



## Criminal Justice System

**For Prelims:** [Article 246](#), [State List](#), [Criminal Procedure Code, 1973](#), [Sessions Judge](#), [Prison System](#), [Vocational Training](#), [High Courts](#), [Supreme Court](#), [Fastrack Courts](#), [Human Rights](#), [Bail](#), [Law Commission of India](#), [Legal Aid](#).

**For Mains:** Flaws involved in India's Criminal Justice System and measures to alleviate them.

[Source: TH](#)

### Why in News?

Recently, a **fabricated rape accusation** and subsequent **imprisonment** revealed a range of systemic **shortcomings** in our **law enforcement machinery** and social complexities that demand urgent attention.

### How is the Criminal Justice System (CJS) in India?

#### ▪ About:

- The criminal justice system of any state is the set of **agencies** and **processes** established by governments for **administration** of criminal justice aimed at controlling **crime** and imposing [punishment](#) on persons who violate the law.
- India's criminal justice system is based on the [Indian Penal Code \(IPC\)](#) enacted in 1860.
- [Article 246](#) of the Constitution of India places the [police](#), [public order](#), [courts](#), [prisons](#), [reformatories](#) and other allied institutions in the [State List](#).
  - However, the **Union laws** are followed by the Police, Judiciary, and Correctional Institutes, which form the basic organs of the criminal justice system.

#### ▪ Structure of the CJS: It consists of the **four main pillars**.

- **Investigation by Police:** Section 161 of the [Criminal Procedure Code, 1973](#) allows the investigation officer to question anyone who may know about the case and write down their statement.
- **Prosecution of Case by the Prosecutors:** [Prosecutors](#) charge an accused with a crime and try to show that he/she is guilty in a court of law.
- **Determination of Guilt by the Courts:** The court pronounces the **sentence** using its **discretion**, considering aggravating and mitigating factors, the offender's background, and the likelihood of their **reform**.
- **Correction through the Prison System:** The imprisonment in India is used for the [reformation and rehabilitation](#) of the prisoner through [education](#), [labour](#), [vocational training](#) and [yoga](#) and **meditation**.

### What are the Challenges Involved in the Criminal Justice System in India?

- **Pendency of Cases:** As of July 2023, **over 5 crore** cases were pending across all courts in India.
  - Of them, **87.4%** are pending in [subordinate courts](#), **12.4%** in [High Courts](#), while nearly **1,82,000 cases** have been pending for over 30 years. The [Supreme Court](#) had **78,400** pending cases.

- **Judicial Vacancies:** Despite a longstanding target of **50 judges per million people**, India has only **21 judges per million** people, laying the foundation for delays.
- **Slow Progress in Fastrack Courts:** The functioning of [fast-track courts](#) has been far from ideal.
  - **New courts** with the necessary infrastructure and dedicated judges are not set up for **fast-track purposes**.
  - Instead, **existing courts** are typically **designated** as **fast-track courts**, requiring judges to manage their **regular caseloads** in addition to these **expedited cases**.
- **Abuse of Power by Police:** Police are often accused of [unwarranted arrest, unlawful imprisonment](#), wrongful search, **harassment, custodial violence**, death etc.
  - In addition, police are continuously acquiring **more and more power** on the grounds of [prevention laws](#).
- **Complex Mechanism:** Present day justice mechanisms are too complex and it is completely far from the [marginalised people](#).
  - In a system focused on institutional arrangements rather than building capacity, [vulnerable sections](#) of society will inevitably be marginalised.
- **Perceived Biases:** In comparison to their percentage in the **total population, Adivasis, Christians, Dalits, Muslims and Sikhs** are all well **over-represented** in Indian prisons.
- **Violations of Human Rights in Prison:** In the name of extracting **confessions** and investigating crimes, authorities use **physical force** upon the prisoners.
  - **Torture** is also inflicted on women in the form of [custodial rape, molestation](#) and other forms of **sexual abuses**.

## How can the Criminal Justice System in India be Reformed?

- **Bail Reforms:** "[Bail is rule and jail is an exception](#)" is a judicial principle that was laid down by the Supreme Court during a landmark judgment of **State of Rajasthan v. Balchand alias Baliya** in 1978.
  - In its **268<sup>th</sup> Report**, the [Law Commission](#) of India stressed that urgent measures need to be taken to curtail the length of [detention](#), and concluded that the law relating to bail must be revisited to prevent this.
- **Reviving Fastrack Courts: Expeditious disposal** of long pending sessions cases should be done to make these courts "**truly fast-track**".
- **Legal Aid Reform: Training, mentoring and building capacities** of young professionals for improving quality of **socio-legal services** to make CJS more effective.
- **Filling Judicial Vacancies:** Filling judicial vacancies effectively is crucial for maintaining a **functional** and [fair judicial system](#). For this, [All India Judicial Service \(AIJS\)](#) can be explored for the recruitment of judges at the level of **additional district judges** and district judges.
- **Application of AI in Criminal Case Management:** AI can be used to help judges make decisions about **bail, sentencing, and parole**.
  - AI can be used to assess the risk of **recidivism** for offenders.

## Related initiatives Taken by Government:

- [National Mission for Justice Delivery and Legal Reforms](#)
- [AI Portal SUPACE](#)
- [Modernisation of Police Scheme](#)
- [Bharatiya Nyaya \(Second\) Sanhita, 2023](#)
- [Bharatiya Nagarik Suraksha \(Second\) Sanhita, 2023](#)
- [Bharatiya Sakshya \(Second\) Bill, 2023](#)
- [National Mission for Justice Delivery and Legal Reforms](#)

## What Commissions have been set up to Reform CJS?

- [National Police Commission \(NPC\)](#): It recommended that there must be a **judicial enquiry** in cases of **custodial death or rapes**.
- [Malimath Committee](#): It recommended that there is a need to have a **separate police force** for

maintaining law and order and crime investigation.

- [All India Jail Reforms Committee \(Mulla Committee\)](#): It emphasised the recruitment of **proper** and **trained staff** for the administration of jails and, for this purpose, a correctional service should be established.
- [Krishnan Iyer Committee](#): It recommended the appointment of **women staff** in the police for handling **women** and **child offenders**.

//

# Police Reforms in India

**CONSTITUTIONAL STATUS**

- **Police and Public Order**: State subjects (7<sup>th</sup> Schedule)

**NEED FOR REFORM**

- Colonial Law
- Custodial Death
- Lack of Accountability
- Political Interference
- Poor Gender Sensitivity
- Communal/Caste Bias
- No Anti-Torture Law

**RELATED DATA**

- **Police-People Ratio**: 153 police/100,000 people (Global benchmark: 222 police /100,000 people)
- **Custodial Deaths**: 175 in 2021-2022 (as per MHA)
- **Women's Share**: 10.5% of entire force (India Justice Report 2021)
- **Infrastructure**: 1 in 3 police stations is equipped with CCTV (India Justice Report 2021)

**IMPORTANT COMMITTEES/COMMISSION**

Year	Committee/Commission
1977-81	National Police Commission
1998	Ribeiro Committee
2000	Padmanabhalah Committee
2002-03	Malimath Committee
2005	Police Act Drafting Committee
2006	Supreme Court Directions in <i>Pakash Singh vs Union of India</i>
2007	Second Administrative Reforms Commission
2012-13	Justice J.S. Verma committee
2015	Police Act Drafting Committee II

**RELATED INITIATIVES**

- **SMART Policing** (pan-India)
- Automated Multimodal Biometric Identification System (**AMBIS**) (Maharashtra)
- **Real Time Visitor Monitoring System** (uses **AI and blockchain**) (Andhra Pradesh)
- **CyberDome** (Tech R&D Centre) (Kerala)

**CHALLENGES WITH POLICING**

- Low Police-Population Ratio
- Political Superimposition
- Unsatisfactory Police-Public Relations
- Infra Deficit
- Corruption
- Understaffed/Overburdened

**WAY FORWARD**

- ↑Police Budget, Resources
- ↑Recruitment Process
- Implement Measures to Reduce Corruption
- ↑Skills of Policemen
- Better Representation (Women, Minorities)

**Drishiti IAS**

## What are Judicial Pronouncements Related to Reformation of CJS?

- [Prakash Singh v. Union of India Case, 2006](#): The Hon'ble Supreme Court stated that a **state security commission** must be established in each state to keep a check on the work of the police and observe that there is no influence.
- [S.P. Anand v. State of Madhya Pradesh Case, 2007](#): Prisoners have basic **rights to a healthy life** even though their right to liberty and free movement is restricted.
- [State of Gujarat v. High Court of Gujarat Case, 1988](#): It was held that **reasonable** wages must be paid to prisoners in jail for the work or labour they have done.
- [Hussainara Khatoun v. Home Secretary, State of Bihar Case, 1979](#): Keeping the **undertrials** in jail

for a longer period than their punishment is a **clear violation** of their fundamental rights guaranteed under [Article 21](#).

- **Prem Shankar Shukla v. Delhi Administration Case, 1980:** The practice of **handcuffing** is **inhuman, unreasonable and harsh**, and thus, an accused person must not be handcuffed in the first instance.

## Conclusion

The Indian criminal justice system faces challenges such as a large backlog of cases, inefficiency, lack of resources, poor infrastructure, and insufficient training for personnel. However, efforts are being made to reform and improve the system, particularly to ensure that marginalised communities have better access to justice.

### Drishti Mains Question:

Q. The reform of the criminal justice system in India has become imperative especially considering the recent failures and shortcomings within the system. Do you agree?

### UPSC Civil Services Examination, Previous Year Question:

Q. Critically examine the Supreme Court's judgement on 'National Judicial Appointments Commission Act, 2014' with reference to appointment of judges of higher judiciary in India. **(2017)**

## Mercy Petition

**For Prelims:** [President](#), [Mercy Petition](#), [Article 72](#), [Article 161](#), [Judicial Review](#), [Supreme Court \(SC\)](#), Pardoning Power, Death Penalty, [Law Commission](#), [Fundamental Right](#), [Article 21](#), Commutation, Reprieve, Remission, Respite, [Indian Judiciary](#)

**For Mains:** Issue of Mercy Petition

[Source: IE](#)

## Why in News?

Recently, the [President of India](#) has denied the [mercy petition](#) of a Pakistani national sentenced to death for the 2000 Red Fort terrorist attack.

## What is Mercy Petition?

### ▪ About:

- A mercy petition is a **formal request** made by someone who has been sentenced to **death or imprisonment** seeking mercy from the President or the Governor, as the case may be.
- The idea of Mercy Petition is followed in many countries like the United States of America, the United Kingdom, Canada, and India.
- Everyone has the basic [right to live](#). It is also mentioned as a [fundamental right](#) mentioned

under [Article 21](#) of the **Indian Constitution**.

- **Philosophy behind:** The philosophy behind the pardoning powers in India is rooted in the recognition that no judicial system is infallible and the need for a mechanism to rectify potential judicial errors.
  - **Rectification of Judicial Errors:** This safeguard acts as a **corrective measure** against potential miscarriages of justice.
    - For example, in 2012, 14 judges from the Supreme Court and High Courts, in separate letters to the President of India, highlighted cases from the 1990s where courts had wrongfully awarded capital punishment to 15 individuals, two of whom were subsequently executed.
  - **Maintaining Public Trust:** One of the core objectives of the pardoning power is to uphold and maintain the trust of the common man in the criminal justice system.
- **Constitutional Framework:**
  - As per the Constitutional framework in India, a mercy petition to the President is the last **constitutional resort** a convict can take when he is sentenced by a **court of law**. A convict can present a mercy petition to the President of India under [Article 72](#) of the Constitution of India.
  - Similarly, the power to grant pardon is conferred upon the **Governors of States** under [Article 161](#) of the Constitution of India.

Article 72	Article 161
<ul style="list-style-type: none"> <li>• The President shall have the <b>power to grant pardons, reprieves, respites or remissions</b> of punishment or to <b>suspend, remit or commute</b> the sentence of any person convicted of any offence:</li> <li>• In all cases where the punishment or sentence is by a <a href="#">Court Martial</a></li> <li>• In all cases where the punishment or sentence is for an offence against any law relating to a matter to which the executive power of the Union extends</li> <li>• In all cases where the sentence is a sentence of death</li> </ul>	<ul style="list-style-type: none"> <li>• It provides that the <b>Governor</b> of a State shall have the power to <b>grant pardons, reprieves, respites or remissions</b> of punishment or to suspend, remit or commute the sentence of any person convicted of any offence against any law relating to a matter to which the executive power of the State extends.</li> <li>• The SC in 2021 held that the Governor of a State can pardon prisoners, including death row ones, even before they have served a minimum 14 years of prison sentence.</li> </ul>

- **Process of making a Mercy Petition:**
  - There is **no statutory written procedure** for dealing with mercy petitions, but in practice, after extinguishing all the reliefs in the court of law, either the **convict in person or his relative** on his behalf may submit a written petition to the President.
  - The petitions are received by the President's secretariat on behalf of the President, which is then **forwarded to the Ministry of Home Affairs** for their comments and recommendations.
- **Grounds for filing Mercy Petition:**
  - The mercy or clemency is granted on the grounds based on his **health, physical or mental fitness**, and his family's financial conditions considering if he is the only sole earner of bread or butter or not.
    - The Supreme Court in cases such as *Shatrughna Chauhan vs Union of India* (2014) held that Right to seek for mercy under Article 72/161 of the Constitution is a constitutional right and not at the discretion or whims of the executive.
- **Judicial Review:**
  - SC in several cases such as **Maruram vs Uoi, Epuru Sudhakar vs State of Andhra Pradesh, and Kehar Singh vs Uoi** has stated that judicial review of the exercise of pardoning power is possible but on the limited ground.

- The court has stated the following provision for [judicial review](#) of clemency power:
  - Powers have been exercised without application of mind
  - Exercised with Malafide intentions
  - Relevant material was kept out of consideration

## What are some of the Important Judgments Related to Mercy Petition?

- [Bachan Singh v. State of Punjab](#): In 1980, the Supreme Court upheld the constitutionality of the death penalty, but established important guardrails. “Judges”, the court said, “should never be bloodthirsty”, and the death penalty should not be awarded “save in the rarest of rare cases when the alternative option is unquestionably foreclosed”, and all possible mitigating circumstances have been considered.
  - The court has reaffirmed the “rarest of rare” standard in several decisions since then.
- [Maru Ram v. Union of India \(1981\)](#): The SC held that the power to grant pardon under Article 72 is to be exercised on the advice of the Council of ministers.
- [Kehar Singh v. Union of India \(1989\)](#): The SC had examined the scope of the President’s pardoning power under Article 72 in detail.
  - In the Kehar Singh case, the court stated that the convict does not have the right to an oral hearing to mercy petition.
- **Shatrugan Chauhan v. State of U.P. (2014)**: In this judgement the SC held that inordinate delays in deciding mercy petitions can lead courts to commute death sentences.
- **Law Commission Report**: The Report of the 262nd [Law Commission](#) published in 2015 recommended the “absolute abolition” of the death penalty “for all crimes other than terrorism-related offences and waging war”.

## What are the Different Types of Pardoning Power?

Type of Pardoning	Description	Example
<b>Power</b>		
<b>Pardon</b>	Completely absolves the convict of the crime, erasing the conviction and all associated penalties.	The President grants a pardon to a person wrongly convicted of treason.
<b>Commutation</b>	Substitutes a harsher punishment with a lighter one.	The President commutes a death sentence to life imprisonment.
<b>Remission</b>	Reduces the period of the sentence without changing its nature.	The Governor remits one year from a two-year sentence of rigorous imprisonment.
<b>Reprieve</b>	Temporarily postpones the execution of a sentence, usually for a short period.	The President grants a reprieve to a condemned prisoner to allow time for the filing of a mercy petition.
<b>Respite</b>	Similar to reprieve, but for a longer period and often for medical reasons.	The Governor grants a respite to a terminally ill prisoner to allow them to spend their final days at

**Table 30.3** Comparing Pardoning Powers of President and Governor

President	Governor
1. He can pardon, reprove, respite, remit, suspend or commute the punishment or sentence of any person convicted of any offence against a Central law.	1. He can pardon, reprove, respite, remit, suspend or commute the punishment or sentence of any person convicted of any offence against a state law.
2. He can pardon, reprove, respite, remit, suspend or commute a death sentence. He is the only authority to pardon a death sentence.	2. He cannot pardon a death sentence. Even if a state law prescribes for death sentence, the power to grant pardon lies with the President and not the governor. But, the governor can suspend, remit or commute a death sentence.
3. He can grant pardon, reprove, respite, suspension, remission or commutation in respect to punishment or sentence by a court-martial (military court).	3. He does not possess any such power.

### What do the Laws of other Countries Provide?

- **USA:** The **Constitution of America** gives the President the similar powers to grant reprieves or pardon for offences under Federal law, except in cases of impeachment. However, in cases of violation of state law, the power has been given to the concerned Governor of the state.
- **UK:** In the UK, the Constitutional **monarch can pardon** or reprove for offences on ministerial advice.
- **Canada:** The National Parole Board under the **Criminal Records Act** is authorized to grant such reliefs.

### Conclusion

- The way forward lies in **striking a balance**. Measures promoting transparency, such as **clear guidelines** for considering petitions and a **defined timeframe** for decisions, could enhance public trust. Additionally, ensuring **legal representation** for mercy petition applicants would strengthen the process.
- Ultimately, the mercy petition system serves a vital purpose in the Indian justice system. By acknowledging its strengths and addressing its shortcomings, India can ensure a **more humane** and **effective application** of this extraordinary power..

**Drishti Mains Question:**

Q. Discuss the significance and challenges associated with the exercise of mercy petitions by the President of India in the context of capital punishment

## UPSC Civil Services Examination, Previous Year Question

### ***Prelims:***

**Q. Which of the following are the discretionary powers given to the Governor of a State? (2014)**

1. Sending a report to the President of India for imposing the President's rule
2. Appointing the Ministers
3. Reserving certain bills passed by the State Legislature for consideration of the President of India
4. Making the rules to conduct the business of the State Government

**Select the correct answer using the code given below:**

- (a) 1 and 2 only  
(b) 1 and 3 only  
(c) 2, 3 and 4 only  
(d) 1, 2, 3 and 4

**Ans: (b)**

### ***Mains***

**Q. Discuss the essential conditions for exercise of the legislative powers by the Governor. Discuss the legality of re-promulgation of ordinances by the Governor without placing them before the Legislature. (2022)**

---

## Railway Accidents and Kavach System

**For Prelims:** [Rashtriya Rail Sanraksha Kosh \(RRSK\)](#), [KAVACH](#), [Committees](#)

**For Mains:** Railway Safety: Challenges, Measures Taken and Way Forward

[Source: IE](#)

### **Why in News?**

Recently, the collision at Rangapani involving the **Kanchenjunga Express** highlights the necessity for **enhanced safety measures**.

- Despite safety advancements, Indian Railways has experienced **fluctuating collision rates**,



recording six incidents in 2022-23 and four in 2023-24, highlighting the ongoing need to prevent such incidents.

## What are the Reasons behind Railway Accidents?

- **Derailments:** Many train disasters in India are **caused by derailments**, with a government safety report from 2020 finding they were responsible for **70% of train crashes** in the country.
  - A 2022 [Comptroller and Auditor General](#) report noted that 7 in 10 railway accidents between 2018 to 2021 came due to derailments.
- **Human Errors:** The railway staff, who are responsible for operating, maintaining, and managing the trains and tracks, are **prone to human errors** due to **fatigue, negligence**, corruption, or disregard for safety rules and procedures.
- **Signalling Failures:** The signalling system, which controls the movement and direction of trains on the tracks, can fail due to **technical glitches, power outages**, or human errors.
- **Unmanned level crossings (UMLCs):** UMLCs are crossings where railway tracks intersect without barriers or signals, all unmanned ones on broad gauge routes have been removed, yet accidents still pose risks at [manned level crossings \(MLCs\)](#).
- **Infrastructure Defects:** The railway infrastructure, which includes tracks, bridges, overhead wires, and rolling stock, is **often defective** due to poor maintenance, ageing, vandalism, sabotage, or natural disasters.
  - Many routes are **operating at over 100% capacity**, which increases the risk of accidents due to congestion and overloading.
- **Safety and Information Flow Challenge:** Since the inception of railways in India, periodic field inspections by authorities at various levels have been crucial for ensuring compliance with established procedures and standards.
  - This "**top-down**" **approach** inherently places the responsibility of detecting deviations on higher authorities, creating a "**cops and robbers**" dynamic where **higher authorities view frontline staff with suspicion**, and the latter adopts a "**catch me if you can**" attitude.
    - This scenario **encourages superficial compliance** and conceals underlying issues, undermining transparency and frankness.
    - Such dynamics can be counterproductive, especially in railway safety matters, where many accidents result from a series of 'near miss' situations, unsafe practices, or deviations from the norm over time.

## What Steps have been taken by Railways to Reduce Accidents?

- **Sufficient Funding:** Creation of special funds known as [Rashtriya Rail Sanraksha Kosh \(RRSK\)](#) and the [Rail Safety Fund](#) but also through capital grants it is permitted to utilise towards these essential requirements.
  - **Rashtriya Rail Sanraksha Kosh (RRSK)** is a **safety fund for critical assets** established in 2017-18 with a corpus of Rs 1 lakh crore over five years for critical safety-related works such as track renewals, signalling projects, bridge rehabilitation, etc.
  - An unprecedented allocation for **capex of over Rs 2.5 lakh crore** was made during 2023-24 and again for 2024-25.
- **Expansion of Railway Network:** While the rail network is being extended to cover the farthest parts of the **country**, **capacity augmentation** of the congested routes is also being undertaken.
  - The **National Rail Plan 2030** aims to identify [new dedicated freight](#) and high-speed rail corridors and increase the average speed of trains.
- **LHB Design Coaches:** Lighter and safer coaches for Mail/Express trains. These coaches are **based on German technology** and have better anti-climbing features, fire retardant materials, higher speed potential and longer service life than conventional ICF design coaches.
- **Modern Track Structure:** Stronger and more durable tracks and bridges. This includes using a **Prestressed Concrete Sleeper (PSC)**, higher Ultimate Tensile Strength (UTS) rails, fan-shaped layout turnout on PSC sleepers, Steel Channel Sleepers on girder bridges, etc.
- **Technological Upgradation:** Improved design and features of coaches and wagons. This includes **introducing Modified Centre Buffer Couplers**, Bogie Mounted Air Brake System (BMBS), improved suspension design and provision of Automatic fire & smoke detection system in coaches.

- It also includes installing [KAVACH](#)- an indigenously developed Automatic Train Protection (ATP).
- Indian Railways have installed **Block Proving Axle Counter (BPAC)** for better Railway traffic control. BPAC is a **train detection system** installed on trains, which **automatically detects** the crossing of a train between two points on the track.
  - It doesn't permit two trains to be within the same block section at the same time, which ensures the safety of trains.

## Electronic Interlocking (EI)

- It employs **computer-based systems** and electronic equipment to control signals, points, and level-crossing gates.
- Unlike conventional relay interlocking systems, EI utilises software and electronic components to manage the interlocking logic.
- EI ensures the **synchronisation of all elements** to facilitate uninterrupted train movement.
- As of 2022, 2,888 stations in India were equipped with an electronic interlocking system comprising 45.5% of the Indian Railways network.

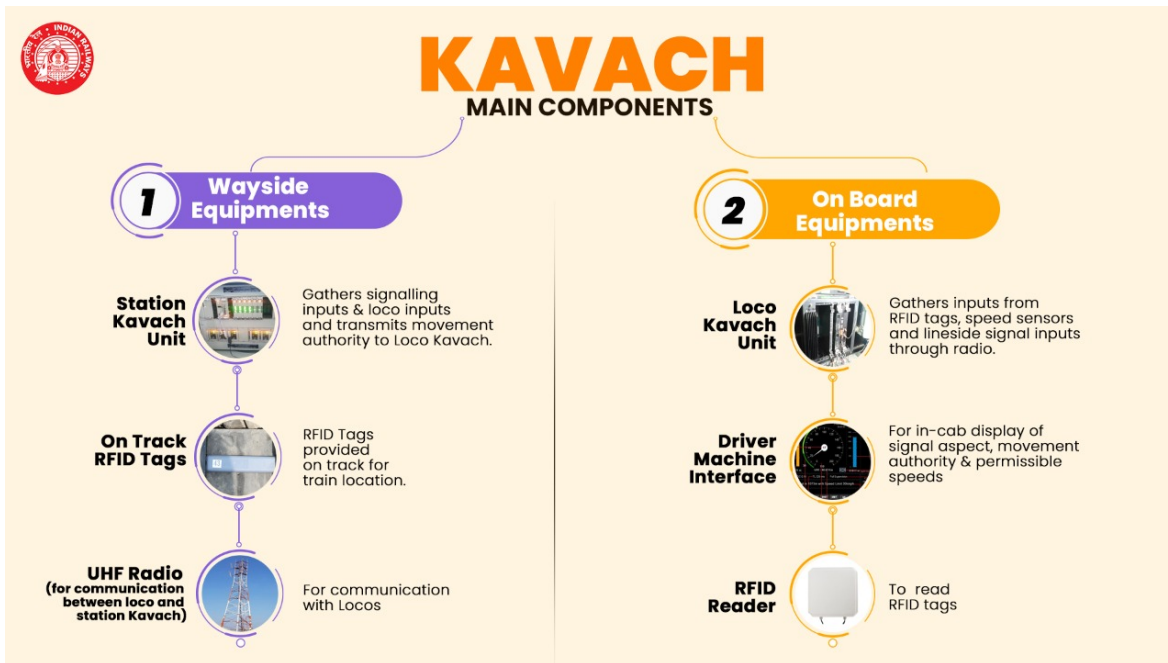
## What is the Kavach System?

### ▪ About:

- [Kavach](#) launched in 2020, is a **cab signaling train control system** with **anti-collision features** developed by the [Research Design and Standards Organisation \(RDSO\)](#) in association with three Indian vendors.
- It has been adopted as **National Automatic Train Protection (ATP) System**.
- It adheres to **Safety Integrity Level-4 (SIL-4) standards** and acts as a vigilant watchdog over the existing signaling system, alerting the loco pilot when approaching a 'red signal' and applying automatic brakes if necessary to prevent overshooting the signal.
  - Safety Integrity Level is a measure used in functional safety standards to quantify the level of risk reduction provided by a safety function. SILs are defined in range from SIL 1 (lowest level of safety integrity) to SIL 4 (highest level of safety integrity).
- The system also **relays SoS messages** during emergency situations.
- It features **centralised live monitoring** of train movements through the Network Monitor System.

### ▪ Components of Kavach:

- **The Kavach system's deployment involves three critical components:**
  - Firstly, [Radio Frequency Identification \(RFID\)](#) technology is integrated into the tracks. RFID uses electromagnetic fields to automatically identify and read information from a wireless device from a distance, without requiring physical contact or a line of sight
  - Secondly, the driver's cabin (locomotive) is equipped with **RFID readers**, a computer, and brake interface equipment
  - Finally, **radio infrastructure**, including towers and modems, is installed at railway stations.



### ▪ Status of Kavach:

- Kavach aims to secure India's extensive railway network of over 68,000 km, but **only 1,500 km are currently equipped** with the system since its initial rollout.
  - It costs ₹50 lakh per km for trackside installation and ₹70 lakh per train.
- It aims to **cover 6,000 km by 2025**, including key routes like **Delhi-Mumbai and Delhi-Howrah**.
  - While current capacity is 1,500 km annually, it's expected to reach 5,000 km by 2026.
- Upgrades are planned to make the system **4G/5G** compatible.
- Installation is ongoing, with components like optical fiber cables, towers, and station equipment being deployed.

### Committees Recommendations

- [Kakodkar Committee \(2012\):](#)
  - Adopting **advanced technologies** for track maintenance and inspection
  - Improving **human resource** development and management
- [Bibek Debroy Committee \(2014\):](#)
  - Separating the **railway budget** from the general budget
  - Outsourcing **non-core activities**
  - Creating a **Railway Infrastructure Authority of India**
- [Vinod Rai Committee \(2015\):](#)
  - Establishing an independent Railway Safety Authority with statutory
  - Setting up a **Railway Accident Investigation Board** to conduct independent and impartial inquiries.
  - Creating a **separate Railway Infrastructure Company** to own and maintain railway assets.

### What Steps are Needed to Enhance Safety in India?

- **Creating Statutory Railway Safety Authority:** Set up a railway safety authority as a statutory body with **powers to frame safety standards**, conduct safety audits and inspections, enforce accountability and penalties for lapses, and investigate accidents.
- **Confidential Incident Reporting and Analysis System (CIRAS):** Given the rapid advances in communications and information technology, it is crucial to **introduce a confidential reporting**

**system** like CIRAS in the UK for Indian Railways, focusing on **correction over punishment** and fostering a **culture of shared safety** commitment from management.

- **Enhance Coordination and Communication:** Improve the communication and coordination **among the railway board, zonal railways**, divisions, production units, research organisations, etc., which are involved in railway operations.
- **Invest More in Safety-Related Works:** Allocate more funds **for track renewal, bridge repair**, signalling upgrade, coach refurbishment, etc.
- **Train Employees to Minimize Human Errors:** Provide **regular and comprehensive training** to the railway staff on the latest technologies, equipment, systems, safety rules and procedures.
- **Improve Infrastructure:** Indian railway tracks **need regular checks**, especially because they expand in summer and contract in winter due to temperature changes, requiring **structural and geometrical evaluations** every **three months**.
- **Adopt advanced technologies:** Install [anti-collision devices \(ACDs\)](#) such as Kavach/ Train Collision Avoidance System (TCAS), Train Protection Warning System (TPWS), Automatic Train Control (ATC), etc.
  - The railways are in the process of installing these technologies on some sections of tracks, but they **need to be expanded** to cover the entire network.
  - Emulate **successful Automatic Train Protection Systems** from other regions, like **Mumbai's suburban system**.
- **Introduce Performance-Linked Incentives:** Reward the railway staff based on their **performance and compliance** with the safety rules and procedures.
- **Ensure accountability:** The government must consider presenting an **annual performance report** of the Railways in the Parliament, similar to the Finance Ministry's Economic Survey before the General Budget, **focusing on internal audit** of performance.
- **Indian Railways Management Service (IRMS):** Evaluate the IRMS scheme's impact on loyalty, ownership, and safety, and consider revising and implementing it to enhance specialization and commitment to safety.
- **Learning From Best Global Practices:**
  - Despite recent accidents, Indian railways **maintain a strong safety record** compared to international standards. In 2022, IR recorded 0.03 significant accidents per million train km, **significantly lower than** the 0.39 per million train km average **across 35 countries**.
  - **United Kingdom:** The UK has **one of the lowest rates of train accidents** in Europe.
    - The **Train Protection and Warning System (TPWS)**, **automatically stops trains** that pass signals at danger or exceed speed limits.
    - The European Train Control System (ETCS), provides continuous **communication** between trains and signalling centres.
  - **Japan:** Japan's high-speed Shinkansen trains, operating at up to 320 km/h, have maintained a **perfect safety record** since 1964 due to advanced safety measures like the **Automatic Train Control (ATC) system, Comprehensive Automatic Train Inspection System (CATIS)**, and Earthquake Early Warning System (EEWS).

**Drishti Mains Question:**

Q. Discuss the major challenges faced by Indian Railways in preventing train collisions. What measures can be implemented to enhance safety and reduce the risk of such incidents?

**UPSC Civil Services Examination, Previous Year Question (PYQ)**

**Prelims:**

**Q. Consider the following communication technologies: (2022)**

1. Closed-circuit Television
2. Radio Frequency Identification
3. Wireless Local Area Network

**Which of the above are considered Short-Range devices/technologies?**

(a) 1 and 2 only

(b) 2 and 3 only

(c) 1 and 3 only

(d) 1, 2 and 3

Ans: (d)

**Mains:**

**Q.** The setting up of a Rail Tariff Authority to regulate fares will subject the cash strapped Indian Railways to demand subsidy for obligation to operate nonprofitable routes and services. Taking into account the experience in the power sector, discuss if the proposed reform is expected to benefit the consumers, the Indian Railways or the private container operators. (2014)

---

## Inauguration of Nalanda University

### Why in News?

Recently, the campus of Nalanda University was formally inaugurated by the Prime Minister of India.

- It is spread across 455 acres, located in Rajgir, Bihar. The site is only 12 km away from the ruins of the ancient Buddhist monastery of the same name.

### What is the History and Revival Efforts of Nalanda University?

- **History:**

- [Gupta Emperor](#) Kumaragupta (Shakraditya) of the **Gupta dynasty** founded Nalanda University in **427 CE** in modern Bihar in the early 5th century, and it flourished for 600 years until the 12<sup>th</sup> century.
- During the era of **Harshavardhana** and the [Palas monarchs](#), it rose to popularity.
- During King **Harshavardhana's reign (606-647 AD)** Chinese scholar **Xuan Zang** (also known as **Hiuen Tsang** and **Moksadeva**, a **7<sup>th</sup>-century Chinese Buddhist monk**, scholar, traveller, and translator) came here and studied for about 5 years.
  - He also carried back many scriptures from Nalanda, which were later translated into Chinese.
- In **670 AD**, another Chinese pilgrim **I-Tsing** visited Nalanda. He stated that Nalanda housed 2,000 students and was supported by money from 200 villages.
  - A large number of students have come to study from **China, Mongolia, Tibet, Korea**, and other Asian countries.
- Archaeological evidence also indicates contact with the [Indonesian Shailendra dynasty](#), one of whose kings built a monastery in the complex.
- Spiritual divines like [Lord Buddha](#) and [Lord Mahavira](#) meditated in this region, adding to the positive vibrancy of the area.
- Great masters such as **Nagarjuna, Aryabhata**, and Dharmakirti contributed to the scholarly traditions of ancient Nalanda.
- The university was **destroyed in 1193 by Bakhtiyar Khilji, a general of the [Turkish ruler Outbuddin Aibak](#)**.
- It was rediscovered in 1812 by Scottish surveyor **Francis Buchanan-Hamilton** and later identified as the ancient university by **Sir Alexander Cunningham** in 1861.

### ▪ Attacks:

- The first attack on Nalanda Mahavihara occurred between **455-470 AD** during the reign of Emperor **Samudragupta** of the Gupta Empire.
  - The attackers were the **Hunas**, a Central Asian tribal group, primarily motivated by the **desire to loot the university's valuable resources**.
  - [Emperor Skanda Gupta](#) later re-established the university. It was during his reign that the renowned Nalanda library was founded.
- The second attack on Nalanda Mahavihara occurred in the **early 7<sup>th</sup> century**, planned by **Goudas emperors** of Bengal.
  - The attack was driven by political tensions with **Emperor Harshavardhana** of Kannauj.
  - Despite destruction, the university was restored by Harshavardhana, allowing Nalanda to continue its mission of global knowledge dissemination.

### ▪ Revival:

- The idea for revival emerged in the early 2000s. Former President A.P.J. Abdul Kalam, the **Singapore** government, and leaders of [East Asian Summit \(EAS\)](#) countries all advocated for Nalanda's return.
- The **Indian Parliament** passed the **Nalanda University Act in 2010**, providing a legal framework for the new institution.
- Nalanda University is envisioned as a **collaborative effort** between **India** and other **East Asian nations**, symbolising a renewed focus on regional knowledge exchange.
- The Bihar government provided a 455-acre site near the ancient ruins. The architect, **B.V. Doshi**, **designed an eco-friendly campus** reflecting the spirit of the past while incorporating modern amenities.
- The **university offers postgraduate programs in various fields**, including Buddhist Studies, Historical Studies, Ecology and Environmental Studies, and International Relations.
- The **Campus is a 'Net Zero' Green Campus**. It is self-sustainable with a solar plant, domestic and drinking water treatment plant, **water recycling plant for reusing wastewater**, 100 acres of water bodies, and many other environment friendly facilities.
- The ruins of Nalanda University was declared as a [UN Heritage Site](#) in 2016.

### East Asia Summit:

- The EAS was established in 2005 as an [Association of Southeast Asian Nations \(ASEAN\)](#)-led initiative.
- It is the only leader-led forum in the Indo-Pacific that brings together all key partners to discuss political, security and economic issues of strategic importance.
- It operates on the principles of **openness, inclusiveness, respect for international law**, ASEAN centrality, and ASEAN's role as the driving force.

### UNESCO's Heritage Sites Related to Buddhism:

- Archaeological Site of **Nalanda Mahavihara at Nalanda, Bihar**
- Buddhist Monuments at [Sanchi](#), MP
- [Mahabodhi Temple](#) Complex at Bodh Gaya, Bihar
- [Ajanta Caves](#) Aurangabad, Maharashtra.
- The **Buddhist chanting of Ladakh** was included in [UNESCO's Representative List of Humanity's Intangible Cultural Heritage](#) in 2012.



[Read more...](#)

## Global Initiative on Digital Health

[Source: IE](#)

### Why in News?

The Department of Economic Affairs (DEA) under the **Ministry of Finance** has not approved of India's contribution of USD 10 million for **Global Initiative on Digital Health (GIDH)**.

### What is the Global Initiative on Digital Health (GIDH)?

#### ▪ About:

- The [Global Initiative on Digital Health \(GIDH\)](#) is a network of organisations, institutions and government technical agencies engaged in supporting national digital health transformation.
- It is managed by the [World Health Organization \(WHO\)](#).
- Its objectives include to assess and prioritise **needs for sustainable digital health transformation** and to match digital health resources and unfunded priorities.
- **GIDH** was launched during India's [G20 Presidency at the Health Ministers' meeting](#) in Gujarat in August 2023.
- It became part of the [New Delhi declaration](#) and **India** promised to make a **USD 10-million** contribution to it as a seed fund. The initiative was formally launched in February 2024.

- **Components of GIDH:** It has four Main Components.
  - **Country Needs Tracker:** A mechanism to identify and track the digital health needs of different countries.
  - **Country Resource Portal:** A map of available digital health resources within each country.
  - **Transformation Toolbox:** A repository of quality-assured digital tools for health transformation.
  - **Knowledge Exchange:** Facilitation of knowledge sharing among participating nations.
- **Similar Initiatives:**
  - **Presidency Prevention, Preparedness Response (PPR) Financial Intermediary Fund (FIF)** was taken during the G20 Presidency by Indonesian, and **Indonesia had contributed USD 50 million as an initiator of the proposal.**

## What is Digital Healthcare?

- **About:**
  - **Digital healthcare** is a system of medical care delivery that uses an array of digital technologies to make quality medical care services accessible, affordable, and sustainable.
  - The broad scope of digital health includes categories such as mobile health (mHealth), **health information technology (IT)**, wearable devices, telehealth and telemedicine, and personalised medicine.
- **Ayushman Bharat Digital Mission:**
  - India's [Ayushman Bharat Digital Mission](#) is working toward creating a seamless electronic health record system.
  - It was launched in September 2021 by the Prime Minister.
  - It aims to provide **digital health IDs** for all Indian citizens to help hospitals, insurance firms, and **citizens access health records electronically** when required.
  - The project is being implemented in the pilot phase in six States & Union Territories.
  - The [National Health Authority \(NHA\)](#) under the Ministry of Health and Family Welfare will be the implementing Agency.

## UPSC Civil Services Examination, Previous Year Questions (PYQs)

### Prelims:

**Q. With reference to the Ayushman Bharat Digital Mission, consider the following statements: (2022)**

1. Private and public hospitals must adopt it.
2. As it aims to achieve universal, health coverage, every citizen of India should be part of it ultimately.
3. It has seamless portability across the country.

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

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

**Ans: (d)**



# India-EU Trade Conundrum

[Source: ET](#)

## Why in News?

Recently, the [European Union \(EU\)](#) has decided to extend [safeguard duties](#), which were set to expire this month. As a result of this extension, the safeguard duties will now remain in effect **until 2026**.

## What are the Recent Key Highlights in India-EU Trade?

- **Exports:** [India's exports to Europe](#) in **FY24** are about **USD 86 billion** and [merchandise exports to EU member](#) countries stood at **about USD 65 billion in 2021-22**, while imports aggregated at **USD 51.4 billion**.
  - In 2022-23, the exports aggregated at USD 67 billion.
- **Substantial Interest in Steel Exports:** India's **iron and steel product exports to the EU increased to USD 6.64 billion in 2023-2024** and from **USD 6.1 billion** in 2022-23.
- **Imposition of Countervailing Duties:** In 2020, the US and EU imposed [countervailing duties \(CVDs\)](#) on certain Indian exports, including **paper file folders, common alloy aluminium sheets, and forged steel fluid**.
  - **Countervailing duties (CVDs)** are tariffs on **imported goods** imposed to offset subsidies given by the exporting country's government, aimed at protecting the domestic industry.
- **Government's Response:** The commerce ministry is working on an institutional mechanism to **verify tax refunds** given to **exporters** under the [government's duty remission scheme \(RoDTEP\)](#) to avoid countervailing duties imposed by top importing countries.

## What is the RoDTEP Scheme?

- **About:**
  - It is a duty remission program implemented from **1st January 2021**, and **designed to boost exports** by reducing **tax burdens on exported goods**.
    - It is administered by the Department of Revenue, Ministry of Finance.
  - **It replaces the prior export incentive program, [Merchandise Exports from India \(MEIS\)](#).**
    - MEIS was driven by a [World Trade Organization \(WTO\)](#) decision, as the MEIS scheme violated the World Trade Organization (WTO) regulations
- **Objective:**
  - The scheme aims to offer **comprehensive assistance** to exporters by reimbursing a wide range of costs.
  - It aims to reimburse exporters for **taxes, duties, and levies** incurred during the production and distribution process that are not refunded under other schemes.
- **Addition of New Sectors Under RoDTEP:**
  - The Government of India has announced the extension of the RoDTEP Scheme support to additional export sectors Such as **Advance Authorisation (AA)** holders, **Export Oriented Units (EOU)**, and [Special Economic Zones \(SEZ\)](#) export units.

- Sectors such as **Engineering, Textiles, Chemicals, Pharmaceuticals & Food Processing**, and many others stand to benefit from the measure.

▪ **Financial Allocation:**

- Since its inception, the RoDTEP Scheme has already provided support amounting to Rs **42,000 Crores** to more than **10,500 export items**.
- In the current financial year, the scheme has a budget of **Rs 15,070 Crore** with an additional increase of **10% in FY 2024-25**.

**Extending Support**

**Refund of Duties and Taxes on Exported Products (RoDTEP) scheme implemented from Jan 1, 2021**

**Offers 0.3-4.3% incentive to 8,555 products** in sectors such as marine, agri, and gems & jewellery

**But excludes pharma, steel and chemicals**

**Commerce ministry will need additional ₹2,000 cr to expand coverage under scheme**

**Chemical sector eyes a remission rate of 2.3-2.9%**

**Pharma industry seeks 5-6%**

**It's a crucial move as India's Sent exports shrank 3.5% on weak global demand**

**UPSC Civil Services Examination, Previous Year Question (PYQ)**

**Prelims:**

**Q. With reference to the international trade of India at present, which of the following statements is/are correct? (2020)**

1. India's merchandise exports are less than its merchandise imports.
2. India's imports of iron and steel, chemicals, fertilizers, and machinery have decreased in recent years.
3. India's exports of services are more than its imports of services.
4. India suffers from an overall trade/current account deficit.

**Select the correct answer using the code given below:**

- (a) 1 and 2 only
- (b) 2 and 4 only
- (c) 3 only
- (d) 1, 3 and 4 only

**Ans: D**

---

## Iberian Lynx

[Source: DTE](#)

Recently, the **Iberian lynx** (*Lynx pardinus*), one of the rarest cat species globally, has moved from being 'endangered' to 'vulnerable' on the [International Union for Conservation of Nature \(IUCN\) Red List](#).

- Since 2001, the number of mature Iberian lynxes has risen from 62 to 648 in 2022. Currently, there are over 2,000 lynxes, including young ones, across Spain and Portugal.
- **About Iberian Lynx:**
  - It belongs to the family **Felidae**.
  - It is the most dangerous of feline species (family of flesh-eating mammals).
  - **Distribution:** The Iberian Lynx is restricted to two separate regions of southwestern Spain, namely eastern Sierra Morena and the coastal plains west of the lower Guadalquivir.
  - **Protection Status:** These are protected under [Appendix II of IUCN Red List](#) and it is listed on [CITES Appendix I](#).
  - Threats: Poaching, road accidents, habitat loss and climate change.
- IUCN created in 1948 is the global authority on the status of the natural world and the measures needed to safeguard it.



Photo Dr. Alex Silva

[Read More...](#)

---

**e-Shram Portal Showcased at International Labour Conference**

[Source: PIB](#)

Recently, the **e-Shram portal** was showcased by an Indian delegation led by the Secretary, Ministry of Labour & Employment during the **112th International Labour Conference** held on 4<sup>th</sup> June 2024 at Geneva, Switzerland.

- The **International Labour Conference** is the [ILO's](#) highest decision-making body. It sets international labour standards and broad policies of the ILO. It meets annually.
  - It brings together representatives of **governments, workers, and employers** from all **187** ILO member States.
- **eShram** portal was launched in **2021** as "**One-Stop-Solution**" for **unorganised workers** to create a **National Database for migrant or unorganised workers** across India and facilitating access to various social security schemes.
  - It is integrated with [National Career Service \(NCS\) Portal](#), [Skill India Digital Hub \(SIDH\)](#), [myScheme portal](#), and [Pradhan Mantri Shram Yogi Mandhaan \(PMSYM\) scheme](#).
- Government aims to integrate other schemes such as **Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY)**, **Pradhan Mantri Suraksha Bima Yojana (PMSBY)**, and **Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY)**, **PM-SVANidhi**, into the e-Shram portal.
- India's informal labour market comprises nearly 85% of the nation's workers, with over 90% of them being self-employed or casual labourers.

**e-SHRAM Portal**  
National Database of Unorganized Workers

Category of Unorganized Workers covered

- Construction Worker
- Migrant Worker
- Gig & Platform Worker
- Street Vendor
- Domestic Worker
- Agriculture Worker
- Other Unorganized Workers

**Benefits of e-SHRAM**

- ▶ eSHRAM Card to be acceptable across the country
- ▶ Accidental Insurance Coverage through PMSBY for a year
- ▶ Rs 2 lakh for accidental death and permanent disability and Rs. 1 lakh for partial disability
- ▶ Social security benefits to be delivered through this portal
- ▶ Helpful for State & Central Governments while providing assistance during calamities/pandemics

[Read More...](#)

## Pro-tem Speaker

[Source: TH](#)

**Bhartruhari Mahtab** has been appointed and administered oath by the **President of India** as the **pro-tem Speaker** of the 18<sup>th</sup> [Lok Sabha](#).

- Speaker Protem is appointed by the President under **Article 95(1)** of the **Constitution** to perform the duties of the Speaker till the election of the Speaker.
- Pro-tem is a Latin phrase which means "**for the time being**".
- The **pro-tem speaker** is appointed to preside over the sittings of the newly elected house. Usually, the **senior most member** of the house is made the pro-tem speaker.
- When the new Speaker is elected by the House, the office of the Speaker Pro Tem ceases to exist.

▪ **Duties of pro tem speaker:**

- The Pro-tem Speaker presides over the **first sitting** of the Lok Sabha and administers the oath of office to the newly elected MPs.
- To conduct the vote for the speaker and deputy speaker. He also administers the floor test.

# LOK SABHA SPEAKER

The **Constitutional/Ceremonial Head** of LS who presides over its day-to-day functioning

What **Speaker/Deputy Speaker** is for LS, the **Chairman/Dy Chairman** is for RS

### ORIGIN IN INDIA

- 1921 (Gol Act of 1919) under the name **President and Dy President**

*Gol Act of 1935 changed this nomenclature to Speaker and Deputy Speaker*

### ELECTION (BOTH SPEAKER & DY SPEAKER)

- Article 93, Part V
- By a **simple majority**
- Re-election - Eligible

### ELECTION CRITERIA

- Should be a member of LS
- No specific qualifications
- Generally, belongs to the ruling party

### TENURE

- **5 years** (till immediately before first meeting of the next LS)

*Speaker does not vacate his/her office upon dissolution of LS*

### POWERS

- Final interpreter of Constitutional provisions in LS; his/her **rulings are binding** in nature
- Presides over a **joint sitting** of the two Houses of Parliament
- Can adjourn the House/suspend the meeting **in absence of Quorum**
- Power of **Casting vote** to resolve a deadlock
- Decides:
  - if a bill is (not) a **money bill**
  - **Disqualification** of LS members (under 10<sup>th</sup> Schedule) (granted via **52<sup>nd</sup> Amendment 1985**)

### REMOVAL (CONDITIONS)

- If s/he **ceases to be a member** of LS
- **Written Resignation** to Dy Speaker
- Removed by **Effective Majority**

[Read more...](#)

## Viability Gap Funding (VGF) Scheme

Source: PIB

The Union Cabinet has recently approved the [Viability Gap Funding \(VGF\) scheme](#) for offshore wind energy projects with a total outlay of **Rs.7453 crore**.

- The scheme includes the installation and commissioning of 1 GW (Gigawatt) of offshore wind energy projects **with an outlay of Rs. 6853 crore, featuring 500 MW wind energy projects**

**off the coasts of Gujarat and Tamil Nadu.**

- Offshore wind is a source of [renewable energy](#) which **offers several advantages such as higher adequacy & reliability, lower storage requirement.**
- The VGF scheme, **overseen by the Ministry of New and Renewable Energy**, is a major step towards implementing the National Offshore Wind Energy Policy **notified in 2015.**
  - VGF is a government **grant of up to 40% of the total project cost**, provided to support infrastructure projects that are economically justified but not financially viable.
- The VGF support from the Government will reduce the cost of power from offshore wind projects and make them viable for purchase by [Distribution Companies \(DISCOMs\)](#).

[Read more...](#)

---

PDF Refernece URL: <https://www.drishtias.com/current-affairs-news-analysis-editorials/news-analysis/22-06-2024/print>

