

Forum IAS

7 PM COMPILATION

1st and 2nd week February, 2026

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
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Union Budget 2026-2027

On the sacred occasion of Magha Purnima and the birth anniversary of Guru Ravidas, Finance Minister Nirmala Sitharaman presented the Budget for the year 2026-2027. This was her 9th consecutive budget. This is a **Yuva Shakti-driven Budget**.

Budget Basics:

- **Budget:** Budget is essentially a statement of anticipated receipts and expenditure. The annual budget covers all aspects of government finances, including revenue generation, expenditure allocations, and policy announcements.
- **Government Receipts:** The Government receipts are categorised into revenue and capital receipts.
- **Government Receipts for 2026-27:**
- **Government Expenditure:** The expenditure of the Government is also categorized into revenue and capital expenditure. The components of the expenditure are also shown below.
- **Government expenditure for 2026-27:**

MACRO-ECONOMIC HIGHLIGHTS OF THE BUDGET 2026-27:

1. **Total Receipts for FY 2026-27:** The total receipts for FY 2026-27 is estimated at Rs. 53.4 lakh crore.
2. **Total Expenditure for FY 2026-27:** The total expenditure in Budget Estimates (BE) 2026-27 is estimated at ₹53,47,315 crore of which total capital expenditure is ₹12,21,821 crore and effective capital expenditure is ₹17,14,523 crore.
3. **Fiscal Deficit:** The fiscal deficit is estimated at 4.3 per cent of GDP.
4. The Government has accepted the recommendation of the 16th Finance Commission to retain the vertical share of devolution at 41%. ₹1.4 lakh crore has been provided to the States for the FY 2026-27 as Finance Commission Grants, which include Rural and Urban Local Body and Disaster Management Grants.
5. The debt-to-GDP ratio is estimated to be 55.6 percent of GDP in BE 2026-27, compared to 56.1 percent of GDP in RE 2025-26.

Budget Highlights 2026-27-Part A:

- India's economic trajectory has been marked by stability, fiscal discipline, sustained growth and moderate inflation.
- India will continue to take confident steps towards Viksit Bharat, balancing ambition with inclusion. India will prefer action over ambivalence, reform over rhetoric and people over populism.
- **Steps taken by the Government to achieve 7% High Growth Rate:**
- **Government's Sankalp:** The budget reiterates Government's 'Sankalp' of its focus on poor, underprivileged and the disadvantaged. The Budget 2026-27 is inspired by **3 kartavya:**
 - **First Kartavya:** Accelerate and sustain economic growth, by enhancing productivity and competitiveness, and building resilience to volatile global dynamics.
 - **Second kartavya:** To fulfil aspirations of our people and build their capacity, making them strong partners in India's path to prosperity.
 - **Third kartavya:** To ensure that every family, community, region and sector has access to resources, amenities and opportunities for meaningful participation.

Kartavya-1- Area-1 Scaling up manufacturing in 7 strategic and frontier sectors:

1. **Biopharma SHAKTI** has been proposed with an outlay of ₹ 10,000 crores over the next 5 years, to develop India as a global Biopharma manufacturing hub. This will build the ecosystem for domestic production of biologics and biosimilars, for non-communicable diseases, like diabetes, cancer and autoimmune disorders:
 - a. Setting up **3 new National Institutes of Pharmaceutical Education and Research (NIPER)** and upgrading 7 existing ones.
 - b. Creation of a network of over **1000 accredited India Clinical Trials** sites.
2. **India Semiconductor Mission (ISM) 2.0** to be launched to produce equipment and materials, design full-stack Indian IP, and fortify supply chains, for expansion of India's semiconductor sector capabilities.
3. **The Electronics Components Manufacturing Scheme-** Outlay on the scheme to be increased to ₹40,000 crore.
4. **Establishment of dedicated Rare Earth Corridors** in the mineral-rich States of Odisha, Kerala, Andhra Pradesh and Tamil Nadu to promote mining, processing, research and Manufacturing.
5. **Scheme to support States in establishing 3 dedicated Chemical Parks** to enhance domestic chemical production and reduce import dependency.
6. **Building strong capital goods capability:**
 - a. **Hi-Tech Tool Rooms to be established by CPSEs at 2 locations** as digitally enabled automated service bureaus that locally design, test, and manufacture high-precision components at scale and at lower cost.
 - b. **Scheme for Enhancement of Construction and Infrastructure Equipment (CIE)** to be introduced to strengthen domestic manufacturing of high-value and technologically-advanced CIE.
 - c. **Scheme for Container Manufacturing** to create a globally competitive container manufacturing ecosystem, with a budgetary allocation of ₹10,000 crore over a 5 year period.
7. **Labour- Intensive Textile Sector:**
 - a. The **National Fibre Scheme** for self-reliance in natural fibres such as silk, wool and jute, man-made fibres, and new-age fibres.
 - b. **Textile Expansion and Employment Scheme** to modernise traditional clusters.
 - c. A **National Handloom and Handicraft programme** to integrate and strengthen existing schemes and ensure targeted support for weavers and artisans.
 - d. **Tex-Eco Initiative** to promote globally competitive and sustainable textiles and apparels.
 - e. **Samarth 2.0** to modernize and upgrade the textile skilling ecosystem.
 - f. Launch of **Mahatma Gandhi Gram Swaraj initiative** to strengthen khadi, handloom and handicrafts. This will help in global market linkage and branding.
 - g. **Dedicated initiative for sports goods** that will promote manufacturing, research and innovation in equipment design as well as material sciences.

Kartavya-1- Area-2 Rejuvenation of Legacy Industrial Clusters:

Scheme to revive 200 legacy industrial clusters to improve their cost competitiveness and efficiency through infrastructure and technology upgradation.

Kartavya-1- Area-3 Creating "Champion SMEs" and supporting micro enterprises Three-pronged approach to help the MSME's grow as "champions".

Kartavya-1- Area-4 Delivering a powerful push to Infrastructure:

- Continue to **focus on developing infrastructure in cities with over 5 lakh population** (Tier II and Tier III), which have expanded to become growth centres.
- **Public capex to be increased to ₹12.2 lakh crore**, to continue the infrastructure momentum.
- Setting up **Infrastructure Risk Guarantee Fund** to provide prudently calibrated partial credit

Second kartavya: To fulfil aspirations and build capacity	Second Kartavya- Area- Renewed emphasis on the Services Sector: To provide a pathway to fulfilling aspirations of a youthful India. The following measures are envisaged under the following pillars to achieve the second Kartavya.	
	Services Sector	High-Powered 'Education to Employment and Enterprise' Standing Committee to focus on the Services Sector as a core driver of Viksit Bharat. Committee to prioritise areas to optimise the potential for growth, employment and exports.
	Health Sector	Upgradation of existing institutions for Allied Health Professionals (AHPs) and establishment of new AHP Institutions in private and Government sectors, to cover 10 selected disciplines.
	Care Ecosystem	Building a strong Care Ecosystem , covering geriatric and allied care services. Training of 1.5 lakh caregivers , covering core care and allied skills, such as, wellness, yoga and operation of medical and assistive devices.
	Medical Value Tourism	Schemes to support States in establishing Five Hubs for Medical Value Tourism in partnership with the private sector.
	Animal Husbandry	Scale up availability of veterinary professionals by more than 20,000 . Loan-linked capital subsidy support scheme for establishment of veterinary and paravet colleges, veterinary hospitals, diagnostic laboratories and breeding facilities in the private sector.
	Orange Economy	Support to the Indian Institute of Creative Technologies, Mumbai in setting up AVGC Content Creator Labs in 15,000 secondary schools and 500 colleges.
	Design	Setting up of a new National Institute of Design through the challenge route in the eastern region of India .
Education	<ul style="list-style-type: none"> ● 5 University Townships in the vicinity of major industrial and logistic corridors. ● A girls' hostel in Higher Education STEM institutions in every district. ● Setting up or upgrading of four Telescope Infrastructure facilities. 	

	<p>Tourism</p> <ul style="list-style-type: none"> ● Setting up a National Institute of Hospitality as a bridge between academia, industry and the Government. ● Pilot scheme for upskilling 10,000 guides in 20 iconic tourist sites. ● National Destination Digital Knowledge Grid to digitally document all places of significance. To develop ecologically sustainable Mountain trails, Turtle Trails and Bird watching trails: <ol style="list-style-type: none"> 1. Mountain trails in Himachal Pradesh, Uttarakhand and Jammu and Kashmir; Araku Valley in the Eastern Ghats and Podhigai Malai in the Western Ghats. 2. Turtle Trails along key nesting sites in the coastal areas of Odisha, Karnataka and Kerala. 3. Bird watching trails along the Pulikat lake in Andhra Pradesh and Tamil Nadu. ● India to host the first ever Global Big Cat Summit. ● Development of 15 archeological sites (Lothal, Dholavira, Rakhigarhi, Adichanallur, Sarnath, Hastinapur, and Leh Palace) into vibrant, experiential cultural destinations. ● Development of Buddhist Circuits in the North East Region.
	<p>Sports</p> <p>Launch of Khelo India Mission for integrated talent development pathway, systematic coaching development, integration of science & technology and development of sports infrastructure.</p>

**Third
kartavya:
Sabka
Sath,
Sabka
Vikas
towards a
Viksit
Bharat**

Third Kartavya- Area 1: Increasing farmer incomes:

<p>Fisheries</p>	<ul style="list-style-type: none"> • Undertake initiatives for integrated development of 500 reservoirs and Amrit Sarovars. • Strengthen the fisheries value chain in coastal areas and enable market linkages.
<p>Animal Husbandry</p>	<p>Entrepreneurship development through:</p> <ol style="list-style-type: none"> 1. Credit-Linked Subsidy Programme 2. Scaling-up and modernisation of livestock enterprises 3. Enhanced creation of livestock, dairy and poultry-focused integrated-value chains 4. Creation of Livestock Farmer Producers Organisations
<p>High Value Agriculture</p>	<p>Support high value crops such as coconut, sandalwood, cocoa and cashew in our coastal areas. Support Agar trees in North East and nuts such as, almonds, walnuts and pine nuts in hilly regions.</p> <ol style="list-style-type: none"> 1. Coconut Promotion Scheme to increase production and enhance productivity of coconuts. 2. Enhance export competitiveness and transform Indian Cashew and Indian Cocoa into premium global brands by 2030. 3. Partner with State Governments to promote focused cultivation and post-harvest processing to restore the glory of the Indian Sandalwood ecosystem. 4. Rejuvenate old, low-yielding orchards and expand high-density cultivation of walnuts, almonds and pine nuts, through a dedicated programme to enhance farmer incomes.
<p>Bharat-VISTARR</p>	<p>A multilingual AI tool that shall integrate the AgriStack portals and the ICAR package on agricultural practices with AI systems.</p>
<p>SHE-Marts for Rural Women-led Enterprises</p>	<p>Community-owned retail outlets within the cluster level federations through enhanced and innovative financing instruments.</p>

Third Kartavya- Area 2-Empowering Divyangjan:

<p>Divyangjan Kaushal Yojana</p>	<p>Ensure dignified livelihood opportunities for divyangjans in IT, AVGC sectors, Hospitality and Food and Beverages sectors.</p>
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- **Ecosystem required for the achievement of the Sankalp:** This threefold approach requires a **supportive ecosystem**– *Sustaining the momentum of structural reforms, robust and resilient financial sector, and cutting-edge technologies, including AI applications.*

India's Reforms Express:

The Government has undertaken comprehensive economic reforms towards creating employment, boosting productivity and accelerating growth. Over 350 reforms have been rolled out. These include GST simplification, notification of Labour Codes, and rationalisation of mandatory Quality Control Orders.

Budget Tax Proposals- Part B:

Tax Reforms to Boost the Manufacturing Sector:

- Exemption from income tax for five years to non residents providing capital goods, equipment or tooling, to any toll manufacturer in a bonded zone.
- Provision of safe harbour to non-residents for component warehousing in a bonded warehouse.
- Deferred duty payment window to trusted manufacturers.
- Increase the limit for duty-free imports of specified inputs used for processing seafood products for export, from the current 1 per cent to 3 per cent of the FOB value of the previous year's export turnover.
- Duty-free imports of specified inputs extended to export of shoe uppers in addition to leather or synthetic footwear.
- Extension of time for the export of final product from the existing 6 months to 1 year, for exporters of leather or textile garments, leather and synthetic footwear.
- Exemption from basic customs duty on specified parts used in the manufacture of microwave ovens.
- Exemption from basic customs duty on components and parts used in aircraft manufacturing.
- Exemption from basic customs duty on raw materials imported for manufacture of aircraft parts used in maintenance, repair, or overhaul requirements defence units.
- Regular importers with trusted longstanding supply chains to be recognized in the risk system.
- Export cargo using electronic sealing to be provided through clearance from the factory premises to the ship.
- A special one-time measure to facilitate sale in domestic tariff area at concessional rate of duty by eligible manufacturing units of SEZs.

Tax Proposal for MSMEs- Removal of the current value cap of ₹10 lakh per consignment on courier exports.

Tax Reforms to boost Services Sector:

- Clubbing of services under a single category of information technology services with a common safe harbour margin of 15.5%.
- Safe harbour threshold for IT services increasing from ₹ 300 crore to ₹2,000 crore.
- Approval of safe harbour for IT services by an automated rule-driven process.
- Continuation of safe harbour for a period of five years at the company's choice.
- Fastracking unilateral APA process for IT services with an aim to conclude it within a period of two years. Can be extended by a further period of six months on the taxpayer's request.
- Extension of facility of modified returns for APA-availing entities to its associated entities.

- Provision of tax holidays until 2047 to foreign companies providing cloud services to global customers through India-based data centre services. Related Entities providing data center services from India to get a safe-harbour of 15% on cost.
- Exemption to global income of non-resident expert for a stay period of 5 years under notified schemes.

Tax Proposals for Financial Sector:

- Raising the STT on Futures from 0.02% to 0.05%.
- STT on options premium and exercise of options to be raised to 0.15% from rate of 0.1% and 0.125%, respectively.

Tax Proposals for Agriculture Sector:

- Fish catch by an Indian fishing vessel in Exclusive Economic Zone (EEZ) or on the High Seas to be made free of duty. Treating the landing of such fish on foreign port as export of goods.
- Deduction allowed to primary cooperative society engaged to include supply of cattle feed and cotton seed produced by members.
- Allowing inter-cooperative society dividend income as deduction under the new tax regime to the extent distributed to members.
- Exemption from tax dividend income received by a notified national co-operative federation from investments made in companies up to 31.1.2026 from tax for a period of three years. Exemption to be allowed only for dividends distributed to its member co-operatives.

Tax Proposals for Energy Sector:

- Exemption of BCD on import of sodium antimonate for use in manufacture of solar glass.
- Exemption of BCD on import of capital goods required for the processing of critical minerals in India.
- Extending exemption of BCD to capital goods used for the manufacture of Lithium-Ion Cells for batteries to be used in battery energy storage systems.
- Extension of the existing basic customs duty (BCD) exemption on imports of goods required for Nuclear Power Projects till the year 2035 and expand it for all nuclear plants irrespective of their capacity.
- Exclusion of entire value of biogas in Central Excise duty payable on biogas blended CNG.

Proposals for Trust Based Governance:

- Enhancement of duty-deferral period for Tier 2 and Tier 3 Authorised Economic Operators (AEO) from 15 to 30 days. Eligible manufacturer importers to get the same duty deferral facility. Government agencies will be encouraged to leverage AEO accreditation.
- Extension of validity period of advance ruling, binding on Customs, from 3 years to 5 years.
- Transformation of Customs warehousing framework into a warehouse operator centric system with self-declarations etc.
- The filing of Bill of entry by a trusted importer, and arrival of goods to automatically notify Customs.
- Regular importers with trusted longstanding supply chains will be recognized in the risk system, so that the need for verification of their cargo every time can be minimized.

Proposals for Ease of Doing Business and Ease of Living:

- Individual Persons Resident Outside India (PROIs) will be permitted to invest in equity instruments of listed Indian companies through the Portfolio Investment Scheme (PIS).
- Interest awarded by the motor accident claim tribunal to a natural person will be exempt from Income Tax, and any TDS on this account will be done away with.
- Reduce TCS rate on sale of overseas tour program package from 5% and 20% to 2% without any stipulation of amount.
- Reduce TCS for pursuing education and for medical purposes under the Liberalized Remittance Scheme (LRS) from 5% to 2%.
- TDS on Supply of manpower services to be at the rate of either 1% or 2%.
- Obtaining a lower or nil deduction certificate through rule-based automated process for small taxpayers.
- Enable depositories to accept Form 15G or Form 15H from taxpayers holding securities in multiple companies. Time available for revising returns extended from 31st December to up to 31st March with the payment of a nominal fee.
- Individuals with ITR 1 and ITR 2 returns will continue to file till 31st July and non-audit business cases or trusts are proposed to be allowed time till 31st August.
- TDS on the sale of immovable property by a non-resident to be deducted and deposited through resident buyer's PAN instead of TAN.
- Introducing a one-time 6-month foreign asset disclosure scheme below a certain size for small taxpayers.
- Allow taxpayers to update their returns even after reassessment proceedings have been initiated at an additional 10 percent tax rate over and above the rate applicable for the relevant year.
- Framework for immunity from penalty and prosecution in the cases of underreporting extended to misreporting.
- Non-production of books of account and documents and requirement of TDS payment is decriminalised.
- Immunity from prosecution with retrospective effect from 1.10.2024 for non-disclosure of non immovable foreign assets with aggregate value less than ₹ 20 lakh.
- Exemption from Minimum Alternate Tax (MAT) to all non-residents who pay tax on presumptive basis.
- Constitute a Joint Committee of Ministry of Corporate Affairs and Central Board of Direct Taxes for incorporating the requirements of Income Computation and Disclosure Standards (ICDS) in the Indian Accounting Standards (IndAS).
- Tax buyback for all types of shareholders as Capital Gains. However, promoters will pay an additional buyback tax.
- Set-off using available MAT credit to be allowed to an extent of 1/4th of the tax liability in the new regime.
- MAT is proposed to be made final tax.
- Exempt BCD on 17 drugs or medicines for cancer patients.
- Single and interconnected digital window for cargo clearance approvals.
- Customs Integrated System (CIS) to be rolled out in 2 years.
- Honest taxpayers willing to settle disputes will now be able close cases by paying an additional amount in lieu of penalty.

Wetland Conservation in India- Explained Pointwise

February 2 is celebrated annually as World Wetlands Day. The theme for 2026 is “Wetlands & traditional knowledge”. Wetlands, often referred to as the earth’s kidneys, are among the most productive ecosystems, providing critical ecosystem services such as water purification, flood control, and carbon sequestration. Globally, **wetlands cover 6% of the Earth’s land surface** and **support 40% of the world’s species**, as per the Ramsar Convention. However, since 1970, 35% of global wetland areas have been lost due to human activities like urbanization, agriculture, and pollution.

In India, wetlands are equally vital but face similar threats. The National Wetland Decadal Change Atlas (2017-18) reveals that **India has 27,403 wetlands, covering 18.4% of the country’s area**. Despite their ecological and economic significance, wetlands are disappearing at an alarming rate of 2-3% annually, with 50% of India’s wetlands already lost.

What is the present status of wetlands?

Global Scenario	Wetlands are declining at a rate of (-)0.78% annually, with 81% of inland wetland species and 36% of coastal species experiencing population declines since 1970, as per the Wetland Extent Trends (WET) index. Since 1900, 50% of global wetland area has been lost, with a decline of 35% between 1970 and 2015.
Indian Context	<ol style="list-style-type: none"> 1. India has 98 Ramsar sites (wetlands of international importance), covering 1.36 million hectares. However, this represents only a fraction of the total wetland area. 2. Wetlands cover 18.4% of India’s land area (excluding rivers); 70% of these are used for paddy cultivation. 3. The coastal wetlands span 6,750 sq. km, with “mangrove ecosystems” concentrated in Sundarbans, Andaman & Nicobar Islands, Odisha, and Gujarat. 4. Southern peninsular wetlands are largely man-made reservoirs, locally known as Yeris (tanks), essential for water storage and biodiversity conservation. 5. 50% of India’s wetlands have been lost due to encroachment, land-use change, and pollution. E.g. Pallikaranai Marsh and East Kolkata Wetlands have shrunk drastically due to urbanization. 6. The Wildlife Institute of India reports that 70-80% of freshwater marshes in the Gangetic floodplains have been lost in the last five decades. 7. Urban areas like Mumbai, Chennai, and Kolkata have lost 71%, 85%, and 36% of their wetlands, respectively, due to urbanization and pollution. 8. Indian mangrove areas have shrunk from 700,000 hectares in 1987 to 453,000 hectares in 1995, with only 4,000 sq. km remaining today, as per remote sensing data.

What is the significance of Wetlands?

- 1. Ecological Importance:** Wetlands are biological supermarkets, supporting a wide range of species, nutrient cycling, hydrological regulation and habitat heterogeneity. Also, it acts as carbon sinks, mitigating climate change by sequestering carbon. They also support biodiversity, **hosting 40% of the world's species**, as per the Ramsar Convention. **E.g.** the Sundarbans, a Ramsar site, is home to the endangered Bengal tiger and acts as a natural barrier against cyclones.
- 2. Economic Value:** Wetlands contribute significantly to livelihoods. The East Kolkata Wetlands treat wastewater and support fisheries, generating an estimated \$100 million annually.
- 3. Climate Resilience:** Wetlands act as carbon sinks, sequestering carbon and mitigating climate change. They also regulate floods and droughts, providing “**nature-based solutions**” for climate adaptation.
- 4. Cultural & Recreational Value:** Wetlands like **Chilika Lake, Loktak Lake, and Wular Lake** have spiritual, tourism, and aesthetic value.
- 5. Wetlands as Natural Disaster Buffers:** Economic Survey (2020-21) recognizes wetland conservation as a Nature-Based Solution (NbS). Mangrove forests reduce storm surge heights by up to 50% (World Bank, 2021).

What progress has been made so far in wetland conservation?

- 1. Policy Framework:** India is a signatory to the Ramsar Convention (1971) and has designated 85 Ramsar sites. The **Wetlands (Conservation and Management) Rules, 2017**, provide a legal framework for wetland conservation. The National Committee on Wetlands, Mangroves, and Coral Reefs has identified 93 wetlands for priority conservation.
- 2. Government Initiative:** National Plan for Conservation of Aquatic Ecosystems (NPCA), ₹900 crore allocated. **AMRUT 2.0 (2021)**, focus on “urban blue-green infrastructure” for wetlands. **Namami Gange Programme**, wetland rejuvenation along the Ganga River Basin.
- 3. Judicial Interventions:** The National Green Tribunal (NGT) and the Meghalaya High Court have emphasized the need for wetland conservation through suo motu PILs and directives.
- 4. Global Initiatives:** Ramsar **COP14 (2022) in Wuhan & Geneva** highlighted the need to link wetland conservation with global sustainability goals, including the SDGs, IPCC targets, and UN Decade on Ecosystem Restoration, Global Biodiversity Framework.

What are the Challenges in wetland conservation?

Wetlands are among the most threatened ecosystems because they sit at the intersection of land, water, & development.

- 1. Urbanization and Land Use Change:** Urban expansion has led to the loss of wetlands in cities like Mumbai and Chennai. The **National Wetland Decadal Change Atlas** shows a decline in natural wetlands due to infrastructure development.
- 2. Pollution:** Industrial effluents and untreated sewage have degraded wetlands like the Bellandur Lake in Bengaluru, which famously caught fire due to pollution. Growing pollution results in eutrophication of water bodies when untreated sewage, industrial effluents, agricultural runoff, and solid waste are pushed into wetlands. When a wetland becomes the dumping ground, its biodiversity collapses, along with its ability to buffer floods & purify water.
- 3. Climate Change:** Rising temperatures and erratic rainfall patterns threaten wetland ecosystems. For example, the Sundarbans face salinity intrusion due to sea-level rise.
- 4. Lack of Awareness and Governance:** Weak enforcement of conservation laws and limited public awareness hinder effective wetland management. State wetland authorities are often underfunded & understaffed.

5. **Biodiversity Decline:** 81% of inland wetland species populations have declined since 1970 (WWF, 2022).

What is the Way Forward?

1. **Integrated Management:** Adopt an ecosystem-based approach to wetland management, as advocated during the Ramsar COP14. Integrate wetland conservation into urban planning and development policies.
2. **Strengthening Legal Frameworks:** Amend the Wetlands (Conservation and Management) Rules, 2017, to include stricter penalties for violations. Ratify and implement global agreements like the ILO's Recommendation 204 on transitioning to sustainable ecosystems.
3. **Community Participation:** Engage local communities in wetland conservation through programs like Community-Based Resource Management (CBRM). Promote eco-tourism to generate livelihoods while conserving wetlands.
4. **Technological Interventions:** Use Geographic Information Systems (GIS) and remote sensing for real-time monitoring of wetlands. Develop blue-green infrastructure in urban areas to restore wetland ecosystems.
5. **International Best Practices:** Learn from the Netherlands' Room for the River Program, which integrates wetlands into flood management. Adopt China's Sponge Cities Initiative, which uses wetlands for urban water management.
6. **Financial Mechanisms:** Allocate funds for wetland conservation in the Union Budget and State Budgets. Leverage international funding mechanisms like the Green Climate Fund (GCF). Wetland Conservation Bonds to raise funds for restoration.
7. **Wastewater Treatment:** Treat the wastewater before it meets the wetlands. For urban & peri-urban wetlands, a key action is to ensure treated inflows. Wetlands cannot be substitute for sewage treatment plants.
8. **Coastal & Riparian Wetlands:** Make coastal & riparian wetlands central to disaster risk reduction. Planning authorities should treat them as risk buffers – worthy of investment as compared to 'grey infrastructure'.
9. **Build Skills & Institutions:** A national capacity mission for wetland managers with accredited training in hydrology, restoration ecology, GIS/remote sensing, environmental law & community-led governance.

Conclusion: Wetlands are not just ecological assets but are vital for “ecological, economic, and social security.” As the Ramsar Convention aptly states, “Wetlands are essential for a sustainable future.” The Meghalaya High Court's intervention and the Ramsar COP14's emphasis on integrating wetlands into global development agendas underscore the urgency of mainstreaming wetland conservation.

India must adopt a holistic approach, combining legal, technological, and community-driven strategies, to conserve its wetlands. As Mahatma Gandhi said, “The earth provides enough to satisfy every man's needs, but not every man's greed.” Let us strive to protect our wetlands, ensuring a sustainable future for generations to come.

Read more- [The Hindu](#)

UPSC Syllabus- GS 3- Conservation, environmental pollution and degradation, environmental impact assessment.

Death Penalty in India – Explained Pointwise

According to an annual statistics report on death penalties in India (Published by Square Circle Clinic – a criminal justice initiative at the NALSAR University) the SC has not confirmed a single death penalty in the past 3 years.

What are the findings of the Report?

- **Death Row Convicts:** India had 574 prisoners – 550 men & 24 women – on death row as of Dec 2025. The average time spent on death row before acquittal was over 5 years, with some prisoners languishing for nearly a decade before being exonerated.
- **Supreme Court Restraint:** The Supreme Court has not confirmed a **single death sentence** in the last three years (2023–2025). In 2025, it acquitted 10 death-row prisoners – the highest number of such acquittals in a single year in a decade – citing “wrongful convictions” and “procedural failures.”
- **Trial Court Enthusiasm:** Conversely, Sessions Courts awarded **128 death sentences** in 2025 alone. Nationwide, there are now **574 prisoners on death row** (the highest since 2016), with Uttar Pradesh, Gujarat, and Maharashtra holding the largest populations. The Session Courts have handed down 1310 death sentences nationwide between 2016-2025.
- **The Confirmation Gap:** High Courts confirm only about **8%** of the death sentences handed down by lower courts, with the rest being commuted to life imprisonment or resulting in acquittals. The Supreme Court’s stance has been even more restrictive, with no death sentence confirmed in the past 3 years.
- **Procedural Violation at Sentencing Stage:** Despite clear guidelines laid down by SC in *Manoj vs. State of Punjab Case*, which mandated psychological evaluations, prison conduct reports, and mitigation hearings – nearly 95% of death sentences in 2025 were imposed without compliance. Source: The Hindu

What is the Judicial view on Death Penalty?

- ***Jagmohan Singh v. State of UP (1973)*:** First upheld the constitutionality of the death penalty.
- ***Ediga Anamma v. the State of Andhra Pradesh, (1974)*:** The Supreme Court (SC) laid down the principle that life imprisonment for the offence of murder is the rule and **capital punishment is the exception in certain cases**. The Court also stated that a special reason should be given if a court decides to impose a death sentence.
- ***Bachan Singh v. the State Of Punjab, (1980)*:** The SC stated that the death penalty should be awarded only in ‘**rarest of rare**’ cases. A case becomes rarest of rare when there is **extreme culpability of the offender** in committing the offence of murder; and an extreme cause of the offender in committing the offence of murder. The Supreme Court stated that it should be issued only when the alternative of a life sentence is ‘unquestionably foreclosed’. The death penalty should be awarded after seeing the **aggravating and mitigating factors** and balance of the same.
- ***Manoj vs. State of Madhya Pradesh (2022)*,** the Court mandated that trial courts must conduct a thorough study of the convict’s background – including psychological evaluations and prison conduct reports – before deciding on a death sentence.

What are arguments in favour of Death Penalty?

- 1. Maintaining Deterrence:** The foremost argument given in support is the level of deterrence maintained in society by awarding death penalty. Many people believe that a person may restrain himself from committing a heinous crime like murder if death penalty is awarded for it.
- 2. National Security:** Some acts like waging war against the State, terrorism etc erodes the sanctity of our National Security framework. Such acts threaten the very existence of the country and its people. For instance, Ajmal Kasab was awarded the death sentence for carrying out 26/11 Mumbai attacks.
- 3. Acts that shake the collective conscience:** Supporters of Death Penalty says that there are some acts which shakes the collective conscience of society and deserves nothing except death penalty. For instance, The *Vinay Sharma v. the Union of India* (2020) case, also famously known as the Nirbhaya gang-rape case, had shocked the conscience of the whole country. One of the accused committed suicide in jail and one of the accused was a juvenile so he was not sentenced to death. But the other four accused were sentenced to death and were also hanged in the year 2020.
- 4. Safety of Citizens:** Proponents of capital punishment argue that some criminals commit most terrible of crimes and are beyond redemption (e.g., some accused of multiple rape cases). They show no remorse or repentance. There is no change of reform and should be awarded death sentence for safety of citizens.
- 5. Closure and Justice for Victims' Families:** For some families of victims, the execution of the perpetrator provides a definitive sense of closure and finality that life imprisonment may not. It can represent the conclusion of a long and painful legal process and a final affirmation that the justice system has taken the ultimate action on their behalf.
- 6. Preventing Vigilantism:** If the law does not provide a punishment that the public deems "sufficient" for a horrific crime, there is a risk that citizens might take the law into their own hands.

What are the arguments in favour of abolition of Death Penalty?

- 1. High Degree of Subjectivity:** There is a high degree of subjectivity in awarding death sentences as the judges find it difficult to balance the mitigating and aggravating factors.
- 2. Socio-Economic Bias:** The death sentence is frequently used disproportionately on the poor, minorities, and members of racial, ethnic, political, and religious communities. According to the Death Penalty India Report 2016 (DPIR), approximately **75% of all convicts sentenced to death in India are from socio-economically underprivileged categories**, such as Dalits, OBCs, and religious minorities.
- 3. Risk of Irreversible Error:** Courts often give compensation to individuals who are wrongly convicted and have spent considerable time in jail due to an error by the State. However, if a person is wrongly hanged, then no amount of compensation can bring back the person and mitigate the error. Various studies (such as the *Death Penalty India Report*) have shown that trial courts frequently award death sentences based on flawed investigations or coerced confessions, only for these sentences to be overturned years later by the Supreme Court.
- 4. Inhumane:** Human rights and dignity are incompatible with the death penalty. The death sentence is a violation of the right to life, which is the most fundamental of all human rights.
- 5. Capacity for Change:** People in support of abolition of death penalty argue that every human has the potential for reform. Executing a prisoner eliminates the possibility of them ever making amends or contributing positively to society. Modern penology has shifted from **Retribution** (revenge) to **Reformation** (rehabilitation).
- 6. Mental Stress:** In many cases the convicts have to undergo a huge term of imprisonment before being finally executed. The findings of Project 39A's report 'Deathworthy' shows that the segregated, alienated and stigmatized experiences of being on a death row for a longer time result in mental illness.

- 7. Misuse:** The death penalty can be used as a tool for political repression, to silence dissent, or target vulnerable groups (e.g., in authoritarian regimes).
- 8. Global Precedent – No correlation with low crime rates:** Scandinavian countries like Norway, Sweden and Finland have one of the lowest crime rates in the world without death penalty. They focus on reforming the criminal rather than deterring him with stricter and harsh punishments. As of 2026, over 140 countries have abolished the death penalty in law or practice, making retentionist countries like India part of a shrinking minority.

Source: *The Guardian*

What should be the way forward?

- 1. Institutionalizing “Life without Remission”:** The judiciary is increasingly viewing “**Life Imprisonment for the remainder of natural life**” as the standard alternative to execution. This satisfies the need for **Retribution** (the prisoner never leaves jail) while avoiding the moral and legal risks of **Execution** (irreversibility).
- 2. Self-Executing Commutation:** Legal experts suggest a “time-bound” rule: if a mercy petition is not decided by the President/Governor within a specific timeframe (e.g., 2–3 years), the sentence should automatically be commuted to life imprisonment.
- 3. Balancing Aggravating & Mitigating Factors:** The SC should release updated guidelines on how to balance the aggravating and mitigating factors in cases. This will help in reducing subjectivity in awarding death penalty and reduce the instances of unnecessary award of death sentence.
- 4. Certainty of Punishment:** The focus should be on ensuring certainty of punishment rather than quantum of punishment that will act as a better deterrent for criminals. Experts argue that the **certainty** of being caught and punished is a much stronger deterrent than the **severity** of the punishment itself.
- 5. The Ultimate Step:** The long-term solution is for Parliament to follow the 262nd Law Commission Report and abolish the death penalty for all crimes except terrorism (**262nd Law Commission Report (2015)** recommended the abolition of the death penalty for all crimes except terrorism-related offenses and waging war against the state).

Conclusion:

The Law Commission in its 262nd report proposed that the death penalty should be abolished for all crimes excluding terrorism-related offences and war. The experience of the Scandinavian countries also supports this view.

UPSC GS-2: Polity
Read More: [The Hindu](#)

16th Finance Commission Recommendations – Explained Pointwise

The Finance Commission (FC) is a Constitutional body constituted by the President every five years to make recommendations on centre-state fiscal relations. The Report of the 16th Finance Commission (Chairman: Dr. Arvind Panagariya) was tabled in Parliament on February 1, 2026 for the five-year period between 2026-27 and 2030-31.

What are some of the key recommendations of the Finance Commission?

1. **Vertical Devolution:** The share of states in the divisible pool of central taxes has been recommended at 41%. This is same as the share recommended by the 15th Finance Commission.
2. **Horizontal Devolution:** To provide for the distribution of central taxes among states, Finance Commissions define a formula with weightage for certain parameters – which include:
 - **Income distance**
 - **Population (2011)**
 - **Demographic performance**
 - **Area**
 - **Forest**
 - **Contribution to GDP** = The 16th FC has introduced this parameter to account for the contribution to national GDP. This replaces the **Tax and Fiscal Efforts** parameter used by the 15th FC which rewarded states with a higher tax collection efficiency.
3. **Grants-in-Aid:**
 - The 16th FC has recommended grants worth Rs 9.47 lakh crore over the five-year period. These comprise grants for:
 - a. Urban & Rural Local Bodies
 - b. Disaster Management
 - The 16th FC has discontinued the following grants recommended by the 15th FC:
 - a. Revenue Deficit Grants
 - b. Sector-specific Grants
 - c. State-specific Grants
4. **Grants for Local Bodies:**
 - The 16th FC has recommended grants worth Rs 4.4 lakh crore and Rs 3.6 lakh crore for rural and urban local bodies, respectively.
 - These grants are divided into **basic (80%)** and **performance-based (20%)** components:
 - a. **Basic grants:** 50% of the basic grant will be untied and the rest 50% will be tied to:
 - (i) sanitation and solid waste management, and/or
 - (ii) water management.
 - b. **Performance grants:** These grants for local bodies are further divided into state performance grants and local body performance grants. **State performance grants** will be made available upon meeting a minimum benchmark for transfers to local bodies from their own resources. **Local body performance grants** are linked to achievement of minimum targets specified by the Commission for own source revenue growth.
 - Special Infrastructure Grants and Urbanisation Premium Grants have also been recommended for urban local bodies.
 - All local body grants will be made available upon fulfilment of three entry-level criteria:
 - a. Constitution of the local bodies as per the Constitution.
 - b. Publication of provisional and audited accounts of the local bodies in the public domain.
 - c. Timely constitution of the State Finance Commission.
5. **Disaster Management Grants:**
 - The Commission has recommended disaster management corpus of Rs 2,04,401 crore for State Disaster Relief and Management Funds (SDRF and SDMF).
 - The cost-sharing pattern between the centre and states is recommended to be: (i) 90:10 for north-eastern and Himalayan states, and (ii) 75:25 for all other states.

6. Fiscal roadmap:

- The Commission has recommended that the Centre should bring down fiscal deficit to **3.5% of GDP** by 2030-31. It recommended the annual fiscal deficit limit for states to be 3% of GSDP.
- It also recommended strictly discontinuing the practice of **off-budget borrowings** for states and bringing all such borrowings onto their budgets. The definition of fiscal deficit and debt should be expanded to uniformly include all off-budget borrowings.

7. Power-sector Reforms:

- The Commission recommended that states should actively pursue privatisation of electricity distribution companies (DISCOMs). To shield the private investor from debt burden after discom takeover, a special purpose vehicle may be created to warehouse the debt.
- Pre-payment or eventual repayment of this debt may be allowed using the funds from the Special Assistance Scheme for Capital Investment. It also recommended that states should be allowed to utilise this assistance only after the privatisation process is complete.

8. Subsidy Expenditure:

- The Commission recommended states to review and rationalise their subsidy expenditure. It noted that schemes providing unconditional cash transfers tend to have large and untargeted beneficiaries.
- It recommended setting clear exclusion criteria and a rigorous review process to ensure effective targeting. In addition, it recommended discontinuing financing of subsidies through off budget borrowings.

9. Public Sector Enterprise (PSE) Reforms:

- The Commission recommended a review and closure of 308 inactive State Public Sector Enterprises (SPSEs). It recommended formulation of a state-level PSEs disinvestment policy to target inactive and underperforming SPSEs.
- State or union PSEs, which incur losses for three out of four consecutive years, should be placed for the respective Cabinet's consideration. The Cabinet may decide closure, privatisation, or continuation depending on the strategic importance of the enterprise.

What are the positive aspects of the 16th Finance Commission's recommendations?

- 1. Rewarding Economic Performance (The GDP Parameter):** By replacing the narrow "Tax and Fiscal Effort" metric with "Contribution to GDP", the 16th FC rewards states that drive national economic growth. This addresses long-standing grievances from industrialized states (like Karnataka, Tamil Nadu, and Maharashtra) that felt penalized for their economic success under previous formulas.
- 2. Strategic Urbanisation Focus:** The 16th FC acknowledged that India's future growth lies in its cities, introducing two innovative grants:
 - a. Urbanization Premium:** A one-time incentive for states to merge "peri-urban" (semi-urban) villages into larger Urban Local Bodies (ULBs). This encourages planned urban expansion rather than chaotic sprawl.
 - b. Special Infrastructure Component:** Dedicated funding for wastewater management in mid-sized cities (population 10–40 lakh) which often lack the financial muscle of mega-metros.
- 3. Enforcing Fiscal Discipline:**
 - a. End of Off-Budget Borrowings:** 16th FC called for a strict discontinuation of off-budget borrowings, requiring all such liabilities to be disclosed in the main budget. This provides a truer picture of public debt.

- b. Rationalizing Subsidies:** It advised states to move away from “unconditional cash transfers” and implement clear exclusion criteria, ensuring welfare spending reaches the most vulnerable rather than becoming a general populist tool.
- 4. Empowerment of Local Bodies:** While the 15th FC started the trend, the 16th FC has solidified the push for grassroots accountability by recommending Performance-linked grants. In fact, to even access basic grants, states must ensure timely constitution of State Finance Commissions and the public disclosure of audited accounts for all panchayats and municipalities.
- 5. Transparency in “Net Proceeds”:** The commission recommended that the Centre annually disclose tax data as certified by the CAG to ensure states have full visibility into the “divisible pool.”

What are the criticisms against the recommendations of 16th finance commission?

- 1. Vertical Devolution Stagnation:** A major point of contention is the decision to retain the states’ share at 41%. 18 out of 28 states had formally requested an increase to 50%. 41% is insufficient given that states now bear the majority of “ground-level” expenditure responsibilities in health, education, and social welfare, while their power to raise independent revenue has been curtailed post-GST.
- 2. The “Cess & Surcharge” Loophole:** The commission has been criticized for not addressing the growing “leakage” of the divisible pool through cesses and surcharges. Cess & surcharge are collected by the Centre but are not shared with states. Between 2013-2019, for every Rs100 collected by the Centre, about Rs 93-95 was collected as taxes & duties that form the divisible pool & the remaining Rs 5-7 was collected as cess & surcharge. For 2025-26, the Centre is expected to collect Rs 89 as taxes & duties & Rs 11 as cesses & surcharges.
- 3. Impact on Poorer States:** States like Bihar and Uttar Pradesh have seen a marginal decline in their share because to accommodate the GDP parameter, the weight of “Income Distance” was reduced from 45% to 42.5%. Critics argue that this parameter benefits already industrialized states (the “richer” states), potentially widening the developmental gap and violating the principle of “Economic Convergence.”
- 4. Discontinuation of Revenue Deficit Grants:** Complete scrapping of RDGs will impact the Hill & Special Category States like NE States, Himachal Pradesh, Uttarakhand etc. Revenue deficit of these states is due to lack of favourable geography & industrialization. Removing these grants without a transition plan could cripple their public services.
- 5. “Freebie” Criticism:** The commission’s warning against “unconditional cash transfers” (like *Majhi Ladki Bahin* or *Gruha Lakshmi*) is viewed as an ideological intervention into state welfare politics.
- 6. Power Sector Privatization:** Linking capital assistance to the privatization of DISCOMs is criticized as a “one-size-fits-all” approach that ignores the specific political and social realities of different states.

Read More: [PRS India](#), [The Hindu](#)

UPSC GS-2: Polity

DISCOM sector in India – Challenges & solutions – Explained Pointwise

Power distribution companies (DISCOMs) in India have recently shown an improvement in their performance – recording a positive turnaround marked by reduced AT&C losses, a narrowed ACS-ARR gap & improved financial discipline. However, still many utilities continue to rely on tariff subsidies & loss takeover by the state governments – underscoring the scope for further improvement.

Introduction:

- Power generation, transmission, and distribution are the three main processes involved in the power sector.
- Distribution is done by the Distribution Companies (DISCOMs) which connect power producers to the households. They are the interface between utilities and the consumers. There are total 72 DISCOMs in India (44 State-owned, 16 Private sector entities & 12 Power department).
- Under the Indian Constitution, power is a concurrent subject and the responsibility for distribution and supply of power to rural and urban consumers rests with the states. Hence, DISCOMs are predominantly owned by the state governments.
- Private DISCOMs are also operational in India but are limited to a few cities like Delhi and Mumbai.
- Government of India provides assistance to states through various Central Sector / centrally sponsored schemes for improving the distribution sector. Since many years, most power distribution companies in India are incurring losses every year. Due to these accumulated losses and various other reasons the condition of DISCOMs in India is quite fragile.

What are the challenges being faced by the DISCOMs in India?

1. High AT&C losses:

- The precarious financial position of DISCOMs is due to the **high level of aggregate technical and commercial (AT&C) losses**, the levy of **inadequate or lesser tariffs** when compared to the cost of power supply, and **insufficient subsidy support from state governments**.
- Their annual losses are estimated to be around 45,000 to 50,000 crore and the overall debt is around 6 lakh crore.
- The figure for AT&C loss in India, as per Min. of Power, was **18-19%** in 2019. In countries such as UK and US, it is about **6-7%**. However, in recent times, there has been an improvement as AT&C losses have been reduced to 15%.

Note: AT&C loss reflects the loss due to energy loss during transmission and distribution (technical reasons), theft, and inefficiency in billing and commercial loss such as inefficiency in collection, and default in payment.

2. Determination of tariffs: One major factor impacting the health of DISCOMs is the determination of the tariffs. There are frequent delays in the tariff determination process.

3. Poor financial health (**High ACS-ACR Gap**):

- Power distribution companies collect payments from consumers against their energy supplies (purchased from generators) to provide necessary cash flows to the generation and transmission sectors to operate.
- Due to the perennial cash collection shortfall, often due to payment delays from consumers, Discoms are unable to make timely payments for their energy purchases from the generators. This overhang limits their ability to pay on time, forcing them to run up operational debt to electricity suppliers and transmission firms.
- Further, this gap/shortfall is met by borrowings (debt), government subsidies, and possibly, through reduced expenditure. This increases the Discoms' cost of borrowing (interest), which is inevitably borne by the consumer.

Average Cost of Supply (ACS) = The expense incurred by a DISCOM to deliver a unit of electricity to consumers.

Annual Revenue Requirement (ARR) = The revenue collected by the DISCOM as consumer tariffs and subsidy payments from the government.

4. **Lack of metering:** Minimizing the AT&C losses is critical to improve the operational efficiency of Discoms. However, even 10 years after UDAY was launched, various levels in the distribution chain (the feeder, the distribution transformer (DT) and the consumer) have not been fully metered. As a result, it is difficult to isolate and identify loss-making areas and take corrective action.
5. **Decrease in revenue generation owing to the Pandemic:** Revenue from industrial and commercial users is used to cross-subsidize other consumers. However, owing to the Pandemic the demands from industrial and commercial users is falling. This has led to stress on discom finances.
6. **Absence of political consensus at the state level to raise tariffs:** Many states report losses as they could not eliminate the gap between power costs and revenue.
7. **Emergence of alternative sources of energy and resultant decline in cross-subsidy tariff:** DISCOMs were able to charge higher tariffs from commercial and industrial consumers to cross-subsidize agricultural and low-income households. However, high-tariff paying consumers are migrating to alternative sources of energy like solar. This is happening due to two reasons: an increase in funding at national and global level towards cleaner options and secondly, the average cost per unit for commercial and industrial consumers has dropped considerably. This reduced reliance of high tariff paying consumers on DISCOMs will only worsen their already weak financial position.

What are the implications of a weak DISCOM sector in India?

A fragile state of DISCOMs in India will lead to various other problems:

1. **Difficulty in achieving the new climate targets:** India will struggle to meet its bold target of raising non-fossil-fuel generation capacity—including hydroelectric and nuclear power—to 500 gigawatts by 2030, up from roughly 150 gigawatts now. At COP26 meeting, India had recently committed to use non-fossil-fuel sources for half of its energy needs by 2030.
2. **Payment Delays:** Financially stressed DISCOMs often delay payments to renewable energy (RE) developers. This increases the risk profile of RE projects, making it harder for developers to secure low-cost financing.
3. **PPA Reluctance:** Many DISCOMs are locked into expensive, long-term **Power Purchase Agreements (PPAs)** with old coal plants and are hesitant to sign new agreements for greener power, even if it is cheaper.
4. **Bailout Cycles:** Historically, states have had to take over DISCOM debt (like under the UDAY scheme). As of late 2025, outstanding DISCOM debt was approximately **₹7.26 lakh crore**, forcing states to divert funds from healthcare, education, and infrastructure.
5. **Poor Service Quality & Vicious Cycle:** Financial weakness leads directly to operational failure as DISCOMs often resort to load-shedding (power cuts) to avoid buying expensive power during peak hours.

What key initiative have been taken by the Govt to address the DISCOM problem?

Various steps have been taken by the govt to resolve the problems being faced by the DISCOMs:

1. **UDAY Scheme:** Launched in November 2015, the Ujjwal DISCOM Assurance Yojana (UDAY) was designed to turn around the financial position of state distribution companies (DISCOMs). The state

governments took over 75 % of the debt of their DISCOMs, issuing lower-interest bonds to service the rest of the debt. In return, DISCOMs were given target dates (2017-19) to meet efficiency parameters like reduction in power lost through transmission, theft and faulty metering. The scheme was not successful in fulfilling its objective.

2. **Reforms-Linked, Result-Based Scheme for Distribution (RLRBSD):** In budget 2021-22, the Union government had announced the launch of a “reforms-based and results-linked” scheme for improving the financial health and operational efficiency of discoms. Under the scheme, AT&C losses will be brought down to 12-15% by 2025-26, from 21-22%. Operational efficiencies of discoms will be improved through smart metering and upgradation of the distribution infrastructure, including the segregation of agriculture feeders and strengthening the system.
3. **Smart Metering Revolution:** By late 2025, over **5.28 crore smart meters** have been installed across India. These help in real-time billing, reducing theft, and enabling “prepaid” models that ensure DISCOMs get paid upfront.
4. **Electricity (Amendment) Bill:**
 - **Cost-Reflective Tariffs:** It mandates that tariffs must cover the actual cost of supplying power, reducing the “ACS-ARR gap”.
 - **Promoting Competition:** The bill proposes allowing multiple DISCOMs to operate in the same area using a **shared network**, effectively giving consumers the choice to switch providers—much like choosing a mobile network.
 - **Reducing Cross-Subsidies:** A plan to phase out the practice of charging industries more to subsidize domestic users over a five-year period.

What is the way forward?

1. **DISCOM Restructuring:** Only 10% of India’s population is served by private distribution licensees. Hence, **good Corporate Governance and higher private participation in distribution** hold out the possibility of greater efficiency.
2. **Regulatory Reforms:** The state governments should promote **autonomy, competence and transparency** of the State Electricity Regulatory Commission (SERC). Depoliticisation of DISCOMs is a must.
3. **Operational Reforms:** The overall AT&C loss figure in India is high. Many discoms need to improve their billing efficiency through better and smart metering.
4. **Renewable Energy Integration Reforms:** DISCOMs need to prepare to accommodate an increasing amount of renewable energy (RE), from generators as well as prosumers.
5. **Managerial Reforms:** Effective reforms such as easily accessible call centres, convenient bill payment facilities can help reduce customer dissatisfaction and increase revenue. Moreover, Performance incentives can also help align discom employees to the interests of the organisation.
6. **Increase share of solar power in power mix:** While errant billing and collection, the other aspect of high cost can be partially solved by renewable power, especially solar. **A low-cost robust solar panel manufacturing industry** in India will lead to lower cost of power for DISCOMs. As the share of solar power increases, the cost for DISCOMs will come down.
7. **Privatisation of DISCOMs:** It is an experiment that has yielded positive results in many cities, including Delhi, Mumbai, Kolkata and Ahmedabad. Before it was privatised in 2002, AT&C losses in the national capital were at a high 53% and the government was subsidising discoms to the extent of Rs 12,000 crore every year. After privatisation losses came down, and today Delhi has one of the lowest AT&C losses among DISCOMs in the country at just 8 per cent.

Read More: [The Hindu](#)

UPSC GS-3: Economics (Electricity)

Deep Tech Startups – Significance & Challenges – Explained Pointwise

The Department for Promotion of Industry and Internal Trade (DPIIT) has introduced a dedicated “**Deep Tech Startup**” category with significantly relaxed eligibility to account for long development cycles. DPIIT has released a gazette notification in which it has provided an official definition a ‘deep tech’ startup in India. In this article we delve about deep tech startups, its significance, the challenges they are facing in India, the initiatives taken by the government for their growth & what could be the way forward.

What are Deep tech Startups?

- Deep tech startups, according to DPIIT, is one that primarily concerned with producing a solution based on new knowledge/advancements in a scientific or engineering discipline. It must spend most of its money on R&D activities; owns or is in the process of creating significant novel IP & taking steps to commercialize the same; faces extended development timelines; long gestation periods, high capital & infrastructure requirements, and carries large technical or scientific uncertainty.
- Deep tech startups refer to startups based on high technology fields like Artificial intelligence, Deep learning, Robotics, Semiconductors, Biotechnology, Space, e-vehicles, etc. which aim to solve complex problems & create significant impact across various sectors.
- Deep tech company can consider itself a startup for as long as 20 years & has a turnover of up to Rs 300cr.
- To be counted as a deep tech startup, companies must apply to the DPIIT for a certificate. The DPIIT is the final authority that determines whether a company qualifies as a startup or a deep tech startup.

What is the significance of Deep Tech Startups?

1. **Drive innovation:** Deep tech innovations form the basis for science & tech breakthroughs. They form the backbone of transformative industries. *For e.g. Discovery of Penicillin by Alexander Fleming in 1928 ushered in the era of antibiotics & dramatically reduced the deaths from infections.*
2. **Economic & industrial impact:** Deep tech innovations like GenAI can add \$1 trillion to India’s GDP by 2030. According to the former NITI Aayog CEO Amitabh Kant, the cascading effects of deep tech innovations would be critical for India to become a developed economy. Deep tech startups are crucial for ushering in Industrial Revolution 4.0.
3. **Strategic importance:** Deep technologies are not only economic drivers, but are essential for developing self-reliance (**Atmanirbharta**) in critical sectors like defence, energy, healthcare etc. Developing & leveraging such deep tech innovations helps in providing a technological bulwark against geopolitical uncertainties & supply chain vulnerabilities *for e.g. China developed DeepSeek AI to achieve technological independence from the West, particularly in the face of US-led restrictions on advanced semiconductors exports.*
4. **Solving societal challenges:** Development of India-centric deep technologies can help in fueling innovations to provide solutions to India-specific problems like affordable & accessible healthcare or sustainable energy, language-based AI, North-South divide etc.

What are the challenges hindering the growth of deep tech startups in India?

- 1. Low R&D funding & investment:** Annually, USA, UK, Germany & Japan spend >3% of their GDP on R&D, China spends 2.68%, while India spends less than 1% of its GDP. While China's '**Made in China 2025**' initiative poured in >\$800bn in strategic sectors, India's total technological investment from 2014-2024 estimated at \$160bn is pale in comparison. This funding gap stifles the startups aiming to tackle complex problems. Moreover, the investment from the private sector remains low despite government policies like Make in India.
- 2. Long gestation conundrum:** Building of deep tech innovations takes time – which is usually longer than what the venture capital timelines allow in India. The venture capital landscape in India prioritizes quick return investments over deep tech startups that require patience. This myopic view, coupled with regulatory hurdles like Angel Tax (now scrapped) – stifles deep tech growth in India.
- 3. India's talent paradox:** Though India produces lakhs of engineers annually, but only a fraction of engineers in India specialize in frontier technologies. Also, there is a continuous brain drain happening from India to Western countries where many Indians are driving innovations at firms like Tesla & NVIDIA or founding startups in Silicon Valley for e.g. *Aravind Srinivas (Co-founder of Perplexity)*.
- 4. Commercialization bottlenecks:** Indian startups face difficulties in scaling-up from prototype to product due to long R&D cycle, weak industry-academia collaboration for tech transfer, lack of regulatory sandbox etc.
- 5. Regulatory & bureaucratic hurdles:** Complicated IP protection & patent filing process, regulatory uncertainties in sectors like genomics, drones etc are delaying the development of deep tech startups.
- 6. Dominance of USA & China:** While the USA is the global leader in AI through companies like Nvidia, China is also very rapidly catching up. According to a WIPO report, China has filed over 38,000 generative AI patents between 2014-2023. Also, according to a study by the Australian Strategy Policy Institute, China leads globally in 57 out of 64 critical technologies.
- 7. Stagnation in startup ecosystem:** Though India has the 3rd largest startup ecosystem in the world with >100 unicorn startups, but majority of the startups in India are based on quick commerce & other consumer-tech innovations rather than deep tech breakthrough such as startups like OpenAI, Blue Origin, Deep Mind etc.
- 8. Innovation ecosystem:** India lags behind in innovation. According to the Global Innovation Index 2024, India ranks 39th while China ranks 11th. None of the Indian universities rank among global leaders in original research & innovation.

What are the government initiatives?

- 1. Policy reforms in high tech sectors:** Government has taken several initiatives in high tech sectors to promote innovation & private sector participation as well as to boost entrepreneurship & self-reliance for e.g. **Indian Space Policy 2023**, liberalized **Drone Rules 2024**, **Draft National Deep Tech Startup Policy (NDTSP) 2023**, **Nuclear Energy Expansion Policy 2024** etc.
- 2. India Semiconductor Mission (ISM) & Design-linked Incentive (DLI) Scheme:**
 - ISM is a specialized business division within the Digital India Corporation. Its goal is to build a vibrant, sustainable semiconductor and display ecosystem in India. It doesn't just fund factories (Fabs), it supports the entire value chain – from design and manufacturing to packaging and testing.
 - While manufacturing requires billions in capital, **design** is where the high-value Intellectual Property (IP) lives. The DLI scheme targets Indian startups and MSMEs to ensure India owns the "blueprints" of the chips it uses.

- 3. IndiaAI Mission:** The IndiaAI Mission is a government-approved, national-level strategy to strengthen India's AI ecosystem – from research and talent development to real-world applications and ethical standards. In 2024, the Union Cabinet has approved Rs 10,000cr for IndiaAI Mission.
- 4. National Supercomputing Mission:** Aim is to build a network of 70 high-performance computer facilities with a cumulative capacity of 45 PF (Petaflops).
- 5. National Quantum Mission:** Aims to put India among the top 6 leading nations involved in the R&D in quantum technologies.
- 6. Deep Tech Fund:** Government has recently announced Rs 10,000cr Deep Tech Fund of Funds as well as Rs 1000cr space tech venture capital fund with the aim to bridge the critical funding gaps & catalyzing innovations. These initiatives also send a strong signal to the private investment ecosystem that India is committed to playing the long game in advanced technology.
- 7. Innovation ecosystem:** Govt has introduced policies like Atal Innovation Mission, NIDHI-PRAYAS, T-Hub, iCreate etc to foster innovation & entrepreneurship at early stages for inquisitive minds.
- 8. Slow but definite growth:** Despite various challenges, India has seen pockets of deep tech startups success – supported by various government initiatives such as Space tech (**Skyroot, Agnikul, Digantara**), Robotics (**Addverb, CynLR**), Gene editing (**CrisprBits**), Quantum solutions (**Qnu Labs**), EVs (**Ola, Ather**) etc. As per NASSCOM, India's 4000 deep tech startups attracted \$1.6bn investment in 2024 – which is a 78% increase year-on-year.

What is the way forward?

- 1. Increase R&D investments:** USA is facilitating a \$500bn AI initiative called Stargate, France is mobilizing \$112bn in public & private investments towards AI development. China has set up a \$138bn fund for accelerating growth in emerging technologies. Thus, India is also required to follow their steps.
- 2. Increased & patient capital:** Attracting more venture capital with a long-term perspective, as well as government-backed funds specifically for deep tech, is crucial. Loan guarantees and other mechanisms to reduce investor risk can help.
- 3. Industry-Academia linkage:** A close collaboration between India's premier universities & research institutes like IITs, IISc and deep-tech startups is needed. *For e.g. India can take inspiration from USA's Federal institutes like Defence Advanced Research Projects Agency & NASA to encourage bold innovations.*
- 4. Education sector reforms:** Reforms in the education sector are needed to build a framework for cutting-edge research & promoting innovation from the very beginning.
- 5. IPR Ecosystem:** Providing robust IPR protection & speeding up the process of patent approval can also help in promoting deep tech innovations in India.
- 6. Global integration:** Encourage international collaboration for joint R&D and market access. Facilitate Indian deep tech participation in global standards bodies & consortia. Promote collaboration of Indian universities & research institutes with global powerhouses in frontier technologies.
- 7. Developing Specialized Talent:** Focused programs to train and upskill professionals in deep tech domains, along with initiatives to attract and retain global talent, are necessary.

Conclusion: Deep tech startups are essential to India's technological sovereignty, economic resilience, and strategic autonomy. By promoting deep tech entrepreneurship, streamlining regulatory processes, enhancing IP protection, India can unlock the immense potential of its deep tech startups & position itself as global leader in this transformative space.

Read More-[Indian Express](#), [The Hindu](#)

UPSC Syllabus GS3-Indian economy, Awareness in the field of IT, Space, Computers

India-Malaysia Relations- Significance and Challenges- Explained Pointwise

Recently, PM Modi visited Malaysia as a part of India-Malaysia Bilateral Summit where leaders deepened their **Comprehensive Strategic Partnership** across economic, strategic and people-to-people fronts. It was noted during the visit that **India and Malaysia have close similarities** as both are 'multicultural, multi-ethnic and multi-religious countries'. 11 key agreements were signed during the visit, providing impetus for the deepening of India-Malaysia relations.

However, there are also serious challenges between India and Malaysia. In this article, we will look at the history of India-Malaysia Relations, significance of the relations and the way forward.

Key Takeaways from the recent India-Malaysia Bilateral Summit:

- Semiconductor Cooperation:** Enhancing collaboration in semiconductor research, manufacturing, testing and global supply chain integration.
- Disaster Management Cooperation:** Joint efforts in disaster preparedness, training and exchange of best practices.
- Anti-Corruption Cooperation:** Framework for cooperation on transparency and anti-corruption measures.
- Local Currency Settlement:** Both nations reaffirmed their commitment to settle trade in **Indian Rupee (INR) and Malaysian Ringgit (MYR)**.
- UPI-PayNet Linkage:** India and Malaysia have agreed to work on connecting **India's Unified Payments Interface (UPI)** with **Malaysia's PayNet** for **digital transactions**.
- Intelligence Sharing:** New agreements were signed between the National Security Councils of both countries to enhance intelligence sharing and maritime security in the Indo-Pacific.
- Terrorism:** The leaders of the both the countries unequivocally & strongly condemned terrorism in all its forms & manifestations, including cross-border terrorism. They called for zero-tolerance of terrorism & for concerted international efforts to combat terrorism in a comprehensive & sustained manner. They also recognised the linkages between terrorism & transnational organised crime.
- Social Security Agreement:** A new pact between India's ESIC and Malaysia's PERKESO ensures better social security protections for Indian workers in Malaysia.
- Thiruvalluvar Scholarships:** To deepen cultural ties, new scholarships were announced for Malaysian students to study in India, emphasizing shared Tamil heritage.
- AITIGA Review:** Both sides agreed to fast-track the review of the **ASEAN-India Trade in Goods Agreement** to address India's trade deficit and improve market access.
- UNSC & BRICS:** Malaysia explicitly reaffirmed its support for India's permanent membership in a reformed UN Security Council. In return, India welcomed Malaysia's aspirations to join BRICS, with India serving as the 2026 BRICS Chair.

What is the History of India-Malaysia Relations?

Historical Ties:

- 1. Establishment of Relations:** The historical ties between India and Malaysia trace back over a millennium. The relation was **significantly influenced by the Chola Empire** (9th-13th centuries). The Cholas established **extensive maritime trade routes** that connected South India with the Malay Peninsula. It fostered close cultural and economic exchanges.
- 2. Rule over the Malaysian Territory:** Under the reign of emperors like Rajaraja Chola I and Rajendra Chola I, the Cholas established control over parts of Southeast Asia, including present-day Malaysia.

Post

Independence

Ties:

India and Malaysia share close cooperation since the independence of both nations. The major phases of relations are mentioned below:

Establishment of Relations	India established diplomatic relations with the Federation of Malaya (predecessor state of Malaysia) in 1957 .
Phase of Strong Relations	India-Malaysia enjoyed a strong relationship in the 1960s as a result of the personal friendship between Prime Ministers Nehru and Tunku Abdul Rahman Putra . India and Malaysia have developed close political, economic and socio-cultural relations.
Strategic Partnership	India-Malaysia relations were elevated to Enhanced Strategic Partnership during the visit of PM Narendra Modi in 2015. The Enhanced Strategic Partnership was upgraded to a Comprehensive Strategic Partnership during the visit of Malaysian PM Anwar Ibrahim in 2024.

What are the areas of cooperation between India and Malaysia?

- 1. Geopolitical Cooperation:** India and Malaysia are members of key global forums like the **Commonwealth of Nations**, **NAM**, **G-15**, and **G-77**. This forms a strong foundation for close geo-political mutual cooperation. Further, India and Malaysia closely cooperate through **ASEAN plus** and **East Asia Summits**.
- 2. Geo-strategic Cooperation:**
 - India and Malaysia have steadily expanded their defence ties since signing a **defence cooperation memorandum in 1993**.
 - India and Malaysia engage in regular defence cooperation meetings, and joint military exercises. **For ex-** **Exercise Harimau Shakti (Military)**, **Exercise Samudra Lakshmana (Navy)**, and **Exercise Udara Shakti (Air Force)**.
- 3. Geo-economic Cooperation:**
 - Bilateral trade between India and Malaysia has reached a **record high of ~USD 19 billion**. Malaysia is among India's 10 largest trading partners. India is among the **top partners for Malaysia** too.

- b. As per official figures (DPIIT), **Malaysia ranks as the 26th largest investor in India** with FDI inflow of US\$1.16 billion during the period April 2000 to September 2022.
 - c. **India is a significant investor in Malaysia**, particularly in sectors like technology, manufacturing, and services. More than 150 Indian companies, including 61 Indian joint ventures and 3 Indian Public Sector Undertakings, operate in Malaysia.
 - d. **Exports from India:** It Includes mineral fuels, aluminum, meat, iron and steel, copper, organic chemicals, and machinery.
 - e. **Imports to India:** It Includes palm oil, mineral fuels, electrical machinery, animal or vegetable fats, and wood.
 - f. **ASEAN-India Business Summit 2023** celebrated 30 years of ASEAN-India Engagement, with significant participation from Indian and Malaysian stakeholders.
4. **Diaspora Cooperation:** Malaysia is home to over **2.95 million large Indian diaspora** and **the second-largest Persons of Indian Origin (PIO)** community in the world after the US.
5. **Cultural Cooperation:** India and Malaysia share close cultural Cooperation, which are explained below:
- a. **Institutional Cooperation:** The **Indian Cultural Centre Kuala Lumpur**, established in **2010** and **Netaji Subhash Chandra Bose Indian Cultural Center (NSCBICC)** offers classes in Carnatic vocal music, Kathak dance, Yoga, and Hindi, with teachers from both India and Malaysia.
 - b. **Literary Cooperation:** **Hikayat Seri Rama** (Malay literary adaptation of the Hindu Ramayana epic) reflects local adaptations, and close literary cooperation. Ramayana's themes are reflected in local stories, arts, and performances of Malaysia.
 - c. **Shared Cultural Architecture & Craft:** The **Sri Veera Hanuman Temple in Malaysia** shows the shared cultural heritage, with its architecture and tales deeply rooted in Indian traditions.

What is the significance of India-Malaysia Relations?

1. **Geopolitical Significance:** Close India-Malaysia relations **aligns with India's Act East Policy**. Close cooperation with Malaysia, provides India the **strategic pivot towards the ASEAN region**, and enhance its influence and connectivity in South East Asia. Deepened India-Malaysia relations also forms an important pillar of India's effort of outreach to countries of the Global South.
2. **Geostrategic Significance:**
 - a. Close cooperative mechanism between India and Malaysia on the **Straits of Malacca and Singapore (SOMS)**, is key for the **establishment of rule based order in Indo-Pacific**.
 - b. Close India-Malaysia relations will **enhance interoperability** and **address regional security challenges** like counter-terrorism and extremism in South East Asia.
3. **Geo-economic Significance:**
 - a. **Comprehensive Economic Cooperation Agreement (CECA)** between India and Malaysia will provide a boost to India's effort for achievement of its foreign trade target of \$2 trillion in merchandise exports by 2030.
 - b. The exploration of option of **Local Currency Trade** between the Indian Rupee (INR) and Malaysian Ringgit (MYR), will help in reducing reliance on the US dollar and enhancing economic resilience.
4. **Cultural Significance:** The close people to people connect and the presence of large Indian diaspora in Malaysia can be **leveraged for increasing the cross-border investment and trade**.

What are the Challenges in India-Malaysia Relations?

- 1. Extradition of Zakir Naik:** Malaysia's **rejection of repeated India's request for extradition of Zakir Naik**, who is wanted in India on hate-speech and money laundering charges, is one of the prominent challenges in India-Malaysia relations.
- 2. Malaysia's criticism of India's internal Policies:** Malaysia's strong criticism of Indian Government's Policies like the **Citizenship Amendment Act**, and the **re-organisation of Jammu and Kashmir**, has created further wedge between India and Malaysia.
- 3. Economic Challenges:**
 - The economic relationship between India and Malaysia faces challenges such as **higher import tariffs** and **trade restrictions**. This has impeded the growth of bilateral trade between India and Malaysia.
 - India consistently runs a significant trade deficit with Malaysia (driven largely by palm oil and petroleum imports).
 - Both nations are currently pushing for an early conclusion to the review of the **ASEAN-India Trade in Goods Agreement (AITIGA)** to address high tariffs and market access issues.
- 4. Diaspora Challenges:** There are concerns of **illegal immigration, exploitation of workers, and human trafficking** surrounding the Indian diaspora. The **detention of hundreds of Malaysians during the COVID-19** pandemic also created tensions between India and Malaysia.
- 5. The China Factor:** Malaysia maintains a delicate balancing act with China, its largest trading partner. Unlike India, Malaysia is more cautious about joining security frameworks that could be perceived as "anti-China".

What Should be the Way Forward?

- 1. Comprehensive Economic Cooperation Agreement (CECA):** India and Malaysia must **accelerate the review and amendment of the CECA**, to include emerging sectors such as fintech, semiconductors, and defense. This will help achieve the **target of increasing bilateral trade to \$25 billion**.
- 2. Closer Economic Cooperation:** Efforts like **avoiding double taxation, mutual customs assistance, improving air connectivity, and collaborations among airlines** can boost trade and tourism between India and Malaysia.
- 3. Defense Technology Collaboration:** Fostering partnerships in defence technology and research, **can enhance both nation's defence capabilities** and will contribute to regional stability in Indo-Pacific.
- 4. Focus on ASEAN Integration:** India must leverage Malaysia's position in ASEAN to enhance its engagement with the region. This will help in **aligning the relations with India's Act East Policy** and supporting the ASEAN centrality.
- 5. AITIGA Review:** Expediting the review of the **ASEAN-India Trade in Goods Agreement** is a priority to ensure Indian exporters (especially in services and pharmaceuticals) get the same market access that Malaysian palm oil and petroleum enjoy in India.

Read More: [The Indian Express](#)

UPSC Syllabus- GS 2- India and its Neighbourhood relations

India-Seychelles Relations – Explained Pointwise

The President of Seychelles, Patrick Herminie, is on a visit to India – which came within the first 100 days of his swearing-in & coincides with the 50th anniversary of Seychelles independence & 50 years of diplomatic relations between the two countries – indicating the importance of India for the island nation. The leaders of

the both the countries reaffirmed that as a close maritime neighbours they share a special partnership rooted in history, kinship and shared democratic values.

Key takeaways from the recent visit:

1. **Adoption of a Joint Vision - "SESEL":** India and Seychelles adopted the **Joint Vision for Sustainability, Economic Growth and Security through Enhanced Linkages (SESEL)**, setting a roadmap for deeper cooperation in development, security, and technology.
2. **\$175 Million Special Economic Package:** India announced a **\$175 million economic package** for Seychelles. The funding targets infrastructure, public housing, mobility, capacity building, health, defence, and **maritime security** projects.
3. **Seven MoUs** were signed to expand cooperation in health, digital transformation, meteorological cooperation etc.
4. **Maritime Security and Defence:** The visit solidified Seychelles' role in India's **Vision MAHASAGAR**.

What is the significance of Seychelles for India?

1. Geopolitical Importance:

- a. **Strategic Location:** Situated in the Indian Ocean, Seychelles acts as a key maritime neighbor to India. Its location provides India with a critical foothold in the region to counteract influences from other powers, particularly China.
- b. **Security Cooperation:** India and Seychelles have strengthened military and security ties, conducting joint exercises and sharing intelligence to tackle piracy and other maritime security challenges.

2. Economic Importance:

- a. **Trade Relations:** Seychelles is a growing market for Indian goods and services, including pharmaceuticals, food products, and construction materials. The bilateral trade has seen significant growth over the years.
- b. **Investment Opportunities:** Indian companies are investing in sectors like tourism, renewable energy, and fisheries in Seychelles, contributing to the country's economic development.

3. Environmental Cooperation:

- a. **Conservation Efforts:** Seychelles is known for its biodiversity and unique ecosystems. India collaborates with Seychelles in conservation efforts, especially concerning marine ecosystems and threatened species.
- b. **Climate Change:** Both countries share concerns regarding climate change impacts in the Indian Ocean region and work together on sustainability initiatives.

4. Cultural Connections:

- a. **Diaspora Ties:** About **11%** of the Seychellois population is of Indian origin, creating a strong cultural bridge and "soft power" influence that stabilizes the political relationship. This community plays a vital role in strengthening bilateral relations.
- b. **Cultural Exchange Programs:** Various cultural initiatives, including festivals and art exhibitions, enhance mutual understanding and build goodwill.

What is the significance of India for Seychelles?

1. Economic Importance:

- a. Trade Relations:** India is one of Seychelles' significant trading partners. Indian goods, particularly in pharmaceuticals, food products, and textiles, are vital for the local market.
- b. Foreign Investment:** Indian investments in sectors like tourism, energy, and infrastructure have contributed to Seychelles' economic growth and development, enhancing local business opportunities.

2. Strategic & Security Cooperation:

- a. Geopolitical Stability:** India's presence in the Indian Ocean helps Seychelles counterbalance potential risks from other regional powers, enhancing the nation's strategic security framework.
- b. Military Partnerships:** Seychelles and India conduct joint naval exercises and training, reinforcing military ties that aid Seychelles in maintaining maritime security, particularly against piracy.

3. Environmental Collaboration:

- a. Sustainable Development:** Both nations work together on initiatives for environmental protection, focusing on the conservation of marine biodiversity and combating climate change, which is particularly impactful for island nations like Seychelles.
- b. Disaster Relief:** India has provided assistance during natural disasters, showcasing its commitment to supporting Seychelles in times of need.

4. Cultural & Social Connections:

- a. Diaspora Influence:** A historical Indian diaspora enriches Seychelles' cultural landscape, promoting cultural exchanges and fostering connections between the two nations.
- b. Educational Initiatives:** India offers scholarship programs for Seychellois students in various fields, enhancing educational opportunities and fostering long-term relations.

What are the challenges in the India-Seychelles relations?**1. Geopolitical Tensions:**

- a. Chinese Influence:** Seychelles has been increasingly engaging with China, which raises concerns for India. Beijing's growing presence in the Indian Ocean can challenge India's strategic interests in the region.
- b. Naval Competition:** The presence of foreign naval forces, particularly from China, could complicate India's military and maritime strategies in the region, potentially leading to tension.

2. Economic Issues:

- a. Trade Imbalance:** While trade relations have grown, a significant trade imbalance favoring India persists. This could lead to concerns in Seychelles regarding dependency on Indian goods.
- b. Investment Challenges:** Implementation of Indian investments can face bureaucratic hurdles or local resistance, slowing down developmental projects.

3. Environmental Concerns:

- a. Sustainable Development Pressures:** Intensive development driven by foreign investments, including from India, might lead to environmental degradation, affecting Seychelles' rich biodiversity and ecosystems.

- b. **Climate Change Vulnerability:** As a low-lying island nation, Seychelles is particularly vulnerable to climate change, and coordinating effective environmental initiatives can be challenging.
4. **Cultural & Social Issues:**
- a. **Perceptions of Influence:** Some citizens of Seychelles perceive Indian influence as overwhelming, which can lead to social tensions or anti-foreign sentiments, complicating diplomatic relations.
 - b. **Cultural Integration:** Balancing local culture with influences from India may sometimes create friction, as the local identity is an important aspect of Seychelles' society.
5. **Political Factors:**
- a. **Domestic Politics:** Changes in leadership or policy in either country can impact bilateral relations, sometimes leading to a reevaluation of priorities or strategies.
 - b. **Regional Instability:** Political instability in neighboring countries or within Seychelles itself can complicate wider regional cooperation and affect bilateral dynamics.

What are the various initiatives to boost the ties?

1. **Trade Agreements:** India and Seychelles have negotiated trade agreements to enhance commercial exchanges and reduce tariffs, aiming to bolster bilateral trade.
2. **Investment in Infrastructure:** India has engaged in various infrastructure projects in Seychelles, including roads, hospitals, and housing, fostering development and strengthening economic ties.
3. **The Assumption Island Project:** India and Seychelles signed an agreement to develop a naval facility there. This would allow India to extend its reach in the Western Indian Ocean.
4. **Joint Military Exercises:** Regular naval exercises are conducted, such as the "Varuna" exercises, focusing on maritime security and anti-piracy operations, which enhance military collaboration.
5. **Coast Guard Cooperation:** India has trained Seychelles' Coast Guard personnel and provided equipment, enhancing Seychelles' capabilities to protect its maritime interests.
6. **Digital India Initiative:** India has extended its expertise in IT and digital technologies to help Seychelles improve its digital infrastructure and services. India is actively exporting its "Digital Public Infrastructure" (DPI) model to Seychelles such as UPI & other digital governance initiatives.
7. **Skill Development:** India provides training programs for Seychellois in diverse sectors such as healthcare, agriculture, and tourism, fostering capacity building.
8. **Participation in Multilateral Forums:** Both nations collaborate on various global platforms, such as the Indian Ocean Rim Association (IORA), Colombo Security Conclave, where they can collectively address regional issues. Seychelles has officially joined the Colombo Security Conclave as a full member, solidifying a regional security bloc with India, Sri Lanka, Mauritius, and the Maldives.
9. **Blue Economy & Climate Action:** As part of India's **MAHASAGAR** vision (Mutual and Holistic Advancement for Security and Growth Across Regions), both countries are focusing on:
 - a. **Ocean Research:** Agreements for joint ocean observation and maritime scientific research to protect coral reefs and manage fisheries.
 - b. **Renewable Energy:** India is providing technical assistance for power grid management and e-mobility solutions (electric buses/cars) to help Seychelles meet its climate goals.

UPSC GS-2: International Relations
 Read More: [The Indian Express](#)

Aviation Sector in India – Opportunities & Challenges – Explained Pointwise

Aviation Sector in India has experienced significant growth in recent years. India has become **the third-largest domestic aviation market** in the world. According to the International Air Transport Association (IATA), by the year 2030, India is expected to overtake China and the United States as the world's largest air passenger market. However, the aviation sector in India also faces numerous challenges, as operational failures & safety incidents threaten IndiGo & Air India. With profits declining & rising passenger dissatisfaction, the industry must address systemic vulnerabilities ahead of the entry of new regional players.

Status of Aviation Sector in India:

- India's aviation industry has experienced significant growth in the past 9 years.
- India is the third-largest domestic aviation market globally, operating over 840 aircraft & carrying more than 350mn passengers annually. But this scale has been achieved through an expansion that is increasingly stretched.
- Indian aviation contributes about 5% to the country's GDP, creating a total of 4 million jobs. In addition to it, there is a \$72 billion gross value-added contribution to GDP by this industry.
- The Indian aviation fleet consists of over 860 aircraft, accounting for around 2.4% of the global fleet, and total operational airports increased from 74 in 2014 to 162 in 2025.
- Passenger traffic from January to April 2025 showed significant growth (nearly 10% year-on-year), led by low-cost carriers (64.3% market share).

What is The Potential of Aviation Sector In India?

1. **Increased Market Size of Indian Aviation Sector:** According to IATA, India is expected to surpass the aviation sector of the United States and China by 2030. This will make India a **lucrative market for airlines** and **related businesses**.
2. **Promotes Balanced Economic Growth:** Passenger airlines and air cargo overcome geographic barriers by connecting remote areas which are alienated from the mainstream. **For ex-** Development of North-East due to enhanced airline connectivity.
3. **Growth of Tourism sector:** Aviation industry function as a **growth pole** by promoting **spill-over & trickling-down** of economic growth. **For Ex-** Aviation sector gives a boost to tourism sector which in turn drives the supporting infrastructure in a region, like roads, railways, hotels, markets. This helps in providing employment opportunities to the locals.
4. **Boost to manufacturing sector:** India's expanding aviation sector offers potential for the **growth of maintenance, repair, and overhaul (MRO) facilities**, as well as the development of a domestic aerospace manufacturing industry. **For ex-** Enhanced employment opportunities in aerospace engine maintenance.
5. **FDI in the Expansion of Infrastructure:** Booming aviation sector has attracted **significant FDI to the tune of around ~\$3 bn** in the development of aerospace infrastructure like airports, arrow bridges, airstrips. **For ex-** Greenfield airport development like Navi Mumbai, Noida (Jewar) airport and expansion of Bengaluru airport.
6. **Increased Employment opportunities:** The growth of aviation sector in India has created a need for skilled professionals, including pilots, cabin crew, and maintenance staff. **For ex-** Indian scheduled operators are likely to require 10,900 additional pilots by FY30 (IATA projection).

What are The Challenges With India's Aviation Sector?

1. **Increase in number of Grounded Unsafe Aircrafts:** Airlines like Air India, Spice Jet, Go Air, and IndiGo face issues of poor financial performance due to grounded unsafe aircrafts. **For ex– Over 160 aircraft are currently grounded** which represents about a quarter of the total fleet size of Indian carriers.
2. **Supply Chain Disruptions:** **Delays in aircraft deliveries** and supply chain issues with **original equipment manufacturers (OEMs)** has hindered the industry's capacity to meet growing demand.
3. **Duopoly in Indian Aviation Market:** India's domestic aviation market is overwhelmingly dominated by two carriers – **IndiGo (~64% market size)** and the **Tata group airlines (~27% market size)** – **together forming a duopoly controlling nearly 90% of the market.** This concentration has grown due to industry consolidation (e.g., Air India's privatization and Tata Group's merger of its airline units) and the exit or downsizing of several competitors like Jet Airways, GoAir, and others. Source: The Hindu
4. **Heavy Financial Losses:** Most Indian airlines have reported **continuous net losses for years** despite rising traffic. Several carriers have collapsed (Kingfisher, Jet Airways, Go First) showing that growth in passengers is not getting converted into profitability. Profit margins in India are among the lowest globally (1–3%), while costs remain very high due to – high taxes on Aviation Turbine Fuel (forms 35–40% of airline expenses – among the highest in the world due to taxes and state VAT), intense price competition, aggressive expansion without financial discipline, COVID-19 etc. Source: The Hindu
5. **Operational Disruptions due to crew shortage:** Lack of skilled pilots, maintenance engineers, and cabin crew members have led to operational disruptions like **increase in turn-around time of airlines.**
6. **Low per-capita penetration of domestic air travel:** India's per capita penetration of **domestic air travel (0.13 seats deployed per capita)** remains significantly lower than countries like **China (0.49)** and **Brazil (0.57)**. This indicates the failure of aviation industry in India to tap the maximum potential of domestic air market.
7. **Inflated Projections:** Airlines in India often **announce ambitious growth plans without adequately analysing** their financial security, infrastructural and personnel requirements. **For Ex- Failure of Kingfisher, Jet Airways and Go First** on account of inflated projections.
8. **Regulatory issues:**
 - **Tough entry barriers** for new entrants, **high fuel prices** on account of **high taxes on ATF** (Air Turbine Fuel) and **monopoly of inefficient public sector airports** have all acted as barriers in the rapid growth of the airlines sector.
 - Nearly half of the DGCA's sanctioned technical positions remain vacant even as fleet size & passenger volume expand.
 - The recent disruption in December 2025 have been managed through scheduled exemptions rather than strict enforcement, reflecting a shift towards ad hoc crisis management & underscoring deeper fragilities in India's aviation regulatory framework.
9. **Policy Lacunae:** The **Aircraft Act, 1934** and **Aircraft Rules, 1937** have not kept pace with modern technology in aerospace. This has led to increased costs of the industry's operation and ultimately affected passenger growth.
10. **Poor rural connectivity:** With mega airports controlling air and ground space, there has been challenge of enhancing the rural air connectivity. **For ex- Less number of flights to tier 2 and tier 3 towns despite the UDAN scheme.**
11. **Environmental Concerns:** The Indian aviation industry faces increasing pressure to reduce its carbon footprint and adopt sustainable practices (**The Carbon Offsetting and Reduction Scheme for**

International Aviation or CORSIA). This has also posed a challenge for growth and expansion of the airline sector.

12. Aviation Safety: The crash of Air India Airline in Ahmedabad into a residential area in June 2025 that led to the killing of more than 240 people is considered as one of the worst airline disasters. After the Air India tragedy, the Civil Aviation Ministry tabled a report in the Lok Sabha according to which, out of 754 aircraft analyzed, **377 (exactly 50%)** were flagged for “repetitive defects”—issues that occurred three or more times despite maintenance attempts.

13. India’s Pilot Bottleneck:

- IndiGo with ~5000 pilots operating a fleet of 360 aircraft, translating into a pilot-to-aircraft ratio of ~14, which is well below the global benchmark of 18-20 considered necessary for fatigue-mitigated operations. This mismatch exposed the limits of an operating model calibrated for sustained high utilization.
- While India’s aviation expansion has intensified demands for pilots, training capacity has failed to keep pace. Parliamentary disclosures estimate a requirement of 7000 pilots between 2024 & 2026, rising to 25,000-30,000 over the next decade. In contrast, the DGCA issued only 5700 Commercial Pilot Licenses between 2020 & 2024.

Source: The Hindu

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What are The Government Initiatives For Aviation Sector In India?

National Civil Aviation Policy, 2016	It aims to improve the international footprint of India-based airline services . Airlines can commence international operations, provided they deploy 20 aircrafts or 20% of their total capacity (whichever is higher) for domestic operations.
UDAN Scheme	It aims to expand access to air travel for Tier 2 and Tier 3 cities and shift the traffic pattern away from Metro routes. Under the scheme, 625 routes & 85 airports had been operationalised by 2025.
DigiYatra	Paperless, biometric-enabled air travel to enhance passenger convenience.
Open Sky Policy	Aims to liberalise the aviation sector in India by opening the airport sector to private participation. Currently, 6 PPP airports are being developed and 60% of airport traffic is handled under PPP.
Open Sky Air Service Agreement	Open Sky Air Service Agreement allows for airlines from the two countries to have an unlimited number of flights as well as seats to each other’s jurisdictions. India has signed these agreements with multiple nations like the US, Greece, Jamaica, Japan, Finland, Sri Lanka.

FDI Policies, Tax and Duty cuts	<p>100% FDI is being allowed under the automatic route for greenfield projects, whereas 74% FDI is allowed under automatic route for brownfield projects.</p> <p>100% tax exemption has been provided for airport projects for a period of 10 years. Indian aircraft Manufacture, Repair and Overhaul (MRO) service providers have been completely exempted from customs and countervailing duties.</p>
GAGAN (GPS-Aided Geo-Augmented Navigation)	<p>Developed jointly by AAI and ISRO, GAGAN is India's own Satellite-Based Augmentation System (SBAS). Operational since 2015, it enhances the accuracy and integrity of GPS signals, improving navigation, especially for approach and landing, and enabling precision approaches at non-instrumented airports, thereby significantly enhancing safety, particularly in challenging terrains.</p>
Bhartiya Vayuyan Adhiniyam, 2024	<p>This is a landmark piece of legislation that came into effect on January 1, 2025, replacing the nearly century-old Aircraft Act of 1934. It modernizes India's aviation system, aligning it with contemporary needs and global standards (like the Chicago Convention and ICAO).</p>

What Should be the Way Forward?

1. Capacity Expansion:

- Continue development of new airports, modernization of existing ones, and upgrading air traffic management systems.
- Strengthen regional connectivity under the UDAN scheme by incentivizing flights to underserved and remote areas.
- For the emerging players to survive & meaningfully contribute to market de-concentration, active policy support beyond initial NOCs will be essential – which includes the effective implementation of UDAN subsidies, preferential slot allocation at congested airports, coordinated development of Tier-2 & Tier-3 airport infrastructure and potentially hedging mechanisms or tax relief on ATF to offset price volatility.

2. **Boost Cargo & Logistics:** Develop dedicated air cargo hubs and multimodal logistics parks to support India's export-import trade.

3. **Initiate reforms in the Directorate General of Civil Aviation (DGCA):** DGCA should be modernized, well-staffed and incentivised. DGCA should be headed by **aviation professionals rather than bureaucrats**.

4. **Promote 'Start-up India' initiative in the aviation sector:** Entrepreneurship must be promoted in the **maintenance, repair, and overhaul (MRO) facilities of the aviation industry**.

5. **Rationalisation of taxes:** Tax rationalisation must be initiated in **aviation fuel taxes** (State and Central, which in India are among the highest in the world), **air cargo** and **airport operations**.

6. **Safety Management Systems (SMS) Effectiveness:** Ensure that all aviation service providers (airlines, airports, MROs, ATC) have fully functional and effective SMS that are integrated into their daily operations and decision-making. Regulators should audit the effectiveness of these SMS, not just their presence.

Conclusion:

With India accounting for 4.2% of global air traffic, and domestic demand set to rise sharply by reaching 715mn by 2030, failure to address the constraints affecting the aviation sector risks converting India's aviation growth into a recurring crisis borne ultimately by the passengers.

Created By Forum IAS

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UPSC Syllabus- GS III, Infrastructure: Airports

Gender Justice – Explained Pointwise

In order to address gender stereotyping, the judiciary has recently emphasized the use of gender-sensitive language in courtrooms to prevent victim-blaming. Under CJI D.Y. Chandrachud, the SC released a *Handbook on Combating Gender Stereotypes*. It instructed judges to stop using derogatory terms like “keep,” “fallen woman,” or “concubine,” and instead use neutral terms like “woman” or “partner.” However, the Supreme Court under CJI Surya Kant has moved to “fine-tune” these guidelines. While acknowledging the need for sensitivity, the Court has tasked the **National Judicial Academy (NJA)** to create more “practical” training modules for High Court and District judges to ensure sensitivity isn't just a “sermon” but a practiced skill in every trial.

In this context, it is important to understand the broader concept of gender justice.

What is Gender Justice?

- **Gender Justice** refers to the fair and equal treatment of all genders in social, economic, political, and legal spheres. It emphasizes that everyone, regardless of their gender identity or expression, should have equal access to resources, representation, and decision-making in society.
- It goes beyond **formal equality (equal laws)** and aims at **substantive equality (equal outcomes and opportunities)** by addressing historical and structural disadvantages faced particularly by women and marginalized genders.
- Key Principles of Gender Justice:
 1. **Equality:** Ensures that people of all genders have equal rights and opportunities in society, addressing the systemic inequalities that exist based on gender.
 2. **Respect for Diversity:** Acknowledges and values the diverse experiences and identities related to gender, including those of transgender, non-binary, and gender non-conforming individuals.
 3. **End to Discrimination:** Seeks to eliminate discrimination based on gender, whether in workplaces, educational institutions, or legal systems.
 4. **Empowerment:** Focuses on empowering marginalized genders, ensuring they have a voice in decision-making processes that affect their lives.
 5. **Access to Resources:** Strives to guarantee equal access to resources such as education, healthcare, and economic opportunities for all genders.

What are the constitutional and statutory provisions related to gender justice in India?

Constitutional Provisions:

1. **Article 14 (Equality Before Law):** Guarantees that everyone is equal before the law and provides for equal protection of the laws.
2. **Article 15 (Prohibition of Discrimination):**
 - a. **Article 15(1):** Prohibits the State from discriminating against any citizen on grounds *only* of religion, race, caste, **sex**, or place of birth.
 - b. **Article 15(3):** A crucial “justice” provision that allows the State to make **special provisions for women and children** (e.g., reservation of seats or special welfare schemes).
3. **Article 16 (Equality of Opportunity):** Ensures **equality of opportunity** in public employment and prohibits discrimination based on sex.
4. **Article 21: The Right to Life and Personal Liberty**, which the Supreme Court has interpreted to include the right to live with dignity, free from sexual harassment and violence.
5. **Article 23:** Prohibits **human trafficking** and forced labor, which disproportionately impact women and girls.
6. **Article 39:**
 - a. **Article 39(a):** The State shall direct its policy toward securing an **adequate means of livelihood** for men and women equally.
 - b. **Article 39(d):** Mandates **Equal pay for equal work** for both men and women.
7. **Article 42 (Just and Humane Conditions):** Provides for just and humane conditions of work and maternity relief.
8. **Article 46 (Promotion of Educational and Economic Interests):** Protects the interests of Scheduled Castes, Scheduled Tribes, and other weaker sections, promoting their educational and economic interests.
9. **Article 51A(e):** Imposes a duty on every citizen to **renounce practices derogatory to the dignity of women.**
10. **The 73rd and 74th Amendments (1992):** Reserved **one-third (33%) of seats** for women in Panchayats and Municipalities.
11. **The Nari Shakti Vandan Adhiniyam (2023):** A historic act that mandates **33% reservation for women in the Lok Sabha** and State Legislative Assemblies (to be implemented following the next census and delimitation).

Statutory Provisions:

1. **The Protection of Women from Domestic Violence Act, 2005:** Provides protection to women from domestic violence and establishes measures for their safety and legal remedies.
2. **The Sexual Harassment of Women at Workplace (POSH) Act, 2013:** Codified the “Vishaka Guidelines” to protect women at work.
3. **The Maternity Benefit Act, 1961:** Grants maternity benefits, including leave and payment during maternity, to women working in establishments.
4. **The Equal Remuneration Act, 1976:** Provides for equal remuneration to men and women for the same work and prohibits discrimination in matters of pay.
5. **The Prohibition of Child Marriage Act, 2006:** Prohibits child marriages and provides for the punishment of those involved in carrying out such marriages.

6. **The Dowry Prohibition Act, 1961:** Prohibits the giving or receiving of dowry in marriages and penalizes those who engage in such practices.
7. **The Pre-Conception and Pre-Natal Diagnostic Techniques (PCPNDT) Act, 1994:** Prohibits sex-selection and prenatal sex determination to combat female feticide.
8. **The Transgender Persons (Protection of Rights) Act, 2019:** Recognizes the right of transgender persons to self-perceived gender identity and prohibits discrimination in education, employment, and healthcare.

What were the various cases in which the Supreme Court upheld gender justice?

<p>Vishaka v. State of Rajasthan</p>	<ul style="list-style-type: none"> ● Laid down the Vishaka Guidelines to prevent sexual harassment at the workplace. ● Recognized sexual harassment as a violation of Articles 14, 15, and 21 of the Constitution. ● Eventually led to the Sexual Harassment of Women at Workplace Act, 2013.
<p>Shayara Bano v. Union of India</p>	<ul style="list-style-type: none"> ● Declared instant triple talaq (talaq-e-biddat) unconstitutional. ● Held that the practice violated fundamental rights and gender equality. ● Strengthened protections for Muslim women.
<p>Joseph Shine v. Union of India</p>	<ul style="list-style-type: none"> ● Struck down Section 497 of IPC (Adultery law). ● Held that the law treated women as property of husbands and violated dignity and equality.
<p>Sabarimala Case</p>	<ul style="list-style-type: none"> ● Allowed women of menstruating age to enter the Sabarimala temple. ● Held that exclusion violated equality and religious freedom rights of women.
<p>Lata Singh v. State of Uttar Pradesh</p>	<ul style="list-style-type: none"> ● Protected a woman's right to marry a person of her choice. ● Condemned honour-based violence.
<p>Vineeta Sharma v. Rakesh Sharma (2020)</p>	<ul style="list-style-type: none"> ● The Court clarified that daughters have equal coparcenary (birthright) rights in Hindu Undivided Family property, regardless

	of whether the father was alive when the 2005 Amendment to the Hindu Succession Act was passed.
Navtej Singh Johar v. Union of India	<ul style="list-style-type: none"> ● Decriminalized consensual same-sex relations by partially striking down Section 377 IPC. ● Held that criminalization violated equality, dignity, privacy, and freedom of expression. ● Strongly affirmed constitutional morality over social morality.

What is the need for gender justice?

1. **Systemic Discrimination:** Gender justice addresses the historical and systemic inequalities faced by marginalized genders, including women, transgender, and gender non-conforming individuals. These groups often experience disparities in income, education, and healthcare access.
2. **Maximizing Potential:** Promoting gender justice ensures that all individuals can contribute to the economy, which leads to increased productivity and economic growth. Gender-diverse workplaces enhance innovation and performance.
3. **Peace and Cohesion:** Societies that uphold gender justice are generally more peaceful and stable. Reducing gender-based violence and discrimination fosters social harmony, contributing to overall well-being.
4. **Basic Human Rights:** Gender justice aligns with universal human rights principles, ensuring everyone has the right to live free from discrimination and violence. This strengthens the fabric of democracy and promotes accountability in governance.
5. **Access to Resources:** Ensuring gender justice involves providing equal access to healthcare, education, and social services. This leads to improved health outcomes and empowers individuals to make informed choices about their lives.
6. **Increased Representation:** Gender justice promotes the inclusion of diverse voices in decision-making processes, leading to more equitable policies and community development. Empowered individuals are better positioned to challenge oppressive systems.

What are the challenges in ensuring gender justice?

1. **Deep-rooted Beliefs:** Traditional gender roles and stereotypes often shape societal expectations, limiting opportunities for individuals based on gender. These norms can perpetuate discrimination and violence against marginalized genders.
2. **Ineffective Laws:** Despite existing laws promoting gender equality, many are poorly enforced or have gaps that allow discrimination to persist. Institutional biases within legal systems can also undermine efforts toward gender justice.
3. **Pay Gaps and Employment Inequality:** Gender-based economic disparities, such as wage gaps and unequal access to certain professions, persist in many societies. This limits financial independence and economic empowerment for marginalized genders.
4. **Gender-based Violence:** High rates of gender-based violence, including domestic violence and sexual harassment, create significant barriers to achieving gender justice. Fear of violence can deter individuals from seeking justice or asserting their rights.

5. **Educational Inequities:** In many regions, access to education and resources is often unequal, with girls and marginalized genders facing barriers to obtaining quality education and skills training.
6. **Lack of Representation:** Underrepresentation of women and marginalized genders in political and leadership roles hinders the development of policies that address their specific needs and interests.
7. **Multiple Identities:** The intersection of gender with other identities (such as race, class, and sexuality) complicates the challenges faced. Individuals may experience compound discrimination that makes addressing gender justice even more difficult.

UPSC GS-2: Polity

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Labour Codes- Explained Pointwise

In November 2025, the Government of India implemented all four Labour Codes — the Code on Wages, the Industrial Relations Code, the Code on Social Security and the Occupational Safety, Health and Working Conditions Code — with effect from 21 November 2025, **replacing and consolidating 29 existing labour laws**.

This reform aims to modernise labour governance, improve worker welfare, and align labour practices with emerging workplace trends, paving the way for a future-ready workforce and more resilient industries under the vision of Aatmanirbhar Bharat.

- The implementation of India's labour codes marks a decisive shift towards greater financial inclusion of the workforce by embedding social security, income protection, and long-term financial safeguards into the employment relationship. By consolidating multiple fragmented labour laws, the codes aim not only to modernise labour governance but also to ensure that the gains of economic growth are shared more equitably with workers.
- These reforms are fundamentally designed to correct long-standing exclusions and integrate millions of workers into formal systems of financial and social security.

Labour and Constitutional Rights in India:

The **Constitution of India** provides several safeguards and rights concerning labour and workers:

1. **Article 19(1)(c):** Grants all citizens the **right to form associations or unions**, enabling collective bargaining and organisation of workers.
2. **Article 23:** Prohibits **forced labour**, making it unconstitutional to compel any person to work against their will.
3. **Article 24:** Prohibits **child labour**, specifically banning the employment of children below **14 years in hazardous occupations or processes**.
4. **Article 38(1) & 38(2):**
 - a. Directs the state to **promote the welfare of the people**.
 - b. Seeks to **reduce economic inequalities**, including income disparities.
5. **Article 43(A):** Provides for **workers' participation in the management of industrial and other undertakings**, fostering cooperative industrial relations.

Overview of Labour Codes

Labour Codes	Major Acts Subsumed	Key Provisions
Code on Wages, 2019	<ul style="list-style-type: none"> - Payment of Wages Act, 1936 - Minimum Wages Act, 1948 - Payment of Bonus Act, 1965 - Equal Remuneration Act, 1976 	<ul style="list-style-type: none"> ● Establishes a uniform definition of 'wages' for all workers. ● Mandates timely payment of wages to every employee. ● Introduces a national minimum wage, adjustable by states above the central floor. ● Ensures equal remuneration for men and women performing the same or similar work.
Industrial Relations Code, 2020	<ul style="list-style-type: none"> - Trade Unions Act, 1926 - Industrial Employment (Standing Orders) Act, 1946 - Industrial Disputes Act, 1947 	<ul style="list-style-type: none"> ● Simplifies trade union registration and recognition. ● Introduces negotiation unions or councils for dispute resolution. ● Sets conditions for strikes, including a 60-day notice period for strikes in public utility services. ● Establishes grievance redressal mechanisms. ● Raises threshold for prior government permission for closure, lay-off, or retrenchment from 100 to 300 workers. ● Introduces fixed-term employment, providing flexibility for employers while ensuring protection for workers.
Code on Social Security, 2020	<ul style="list-style-type: none"> - Employees' Provident Funds and Miscellaneous Provisions Act, 1952; - Employees' State Insurance Act, 1948; - Maternity Benefit Act, 1961; 	<ul style="list-style-type: none"> ● Expands employee definition to include gig and platform workers. ● Introduces social security schemes for gig, platform, and unorganised workers. ● Mandates creation of a social security fund for unorganised workers.

	<ul style="list-style-type: none"> - Payment of Gratuity Act, 1972; - Unorganised Workers Social Security Act, 2008 	<ul style="list-style-type: none"> • Provides maternity benefits and gratuity to women workers, including those in the unorganised sector.
Occupational Safety, Health and Working Conditions (OSHC) Code, 2020	<ul style="list-style-type: none"> -Factories Act, 1948 -Mines Act, 1952 -Contract Labour (Regulation and Abolition) Act, 1970 -Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979 	<ul style="list-style-type: none"> • Ensures health, safety, and welfare for all workers. • Mandates annual health check-ups for employees. • Regulates working hours and conditions for different sectors. • Introduces a single licensing mechanism for contractors and employers. • Increases thresholds for contract labour applicability and prohibits contract labour in core activities, with certain exceptions. • Shifts primary responsibility for welfare facilities from contractors to principal employers.

Comparison of the Labour Ecosystem Before and After Labour Codes

Parameter	Pre-Labour Reforms	Post-Labour Reforms
Formalisation of Employment	No mandatory appointment letters.	Written appointment letters mandatory for all workers, ensuring transparency, job security, and formal employment.
Social Security Coverage	Limited coverage; many workers, especially in the informal sector, remained outside the social security net.	Under the Code on Social Security, 2020 , all workers—including gig and platform workers—are eligible for PF, ESIC, insurance, and other social security benefits.
Minimum Wages	Minimum wages applied only to scheduled	Under the Code on Wages, 2019, every worker has a statutory right to minimum wages. Timely payment and

	industries/employments, leaving large segments uncovered	wage protection enhance financial security.
Preventive Healthcare	No legal mandate for employers to provide annual health check-ups	Employers are required to provide free annual health check-ups to workers aged 40+ , promoting preventive healthcare and timely diagnosis.
Timely Wages	No strict compliance requirement for timely wage payments.	Employers must ensure timely payment of wages , improving financial stability and worker morale while reducing exploitation.
Women Workforce Participation	Women faced restrictions on night shifts and certain occupations	Women are permitted to work in all occupations, including night shifts, with consent and adequate safety measures, enhancing access to high-paying opportunities
ESIC Coverage	Limited to notified areas; establishments with fewer than 10 workers were largely excluded; hazardous units had non-uniform coverage.	ESIC benefits extended PAN-India: voluntary for establishments with fewer than 10 workers, and mandatory for even one worker in hazardous processes, ensuring wider social protection.
Compliance Burden	Multiple registrations, licences, and returns under separate laws	Single registration, PAN-India licence , and unified return reduce compliance burden and simplify processes for businesses.

Benefits of Labour Reforms Across Key Sectors

1. Fixed-Term Employees (FTE):

- FTEs will receive all benefits equal to permanent workers, such as leave, medical benefits and social security.
- Gratuity eligibility reduced from five years to one year of continuous service.
- Equal wages with permanent employees ensure higher income and better protection.
- Encourages direct hiring, reducing excessive contractual dependence.

2. Gig & Platform Workers:

- For the first time, '**Gig work**', '**Platform work**' and '**Aggregators**' are legally defined.
- Aggregators must contribute **1-2% of annual turnover** (capped at 5% of payments made/payable to workers) for worker welfare.
- **Aadhaar-linked Universal Account Number (UAN)** enables fully portable social security benefits across states and migration.

3. Contract Workers:

- Fixed-term employment increases employability, ensuring **legal and social security benefits equal to permanent employees**.
- FTEs become eligible for **gratuity after one year** of continuous service.
- **Principal employers** must provide social security and health benefits to contract workers.
- Workers are entitled to a **free annual health check-up**.

4. Women Workers:

- Gender discrimination is legally prohibited; **equal pay for equal work is ensured**.
- Women can work **night shifts and in all types of work**, including underground mining and heavy machinery, **with consent and safety measures**.
- **Mandatory representation of women on grievance redressal committees**.
- Family definition expanded to include **parents-in-law for women employees**, increasing dependent coverage.

5. Youth Workers:

- **Minimum wage guaranteed** for all workers.
- Mandatory **appointment letters** ensure formal employment and employment history records.
- Employers must **pay wages even during leave**, preventing exploitation.
- Workers to receive wages as per **Central Government floor wage**, enabling a decent standard of living.

6. MSME Workers:

- All MSME workers covered under the **Social Security Code, 2020**, based on employee count.
- Minimum wages ensured for all workers.
- Workers get access to **canteens, drinking water, restrooms**, and other welfare facilities.
- Provides **standard working hours, paid leave and double overtime**.
- **Timely wage payment is mandatory**.

7. Beedi & Cigar Workers:

- Minimum wages guaranteed.
- Working hours fixed at **8-12 hours a day; 48 hours per week cap**.
- Overtime is **voluntary** and paid at **double the normal wage rate**.
- Timely wage payment ensured.
- Workers become **eligible for bonus after 30 days of work in a year**.

8. Plantation Workers:

- Covered under the **OSHC Code and Social Security Code**.
- Codes apply to plantations with **more than 10 workers or on 5+ hectares of land**.
- **Mandatory safety training** for handling and storing chemicals.
- **Protective gear compulsory** to prevent accidents and chemical exposure.
- Workers and families receive **full ESI medical facilities**, and **education benefits for children**.

9. Audio-Visual & Digital Media Workers:

- Workers such as journalists, dubbing artists and stunt persons get **full social security benefits**.
- **Mandatory appointment letters**, defining wages and entitlements.
- Timely wage payment enforced.
- Overtime requires consent and is paid at **double the normal wage rate**.

10. Mine Workers:

- The Social Security Code treats **certain commuting accidents as employment-related**, under specific conditions.
- Central Government will notify **uniform occupational safety standards**.
- Workers get **free annual health check-ups**.
- Working hours limited to **8-12 hours per day, 48 hours per week**, ensuring work-life balance.

11. Hazardous Industry Workers:

- **Free annual health check-ups** for all workers.
- National safety standards framed by the Central Government.
- Women can work in hazardous sectors, including underground mining and heavy machinery, **with equal opportunities and safety safeguards**.
- **Mandatory safety committee at every hazardous site** for workplace monitoring and chemical handling safety.

12. Textile Workers:

- All migrant textile workers (direct, contract-based, self-migrated) get **equal wages, welfare benefits and PDS portability**.
- Workers can claim dues up to **three years back**, easing dispute settlements.
- Overtime wages must be **double the normal rate**.

13. IT & ITES Workers:

- Salary must be released **by the 7th of every month**.
- **Equal pay for equal work**, with strengthened participation of women.
- Women allowed night shifts with opportunities to earn higher wages.
- Mechanisms established for **timely resolution of harassment, discrimination and wage disputes**.
- Social security ensured through **fixed-term employment and mandatory appointment letters**.

14. Dock Workers:

- All dock workers receive **formal legal recognition and protection**.
- Appointment letters mandatory, guaranteeing social security benefits.

- Provident fund, pension and insurance benefits apply to **contract and temporary workers** as well.
- **Annual employer-funded health check-ups** and medical facilities, sanitation and washing areas made mandatory.

15. Export Sector Workers:

- Fixed-term export workers to receive **gratuity, PF and full social security benefits**.
- Annual leave available after **180 days of work in a year**.
- Right to **timely wage payment, no unauthorized deductions and no wage ceiling restrictions**.
- Women allowed **night shifts with consent**, including guaranteed safety protocols—transport, double overtime wages, CCTV, security arrangements.

Challenges with the New Labour Codes:

1. Uneven implementation across States:

- Labour is in the Concurrent List, so states frame their own rules.
- By mid-2025, **30+ states/UTs had published draft rules**, but some (e.g., West Bengal, Meghalaya) were still lagging (Ministry of Labour).
- This has created a patchwork of protections → workers in Karnataka may enjoy better safeguards than those in Assam.

2. Excessive delegation of Powers:

- Key provisions like the **definition of “wages”** or **thresholds for retrenchment** are left to government notifications.
- This reduces parliamentary oversight and opens scope for arbitrary decisions.
- The **Standing Committee on Labour (2023)** flagged this as a major concern.

3. Inadequate Protection for Gig & Informal Workers:

- Despite **30+ crore unorganised workers registered on e-Shram**, benefits are still unclear.
- Positive efforts by State govts:
 - **Karnataka’s 2025 law** mandating platform firms to contribute to a welfare fund.
 - **Maharashtra** mapping 10 lakh gig workers.
 - **Telangana study** found gig workers earn ~₹20,000/month but face long hours & high commissions.
- Union Budget 2025–26 extended **PM-JAY health coverage** to gig workers, but a comprehensive national framework is missing.

4. Weakening of collective bargaining:

- The **Industrial Relations Code** requires **75% approval for strikes**, nearly impossible in large firms.
- In 2024, trade unions held **nationwide protests in Delhi, Lucknow, and Kolkata**, calling this provision “anti-labour.”

5. Reduced Job Security:

- Retrenchment/closure threshold raised from **100 to 300 workers**.
- Critics say this tilts towards “Ease of Doing Business” over worker security.
- Example: **Gurugram auto-component firms (2024)** downsized without government approval due to the new threshold.

6. Precarious Fixed-Term Contracts:

- Employers use fixed-term contracts to avoid permanency.
- **The Supreme Court (2024)** criticised exploitative contract renewals.

- **Telangana HC (2025)** ordered regularisation of ad hoc staff, calling repeated contracts “unfair labour practice.”
- 7. Broad exemptions diluting protections:**
- Governments can exempt industries in “public interest,” a vague term prone to misuse.
 - This could let factories bypass rules on wages, safety, and working hours.
- 8. Low awareness & compliance (MSMEs and Informal Sector):**
- Many MSMEs struggle with digital compliance.
 - **CII’s 2024 survey:** only 46% of small firms were fully aware of labour code requirements.
 - Informal workers remain under-informed about e-Shram benefits.

Way Forward:

- 1. Uniform Implementation Across States:** Establish a national benchmark framework for minimum wages, occupational safety, and social security. **For Example–** A **GST Council-like institutional mechanism** for labour could promote inter-state harmonisation while preserving federal flexibility.
- 2. Strengthening Legislative Oversight:** Ensure **greater legislative clarity** by embedding critical definitions (e.g., “wages,” retrenchment thresholds) within the Codes themselves.
- 3. Comprehensive Social Security for Gig & Informal Workers:** Draft a **National Gig and Platform Workers Policy** mandating aggregator contributions to welfare funds. The **e-Shram portal** should be integrated with **DBT-enabled schemes** covering health (PM-JAY), pensions (PM-SYM), and accident insurance for effective last-mile delivery.
- 4. Reviving Collective Bargaining Rights:** Rationalise the **strike approval threshold** (from 75% to around 51%) to make it practical while ensuring industrial peace. Promote **tripartite consultations** (Government–Employers–Workers) for dispute resolution.
- 5. Balancing Flexibility with Worker Security:** Couple greater flexibility for firms with mandatory unemployment insurance and reskilling programmes for retrenched workers. This would align with global best practices in labour transition support.
- 6. Regulating Fixed-Term Contracts:** Introduce a **cap on contract renewals** (e.g., 2–3 cycles). Beyond this, workers should either be granted permanency or strengthened social security entitlements to avoid “permanent temporariness.”
- 7. Restricting Exemptions:** Narrow down the scope of “public interest” exemptions. Make them time-bound, criteria-based, and subject to judicial or legislative review to prevent misuse.
- 8. Improving Awareness and Compliance:** Launch **multilingual awareness campaigns, labour helplines, and simplified digital compliance portals**. Special digital support cells for MSMEs should be set up to ease compliance without imposing excessive costs.

Conclusion: The true success of the labour codes will lie not in resistance or rhetoric, but in ensuring their effective implementation so that every worker becomes an active participant in India’s growth story.

Read more: [The Hindu](#)

UPSC Syllabus- GS 2 & GS 3- Social Sector Initiatives & Labour Reforms