



**VAJIRAM & RAVI**  
Institute for IAS Examination

# The Analyst

**CURRENT AFFAIRS Handout**

**03rd September 2025**



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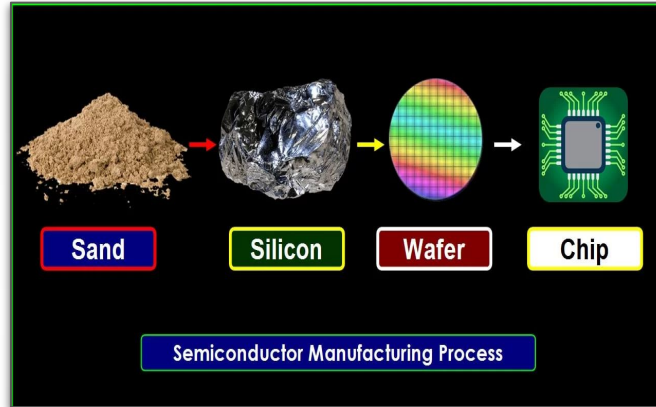
**CONTEXT:** Over the next decade, India is poised to emerge as a competitive hub for the entire value chain.

## What are Semiconductors?

- Materials - **conductivity between conductors & insulators..**
- Their conductivity can be modified by **doping** (adding impurities).
- Example: **Silicon (Si), Germanium (Ge), Gallium Arsenide (GaAs).**
- Core use:** Manufacture of **ICs, microprocessors, memory devices, power electronics.**

## Importance of Semiconductors

- Digital Economy Backbone:** Power computers, smartphones, telecom, medical devices, etc.
- Strategic Resource:** "oil of the digital age."
- Multiplier Effect:** Catalyzes growth in electronics, automotive, etc.
- National Security:** Critical - defence systems, surveillance, and cybersecurity.



## Semiconductor

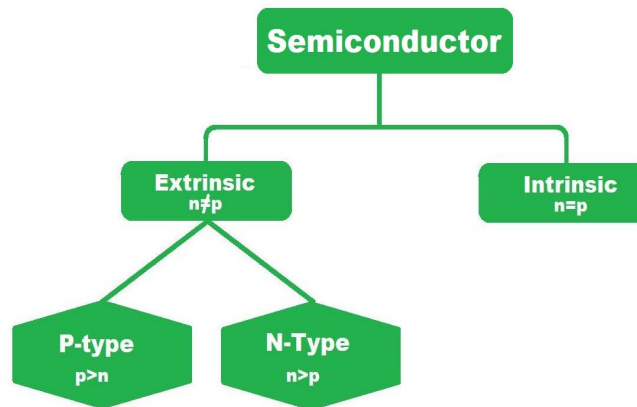
[se-mē-kən-'dāk-tər]

A material used in electrical circuits and components that partially conducts electricity.

estopedia

## What is a Semiconductor?

- A semiconductor is a material, whose conductivity properties lie between the conductor and insulator.
- Semiconductor Examples are: Silicon, Germanium, Gallium Arsenide etc.



- "n" stands for negative (free electrons)
- "p" stands for positive (holes)

## Semiconductor Components



www.TheEngineeringProjects.com

## Multiple Stages -

## Global Semiconductor Landscape

- Concentration of Production:**
  - Taiwan - TSMC
  - South Korea (Samsung, SK Hynix).
  - US (Intel, Nvidia, Qualcomm).
  - Japan (specialised equipment, materials).
  - Netherlands (ASML - EUV lithography machines).
- China:** Heavy investments - "Made in China 2025", dependent - advanced lithography.
- Geopolitics:**
  - US-China chip war (export bans, CHIPS Act 2022)
  - Taiwan Strait tensions - global chip supply.



03rd September 2025

**CONTEXT:** Over the next decade, India is poised to emerge as a competitive hub for the entire value chain.

## India's Semiconductor Ecosystem

- **Electronics Consumption:** 65+ crore smartphone users; Electronics manufacturing
- **Strengths:**
  - 20% of world's semiconductor design engineers
  - Strong IT & start-up ecosystem – Mindgove & Netrasemi
  - Design houses of global majors – already in India.
  - 60k+ – 350 Institutions – EDA Tools
- **Weaknesses:**
  - No large-scale commercial fab operational yet.
  - High capital cost
  - Dependence on imports (> 90%).

## Government Initiatives

- **ISM (2021):**
  - ₹76,000 crore – fabs and chip design ecosystem.
- **PLI Scheme:** For electronics manufacturing.
- **DLI Scheme:** To encourage chip design – start-ups.
- **Semicon India Summit:** Annual global summit – investments and collaborations.
- Part of a broader vision –
- Robust – **DPI**
- **Other policies:** National Policy on Electronics 2019; Make in India; Digital India.



**TURNING INDIA INTO THE GLOBAL HUB OF ELECTRONIC MANUFACTURING**

Union Cabinet approves programme for development of sustainable semiconductors and display ecosystem

- Incentives worth **Rs 2.3 lakh crore** to position India as global hub for electronics manufacturing
- **Rs 76,000 crore** approved for development of semiconductors and display manufacturing ecosystem
- Setting up of **India Semiconductor Mission (ISM)** to drive this sector

Read full at [bitly.ws/kaNY](https://bitly.ws/kaNY)

## Challenges for India

- **High Capital Intensity:** Fabs ~ \$10+ billion investment
- **Supply Chain Gaps:** Lack of robust ecosystem –
- **Skilled Manpower Shortage:** fabrication engineers, equipment specialists.
- **Global Competition:** US, EU, China, Taiwan, South Korea – bigger subsidies.
- **Energy & Water Needs:** uninterrupted electricity and millions of litres of ultra-pure water daily.

## Opportunities for India

- **Talent Edge:** World faces shortage of ~1 million semiconductor professionals by 2030; India can fill gap.
- **Design Leadership:** Already strong in chip design
- **Growing Domestic Demand:** EVs, AI, 5G, etc.
- **Geopolitical Leverage:** Trusted partner status (Quad, India-US Initiative on Critical & Emerging Technologies – iCET).
- **Diversification Need:** alternatives beyond Taiwan & China.





03rd September 2025

**CONTEXT:** Over the next decade, India is poised to emerge as a competitive hub for the entire value chain.

## Way Forward

- **Strengthen Ecosystem:** End-to-end support from design → fab → assembly → testing → packaging.
- **Attract FDI & Tech Partnerships:** Collaborations with US, Japan, South Korea, Taiwan, EU.
- **Invest in Talent:** Expand semiconductor courses in IITs, IIITs, IISc; industry-academia linkages.
- **Research Focus:** Develop indigenous chip architectures.
- **Energy & Infrastructure Readiness:** Reliable power, water, logistics clusters.
- **Balanced Policy Mix:** Combine subsidies with long-term ecosystem building to avoid subsidy-driven dependency.

## Mains Practise Question

*“Semiconductors are to the digital economy what steel was to the industrial economy.” In this context, critically examine India’s efforts to build a robust semiconductor ecosystem. What opportunities and challenges lie ahead for India in becoming a global hub in the semiconductor value chain? (15 Marks, 250 words)*



MINISTRY OF ELECTRONICS & INFORMATION TECHNOLOGY  
GOVERNMENT OF INDIA

my GOV  
मेरी सरकार

Make in India  
Semiconductors for the World

### Design Linked Incentive (DLI) Scheme

**Fiscal Support**

**Product Design Linked Incentive:**  
Reimbursement  
Up to **50%** of the eligible expenditure subject to a ceiling of ₹15 crore

**Deployment Linked Incentive:**  
Incentive of **6%-4%** of net sales turnover over 5 years subject to a ceiling of ₹30 crore

**Tenure**  
**5 years** starting from 01.01.2022

**Beneficiaries**  
**100** Domestic semiconductor design companies



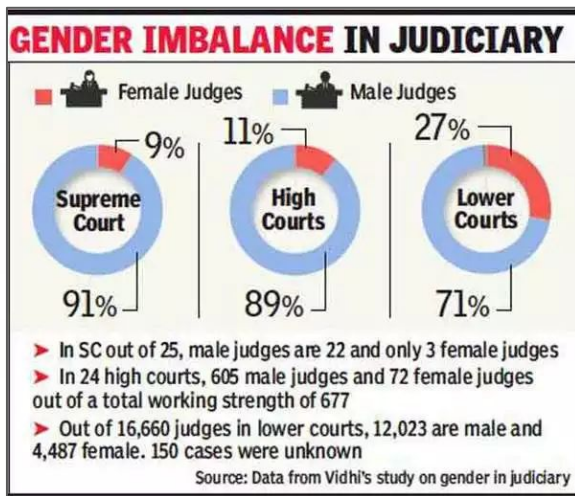


03rd September 2025

**CONTEXT:** The Supreme Court of India must correct its acute gender imbalance by appointing more women judges.

## India needs more women Judges

- Overall Participation - Low
- Women Lawyers ~ 15% - 1.7mn
- Lower Judiciary - 36.3% (2023)
- Higher Judiciary - Abysmally low



women judges, but this did not happen. Justice B.V. Nagarathna is the sole woman judge out of the full strength of 34 judges in the Court. As a

Historically, only 11 women have been appointed to the Court till date, which is a mere 3.8% of the 287 judges who have been appointed since its inception in 1950. The details of the women

## Reasons Behind Gender Gap in Judiciary

- **'deep-rooted and systemic inequality'** - Dr. Ambedkar
- **Hostile Environment** within Courtrooms
- **Entry Level Barriers** - requirement for continuous practice - career breaks - disproportionate impact
- **Absence of Maternity Benefits** or Financial Support - 'forced' - significant drop-off
- **Lack of Supportive Infrastructure** - Basic Amenities - Vidhi Centre for Legal Policy, 2019 - absence of essentials
- **Lack of Family-Friendly Amenities** - feeding rooms and crèches
- **Opaque Collegium System Functioning** - criteria for eligibility ; transparency
- **No Women Reservation** - Lower Judiciary - improved - Higher Judiciary?

opportunities to rise to positions of seniority. Out of 11 women judges in the Court till date, only five women have been a part of the Supreme Court Collegium, with only three having been involved in appointments to the Court. Justice Indu Malhotra and Justice Fathima Beevi had tenures that were shorter than three years, a fate shared by only five male Court judges historically. The delayed age of appointment for women results in women judges not making it to the Collegium or as Chief Justice of India. The first woman CJI will be Justice Nagarathna, who is scheduled to be appointed for only 36 days (September 24, 2027 to October 29, 2027).

The last appointment of women to the Court was on August 31, 2021 when the Collegium, led by then Chief Justice of India (CJI), N.V. Ramana, appointed three women judges. This was seen as unprecedented because even the appointment of three women at one go was a rarity. Along with Justice Indira Banerjee, who was already on the Bench, it was, for the first time, that there was more than 10% representation of women in the Court. There has also been also a total absence of caste diversity among women judges in the Court as this has not led to the appointment of women from the Scheduled Castes and Scheduled Tribes. Justice Fathima Beevi remains the sole woman judge in the Court from a minority faith.

There is a significant gender disparity in the

number of direct appointees to the Court from the Bar, or lawyers directly elevated from practice. From 1950, nine male judges have been elevated to the Court directly from the Bar. However there has been only one woman till date, Justice Indu Malhotra; no other woman





03rd September 2025

**CONTEXT:** The Supreme Court of India must correct its acute gender imbalance by appointing more women judges.

### Procedure and criteria for appointments

The manner of appointments is also a matter of concern. According to the Memorandum of Procedure of Supreme Court Judges, the appointment of a Judge of the Court is decided by the CJI, in consultation with a Collegium of the four seniormost Judges of the Court. After receipt of the final recommendation of the CJI, the Union Minister of Law, Justice and Company Affairs will put up the recommendations to the Prime Minister who will advise the President of India in the matter of appointment.

There is no clarity as to on what basis appointments will be made as the criteria are not public. In 2017, the Collegium headed by then CJI Dipak Misra made public some of the resolutions of the Collegium on the Supreme Court website which included reasons for appointments. The Collegiums led by subsequent CJIs were not consistent in providing the reasons for its recommendations. What we do know is that at various times, the caste, religion or region of candidates have been considered for appointments. Reasons for appointments during

When caste, religion and regional representation are considered as criteria for appointments, why is gender not institutionalised as a criterion for appointment of judges to the Court? It is clear that, presently, gender is not taken into consideration at all for appointments of judges to the Supreme Court and High Courts. This is a matter of serious concern.

The Collegium process is also shrouded in secrecy, without any transparency as to who is being considered and when. Appointments that are being considered to the higher judiciary should be made open and public. Candidates considered should be persons of exceptional intellectual and legal ability, with sound judgment and an excellent record of work, and must show sensitivity to the needs of different communities and groups. There must be a commitment for diversity and inclusion of gender, caste, religion and regional representation, which has to be institutionalised in the form of a written policy in the higher judiciary, so that gender representation is mandatory.

### As a way to create greater trust, confidence

The presence of women judges on the Bench is vital to the Court. Women judges bring unique perspectives to the Court based on their personal and professional experiences with the law, which can have a significant impact on judicial outcomes. Bringing different perspectives and diverse forms of reasoning on the Bench creates greater public trust and confidence as it integrates varied social contexts and experiences that need to be valued. Most importantly, the presence of women judges of varying backgrounds in the Supreme Court will make it a truly representative court, for all citizens which it is intended to serve.

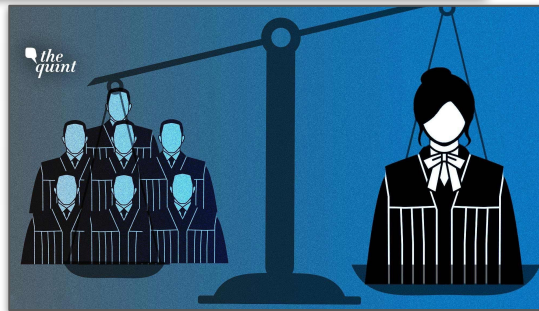
The Supreme Court of India is India's top court. All its elaboration of gender equality would hold meaning only if there are enough women judges in the top court.

## Significance of Higher Representation of Women in Judiciary

- Increased willingness of women to seek justice
- Brings in alternative and inclusive perspectives
- Enriches Jurisprudence

## Way forward to Bridge this Gap

- Need - Institutional, Social and Behavioral change - **Inclusivity**
- '**Gender Diversity**' - Factor in addition to others
- **Collegium** - Clear Criteria & Transparency
- Idea of **Reservation?**
- Supportive **Infra and Programs & Policies**
- Enhanced Participation - Bars
- **Advocacy & IEC**



### Mains Practise Question

*"Despite constitutional guarantees of equality, women's representation in the Indian judiciary remains disproportionately low. Analyze the key barriers to gender diversity in the judiciary and suggest measures to ensure greater inclusion of women at all levels of the judicial system." (10 Marks, 150 words)*

2. विविधता, समता और समावेशिता सुनिश्चित करने के लिए उच्चतर न्यायपालिका में महिलाओं के प्रतिनिधित्व को बढ़ाने की वांछनीयता पर चर्चा कीजिए।

(उत्तर 150 शब्दों में दीजिए)

Discuss the desirability of greater representation to women in the higher judiciary to ensure diversity, equity and inclusiveness.

(Answer in 150 words) 10



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**SYLLABUS : GS 1:** Geophysical Phenomenon  
**Newspaper** The Hindu **Page Number : 06**

Table Comparing  
**Magnitude vs Intensity**

Characteristics	Magnitude	Intensity
<b>Definition</b>	A measure of the size of an earthquake	A measure of how bad the shaking is in an earthquake
<b>How it is measured</b>	Measuring the greatest amplitude of shear waves; how much a fault has been displaced	Measuring how much damage has occurred and how much shaking people feel
<b>Earliest scales</b>	Richter in 1935	Rossi-Forel in the 19th century
<b>What the measurement is based on</b>	Maximum movement or displacement of the fault	Extent and type of damage
<b>Scales of measurement</b>	Richter scale (local magnitude) and moment magnitude	Rossi-Farel, Modified Mercalli, European Macroseismic
<b>Objectivity</b>	More objective of a measure of the energy of an earthquake	More subjective of a measure of the destructive power of an earthquake and the effect it has
<b>Effect of distance from the epicenter</b>	Unaffected	May change with distance from the epicenter of the earthquake, often greatest closest to the epicenter

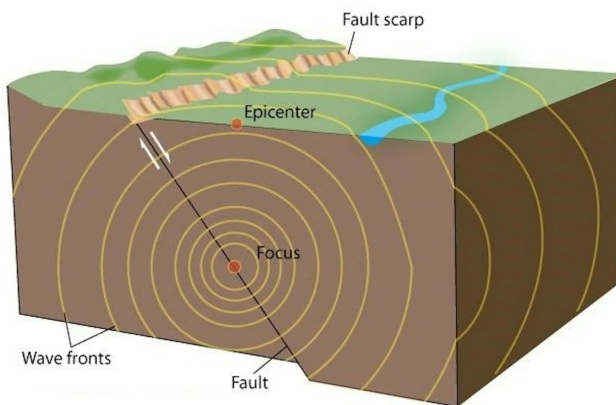




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**SYLLABUS : GS 1: Geophysical Phenomenon**  
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## Seismic waves radiate from the focus of an earthquake



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## RICHTER SCALE • EARTHQUAKES



MAGNITUDE	IMPACT
8.0 +	CATASTROPHIC
7.0 - 7.9	MAJOR DAMAGE
6.1 - 6.9	DAMAGE LIKELY
5.5 - 6.0	SLIGHT DAMAGE
2.5 - 5.4	RARELY DAMAGE
< 2.5	NOT ALWAYS FELT

WFMY NEWS 2

Afghanistan reeled on Monday in the wake of a strong earthquake and multiple aftershocks, killing over 1,400 people, and injuring at least 3,100. According to the United States Geological Survey, the primary tremor was an earthquake of magnitude 6.3 and had struck near Jalalabad, Nangarhar province. After the first tremor, of magnitude 6.3, at a depth of eight kilometres, another earthquake, of magnitude 4.7, struck around 140 km from the epicentre of the initial tremor. The impact of the disaster is playing out in the Kunar and Nangarhar provinces where rescue efforts are on to find and extricate survivors and locate bodies that are buried under piles of rubble. What makes the salvage operations particularly challenging are the limited resources available to authorities given that the ruling Taliban regime faces multiple sanctions. This has been particularly stark following the withdrawal of the United States from Afghanistan in 2021. The United Nations and international humanitarian agencies have voiced their condolences and expressed support to aid the wounded and assist with relief operations.

Afghanistan, which abuts the Hindu Kush mountains, and is at the junction of the Indian and Eurasian tectonic plates, lives under the constant threat of an earthquake. Since 1900, there have reportedly been 12 earthquakes with a magnitude greater than 7 in north-east Afghanistan. In October 2023, the western Herat province was devastated by an earthquake of magnitude 6.3, and several aftershocks, which killed more than 1,500 people and damaged or destroyed more than 63,000 homes. Given the vulnerability of the region, it also bears out that earthquakes of this magnitude and epicentre-depth cause much less damage to lives and property in several parts of the world. Delhi, in February 2025, reported a quake of magnitude 4, at a relatively shallow – and, therefore, potentially more devastating – depth of five kilometres below the surface. True, a quake of magnitude 6 is roughly 100 times more powerful than a one of magnitude 4 assuming similar depths of origin, but there was no



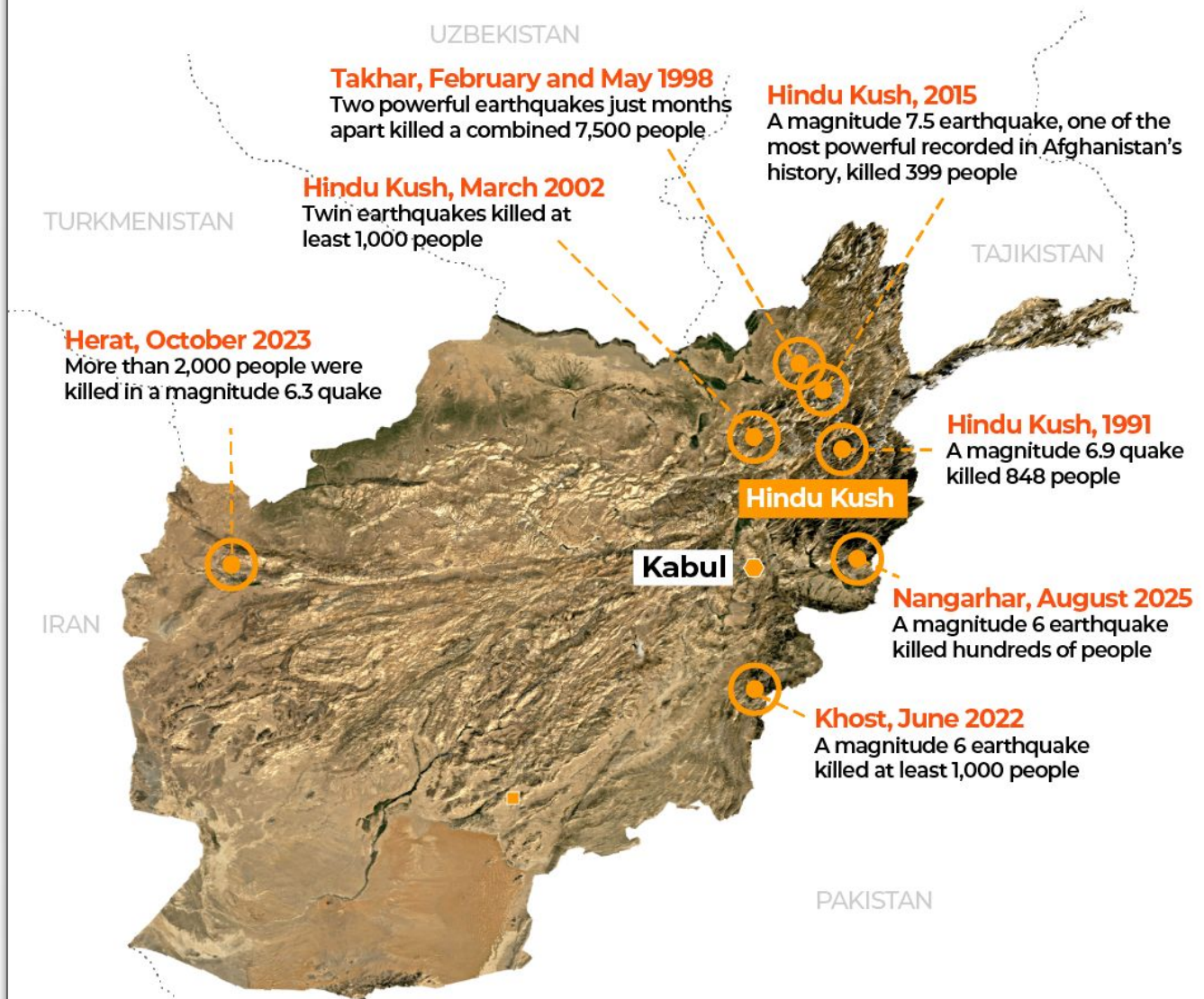


**SYLLABUS : GS 1:** Geophysical Phenomenon  
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## EARTHQUAKE

# Deadly earthquakes in Afghanistan

Afghanistan sits in one of the most seismically active zones on Earth, with the Hindu Kush a hotspot due to powerful surface faults and deep plate movements.



Source: News agencies | September 1, 2025

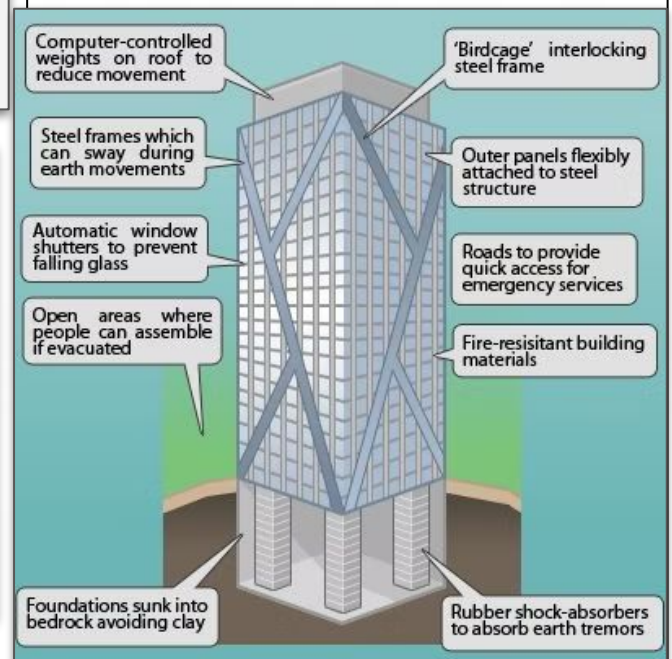
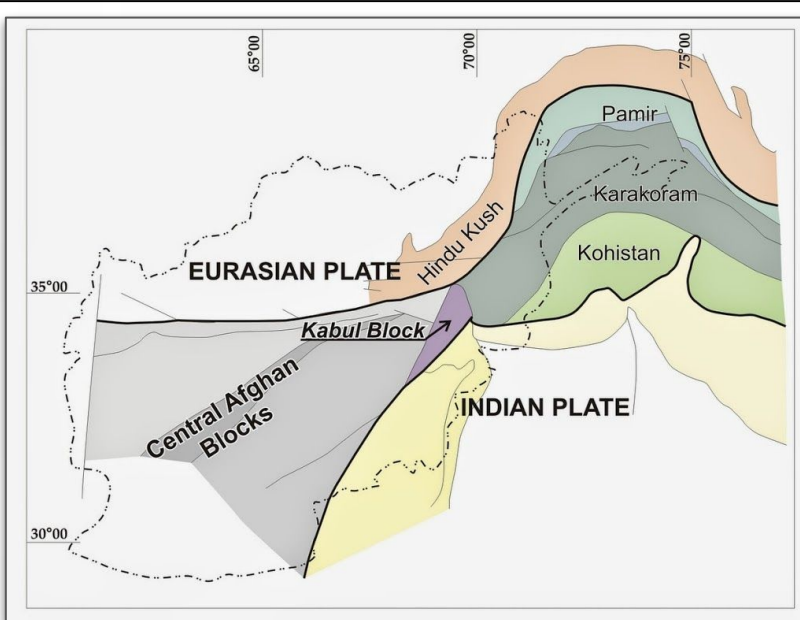


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03rd September 2025

**SYLLABUS : GS 1:** Geophysical Phenomenon  
**Newspaper The Hindu Page Number : 06**



physical damage at all reported anywhere in Delhi. At the other end, Chile is regularly besieged by earthquakes greater than a magnitude of 6, with all accounts suggesting minimal infrastructural damage and no attributable casualties. This is due to the country's focused commitment to enforcing building codes. Earthquakes need not be a death sentence and Afghanistan must take decisive steps to strengthen its building codes and work to spread awareness on their enforcement.





03rd September 2025

**SYLLABUS : GS 2 : Social Sector**

**Newspaper The Hindu Page Number : 07**

In March 2024, the Indian government issued revised guidelines under the Rights of Persons with Disabilities (RPWD) Act, 2016. These guidelines provide a framework for assessing the extent of disability of people with two copies of the sickle cell gene, or with both sickle cell and beta thalassaemia, or Hb D.

Sickle cell disease (SCD) is a painful, progressive, and disabling blood disorder, disproportionately affecting marginalised communities. Recognition under the Act was expected to provide reservations in the allotment of agricultural land and housing, poverty alleviation and development schemes, and education, work, and healthcare for those with the disease. The RPWD Act, 2016 extends reservations in public sector employment under the 4% quota for persons with vision and hearing loss, locomotor disabilities, and intellectual disabilities. However, individuals with SCD and other blood disorders are not included in the quota. This decision has sparked disappointment and criticism.

### The narrow lens of disability

The RPWD Act, 2016, marked a step towards protecting the rights of persons with disabilities, and promoting their full inclusion in society. The law, which aligns with the UN Convention on the Rights of Persons with Disabilities, promises dignity, equality, and non-discrimination. It expanded the legal definition of disability and introduced rights-based protections for persons with 'benchmark disabilities'. Section 2(r) of the Act states that the term 'benchmark' is used to identify individuals with disabilities who meet a certain threshold of impairment, specifically 40% or more. Persons with benchmark disabilities are entitled to free school education as well as reservations in higher educational institutions, development assistance programmes, and

different percentages to the same person, depending on their personal judgment. As a result, disabling conditions that significantly impact an individual's life may still fail to qualify as a benchmark disability.

SCD is not always visibly disabling, but it is debilitating. Individuals with SCD experience recurrent episodes of intense pain, fatigue, anaemia, organ damage, and frequent hospitalisations, often starting in early childhood. These episodes can disrupt schooling, diminish employment and livelihood opportunities, and drastically reduce life expectancy. Stigma and discrimination compound these barriers, particularly for Adivasi and Dalit communities.

The RPWD Act was intended to move away from a medicalised, narrow understanding of disability that prioritises visible, physical impairment over the chronic, fluctuating, and invisible ones. The continual reliance on biomedical scoring and exclusion of people with SCD from full protections undermines the very purpose of recognising the condition under the Act.





03rd September 2025

**SYLLABUS : GS 2 : Social Sector**

**Newspaper The Hindu Page Number : 07**

### The burden of proof

In India, several schemes provide special benefits to individuals with a certified degree of disability. For instance, Odisha and Himachal Pradesh offer enhanced pension schemes for individuals with severe disabilities. Under Section 80U of the Income Tax Act, 1961, those certified by the authorised medical authority as having a disability are eligible for a flat deduction of ₹75,000 from their total income, increased to ₹1.25 lakh in cases of severe disability.

To claim this benefit and many other government schemes, individuals must obtain a disability certificate, issued under Section 58 of the Act.

The major barrier lies in the certification process. A medical authority, including the chief medical officer, evaluates and certifies disability. Diagnosis reports of confirmatory tests must be from a government or standard lab. Further grading of disability beyond the baseline of 40% is based on a scoring system that assigns points to a range of complications, such as pain, blood transfusion requirements, and neurological complications. This system often fails to capture the full extent of the condition's impact, especially when the symptoms are invisible or episodic. This approach misses the socioeconomic and emotional toll on people with SCD. A young person may miss school due to hospitalisation or lose jobs due to debilitating pain – all without qualifying for a 'higher' score.

Worse still, the certification process is largely inaccessible for the people who need it most. For Adivasi and Dalit patients in rural or remote areas, arranging diagnostic tests or travelling distances to district hospitals for evaluation can be impossible.

Several reforms are required to ensure the Act lives up to its promise. Extending job reservations to individuals with SCD and related blood disorders would acknowledge their condition as a significant, lifelong disability. Reforming the certification process to account for fluctuating and invisible disabilities would reflect a rights-based lens rather than a purely biomedical one.

Disability is a lived experience, not only shaped by physical health, but also by social exclusion, structural barriers, and policy gaps, and unless India's recognition of SCD brings real rights and protections, it risks becoming exclusion disguised as inclusion.

### Background: New Guidelines under RPWD Act, 2016

- In **March 2024**, the Indian government issued revised guidelines under the **RPWD Act, 2016**.
- These guidelines cover assessment of people with:
  - Two copies of the sickle cell gene,
  - Sickle cell + beta thalassaemia,
  - Hb D combinations.
- **Expectation:** Inclusion would provide reservations in education, jobs, healthcare, housing, and poverty alleviation schemes.
- **Reality:** Sickle Cell Disease (SCD) patients are recognised under the Act but **excluded from the 4% reservation quota** in public employment.

### Sickle Cell Disease (SCD) – Nature and Impact

- A **chronic, painful, and progressive blood disorder**, disproportionately affecting marginalised communities (esp. **Adivasis & Dalits**).
- **Symptoms:** recurrent pain, anaemia, organ damage, fatigue, frequent hospitalisations, reduced life expectancy.
- **Social impact:** School disruptions, poor job prospects, stigma, and discrimination.



**SYLLABUS: GS 2: Social Sector**  
**Newspaper The Hindu Page Number : 07**

## The Narrow Lens of Disability

- **RPWD Act, 2016:**
  - Aims for dignity, equality, and non-discrimination.
  - Aligns with **UNCRPD (UN Convention on Rights of Persons with Disabilities)**.
  - Defines “**benchmark disability**” as **40% or more impairment**.
- **Problem:**
  - Many conditions don't meet the rigid 40% threshold.
  - Assessment depends on **subjective medical judgment**, varies across hospitals/boards.
  - Invisible or fluctuating disabilities like SCD get **excluded**, undermining the rights-based intent of the Act.

## Certification Challenges

- Disability benefits (e.g., pensions, income tax deductions under **Sec. 80U**, government schemes) require an **official disability certificate**.
- Certification process issues:
  - Based on medical scoring (pain frequency, transfusions, complications).
  - Doesn't capture **invisible, episodic, or socio-economic impacts**.
  - **Access hurdles:** Adivasi/Dalit patients in rural areas face difficulty in reaching district hospitals or getting required lab tests.

## Policy Gaps and Needed Reforms

- **Key gaps:**
  - Exclusion from job reservations.
  - Biomedical approach ignoring lived experience of disability.
  - Inaccessible certification process for vulnerable groups.
- **Reforms suggested:**
  - Extend **job reservations** to SCD and related blood disorders.
  - Reform certification to account for **fluctuating, invisible disabilities**.
  - Adopt a **rights-based lens** instead of a narrow medicalised approach.

## Broader Takeaway

- Disability is not just about physical impairment but also about **social exclusion and systemic barriers**.
- Without genuine protections and inclusion, recognition of SCD under the RPWD Act risks becoming “**exclusion disguised as inclusion**.”





The Supreme Court recently directed State Electricity Regulatory Commissions (SERCs) and distribution companies (DISCOMs) to clear existing regulatory assets within four years and liquidate any new assets within three years. The court also advised capping the regulatory asset at 3% of a DISCOM's Annual Revenue Requirement (ARR) and instructed regulators to set out transparent roadmaps for recovery, along with conducting intensive audits of DISCOMs that continue without recovering these assets.

### What are regulatory assets?

Regulatory assets constitute the unrecoverable revenue gap due to the difference between the Average Cost of Supply (ACS), the expense incurred by a DISCOM to deliver a unit of electricity to consumers, and the ARR, which is the revenue collected by the DISCOM as consumer tariffs and subsidy payments from the government. If the ACS is greater than the ARR, the DISCOM effectively makes a loss on the sale of every unit of electricity. For instance, if a DISCOM's ACS is ₹7.20/unit and ARR is ₹7.00/unit, the gap is ₹0.20 per unit. If the DISCOM supplies 10 billion units, the total shortfall is ₹2,000 crore. To avoid suddenly

the issue is systemic, reflecting financial pressures across many State DISCOMs.

### How are consumers affected?

If the regulatory assets reported by BSES Rajdhani, BSES Yamuna, and Tata Power, the DISCOMs operating in Delhi, are to be recovered within the four-year window set by the Supreme Court, they need to recover about ₹16,580 crore a year. With Delhi's annual electricity consumption of 30 billion units, this works out to an additional ₹5.5 per unit on average.

Since consumers can't be burdened with such high and immediate tariff increases, the State employs regulatory assets. However, the immediate benefit of stable tariffs for consumers is eventually offset by steeper increases when the deferred costs are recovered. Since these assets also attract carrying costs, consumers pay the original gap as well as

burdening consumers with an immediate tariff increase to recover the gap, SERCs allow the DISCOM to record the gap as a regulatory asset. This is essentially a deferred cost that the DISCOM is entitled to recover from consumers in the future, usually with interest.

### What explains the ACS-ARR gap?

Non-cost reflective tariffs, delays in the release of subsidies (for agriculture or low-income households) by State governments, and sudden increases in

### the additional interest.

For DISCOMs, the persistence of large regulatory assets results in significant cash flow pressures. Because revenue doesn't cover current costs, DISCOMs often struggle to pay power generators on time. Many DISCOMs borrow to bridge the gap, increasing their debt burden. With so much money tied up in unrecovered costs, their ability to invest in modernising the grid, integrating renewable energy, and in better consumer services becomes limited. The result is a vicious cycle in which financially distressed DISCOMs face greater operational challenges, which in turn make it harder to improve efficiency and recover costs on time.

### How can ACS-ARR gap be bridged?

One important step is to ensure tariffs are aligned more closely with costs, while using targeted subsidies to protect vulnerable consumers. This ensures the burden is shared transparently rather than hidden in deferred recoveries.

State governments also need to release subsidies on time so that DISCOMs aren't left carrying the financial gap on their books. Automatic fuel cost adjustment mechanisms, such as the fuel and power purchase cost adjustment mechanism, can help tariffs respond quickly to sudden

true-up exercises, where projected and actual expenses are reconciled, can prevent the build-up of large backlogs.

Finally, regulatory commissions play a critical role in maintaining discipline. By enforcing limits, ensuring transparency in accounting, and setting clear timelines for recovery, they can ensure regulatory assets remain an exceptional tool rather than a recurring feature. The Supreme Court's intervention is therefore a call for coordinated action and greater financial discipline across the sector, so that electricity remains both affordable for households and sustainable for utilities.

## Supreme Court's Intervention

- The Supreme Court has directed SERCs and DISCOMs to=
  - Clear existing **regulatory assets** within 4 years.
  - Liquidate any new regulatory assets within 3 years.
  - Cap regulatory assets at **3% of DISCOM's Annual Revenue Requirement (ARR)**.
  - Ensure transparent recovery roadmaps and conduct intensive audits.



## What are Regulatory Assets?

- Regulatory assets = **Deferred costs** recorded by DISCOMs when their **Average Cost of Supply (ACS) > Annual Revenue Requirement (ARR)**.
- Example:
  - If ACS = ₹7.20/unit and ARR = ₹7.00/unit → gap = ₹0.20/unit.
  - Over 10 billion units → loss of ₹2,000 crore.
- Instead of raising tariffs immediately, SERCs allow this gap to be carried forward as a regulatory asset, recoverable in the future (with interest).

## Why does the ACS-ARR Gap Arise?

- Non-cost reflective tariffs** (political reluctance to raise tariffs).
- Delayed subsidy payments** by State governments (especially for agriculture, low-income households).
- Fuel cost hikes** raising power purchase expenses.
- Case studies:**
  - Punjab (2004-06): ₹487.10 crore gap, part converted into regulatory asset.
  - Delhi (2022-23): Regulatory assets of **₹36,057 crore (BSES Rajdhani)**, **₹22,040 crore (BSES Yamuna)**, and **₹8,226 crore (Tata Power DDL)**.
  - Tamil Nadu (2021-22): **₹89,375 crore** regulatory assets → systemic financial stress.

## Impact on Consumers

- Short-term: Stable tariffs.
- Long-term: **Higher electricity bills** when deferred costs + interest are recovered.
- Example: In Delhi, to recover regulatory assets within 4 years → additional **₹5.5/unit** burden on consumers.

## Impact on DISCOMs

- Severe **cash flow pressures** → inability to pay power generators on time.
- Increased **borrowing and debt burden**.
- Limited capacity to:
  - Modernise grids.
  - Integrate renewable energy.
  - Improve consumer services.
- Creates a **vicious cycle** of financial distress and operational inefficiency.

## Bridging the ACS-ARR Gap: Way Forward

- Cost-reflective tariffs** with **targeted subsidies** for vulnerable consumers.
- Timely release of subsidies** by State governments.
- Automatic fuel cost adjustment mechanisms** for quick tariff revision.
- Regular annual true-up exercises** to reconcile projected vs actual expenses.
- Regulatory discipline** by SERCs:
  - Enforce limits on regulatory assets.
  - Ensure transparent accounting.
  - Maintain strict recovery timelines.

## Conclusion

The Supreme Court's directive is a push for **financial discipline and systemic reform** in India's power distribution sector. Without addressing regulatory asset build-up, DISCOMs risk long-term insolvency, jeopardising **affordable electricity for consumers** and **sustainable operations for utilities**.





**SYLLABUS : GS 2:** Social Sector – Health  
**Newspaper** The Indian Express **Page Number : 13**

ONE IN every 100 deaths globally is a case of suicide, says new data released by the World Health Organisation (WHO).

According to the findings, an estimated 7,27,000 people across all ages lost their lives to suicide in 2021, with one death happening in over 20 suicide attempts. The WHO further says that more than a billion people are living with mental health conditions.

The new findings were published in two reports – ‘World Mental Health Today’ and ‘Mental Health Atlas 2024’. Over the next few weeks, WHO will also release country profiles as part of ‘Mental Health Atlas 2024’, the first after Covid pandemic.

The most common mental disorders are anxiety and depressive disorders, which together accounted for more than two-thirds of all mental health conditions in 2021. Between 2011 and 2021, the

“There is an interaction of personal (familial risk), vulnerable temperament and environmental risks such as early exposure to trauma, stressful environment, life events, isolation, lack of support, stigma, poor awareness of help, lack of availability and access to services. A combination of factors increases the risk,” she said.

“There is a need to have psy-

number of people living with mental disorders increased faster than the global population. As a result, the global age-standardised point prevalence of mental disorders reached 13.6%, which is 0.9% higher than a decade ago.

Anxiety disorders typically emerge earlier than depressive disorders, which are rare before 10 years of age. After the age of 40 years, depressive disorders become more prevalent than anxiety disorders, peaking between ages 50 and 69 years.

Suicide is the leading cause of death among young people across all countries and socio-economic

chiatric beds in general hospitals and tertiary care institutions, which can be staffed by well-trained multidisciplinary teams. While acute cases can still be treated at mental health institutions, the model of care must shift from custodial to therapeutic approaches. Bigger tertiary hospitals can even become academic training hubs,” said Dr Murthy.

Psychiatric hospitals are often associated with poor living conditions and ill-treatment. This is because of the second challenge – scant funding.

The third challenge is the scarcity of trained mental health-care personnel. Dr Bharat Vatwani, psychiatrist and Ramon Magsaysay award winner who set up Shraddha Rehabilitation Foundation, said the number of psychiatrists in the interior parts of the country was abysmal.

contexts. Yet, progress in reducing suicide mortality is too low to meet the UN Sustainable Development Goal (SDG) of a one-third reduction in suicide rates by 2030. Given current status, only a 12% reduction will be achieved by that deadline, according to estimates in the report.

Dr Pratima Murthy, Director, National Institute of Mental Health and Neuro Sciences, told *The Indian Express* that suicides have multi-factorial triggers.

## CAUSE FOR CONCERN

- In 2021, 14% of the global population was estimated to be living with a mental disorder, as per the report
- Anxiety and depressive disorders together account for more than two-thirds of all mental conditions
- Between 2011 and 2021, the number of people with mental disorders increased faster than the global population

- Younger adults (20–29 yrs) have seen the largest increase (1.8%) in prevalence since 2011
- Males more commonly have attention deficit/hyperactivity disorder, autism spectrum, idiopathic disorder of intellectual development
- Females more often experience anxiety, depressive, eating disorders
- In 2021, 57 million people had dementia





03rd September 2025

**SYLLABUS : PRELIMS :** Important Institutions  
**Newspaper** The Hindu **Page Number : 08**

## Expanding glacial lakes which need supervision: CWC

**432** According to the Central Water Commission (CWC) report, the total glacial lake area in India has grown by over 30% since 2011 – rising from 1,917 hectares to 2,508 hectares. The findings come in the backdrop of widespread flooding across the country. PTI



Central Water Commission  
(Serving the nation since 1945)



Government of India  
Ministry of Jal Shakti  
Department of Water Resources,  
River Development & Ganga Rejuvenation

## Welcome to Central Water Commission

Central Water Commission is a premier Technical Organization of India in the field of Water Resources and is presently functioning as an attached office of the Ministry of Jal Shakti, Department of Water Resources, River Development and Ganga Rejuvenation, Government of India. The Commission is entrusted with the general responsibilities of initiating, coordinating and furthering in consultation of the State Governments concerned, schemes for control, conservation and utilization of water resources throughout the country, for purpose of Flood Control, Irrigation, Navigation, Drinking Water Supply and Water Power Development. It also undertakes the investigations, construction and execution of any such schemes as required. Central Water Commission CWC is headed by a Chairman, with the status of Ex-Officio Secretary to the Government of India. The work of the Commission is divided among 3 wings namely, Designs and Research (D&R) Wing, River Management (RM) Wing and Water Planning and Projects (WP&P) Wing. Each wing is placed under the charge of a full-time Member with the status of Ex-Officio Additional Secretary to the Government of India and comprising of number of Organizations responsible for the disposal of tasks and duties falling within their assigned scope of functions



03rd September 2025

**Q1. Consider the following statements regarding Semiconductors:**

1. Semiconductors are materials whose conductivity lies between conductors and insulators.
2. P-type semiconductors have more free electrons than holes.

**Which of the above statements is/are correct?**

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

**Answer: a**

**Q2. Consider the following statements regarding Earthquake Magnitude and Intensity:**

1. Earthquake magnitude is measured by how much damage and shaking are felt on the ground.
2. The Richter scale is commonly used to measure the magnitude of an earthquake.
3. Intensity may vary with distance from the epicentre, whereas magnitude remains unaffected.

**How many of the statements given above is/are correct?**

- a) Only One
- b) Only Two
- c) All Three
- d) None

**Answer: b**

**Q3. Consider the following statements regarding Sickle Cell Disease (SCD):**

1. SCD is a genetic blood disorder that often leads to recurrent pain, organ damage, and fatigue.
2. The disease disproportionately affects socially marginalised communities such as Adivasis and Dalits.
3. SCD has no impact on education and employment prospects.

**Which of the statements given above are correct?**

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) 1,2 and 3

**Answer: a**

**Q4. Consider the following statements regarding the Central Water Commission (CWC):**

1. CWC functions under the Ministry of Jal Shakti, Department of Water Resources, River Development and Ganga Rejuvenation.
2. It is responsible for planning, coordinating, and implementing flood control, irrigation, and water power development projects.
3. The Commission has ten main wings, each headed by an Ex-Officio Secretary to the Government of India.

**How many of the statements given above is/are correct?**

- a) Only One
- b) Only Two
- c) All Three
- d) None

**Answer: b**

**Q5. Consider the following statements regarding Regulatory Assets in the Indian power sector:**

1. Regulatory assets are deferred revenue losses allowed to be recovered in the future by DISCOMs, usually with interest.
2. These assets are created when the Average Cost of Supply (ACS) exceeds the Annual Revenue Requirement (ARR).

**Which of the above statements is/are correct?**

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

**Answer: c**







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