorities will be responsible for preparation of disaster plans at the national and state levels. Earlier, the disaster management plans were prepared by the National Executive Committee and State Executive Committees.
Creation of Disaster Databases	The NDMA will be required to create and maintain a national disaster database with information on the assessment of the disaster, fund allocation, expenditure, and preparedness and mitigation plans. The SDMAs will also need to create state-level disaster databases.
Compensations	The Bill proposes that the NDMA should recommend guidelines for minimum standards of relief to be provided to people affected by disasters. This includes a recommendation on compensation amounts in case of loss of lives, damage to homes and property, and loss of livelihoods.
Clarified definition of	The Bill clarifies that the definition of Disasters does not include man-made disasters caused due to law-and-order situation. <b>For ex-</b> Loss of lives, suffering,

#### Disasters or property damage in a riot would not fall in the disaster.

#### What is the Disaster Management Act, 2005? What is the objective of the Act?

The Disaster Management Act, 2005 was enacted in India to provide a comprehensive framework for disaster management across the country. The Act encompasses 11 chapters and 79 sections, focusing on effective disaster management, risk reduction, and rehabilitation efforts.

#### **Objectives of the Disaster Management Act 2005**

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**a. Disaster Management Policies-** The Act seeks to formulate and execute disaster management policies.

**b. Disaster prevention and Mitigation-** The act seeks to provide necessary measures for disaster prevention, mitigation, by enhancing preparedness and capacity building for the anticipated forthcoming calamities.

**c. Disaster Relief-** The Act seeks to provide financial aid and assistance to the disaster-affected state and people.

#### Legal-Institutional Framework of the DM Act 2005

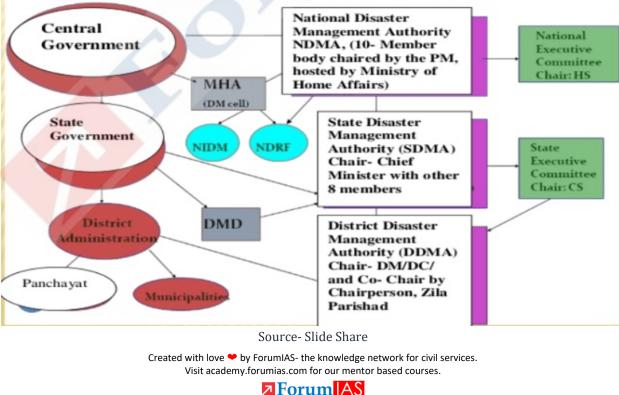
Institutions	Role	Composition	
First Tier			
National Disaster Management Authority (NDMA) (Section 3)	Act as the central body for disaster management policies, plans, and guidelines (Section 6)	Chairperson-PrimeMinisterMembers-MinistersofStateforHomeAffairs, Agriculture, Atomic Energy, Science &Technology, and otherrelevantministriesVice-Chairpersonand othermembers-Asnominated by the Chairperson	
National Executive Committee (NEC)(Section 8)	Assist the NDMA in performing its functions and ensure compliance with the directions.	Chairperson-HomeSecretaryMembers-Secretaries to the Government ofIndia in various departments, Chief of theIntegrated Defense Staff of the Chiefs of StaffCommittee	
National Institute of Disaster Management (NIDM) (Section 42)Training, research, and capac building institution.		<b>Director-</b> Appointed by the Central Govt. <b>Members-</b> Experts and professionals in disaster management and related fields	
National Disaster Response Force (NDRF) (Section 44)	Special response force for disaster situations	Control- Director-General appointed by the CentralGovernmentComposition-Various battalions from Central Armed Police Forces	
Second Tier			
State Disaster Management Authority (SDMA) (Section 14)	Lay down the state disaster management plan and policies	Chairperson-ChiefMinisterMembers-Ministers nominated by the ChiefMinister, including the Minister for DisasterManagement	



State Executive Committee (SEC) (Section 20)	Ensure that the state's disaster management plan is implemented with coordination and monitoring.	<b>Chairperson-</b> The state's chief secretary <b>Members-</b> Department secretaries, as determined by the state government.
Third Tier		
District Disaster Management Authority (DDMA) (Section 25)	Organize, plan, and carry out disaster management initiatives at the district level.	Chairperson-DistrictMagistrateCo-Chairperson-Elected representative ofthelocalauthorityMembers-Include the Chief Medical Officer,SuperintendentofPolice, and additionaldistrict-level personnelnominated by thestate government.
Local Authorities (Section 41)	Execute disaster management procedures in compliance with district and state plans.	<b>Composition-</b> Consists of town planning authorities, municipalities, district and cantonment boards, Panchayati Raj establishments, and other organizations in charge of urban development and planning.

# Legal-Institutional Framework

## Disaster Management Act 2005



#### Funding Framework Provided by the Disaster Management Act 2005

The funding framework of the Disaster Management Act (DMA) 2005 in India is primarily structured around two key financial instruments- the National Disaster Response Fund (NDRF) and the State Disaster Response Fund (SDRF).

	The NDRF is established to provide timely financial assistance for
National Disaster Response	immediate relief and rehabilitation during disasters. The NDRF is funded by
Fund (NDRF)	the central government, and its utilization is governed by guidelines issued
	by the National Disaster Management Authority (NDMA).
	The SDRF operates at the state level, complementing the NDRF. Each state
State Disaster Response	government is required to establish its own SDRF to address local disaster
Fund (SDRF)	management needs. The SDRF is funded through contributions from both
rulia (SDRF)	the central and state governments, with the central government typically
	providing a significant portion of the funding.

What is the Significance of the Disaster Management Act 2005?

**1. Establishment of Legal institutional Framework-** The Act has led to the creation of the NDMA, SDMAs at the state level, a National Disaster Response Force (NDRF), and a National Institute of Disaster Management (NIDM). These institutions help in mitigating disasters by promoting disaster-related research, training, awareness, and capacity building.

**2. Disaster Mitigation-** The institutional framework provided by the Disaster Management Act, has served India well in dealing with natural disasters. Over the years, it has helped in saving thousands of lives, and has provided relief, rescue and rehabilitation services.

**3. Emphasis on Disaster Risk Reduction-** The Act emphasizes the importance of disaster risk reduction by promoting the integration of disaster management into development planning processes. **For ex-** National Disaster Management Policy in 2009 and National Disaster Management Plan in 2016, stress on the importance of Disaster Risk reduction which is the main aim of the Act.

**4. Facilitation of Resource Allocation-** The Act provides for the establishment of the National Disaster Response Fund (NDRF) and State Disaster Response Funds (SDRFs) to ensure timely financial assistance for disaster response and relief operations.

**5. Promotion of Community Participation-** The Act recognizes the importance of community participation in disaster management by emphasizing the role of local authorities and community groups in disaster response and recovery efforts.

#### What are the Challenges with the Disaster Management Act in India?

#### **Institutional Challenges**

**1. Absence of vice-chairperson of NDMA-** The post of Vice chairman of NDMA has been vacant for about a decade. The absence of Vice-chairperson has deprived NDMA of the leadership and the necessary political heft to deal with states and other Government agencies.

**2.** Lack of administrative financial powers- NDMA lacks administrative financial powers, and routing of every small decision through the Home Ministry is an inefficient and time-consuming process.

**3. Staff-Shortage in NDMA-** The NDMA is severely short-staffed at the top. There are only three functioning members in NDMA. Earlier, the NDMA would have six to seven members, with each in charge of a specific type of disaster.

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**4. NDMA's Invisibility during major crises-** The Disaster Management Act has been criticised for its inadequate project planning and execution. National Disaster Management Authority (NDMA) was nearly invisible during major crises like the COVID-19 pandemic.

#### **Functional Challenges**

**1. Ineffective integration and prioritisation of disaster risk reduction (DRR) efforts-** Disaster risk reduction (DRR) efforts are critical for mitigating the impact of disasters. Comparative studies have highlighted the lack of integration of disaster risk reduction (DRR) efforts with the developmental works.

**2. Ineffectiveness in addressing Public Health Crises-** The Act lacks functional provisions to comprehensively address the relief, rescue and rehabilitation in cases of **epidemics** and **bioterrorism**.

**3. Lack of emphasis on Man-made hazards and Climate change risks-** The Act has **not effectively addressed** the systemic and cascading nature of **climate-change related disasters** and **man-made disasters**.

**4. Centralised and Top-Down Functioning-** The centralized and top-down functional nature of the Disaster Management Act has often led to the neglect of local and community-based interventions crucial for long-term resilience and recovery.

#### **Funding Challenges**

**1. Inadequate Funding-** The allocated funds are insufficient to meet the actual needs during large-scale disasters. This has leding to delays in response and recovery.

**2. Bureaucratic Delays-** The disbursement process prescribed by the DMA has met with bureaucratic hurdles, hindering timely assistance to affected populations.

#### What Should be the Way Forward?

**1. Revision of key definitions-** Section 2 of the Act should be amended to include explicit definitions for 'hazards,' 'prevention,' and 'mitigation,'. This will provide consistency and clarity throughout the Act.

**2.** Inclusion of disaster prevention chapters- Chapters that explicitly address disaster prevention and include comprehensive prevention plans should be introduced and included.

**3. Enhanced accountability measures-** Judicial oversight to hold officials accountable for their actions under the Act must be enhanced under the Act. This would enhance transparency and effectiveness of the Act.

**4. Modernization of early warning systems-** The early warning and forecasting clauses must be updated to incorporate modern technologies such as GIS and AI. This would improve prediction accuracy and response in cases of Disaster.

**5. Community engagement and policymaker involvement-** Community awareness of disaster risks and management strategies should be enhanced. The active engagement of policymakers and stakeholders in supporting and implementing disaster risk reduction and management initiatives, should be prioritised.

**6. Special resource allocation-** Specific annual budget allocations for disaster management must be designated to ensure adequate funding for Disaster Management.

Adopting these recommendations can transform the Disaster Management Act of 2005 into a more effective tool, promoting a proactive, organized, and successful approach to disaster management in India.

**Read More-** The Indian Express **UPSC Syllabus-** GS-3 Disaster Management



#### Nutritional Security in India- Significance and Challenges- Explained Pointwise

The recently released NSSO's Household Consumption Expenditure Survey (HCES) 2022-23, provides fresh insights to access nutritional security in India. HCES 2022-23 report provides detailed data on the consumption of various food and non-food items by households and calculates the per capita daily calorie intake.

Key Findings of the Household Consumption Expenditure Survey (HCES) Report Regarding Nutrition Security in India

**a. Nutritional Insecurity amongst the 10% Poorest Population-** Average daily per capita calorie Intake (PCCI) for a healthy life is 2,172 kcal in rural India and 2,135 kcal in urban India. The calorie intake of the poorest 10% of the Indian population is below the average PCCI. The average daily PCCI of 10% poorest population is 1,564-1,764 kcal in rural areas and 1,607-1,773 kcal in urban areas.

**b.** Nutritional insecurity Variation amongst the 10% Poorest Population- There is variation in calorie intake amongst the 10% poorest population. The average PCCI for the poorest 5% in rural areas is 1,564 kcal, and for the next poorest 5% is 1,764 kcal. In urban areas, the figures are 1,607 kcal and 1,773 kcal, respectively.

**c. Proportion of Poor/Deprived based on Nutritional Requirement-** The proportion of poor based on the nutritional threshold of PCCI is estimated at 17.1% for rural areas and 14% for urban areas.

These findings highlight the prevailing nutritional insecurity in India. The policy focus of the Government of India must on ensuring nutritional Security along with food security.



Source- The Hindu

#### What is Nutritional Security? What is the Status of Nutrition insecurity in India?

**Nutritional Security-** According to the FAO (2009), nutrition security implies physical, economic and social access to balanced diet, clean drinking water, safe environment, and health care (preventive and curative) for every individual.



**High Nutritional Insecurity in India (Malnutrition)-** According to World Bank Report, despite the sharp decline in extreme poverty in India from 45.9% to 13.4% between 1993 and 2015, India still suffers from a high malnutrition burden.

**Extreme Poverty according to WB-** Defined at \$1.9 per capita per day at the 2011 purchasing power parity rate (PPP).

#### Latest Findings of NHFS-5 regarding malnutrition

a. More than half the Indian women in the 15-49 age group are anaemic.

b. The prevalence of stunting (Low height-for-age) amongst children under five years is 35.5%.

c. The prevalence of wasting (Low weight-for-height) amongst Children under five years is 19.3%.

d. The proportion of underweight children in India is 32.1%.

**Double Burden of Nutritional Insecurity-** According to a new Lancet study, there has been a steady increase in obesity levels in India. India has become one of the countries with a high 'double burden of nutritional insecurity', with the increase in both malnutrition and the obesity levels.

Read More- Obesity in India- Explained Pointwise

#### What are the reasons for the lack of Nutritional Security in India?

There are multiple reasons behind the lack of nutritional security in India. These are explained below-

**1. Affordability Issues for the Poor Household-** Affordability of nutritious food products, such as green leafy vegetables, protein-rich diet, has become difficult for the poor households in India. The increasing wealth inequality, with top 10% of Indians holding 57% of the national income, has exacerbated nutritional insecurity.

**2. Focus on Staple Crops-** Agricultural policies, like Green Revolution, have prioritized the production of staple crops like wheat and rice over diverse, nutrient-rich crops. This has led to micronutrient deficiencies amongst the population.

**3. Calories Fundamentalism-** The focus of the Public Distribution Scheme has been limited to ensuring food security and calorie requirement. The need for nutritional development has not been taken into account.

**4. Feminine marginalization in Nutrition-** The nutritional requirements of adolescent and young female in poor and lower middle income households are not prioritized. This leads to malnourished female population and their offsprings. **For ex-** Large prevelance of anemia due to inadequate focus on iron deficiency in female diet.

**5.** Laxity in effective implementation of Child Care practices- Child caring practices, including exclusive breastfeeding, and introduction of complementary food and a diversified diet after the first six months, are not implemented properly. For ex- Only 55% of children in India were exclusively breastfed in 2015-16.

**6. Growth of Fast-food and junk-food Culture-** Cheaper and easily available junk food has replaced the nutritious food in the dietary intakes of Indian population. **For ex-** According to recent Household Consumption Survey, Indians are spending less on cereals and pulses and more on beverages, refreshments and processed food.

**7. Increased income and urbanization-** Increased income levels have led to a rise in the consumption of foods high in fats, sugar, and low physical activity. According to a joint study conducted by WHO and ICRIER, India's ultra-processed food industry has grown at a CAGR of 13.37% in terms of retail sales value between 2011 and 2021.



#### What are the negative effects of malnutrition?

**1. Child Deaths-** According to a lancet Study in 2019, a staggering 68% of 1.04 million deaths of children under five years in India were attributable to malnutrition.

**2. Improper development of Children in formative years-** Obesity in children results in stunted physical and cognitive development.

**3. Psychosocial Impact-** Malnourished Individuals face psychosocial challenges like, **body image issues** and **mental health concerns** due to societal stigmas associated with weight.

**4. Economic Burden-** Malnutrition increases the economic burden due to productivity losses on account of decreased work efficiency and absenteeism.

**5. Social Inequality and Disparities-** Undernutrition and malnutrition perpetuates a cycle of health challenges and economic disadvantages amongst the vulnerable sections, exacerbates existing socio-economic disparities. Women are disproportionately affected by malnutrition, facing challenges related to reproductive health, maternal health, and overall well-being.

#### What Initiatives have been undertaken to provide for Nutritional Security in India?

National Nutrition Mission (NNM)	National Nutrition Mission (NNM), also known as POSHAN Abhiyan has been launched which aims to reduce stunting and underweight and low birth weight, each by 2% per annum; and anemia amongst children, adolescent girls and women, each by 3% per annum by 2022.
National Nutrition Strategy (2017)	It aims to reduce the <b>prevalence of underweight children</b> (0-3 years) by three percentage points every year by 2022 from NHFS 2015-16 estimates.
National Breastfeeding Promotion Programs	Programs like MAA- Mother's Absolute Affection and Vatsalya- Matri Amrit Kosh, aim to strengthen the regulation on breast milk substitutes and improve breastfeeding practice.
Integrated Child Development Services (ICDS)	Integrated Child Development Services provides nutritional meals, preschool education, primary healthcare, immunization, health check-up and referral services to children under 6 years of age and their mothers.
Midday Meal Scheme	It aims to provide cooked meals to every child within the age group of six to fourteen years studying in classes I to VIII who enrolls and attends the school.

#### What Should be the Way Forward?

**1. Change in the Policy Focus-** The agricultural policies and programmes should be leveraged to be more 'nutrition sensitive'. The focus of food distribution programmes need to shift from 'calories fundamentalism' to providing a more diversified food basket, including coarse grains, millets, and pulses to improve the nutritional status of pre-school children and women of reproductive age.



**2. Innovative approaches-** Innovative techniques such as **bio-fortification**, which involves incorporating nutrients into the seeds of major food grains will help to improve the micro-nutrient intake. Various food-based safety nets such as **PDS**, **MDM** can include **bio-fortified staples** to provide a more diversified food basket.

**3. Enhanced Focus on WASH initiatives-** Synergy between WASH initiatives (safe drinking water, sanitation and hygiene) and nutritional interventions will have a multiplier effect on nutritional outcomes. This will help in improving child nutritional outcomes and are key to the success of nutritional interventions.

**4. Focus on Women education-** Targeted programs for improving the educational status of girls, particularly at the higher educational levels, need to be promoted. This will help in better implementation of child care practices like breastfeeding and nutritional needs of children.

**5. Improving health care services-** Improvement of access and utilization of prenatal and postnatal health care services must be prioritized. It would play a significant role in curbing undernutrition amongst children through

comprehensive awareness programs and community participation.

**6. Successful International Interventions-** India can draw key lessons from these developing countries to tackle the challenge of food insecurity and malnutrition. **For ex-** Brazil has transformed its food system and is investing in agricultural R&D and social protection programs to reduce the level of hunger in the country. China has attached great importance to early childhood development and has formulated a series of plans in this regard.

Read More- The Hindu UPSC Syllabus- GS Paper 2- Social Issues, Issues related to hunger and poverty

#### The Waqf (Amendment) Bill 2024- Key changes, Reasons and Concerns- Explained Pointwise

The Waqf (Amendment) Bill 2024 was tabled in the Lok Sabha recently by the Union Minister of Minority Affairs. The Bill, proposes major changes to the Waqf Act 1995, by introducing sweeping changes in the governance and regulation of Waqfs in India. However, the Bill has been met with strong criticism from the opposition parties, who have held it as unconstitutional, divisive and anti-minority. The Bill has been referred to a Joint Committee of Parliament, for detailed deliberations.

#### What is a Waqf Property? What has been the governance structure for Waqf properties in India?

**Waqf Property-** A waqf, also known as habs or mortmain property, is an inalienable charitable endowment established under Islamic law. It is a personal property given by Muslims for a specific purpose– religious, charitable, or for private purposes. The ownership of the property is implied to be with God. However, the beneficiaries of the property can be different.

**Formation of Waqf-** The Waqf can be formed through a deed, or Instrument, or even orally. A property can be deemed to be Waqf if it has been used for religious or charitable purposes for a long period of time. Once a property is declared as Waqf, its character changes forever, and cannot be reversed.

#### Governance Structure for Waqfs in India

**Pre-colonial Governance-** The Waqfs in India have been legally Governed in India since 1913. The Muslim Waqf Validating Act was enacted in 1913. This act was replaced by the Mussalman Wakf Act, 1923.



#### 1<sup>st</sup> AND 2<sup>nd</sup> WEEK AUGUST, 2024

#### **7 PM COMPILATION**

**Post Independence-** The Central Waqf Act, 1954 was enacted after independence to provide for the regulation of Waqfs. This act was ultimately replaced by the Waqf Act, 1995.

What are the Major Provisions and Institutional Structure as Provided by the Waqf Act?

Survey commissioner	The Waqf Act provides for the appointment of a survey commissioner. The commissioner maintains a list of all Waqf properties by making local investigations, summoning witnesses, and requisitioning public documents.	
Mutawalli (caretaker)	The Act provides for a Mutawalli (caretaker) who acts as a supervisor of the Waqf properties.	
Management of Waqf Properties	Waqf properties are managed in a way that is similar to how properties under Trusts are managed under the Indian Trusts Act, 1882.	

#### Waqf Boards

	<b>a.</b> It is a body under the state government. It works as a custodian for Waqf properties
	across the state.
About	<b>b.</b> In most states, there are separate Waqf Boards for the Shia and Sunni communities.
	Almost all prominent mosques in the country are Waqf properties and are under the
	Waqf Board of the state.
	A Waqf Board is headed by a chairperson
	Members-
	a. One or two nominees from the state government
Composition	b. Muslim legislators and parliamentarians
	c. Muslim members of the state Bar Council
	d. Recognized scholars of Islamic theology
	e. Mutawallis of Waqfs with an annual income of Rs 1 lakh and above.
	a. Administration of the Waqf properties and taking measures for the recovery of lost
Dervera and	properties of any Waqf
Powers and	<b>b.</b> Sanctioning any transfer of immovable property of a Waqf by way of sale, gift,
Functions	mortgage, exchange, or lease. However, the sanction shall not be given unless at least two
	thirds of the members of the Waqf Board vote in favor of such a transaction.

#### Central Waqf Council (CWC)

About	The Central Waqf Council (CWC) was established in 1964, to supervise and advise state-level Waqf Boards across India.
Functions	<ul><li>a. Provide Guidance to the Central, state Governments, and Waqf boards on property management.</li><li>b. It can require boards Waqf boards to provide information on their performance, including financial records and reports.</li></ul>

#### Waqf Tribunal

About The Waqf Act provided for a Waqf tribunal to be constituted by the state gover to resolve disputes related to Waqf properties in India. According to the Sect		
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	the Waqf Act 1995, the tribunal's decision is taken as final in case of dispute		
	regarding a property's status as Waqf.		
	It comprises three members-		
	a. Chairperson who is a state judicial officer not below the rank of a District, Sessions		
Composition	or Civil Judge, Class I.		
	b. An officer from the state civil services.		
	c. A person with knowledge of Muslim law and jurisprudence.		

#### 2013 Amendment to Waqf Act 1995

a. Authority to Waqf Boards to designate a property as Waqf.

a. Prescribed imprisonment of up to two years for encroachment on Waqf property

b. Explicitly prohibit the sale, gift, exchange, mortgage, or transfer of Waqf property.

#### What key changes are introduced by the Waqf Amendment (Bill) 2024?

Key Changes	Waqf Act 1995	Waqf Amendment (Bill) 2024
Name Change	The parent Act was named Waqf Act, 1995	The new act will be called Unified Waqf Management, Empowerment, Efficiency and Development Act, 1995
Registration	No provision for mandatory registration	Mandatory registration of Waqf properties with the District Collector's Office for evaluation.
Creation of Waqf	No explicit provision	A new provision has been added, which provides that a person cannon create a Waqf unless he is the lawful owner of the property and competent to transfer or dedicate such property.
RecognitionofGovernmentpropertiesasWaqf	No explicit provision	Government properties identified as Waqf properties before or after the act's commencement will not be considered Waqf properties.
Dispute Resolution in case of recognition of Government land as Waqf	Waqf Tribunal	The District Collector will decide whether a property is Waqf or government land, with their decision being final. The collector will update revenue records and report to the state government.
Oral Recognition of Waqf	Oral recognition was admissible for consideration of a property as Waqf	Removes provisions to allow a property to be considered Waqf based on oral declarations. Properties without a valid waqfnama will be treated as suspect or disputed and will remain inactive until the District Collector makes a final decision.
Waqf by use	Provided for Waqf by use. This means that a property could be deemed to be a Waqf through use even if	Omits the provisions relating to "Waqf by use". It makes a Waqf property suspect in the absence of a valid Waqfnama.



	the original declaration is suspect.	
Appeal Mechanism	WaqfTribunal'sdecisionwasconsidered final.	Disputes with Waqf board decisions can now be appealed to high courts.
Audit of Waqfs	No provision of auditing	Central government will have the authority to order audits of Waqf properties by auditors appointed by the Comptroller and Auditor-General of India or designated officers.
Composition of Waqf Boards	No women and no non-Muslim members were allowed	Provides for the appointment of non-Muslim CEO and at least two non-Muslim members to the state Waqf Boards

What is the rationale for the Key changes introduced as part of amendments to the Waqf Act 1995?

**1.** Address Concerns around Mismanagement and Corruption of Waqf Boards- There have been concerns regarding the lack of transparency in the operations of Waqf Boards, in financial and administrative operations. The proposed amendments are aimed at enhancing the operational transparency of Waqf Boards.

**2. Reduction of property disputes-** The government contends that the amendments will lead to reduction of extensive disputes over waqf property, by providing clear definitions and requiring mandatory verification of property claims.

**3. Streamlining of Legal Disputes and Jurisdiction Issues-** According to the Waqf Act, the Waqf Tribunal's decision could not be appealed in civil courts. This led to perceptions of bias and injustice. The proposed amendments seek to streamline the jurisdictional issues in line with the principles of natural justice.

**4. Women Representation-** The proposed amendments which allow for women representation as members of Waqf Board is a **step in the direction of Women empowerment**.

#### What are the concerns surrounding the Waqf (Amendment) Bill 2024?

**1. Violation of Religious Rights-** Critics argue that the bill infringes upon the freedom of religion as provided by Article 25 and the autonomy of the Muslim community to manage their own religious affairs.

**2. Increased Government Control-** The proposed amendments grant greater powers to the government over Waqf properties, including the involvement of district collectors in property disputes. There are concerns that it can lead to bureaucratic delays and potential judicial-executive overreach.

**3. Inclusion of Non-Muslims in Waqf Boards-** Critics argue that the inclusion of non-muslims, undermines the integrity of these religious bodies. Non-muslim members may lack comprehensive understanding of the cultural and religious practices of Islam.

**4. Potential for Increased Disputes-** Removal of the waqf tribunal's authority and the assignment of this role to district collectors, could lead to increased disputes over Waqf properties. Critics argue that this could complicate the resolution process and expose properties to further legal challenges.

**5. Lack of Community Consultation-** The bill has been criticized for being drafted without adequate consultation with the Muslim community and stakeholders. Many organizations, including the All India Muslim Personal Law Board, have voiced their concern that the bill was created without their input.

#### What Should be the Way Forward?

**1.** Adequate Deliberations in the JPC- The government must try to address the concerns around the contentious provisions in the Waqf amendment Bill.

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**2. Broader Consultation-** The government should engage in extensive consultations with various stakeholders, including Muslim community leaders, legal experts, and civil society organizations.

**3. Public Awareness Campaigns-** Implementing public awareness campaigns about the Waqf system and the proposed changes can help dispel misconceptions and educate the community about their rights and **responsibilities under the new framework.** 

Read More- The Indian Express UPSC Syllabus- GS 2- Issues related to Constitution

#### [Kurukshetra July 2024 Summary-2] Lakhpati Didi Initiative- Significance and Challenges-Explained Pointwise

With the success of the Deendayal Antyodaya Yojana National Rural Livelihood Mission (DAY-NRLM) in mobilizing more than 10 crore households into 91 lakh Self-Help Groups (SHGs), the focus has shifted now to creating sustainable livelihoods for the members. Lakhpati Initiative stresses on the creation of different livelihood models across the farm and non-farm sectors for enhancing the household income in a manner that each household earns at least one lakh rupees in a year.



Source- Kurukshetra

Who is Lakhpati Didi? What is the strategy of Lakhpati Didi Initiative?



**Lakhpati Didi**- A Lakhpati Didi is a Self-Help Group member who earns an annual household income of Rupees One Lakh (Rs. 1,00,000) or more. This income is calculated for at least four agricultural seasons and/or business cycles, with an average monthly income exceeding Rupees Ten Thousand (Rs. 10,000), so that it is sustainable.

#### Strategy for Lakhapti Didi initiative

**1. Deepening, Strengthening and Expansion of Livelihood options-** Facilitating and enabling the households to take up diversified income-generating activities. Trained Community Resource Persons to facilitate the Livelihood Planning using a tool and uploading it to a digital platform for further consolidation and resource linkages.

**2. Implementation Support**- Adequate and timely support is facilitated to the SHG members/ Federations for Livelihood enhancement is provided in the form of-

- a. Assets (Input, equipment, infrastructure)
- b. Skills (Knowledge and practical skills)
- c. Access to Finance (Bank linkage, leveraging departmental schemes, Corporate Social Responsibility)

d. Marketing Support (Branding, Packaging, e-commerce etc.).

**3. Convergence and Partnerships-** Convergence with various schemes (Inter and Intra departmental) undertaken for mobilizing technical, and financial resources, and capacity building of SHG federations.

Convergence between the schemes of Ministry of Rural Development (MoRD), Ministry of Agriculture & Farmers' Welfare (MoA&FW), Department of Animal Husbandry and Dairying (DAHD), Ministry of Food Processing Industries (MoFPI).

**4. Training and Capacity Building-** Regular and structured capacity building and exposure of Mission staff, line department officials, community institutions, community cadre and resource persons is undertaken.

#### What is the Significance of Lakhpati Didi Initiative?

**1. Financial Empowerment of Women-** The program targets to create **3 crore Lakhpati Didis by 2025**. By helping women attain a sustainable income of at least Rs. **1 lakh per annum**, the initiative enables them to become financially independent and improve their standard of living.

**2. Promotion of Entrepreneurship and Employment-** The Lakhpati Didi initiative encourages women to start micro-enterprises and become self-reliant. This entrepreneurial skill will help in generation of additional employment. **For ex-** Lakhpati Didis starting tailoring business after acquiring the necessary skills.

**3. Role Models of Women Empowerment-** Lakhpati Didis serve as an inspiration to the women community to empower themselves. They inspire other women through their adoption of sustainable livelihood practices and achievement of a decent standard of life. They serve as conduits for crucial financial literacy, skill development, and livelihood assistance.

**4. Rural Economic Development-** The collective impact of empowered women entrepreneurs through Lakhpati Didi initiative contributes to the development of rural economy. **For ex-** Development of Kondagaon block of Chhattisgarh through the Lakhpati Didi intervention.

#### What are the Challenges in the Creation of Lakhpati Didis?

**1. Skill Development and Training Gaps-** Women in rural areas lack the **necessary skills and education**. This creates a challenge for the scaling up of programs like Lakhpati Didis which aim to utilize skills of rural women.



**2. Lack of Access to Financial Resources-** Rural women face barriers in accessing credit and financial services. The lack of tailored financial products for rural women hinders their ability to invest in and grow their businesses effectively.

**3. Inadequate Market Linkages-** Many women struggle to scale up their businesses due to inadequate market linkages. This limits their ability to sell their products and achieve sustainable income levels.

**4. Cultural and Social Barriers-** Women face resistance from their families or communities, in business operations. These barriers also hamper their engagement in the Lakhpati Didi initiatives.

**5. Poor Digital Infrastructure-** Poor digital infrastructure in rural areas such as **low** internet speed, latency and lack of adequate digital equipments create further challenges for the successful implementation of Lakhpati Didi Initiative.

	1. Governments has been promoting equal pay for equal work through the four		
	new labour codes.		
Economic	2. Government has established maternity leave and childcare policies through		
Empowerment	the Maternity Benefit (Amendment) Act 2017.		
	3. It has also provided access to finance and entrepreneurship training for		
	women, like the Mudra Yojana and the Mahila Udyam Nidhi Yojana.		
	1. Nari Shakti Vandana Adhiniyam(Women reservation Act)- Passed to provide		
	33% reservation for women in the Lok Sabha and state legislative assemblies.		
Political	2. 73rd and 74th amendment Act- Provided 33% reservation to women in local		
	bodies. Some states like Bihar have increased the women reservation in the		
Empowerment	local bodies to 50%.		
	3. Govt has been encouraging political parties to nominate more women		
	candidates and has been providing leadership training.		
	1. Government has focused on ending child marriage and safeguarded sexual and		
	reproductive health rights through The Prohibition of Child Marriage Act, 2006		
	and Medical Termination of Pregnancy Amendment Act of 2021.		
Social Empowerment	2. Government has been protecting women's land rights through Digital India		
	Land Records Modernisation Programme (DILRMP) and implementing gender-		
	responsive budgeting, which are crucial steps towards achieving gender		
	equality.		
What Should ha the way F			

#### What are the other Government initiatives for Women Empowerment?

What Should be the way Forward?

**1. Effective Monitoring and Evaluation-** Effective monitoring and evaluation mechanisms are necessary to assess the impact of the initiative and make necessary adjustments. Robust data collection and analysis should be employed to understand the initiative's effectiveness and identify areas for improvement.

**2. Skill Developing Training Programs-** The alignment of training program with market demands and equipping of women with practical, applicable skills is crucial for their success in micro-enterprises.

**3. Enhanced Market Access-** The initiative must focus on creating technology-driven solutions and ensuring adequacy of digital resources to enhance market access of Lakhpati Didis.

**4. Government and Institutional Collaboration-** Ensuring effective collaboration among various government departments, NGOs, and private sector players to create a holistic support system for women entrepreneurs.



Source- Kurukshetra Chapter 1 Read More- Lakhpati Didi Syllabus- GS 1- Issues related to Women

#### India's Paris Olympics Performance- Challenges and Way Forward

India's Paris Olympics Performance fell short of its last Tokyo Olympics performance. India failed to improve on its last Olympics medal haul of seven medals. India finished with six medals, with its ranking in the medals tally slipping from 48th place in 2021 to 71st place in 2024. For a nation of 1.4 billion, our return of one silver and 5 bronze is very mearge.

In this article, we will delve into India's performance at the Paris Olympics, the hits, and the misses. We will analyze the reasons behind India's underperformance at the biggest sporting spectacle at the globe. We will also delve into the measures that will make India a sporting powerhouse in the future.



Source- The Times of India

How was India's performance at the Paris Olympics 2024? What were the hits and misses?

**About the Paris Olympics-** The Summer Olympic Games 2024 branded as the Paris Olympics 2024, is an international multi-sport event that occurred from 24 July to 11 August 2024 in France. Paris was the host city of these games. The official motto of the olympics is- Games Wide Open. The games saw the participation of

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10,714 athletes, from 206 nations, in 329 events in 32 different sports. Paris 2024 featured the debut of breaking as an Olympic sport.

**Top Performing Nations-** The United States topped the medal table with 40 gold medals and 126 medals in total. China finished second, with 40 gold medals and 91 medals overall. Both USA and China were tied in terms of gold medals. This is also the first time that there has ever been a tie in gold medals at the top of the table in Summer Olympic history. Japan finished third with 20 gold medals and sixth in the overall medal count.

**India's Performance at the Paris Olympics-** India was placed at 71st position in the medals table. India's performance at the 2024 Paris Olympics was a mixed bag. India saw both successes and disappointments.

# INDIA AT GAMES OVER THE YEARS

Games	Gold	Silver	Bronze	Total
2008 Beijing	1	0	2	3
2012 London	0	2	4	6
2016 Rio	0	1	1	2
2020 Tokyo	1	2	4	7
2024 Paris	0	1	5	6

Source- The Times of India

#### Hits of India's performance

**1.** Back to Back Medal in athletics- Neeraj Chopra won a silver medal in the men's javelin throw. With this, he became the third Indian to claim two consecutive individual medals.

**2. Spirited performance in Shooting-** Shooters Manu Bhaker (25m sports pistol), Swapnil Kusale (50m rifle 3-position), and the mixed team pair of Sarabjot Singh and Manu Bhaker (10m air pistol) won bronze medals.

**3. Bankable Wrestling-** Wrestler Aman Sehrawat won a bronze medal. Wrestling has never disappointed Indian sports fan since 2008, with ensuring at least one medal at each Olympic's event.

**4. Rise of Indian Hockey-** The Indian men's hockey team secured a bronze medal. Indian hockey is on the rise again, with 2 back to back medals at the Olympics.

#### Misses in India's performance

**1. Lack of Gold Medal-** While the country matched its London 2012 tally, securing six medals (one silver and five bronze), the lack of a single gold medal was a major letdown. Pakistan, with a considerably smaller contingent side, finished with a gold medal and a higher standing at the points table.

**2. Disqualification of Vinesh Phogat-** The unexpected disqualification of Vinesh Phogat, after reaching the women's 50kg wrestling final, denied India a gold or silver medal.



**3. Six 4th Place Finishes-** Six 4th place finishes denied India six potential bronze medals. Shooters Arjun Babuta (10m air rifle) and the mixed team pair of Anantjeet Singh Naruka and Maheshwari Chauhan (skeet), the archery mixed team pair of Ankita Bhakat and B. Dhiraj, shuttler Lakshya Sen, and weightlifter Mirabai Chanu lost their respective bronze medal contests.

**4. Disappointed performances in badminton, boxing, and archery-** Boxers Nishant Dev and Lovlina Borgohain lost in the quarterfinals, just a step away from securing a medal. Badminton which has been delivering medals for India since 2012, drew a blank. Disappointment with archery continued at the Olympics.

#### What are the reasons behind India's underpar Paris Olympics performance?

**1. Mismanagement of Athletes-** There are issues of mismanagement and inadequate support provided to athletes. **For ex-** Vinesh Phogat's unexpected disqualification after reaching the finals, highlights systemic failures in athlete management.

**2. Lack of Consistency and Performance Pressure-** The six 4th place finishes highlight the lack of consistency and the attitude of succumbing to performance pressure. **For ex-** Several athletes had leads in their matches but failed to convert them into victories due to performance pressure and lack of adequate mental strengthening.

**3. Issues with sports federation-** Indian sports federations suffer from politicization, and systemic rot of favoritism and corruption. The reservation system in sports administration often lead to inefficiencies and the selection of less capable candidates. **For ex-** The mess of Indian sports federations are highlighted in the confusion of Phogat's weight category and Nikhat Zareen's lack of match-day training.

**4. Inadequate Infrastructure and Training Facilities-** Indian sports typically suffer from challenges such as insufficient access to high-quality coaching, training programs, and competitive exposure, as compared with other top sporting nations.

**5. Celebrity driven sports funding-** While the spending on elite athletes was generous, however it was celebrity-driven and without foresight. A lot of celebrity Indian Olympians failed to ensure accountability by failing to put in their season's best or personal best performances.

**6. Cultural and Systemic Barriers-** The cultural emphasis **on academic success over sports** has historically limited the pool of athletes pursuing sports as a career.

**7. Inconsistent Government Support-** Despite improvements in sports funding and support, the prioritization of sports education and infrastructure remains low compared to other pressing social issues. This lack of long-term investment in sports development hinders the growth of a robust sports culture in India.

#### What Government initiatives have been launched to improve India's performance at the Olympics?

	TOPS is a flagship initiative designed to provide comprehensive support to
Target Olympic Podium	elite athletes. It was launched in September 2014 and revamped in April 2018.
Scheme (TOPS)	The athletes receive monthly stipends of ₹50,000, along with funding for
	training camps, international competitions, and equipment.
Mission Olympic Cell	This dedicated body oversees the implementation of TOPS, regularly
(MOC)	evaluating athletes' progress and needs to provide necessary support
	It was introduced to promote sports at the grassroots level and to build a
Khelo India Scheme	strong foundation for sports in the country. Its key features include
	Infrastructure Development, Talent Identification, and coaching and training.



#### 1st AND 2nd WEEK AUGUST, 2024

#### **7 PM COMPILATION**

International Exposure and Training Camps	Athletes are <b>provided opportunities</b> for foreign training and competition. This
	is crucial for gaining experience and improving performance on the world
	stage.

What Should be the Way Forward to improve India's performance at the Olympics?

**1. Broad basing into other sports-** India should ensure of sending a larger pool of athletes at the olympics 2028, by broad-basing into swimming and athletics. The top athletes of badminton, weightlifting, wrestling, and boxing must keep up with their medal marks.

**2. Ending bureaucratic dominance and corruption-** Indian sports bodies and federations must be depoliticized. The establishment of professionalism in the operations of these bodies will help in identification of right talent, their grooming and success at the highest level.

**3. Mental conditioning-** India should not see the six fourth-place finishes as the speck of morning light that promises a sparkling dawn. These near-misses need to be minutely analyzed for meltdowns under pressure. More mental conditioning coaches need to be employed.

**4. Collaborative effort-** Indian sports needs to go into a huddle. The important stake-holders- federations, Sports Authority of India, Sports Ministry and other NGOs- need to pull in the same direction. Olympic medals need a process and persistence with top names, at least over a couple of cycles.

**5. Integration of Sports in the Curriculum-** Sports and physical education should be integrated into the school curriculum from an early age. As highlighted in the National Education Policy (NEP) 2020, sports should be seen as integral to experiential learning, promoting physical and psychological well-being.

**6. Establishment of a National Sports Education Board-** Creation of a National Sports Education Board (NASECA) would help standardize sports education across the country. This body can oversee the development and implementation of a national sports curriculum.

**7. Promotion of a Sports Culture-** Sports culture is significant to shift societal attitudes to view sports as a legitimate career path and not just a pastime. This can be instituted through community engagement, media campaigns, and school initiatives.

Read More- The Indian express UPSC Syllabus- GS 2- Govt intervention for development of various sectors

#### Horticulture Sector in India- Significance and Challenges- Explained Pointwise

Horticulture sector in India has been identified as a sunrise sector by the government of India. The recently launched **Clean Plant Programme** (CPP), by the government of India, aims to increase the yield and productivity of horticulture crops in India. The focus of the Indian diet, shifting from mere calorie security to a nutrition-secure mindset, has also led to the growth of horticultural sector in India.

However, despite the significance of the horticulture sector, there are key challenges in the realization of full potential of the sector. In this article, we will also look at the government initiatives for addressing these challenges.





Source- Indian express

#### What is Horticulture? What is the status of Horticulture sector in India?

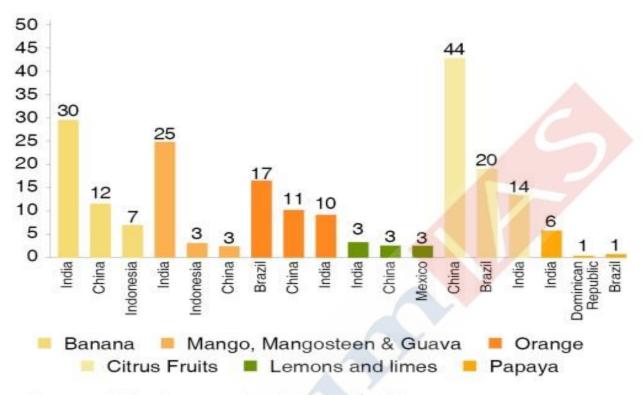
**Horticulture**- Horticulture is the art and science of cultivation of various fruits, vegetables, spices condiments, ornamental, plantation, medicinal and aromatic plants. It also involves the study of plant physiology, genetics, propagation, and the management of plants and their environment to maximize their growth and health.

**Branches of Horticultural activities-** Horticulture has various branches such as floriculture (science of growing flowers), olericulture (science of growing vegetables), pomology (science of growing fruits).

**Status of Horticulture in India-** The diverse agro-climatic conditions and rich diversity in crops and genetic resources enable India to produce a wide range of horticultural crops round the year. India produces a tropical fruit like mango and sub-tropical fruit like apple at the same season in a year.

a. **Second-Largest producer-** India is the second-largest producer of fruits and vegetables in the world after China. India ranks first in the production of number of crops like Banana, Lime & Lemon, Papaya, Okra.





### Figure 1: Leading producers of fruits

Source: FAO, figures of production in million tonnes

Source- FAO

b. **Contribution to agriculture GVA-** Indian horticulture sector contributes about 33% to the agriculture Gross Value Added (GVA) while using only 13.1% of the gross cropped area.

c. **Increase in area under cultivation and production-** From 2013-14 to 2023-24, the area under horticulture crops has risen from 24 million hectares to 28.63 million hectares. The production during the same period has increased from 277.4 million metric tonnes (MT) to 352 million metric tonnes (MT).

d. **Higher production and productivity than food grains-** The horticultural crops have higher production and productivity as compared to food grains.

e. **Major exporter and importer of fruits-** India is also a major importer and exporter of fresh fruits. In the financial year 2023-24, India exported fresh fruits worth \$1.15 billion, while it imported fruits worth \$2.73 billion.

#### What is the significance of Horticulture Sector in India?

**1. Farm produce diversification-** The adoption of horticulture promotes crop diversification which has multiple benefits such as soil conservation, promotion of resilient agriculture and organic farming. The horticultural crops like cashew, arecanut are cash rich crops, which also enhance farmer's income.

**2. Employment Generation-** The horticulture sector is labour intensive in nature and provides significant livelihood opportunities across various stages of production, processing, and marketing. According to research, one hectare of fruit production generates 860 man-days per annum, as against 143 man-days in cereal crops.



**3. Combatting malnutrition-** The increase in the production and consumption of fruits and vegetables helps in combatting the challenge of malnutrition and chronic hunger. **For ex-** Increased affordability of green leafy **vegetables** would help in combatting iron deficiency in women.

**4. Diversification of export basket-** Horticultural crops **diversifies export basket** and creates better opportunities for agriculture trade and expands markets for Indian produce.

**5. Growth of food processing industry-** The horticultural crops have high potential for value addition. They create forward and backward linkages and support the food processing industry. **For ex- Processing of plantation crops like tea, coffee; supports the growth of food processing industry.** 

**6. Resilience and better productivity-** The Horticulture crops need relatively less water than food crops and are more resilient to climate change.

**7. Push to Agri-Inputs Sector-** Increase in horticulture production also unlocks immense potential for the agri-inputs sector that comprises seeds, agrochemicals, and fertilisers.

#### What are the Challenges to the Growth of Horticultural sector in India?

**1. Pests and Diseases-** Horticultural crops in India are often destroyed due to pest, fungal infection and bacterial blights. **For ex-** Blight fungus destroying potato exports, bacterial blights affecting pomegranate orchards.

**2. Fragmented landholdings and low irrigation coverage-** These result in lack of economies of scale of production, leading to higher production costs and reduced price competitiveness.

**3. Staggering post harvest losses-** Horticulture sector in India witnesses high post-harvest losses with 30-35% of the fruits and vegetables perishing at various stages like harvesting, storage, grading, transport, packaging, and distribution. Only 2% of these crops are processed in to value added products.

**4. Lack of adequate infrastructure-** The horticulture sector in India lacks adequate post harvest and marketing infrastructure like Processing units, packaging and grading facilities, cold storage facility, refrigerated transport vehicles/ containers, storage and phytosanitary facilities.

**5. Dominance of Small scale low capacity food processing units-** The Indian horticultural crops processing units are dominated by small scale units with installed processing capacity of 50 tons to 250 tons a year. In comparison, the MNCs food processing capacity is 05 to 30 tons per hour. This results in low Indian export of horticultural produce as compared to other horticulturally rich countries like China, Brazil, USA, Italy, Spain, Mexico, Iran, Philippines, Turkey, and Thailand.

**6. Marketing and Export Barriers-** Small farmers lack scale for proper marketing of their produce. They rely on selling them in local haats or the arhatiyas. Further, these crops face tariffs and non-tariff barriers in the form of sanitary and phyto-sanitary measures.

#### What Government initiatives have been taken for Horticulture sector in India?

Mission for Integrated Development of Horticulture (MIDH)	It is a centrally Sponsored Scheme for the holistic growth of the horticulture sector. The scheme covers fruits, vegetables, root and tuber crops, mushrooms, spices, flowers, aromatic plants, coconut, cashew, and cocoa.
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Coordinated programme on Horticulture Assessment and MANagement using geoinformatics (CHAMAN)	This programme aims to develop and firm up scientific methodology for estimation of area and production under horticulture crops by using Remote Sensing and Sample Survey Techniques.	
Clean Plant Programme	CPP aims to enhance the quality of fruit crops across the nation by providing disease free mother plants of horticultural crops.	
Horticulture Cluster Development Programme	It is a central sector programme aimed at growing and developing identified horticulture clusters to make them globally competitive. It is implemented by the National Horticulture Board (NHB) of the Ministry of Agriculture and Farmers' Welfare.	
Operation Greens	Operation Greens has been launched on lines of operation flood, for holistic development of Tomatoes, Onions and Potatoes (TOPs)	
Mega Food Parks	Establishment of agriculture export zones and Mega food parks to increase processing facilities for horticulture crops.	

What should be the Way Forward?

**1. Improvement of seed varieties-** The focus must be on agronomic and genetic seed innovations to enhance shelf life and improve access to quality Fruits and Vegetable produce in the country. Development of High quality seeds can help in the extension of geographical footprint for cultivation.

**2. 1.0 Hectare Model of Integrated Farming-** This cluster-based, whole-farm approach includes multiple interventions such as solar-powered farming equipment, water conservation practices, diversified cropping integrated with livestock, village cluster creation for produce aggregation and exports. The adoption of this model can improve the horticulture potential of the country.

**3. Multi-stakeholder Partnerships-** Partnerships among farmers, government, customers, industry, and academia/research need to be strengthened to achieve the required growth in the horticulture sector in India. **For ex-** Use of Corporate Social Responsibility grants for horticultural research.

**4. Promoting Horticultural Export Growth through ODOP-** One District One product should be leveraged to scale up the horticultural produce and its processing. **For ex-** Production and processing of Litchi (Bihar), strawberries (Bundelkhand) and kiwis (Uttarakhand).

**5. Technological Advancements-** Digital and technology advancements and increased focus on bio-based and sustainable solutions can solve the challenges of horticulture value chains. **For ex-** Employment of artificial intelligence, machine learning, and Internet of Things in horticulture.

**Read More- The Indian express** 

UPSC Syllabus- GS Paper 3 Agriculture – Major crops-cropping patterns in various parts of the country; Food processing and related industries in India- scope' and significance, location, upstream and downstream requirements, supply chain management.

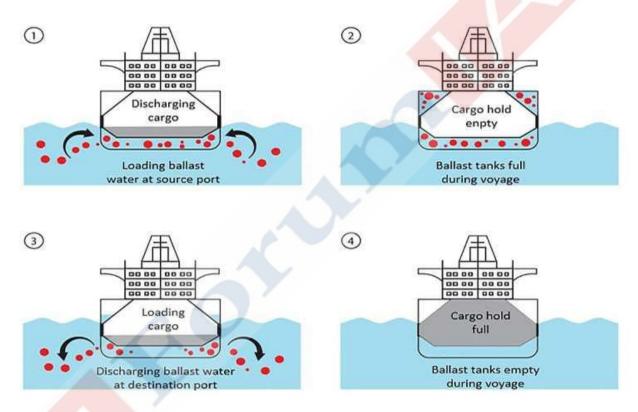


#### Ballast water Management in India- Significance and Challenges- Explained Pointwise

The ballast water management is in news recently after the case of Tamil Nadu Water Resources Department (WRD) demanding ₹160 crore from the Kamarajar Port in Ennore, Tamil Nadu, for inefficient ballast water management. Tamil Nadu WRD contends that inefficient ballast water management has led to the growth and proliferation of Mytella strigata, or charru mussel. This mussel harms marine ecosystems and hinders fisher boat movements, affecting their livelihood.

#### What is Ballast Water? What is the importance of Ballast Water?

**Ballast water-** Ballast water is the water that ships carry in their ballast tanks to maintain stability and maneuverability during voyages. This water can be either fresh or saltwater. Ships typically take on ballast water after unloading cargo and discharge it at the next port when they load more cargo.



Source- GMS Instrument

#### **Importance of Ballast Water-**

1. Stability- Addition of ballast water lowers the center of gravity of the ships, preventing them from capsizing.

**2. Maneuverability-** It enhances the ship's ability to navigate safely through different sea conditions, in particular rough sea conditions.

**3. Weight Adjustment-** It compensates for changes in cargo load, fuel consumption, and other weight variations during a voyage.

**4. Pass through bridges and other structures-** Ballast water is also used to add weight so that a ship sinks low enough in the water to pass under bridges and other structures.



#### What are the Challenges posed by Ballast Water?

**1. Introduction of Invasive Species-** Ballast water have been associated with introduction of invasive species, as they contain a wide range of aquatic organisms, including microorganisms, larvae, and small species. Invasive species outcompete with native species, disrupt ecosystems, and lead to declines in biodiversity. **For ex-** Scientists in India have recorded nearly 30 invasive species coming from ship ballast water, with Charru mussel being the most harmful.

**2. Ecological Disruption-** Invasive species introduced through ballast water disrupt ecosystems by altering food webs, and habitats. This disruption leads to decline in economically and ecologically important native species. **For ex-** Charru mussel has led to **ecological disruption** in the **Pulicat lake in Tamil Nadu**, and Ashtamudi lake in Kerala.

**3. Oceanic Pollution and Algal Blooms-** Ballast water contain pollutants such as oil, heavy metals, and chemicals. Discharging polluted ballast water often results in the release of these contaminants into aquatic ecosystems. These also cause Harmful algal blooms (HABs) which lead to fish kills, and shellfish contamination.

**4. Spread of Diseases-** Pathogenic microorganisms and diseases are transported through ballast water. The release of these pathogens pose risks to human health, wildlife, and aquatic organisms.

**5. Economic Impact-** The introduction of invasive species and water quality issues caused by ballast water pollution have economic consequences for industries such as fisheries, aquaculture, tourism, and water supply.

	The Ballast Water Management (BWM) Convention of the International	
	Maritime Organization (IMO) came into force in 2017 to help prevent the	
<b>Ballast Water Management</b>	spread of potentially harmful aquatic organisms and pathogens in ships'	
(BWM) Convention	ballast water. The ships must manage their ballast water so that aquatic	
	organisms and pathogens are removed or rendered harmless before the	
	ballast water is released in a new location.	
	Ships constructed after the implementation of Ballast water management	
New Ships with Ballast	Convention, have functional ballast water management systems. These	
water management	ships dose the ballast water with chemicals so that all the water is rendered	
systems	free of any biological organism before the water is pumped out during the	
	loading of cargo.	
	Ships built before the BWM convention that do not possess the Ballast	
<b>Old Ships following Ballast</b>	Water Management System are required to exchange the ballast water they	
Water Management System	took in a port with "neutral" water from the middle of the oceans en route	
	to the loading port.	
Strict Implementation in	Ships calling on Australian and New Zealand ports are subjected to rigorous	
Australia and New Zealand	checks, including of ballast water management systems.	

#### What steps have been taken for regulation of Ballast Water?

**India is not a signatory to BWM Convention-** Since India is not a signatory to the Ballistic Water Management convention, the discharge of ballast water brought in from other countries is not subject to checks or regulation.

#### What are the challenges in complying with ballast water management regulations?

**1. Ballast Water Management System (BWMS) Performance-** Many BWMS installations face operational issues, such as malfunctions, inefficiencies in treating ballast water, incorrect installation, inadequate maintenance, or failure to operate under optimal conditions (for ex- UV intensity or chemical dosage).



**2. System Compatibility-** Different ships have unique configurations and operational conditions. This makes it challenging to implement a **one-size-fits-all BWMS**.

**3. Maintenance Requirements-** BWMS requires regular maintenance and monitoring to function effectively. This process is time and resource intensive, which can impact shipping schedules and operational efficiency.

4. Monitoring and Reporting- Monitoring and reporting of compliance is often burdensome for ship operators.

#### What Should be the way Forward?

**1. Signing and ratification of BWM Convention-** India must sign and ratify the Ballast Water Management (BWM) convention at the earliest, for effective management of ballast water and getting rid of its detrimental environmental consequences.

**2. Comprehensive Training Programs-** Shipping companies should invest in robust training modules to ensure that crew members are proficient in operating and maintaining ballast water management systems effectively.

**3. Standardization of Regulations-** Efforts towards standardizing ballast water management regulations across different jurisdictions should be taken to reduce confusion among the ship operators and enhance compliance.

**4. Collaboration with Stakeholders-** Engagement with various stakeholders, including governments, industry experts, and environmental organizations, can foster innovation and the sharing of best practices in ballast water management.

Read More- The Hindu UPSC Syllabus- GS 2- International Conventions and Organisations, GS 3 Environment

