

**GS PAPER2-WELFARE SCHEMES FOR VULNERABLE SECTIONS OF THE POPULATION BY THE CENTRE AND STATES AND THE PERFORMANCE OF THESE SCHEMES;**
**Bonded Labour in India: Persistent Exploitation Despite Legal Safeguards**

On *International Labour Day*, the continued existence of **bonded and forced labour** in India raises serious questions about the effectiveness of welfare schemes, legal enforcement, and institutional mechanisms meant to protect vulnerable sections.

**Constitutional and Legal Safeguards**

- **Article 23** of the Indian Constitution prohibits **forced labour and trafficking**.
- **Bonded Labour System (Abolition) Act, 1976** legally abolishes bonded labour and provides for rehabilitation.
- The **National Policy on Bonded Labour (2000)** and **Central Sector Scheme for Rehabilitation** support victims.
- Labour Codes (2019–20), although consolidating laws, have weakened certain protective provisions (e.g., right to strike).

**Persistent Challenges and Systemic Failures**
**1. Economic Triggers and Debt Dependence**

- **Sudden hardships** like illness, marriage, or job loss compel families to take loans, leading to debt bondage.
- In the absence of formal credit systems, local employers double as lenders, creating exploitative dependencies.

**2. Social and Structural Discrimination**

- **Caste-based hierarchies, illiteracy, and exclusion from legal awareness** intensify vulnerability.
- Many victims are unaware of their rights or fear reprisal when seeking legal recourse.

**3. Employer Monopoly and Power Imbalances**

- In rural and informal sectors, **employers control both credit and jobs**, converting temporary help into long-term bondage.
- **Lack of written contracts, wage withholding, and physical coercion** are common.

**Scale and Nature of the Problem**

- Despite abolition in 1976, **bonded labour affects an estimated 1.84 crore individuals** (official estimates).
- Between 2016–2021, only **12,760 workers** were officially rescued — far below the 2030 rehabilitation target.
- The **unorganised sector**, comprising **39 crore of 47 crore total workers**, is deeply informal and insecure.
- The **ILO India Employment Report (2024)** confirms a dominance of low-quality, exploitative employment.

**Policy-Implementation Gaps**

- **Vision vs. Reality:** The 2016 plan to rescue 1.84 crore labourers by 2030 is severely off-track.
- To meet targets, over **11 lakh rescues per year** are needed — a number current systems cannot handle.
- **Rehabilitation packages**, when offered, are often delayed or inadequately implemented.

**Labour Rights and Institutional Weakness**

- **Low unionisation** in informal sectors limits collective bargaining power.
- **Labour Codes** have diluted prior protections, reducing workers' ability to organise and demand better conditions.
- **Enforcement agencies** are understaffed, undertrained, and lack coordination with local administration.

**Way Forward**

1. **Strengthen Grassroots Awareness:** Empower vulnerable communities through legal literacy and access to grievance redressal.
2. **Revive Worker Unionisation:** Enable safe and lawful collective bargaining structures, especially in the informal sector.
3. **Enhance Enforcement Mechanisms:** Equip labour inspectors, judiciary, and local bodies with resources and training.
4. **Credit Access and Financial Inclusion:** Expand formal microcredit networks to break debt dependency.
5. **Robust Data and Monitoring:** Maintain transparent data on rescues, rehabilitations, and prosecutions.
6. **Inter-state Cooperation:** Improve coordination in tackling exploitation of **migrant workers** across state lines.

**Conclusion**

Bonded labour is not merely a legal issue but a symptom of **deep socio-economic inequalities** and weak institutional structures. To uphold the dignity of labour and ensure justice, India must adopt a **holistic, rights-based approach** that goes beyond rescue to address the roots of exploitation.

**GS PAPER II**
**Digital Access as a Fundamental Right: Empowering Persons with Disabilities**

In *Amar Jain v. Union of India (2025)*, the Supreme Court held that **inclusive digital access** is a part of the **fundamental right to life and liberty under Article 21**, mandating reforms in digital infrastructure to ensure equitable access, especially for **Persons with Disabilities (PwDs)**.

**Significance of the Judgment**

The Court emphasized that **digital access is a constitutional obligation**, not a policy luxury. It drew upon **Articles 14, 15, and 38** to affirm that universal access to e-governance, welfare schemes, and financial systems is essential for equality and dignity. The judgment highlighted the **digital KYC process** as a key area of exclusion, particularly affecting PwDs with visual impairments and facial disfigurements.

**Directions Issued by the Court**

- Revise **digital KYC norms** to accommodate disabilities under the **Rights of Persons with Disabilities (RPwD) Act, 2016**.

- RBI and all regulated entities must ensure **accessibility compliance**, appoint nodal officers, and conduct **periodic accessibility audits**.
- Involve persons with disabilities in **design and development** of digital platforms to ensure usability.

#### Challenges in Digital Empowerment of PwDs

1. **Digital Literacy Divide:** PwDs are underrepresented in schemes like **PMGDISHA**, limiting their access to digital platforms.
2. **Weak Enforcement of Guidelines:** Despite mandates under RPwD Act and initiatives like **Sugamya Bharat Abhiyan**, accessibility implementation remains fragmented.
3. **Lack of Assistive Technology (AT):** Affordable and user-centric AT solutions are scarce, limiting the ability of PwDs to complete tasks like digital verification, especially for acid attack survivors or the visually impaired.

#### Suggested Measures

- **Inclusive Digital Infrastructure:** Integrate screen readers, voice commands, and alternatives to facial recognition under **Digital India**.
- **Digital Literacy Campaigns:** Tailor training modules in collaboration with NIEPMD and private tech companies to improve usage of assistive tools.
- **Disability-Sensitive Urban Planning:** Ensure public infrastructure includes digital signages and smart systems accessible to PwDs.
- **Inclusive Innovation Labs:** Foster R&D through public-private partnerships to build **scalable, affordable, and accessible technologies**.

#### Conclusion

Digital inclusion is critical for **realizing fundamental rights** in a modern democracy. The Supreme Court's ruling sets a constitutional precedent for prioritizing digital equity for PwDs. India must now translate legal mandates into **tangible, inclusive outcomes**, aligned with the **UN Convention on the Rights of Persons with Disabilities (CRPD), 2006**.

### PRELIM FACTS

#### 1. Operation Kagar

Operation Kagar, a large-scale counterinsurgency campaign, has encircled the last remaining Naxal strongholds in Chhattisgarh-Telangana border regions.

##### About Operation Kagar:

- **What it is**
  - Operation Kagar is an **anti-Naxal military campaign** launched in **January 2024** by the Union Government.
  - It integrates **security action, surveillance technology, and development outreach** to dismantle Left-Wing Extremism (LWE).
- **Core zones:** Bastar (Chhattisgarh), Gadchiroli (Maharashtra), West Singhbhum (Jharkhand).
- **Scale & Strategy:**
  - Involves **1 lakh+ personnel** from CRPF, CoBRA, DRG, STF, and state police.
  - Advanced surveillance tools like **drones, AI, and satellite imagery** are being used.
- **Significance:**
  - Reduced Naxal-affected districts from **106 (in 2015) to just 6** in 2025.
  - Aims to restore **state control**, enable **development**, and **protect tribal communities** from Maoist exploitation.
  - Over **287 Naxals neutralized** in 2024 and **150+ in 2025** already.

#### 2. Natural Hydrogen

##### What is Natural Hydrogen?

- Also known as **White/Gold/Geological Hydrogen**.
- Naturally occurring hydrogen gas found in the **Earth's crust or atmosphere**.
- Differs from:
  - **Green Hydrogen** – from renewables (electrolysis)
  - **Blue Hydrogen** – from natural gas with carbon capture
  - **Grey Hydrogen** – from fossil fuels

##### Formation Processes:

1. **Serpentinisation** – Water interacts with ultramafic rocks, forming serpentinite and releasing H<sub>2</sub>.
2. **Radiolysis of water** – Caused by radioactive decay in rocks.
3. **Organic decomposition** – At geological depths.

##### Global Reserves (Exploration in Early Stages):

- **France** – *Moselle region* (46 million tons, one of the largest known reserves)
- **Australia** – Eyre Peninsula, Kangaroo Island
- **USA** – Kansas, Nebraska
- Others: Spain, Albania, Colombia, South Korea, Canada

##### India's Potential Zones:

- **Ultramafic/mafic formations and basaltic rocks**

- **Ophiolite complexes** – Andaman & Himalayas
- **Greenstone belts** – Dharwar, Singhbhum
- **Sedimentary basins** – Vindhyan, Cuddapah, Gondwana, Chhattisgarh
- **Basement rocks** with fractures
- **Active hydrothermal systems** – e.g. hot springs

### 3. Raje Raghuj Bhonsle I – Prelims Facts

- **Born:** 1695, from Hingangkar Bhosale clan
- **Role:** Maratha ruler and military commander; founder of the Nagpur Kingdom
- **Title:** *Senasahib Subha* conferred by Chhatrapati Shahu I
- **Campaigns:** Led Maratha expansion to Odisha, Bihar, Bengal, MP, UP, Chhattisgarh (1745–55)
- **Sword Features:**
  - European-style curved blade with gold Devanagari inscription
  - Looted by British after the 1817 Battle of Sitabuldi
- **Recent Update:** Sword repatriated by Maharashtra govt from London auction

### 4. National Security Advisory Board (NSAB) – Prelims Facts

- **Established:** 1998 (on K.C. Pant Task Force recommendation)
- **Nature:** Non-statutory, advisory body under **National Security Council (NSC)**
- **Structure:** Part of a 3-tier system – NSC (PM-led), Strategic Policy Group, NSAB
- **Function:** Provides strategic inputs & long-term analysis on national security
- **Composition:** Eminent experts from outside govt; recent chairman – **Alok Joshi (ex-RAW chief)**
- **Meetings:** At least once a month
- **Tenure:** Generally reconstituted every two years

### 5. Depot Darpan Portal – Prelims Facts

- **Launched by:** Ministry of Consumer Affairs, Food & Public Distribution
- **Purpose:** Real-time digital monitoring of food grain depots to improve transparency, efficiency, and food safety
- **Technology Used:** IoT, AI, geo-tagging, CCTV, mobile app support
- **Key Features:**
  - Real-time tracking of storage conditions and operations
  - Geo-tagged audits and third-party verification
  - Automated ratings of depots based on performance
  - AI tools: Bag counting, Face Recognition, ANPR
  - Sensors for CO<sub>2</sub>, phosphine gas, humidity, temperature, and fire detection
- **Coverage:** 2,278 warehouses (FCI, CWC, state/private depots)
- **Significance:**
  - Supports **National Food Security Act (NFSA)** by securing food for 80+ crore beneficiaries
  - Promotes digital governance and scientific warehousing

### ANSWER WRITING

**Q."Digital access is no longer a luxury but a constitutional necessity." In light of the Supreme Court's 2025 judgment in *Amar Jain v. Union of India*, discuss the significance of recognizing digital inclusion as a fundamental right and suggest measures to enhance digital empowerment of Persons with Disabilities (PwDs) in India.**

#### **Introduction:**

The Supreme Court's landmark judgment in *Amar Jain v. Union of India* (2025) declared that **inclusive digital access is an integral part of the fundamental right to life and liberty under Article 21**. This ruling recognized digital participation as a precondition for dignity, inclusion, and equality, particularly for vulnerable communities such as Persons with Disabilities (PwDs).

#### **Body:**

##### **Significance of the Judgment:**

- The Court emphasized that digital access is a **constitutional obligation**, invoking **Articles 14, 15, and 38** to support inclusive e-governance and public services.
- It held that digital exclusion, especially in the **Know Your Customer (KYC)** process, violates the dignity and autonomy of PwDs with visual impairments or facial disfigurements.
- The judgment mandated:
  - **Revised KYC norms** to align with the **Rights of Persons with Disabilities (RPwD) Act, 2016**.
  - Accessibility audits, nodal officers, and **inclusion of PwDs** in the design of digital platforms.

##### **Challenges in Digital Empowerment of PwDs:**

- **Digital literacy gap:** PwDs are underrepresented in digital schemes like **PMGDISHA**.
- **Weak enforcement** of accessibility laws and guidelines (e.g., **Sugamya Bharat Abhiyan**).
- **Limited assistive technology (AT):** Scarcity of affordable tools like screen readers and voice navigation impedes digital access.

**Suggested Measures:**

- **Inclusive digital infrastructure:** Integrate screen readers, voice commands, and AI tools in public platforms.
- **Targeted digital literacy programs:** Partner with tech companies and institutions like NIEPMD.
- **Disability-sensitive planning:** Ensure urban and digital infrastructure includes multi-sensory signage and smart systems.
- **Inclusive innovation hubs:** Foster R&D for accessible and affordable assistive technologies.

**Conclusion:**

This judgment is a constitutional milestone, linking digital equity to fundamental rights. For true empowerment, India must go beyond legal mandates and **translate them into inclusive, accessible, and enforceable digital ecosystems**, aligned with its obligations under the **UN Convention on the Rights of Persons with Disabilities (CRPD), 2006.**

**MCQ**

- With reference to **Operation Kagar**, consider the following statements:
  - It was launched in 2024 as an anti-Naxal campaign by the Union Government.
  - The operation primarily focuses on northeastern states like Manipur and Nagaland.
  - It extensively uses technologies like drones, AI, and satellite imagery.
  - One of its goals is to protect tribal communities from Maoist exploitation.

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

A. 1 and 2 only                      **B. 1, 3 and 4 only**  
 C. 2 and 3 only                      D. 1, 2, 3 and 4
- With reference to Natural Hydrogen, consider the following statements:
  - It is also referred to as white or geological hydrogen.
  - It is primarily produced through electrolysis using renewable energy sources.
  - India has potential natural hydrogen reserves in the Dharwar and Singhbhum cratons.
  - The process of serpentinisation can lead to natural hydrogen formation.

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

A. 1 and 2 only                      **B. 1, 3 and 4 only**  
 C. 2, 3 and 4 only                      D. 1, 2, 3 and 4
- Match the following causes of bonded labour with their corresponding characteristics:
 

A. Economic Trigger		1. Monopoly over jobs and credit by employers leading to coercion
B. Social Disadvantage		2. Caused by caste-based exclusion and lack of awareness of rights
C. Power Imbalance		3. Sudden illness or expenses pushing families into debt

Select the correct matching:

A. **A-3, B-2, C-1**                      B. A-2, B-1, C-3  
 C. A-1, B-3, C-2                      D. A-2, B-3, C-1
- Which of the following initiatives is aimed at enhancing accessibility in public infrastructure and digital platforms for Persons with Disabilities?
 

A. Digital India Mission  
**B. Sugamya Bharat Abhiyan**  
 C. PMGDISHA  
 D. BharatNet Project
- Consider the following statements regarding the Supreme Court's 2025 judgment on digital access for Persons with Disabilities (PwDs):
  - The Court invoked Articles 21, 14, 15, and 38 of the Constitution to uphold digital inclusion as a constitutional obligation.
  - It mandated the appointment of nodal officers and periodic audits to ensure digital accessibility.
  - The judgment applies only to government-run platforms and excludes private financial institutions.

Which of the above statements is/are correct?

A. **1 and 2 only**                      B. 1 and 3 only  
 C. 2 and 3 only                      D. 1, 2 and 3
- With reference to Raje Raghujii Bhonsle I, consider the following statements:
  - He was conferred the title of *Senasahib Subha* by Chhatrapati Shivaji.
  - He led Maratha expansion into the eastern parts of India including Odisha and Bengal.
  - His sword was recently reclaimed by the Indian Army from a museum in France.

Which of the statements given above is/are correct?

A. 1 and 2 only                      **B. 2 only**  
 C. 2 and 3 only                      D. 1, 2 and 3
- Consider the following statements about the National Security Advisory Board (NSAB):
  - It is a statutory body under the Ministry of Home Affairs.
  - It was established on the recommendation of a Task Force headed by K.C. Pant.
  - It provides strategic inputs to the National Security Council headed by the Prime Minister.

Which of the statements given above is/are correct?

A. 1 and 2 only                      **B. 2 and 3 only**  
 C. 1 and 3 only                      D. 1, 2 and 3
- Which of the following statements about Raje Raghujii Bhonsle I is correct?
 

A. He was the founder of the Gwalior Maratha dynasty  
 B. He fought against Shivaji in the Battle of Sitabuldi  
**C. He expanded Maratha control into Bengal and Odisha**  
 D. He was the first Peshwa under the Maratha Empire
- Which of the following technologies is/are used in the Depot Darpan Portal?
  - Geo-tagging
  - Artificial Intelligence
  - Biometric Authentication
  - Internet of Things (IoT)

Select the correct answer using the code below:

A. 1 and 2 only                      **B. 1, 2, and 4 only**  
 C. 2 and 3 only                      D. 1, 2, 3, and 4
- Which one of the following foreign travellers elaborately discussed about diamonds and diamond mines of India?
 

A. Francois Bernier  
**B. Jean-Baptiste Tavernier**  
 C. Jean de Thevenot  
 D. Abbe Barthelemy Carre