

INDIA'S "BATTERY PASSPORT" SYSTEM



- It is a system to give electric vehicle (EV) owners detailed digital information about the batteries in use.
- The system will digitally record each battery's specifications — including its source, composition, performance, lifecycle, and supply chain — and embed this data in a QR code.
- A battery passport serves as an Aadhaar identity of sorts, with every battery having a unique ID that provides all information on the product.
- The initiative is expected to enhance safety and quality benchmarks while also boosting India's EV export potential.
- The system will also play a key role in the upcoming battery-swapping policy, enabling users to retrieve battery details by scanning the QR code printed on them.
- Once the battery passport system is implemented, it will be possible to ensure that cells in any battery are manufactured in the same year.
- Through it, users will get to know about the lifecycle and performance of batteries, which is key considering they account for nearly 40% of the costs of EVs.

ADVANCED TOWED ARTILLERY GUN SYSTEM (ATAGS)



- It is a large-calibre gun system with the capability to program and fire future Long Range Guided Munitions (LRGM) to achieve precision and deep strike.
- It has been indigenously designed and developed by the Armament Research and Development Establishment (ARDE), the Pune-based laboratory of the Defence Research and Development Organisation (DRDO).

- The **production partners** of these ATAGS are two **private sector companies**—Pune-based **Bharat Forge** and **Tata Advanced Systems**.
- It will **replace the vintage and smaller-calibre guns** and enhance the artillery capabilities of the Indian Army.
- **Features:**
 - This 155 mm, 52-calibre gun system boasts an impressive **range of over 40 km**, placing it **among the longest-range towed artillery systems**
 - The gun **can fire all types of 155 mm ammunition**, including **high-explosive, precision-guided, smoke**, and illumination shells.
 - It boasts an **enhanced firing rate** of five rounds per minute and can sustain 60 rounds per hour.
 - It also has the **shoot-and-scoot capability** and is also the **first of its kind** gun which is capable of **achieving the shortest minimum range at a high angle**.
 - The gun is **towed by a 6×6 platform**, providing excellent mobility across varied terrains.
 - Its **all-electric drive system** ensures higher reliability and **reduces wear and tear compared** to traditional hydraulic systems.
 - The ATAGS is also designed to **operate in extreme temperatures**.

BROADCASTING INFRASTRUCTURE AND NETWORK DEVELOPMENT (BIND) SCHEME



- It is a **Central Sector Scheme**.
- It aims to provide financial support to Prasar Bharati (All India Radio (AIR) and Doordarshan (DD) for expenses related to **expansion and upgradation of its broadcasting infrastructure**, content development and civil work related to the organization.



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- It enables the public broadcaster to undertake a major upgradation of its facilities with better infrastructure which will widen **its reach, including in the LWE, border and strategic areas** and provide high-quality content to the viewers.
- It also focuses on **development of high-quality content** for both domestic and international audiences.
- It ensures the **availability of diverse content** to the viewers by upgradation of the capacity of the DTH platform to accommodate more channels.
- **Significance of the scheme:**
 - It has **potential to generate indirect employment** by way of manufacturing and services related to the supply and installation of broadcast equipment.
 - The Scheme will increase coverage of AIR FM transmitters in the country to 66% by geographical area and 80% by population up from 59% and 68% respectively.

INDIA'S GLOBAL SOUTH STRATEGY BALANCING: LEADERSHIP AND LEVERAGE

- India has been actively working to project itself as a bridge between the developed and developing worlds, and to emerge as the voice and leader of the Global South.
- **Hosting the Voice of Global South Summits**
 - In 2023 and 2024, India hosted the Voice of Global South Summits, bringing together over 120 developing countries to discuss common concerns such as climate change, debt crisis, food and energy insecurity, and digital divide.
- **Leveraging G20 Presidency (2023)**
 - India used its G20 presidency to champion the cause of the Global South, advocating for inclusive growth, equitable development, and debt relief for poor nations.
 - It succeeded in pushing for the African Union's permanent membership in G20 — a significant diplomatic move that cemented India's leadership credentials.
- **Development Partnerships**

- India continues to expand its development assistance and capacity-building programs in Africa, Latin America, and Southeast Asia.
- **Countering China's Influence**
 - India seeks to offer an alternative model of development to China's Belt and Road Initiative — one that is less debt-driven and more transparent.
- **Moral and Historical Positioning**
 - Drawing from its non-aligned legacy and role in founding the NAM (Non-Aligned Movement), India invokes its history of anti-colonial solidarity to align with the aspirations of the Global South.

Global South

- The **Global South** refers to countries primarily in Asia, Africa, Latin America, and Oceania that are often characterized by lower levels of economic development, colonial histories, and a shared interest in reforming global governance to be more equitable.
- While not a strictly geographical term, it contrasts with the "Global North," which includes wealthier, industrialized nations like those in North America and Western Europe.
 - Australia and New Zealand, both in the southern hemisphere, are not in the Global South.
- The term has gained currency in international relations and diplomacy to signify a collective identity among developing countries, especially in forums like the **BRICS**, **G77**, and the **Non-Aligned Movement**.
- These countries often advocate for **fairer trade terms**, **technology transfer**, **climate justice**, and a **multipolar world order**.
- India has positioned itself as a key voice of the Global South, especially through initiatives like the **Voice of Global South Summit**, aiming to amplify the concerns of developing nations on global platforms such as the **G20**.

END CUSTODIAL BRUTALITY, BEGIN CRIMINAL JUSTICE REFORM

- In the shadowy corners of Tamil Nadu's police stations, a **quiet horror unfolds, custodial deaths that puncture the very soul of justice.**
- The **recent death of Ajith Kumar, a 27-year-old temple guard in Sivaganga, is not an isolated tragedy** but a recurring symptom of systemic dysfunction.
- His haunting last words, **'I didn't steal,'** now echo in a society teetering on the edge of **moral collapse.**
- Now, it is **important to examine the normalisation of custodial violence, the systemic flaws enabling it, and the urgent reforms required to humanise law enforcement and restore the moral contract between the state and its citizens.**

Urgent Reforms Required to Humanise Law Enforcement

- **Systemic Reforms: Rebalancing the Policing Budget**
 - A **structural overhaul of the policing budget is overdue.** Redirecting even a small percentage, **just 5%, towards establishing mental health units, routine counselling, and trauma-informed training** could radically transform outcomes for both detainees and officers.
 - **Current spending favours equipment and surveillance,** but neglects the human beings enforcing the law.
 - **Officers are tasked with managing everything from domestic abuse to gang crime,** often without the emotional tools to cope.
 - Without intervention, the baton becomes a conduit of unaddressed trauma.
- **Training and Accountability: From Cosmetic to Core Reform**
 - The **police training curriculum in India remains outdated and inadequate.** Designed in a pre-liberalisation context, it fails to address the socio-political complexity of modern India.

- What is required is a complete revamp that prioritises ethics, human rights, community policing, and trauma-sensitive methods.
- Moreover, accountability mechanisms remain weak. Suspending a few constables after a death is not justice, it is damage control.
- India needs a dedicated anti-custodial violence law, one that mandates time-bound investigations, video-recorded interrogations, and oversight by civil society.
- **Reimagining Policing: A Vision of Empathy and Service**
 - At the heart of reform lies the need to reimagine the role of the police.
 - The uniform must cease to be a symbol of unyielding authority and instead represent restraint, compassion, and public service.
 - The deaths of Ajith, Vignesh, and Raja are not merely individual tragedies; they are manifestations of a state that has forsaken its responsibility to protect the vulnerable.
 - To uphold the dignity of every citizen, India must shift from reactive punishment to proactive reform.

The Role of Technology: Surveillance as Safeguard

- Technology can be a powerful ally in the fight against custodial violence, but only if implemented with integrity.
- CCTV cameras in custody areas should be tamper-proof and subject to real-time audits. Too often, footage is missing or inaccessible when deaths occur.
- Surveillance must not become a silent spectator to abuse; it must serve as a sentinel of justice, holding both detainees and officers to account.

Conclusion

- The call for justice cannot be answered posthumously. It must be woven into the policies, training, and ethos of the institutions meant to safeguard democracy.
- Custodial deaths are not just the failure of law enforcement; they represent the collapse of the state's moral duty.

INDIA'S CRITICAL MINERALS DIPLOMACY - STRATEGIC ENGAGEMENT THROUGH MINILATERAL 'CLUBS'

- India's participation in global mini-lateral groupings or clubs like the **Quad** (India, Japan, Australia and the US) and the Minerals Security Partnership (MSP) marks a **strategic pivot** in its mineral diplomacy.
- This is particularly crucial amid the **green energy transition and growing dependency on China** for critical minerals.
- Recently, the Quad foreign ministers launched the **Critical Minerals Initiative** to secure and diversify mineral supply chains vital for clean technologies.

The Importance of Critical Minerals:

- **Critical minerals** are those deemed essential for economic prosperity and national security, and whose supply chains are vulnerable to disruption.
- Critical minerals such as lithium, cobalt, and rare earths are **essential for green technologies** — electric vehicles (EVs), solar panels, batteries, and semiconductors.
- **India's over-reliance on China** poses strategic and economic risks, as seen during Beijing's recent export control on rare earth magnets.

The Need for Strategic Mineral Partnerships in India:

- **Weak domestic ecosystem:**
 - **Underexplored reserves** and a late start in global exploration.
 - Indian firms **lack capital** and advanced extraction **technology**.
 - **Political risks** abroad deter private investment in resource-rich but unstable nations.
- **Bilateral agreements - Scope and shortcomings:**
 - Agreements with countries like **Argentina and Zambia** target exploration and mining, while deals with **UAE, UK, and US** focus on processing and recycling.
 - Without secure mineral inputs, processing units risk becoming stranded assets.

Risks and Safeguards for India:

- **Avoiding unequal value distribution:**
 - India risks being seen as merely a **processing or transit hub**, while value-added activities shift to developed countries.
 - **Must negotiate for technology transfer, IPR sharing, and R&D investment clauses.**
- **Guarding against protectionism:**
 - Political changes (e.g., **Trump's policies**) can disrupt trade and resource-sharing.
 - India must ensure **transparent governance, reciprocal obligations, and robust access terms.**

Alignment with Domestic Goals and Global Standards:

- **“Make in India” and “Atmanirbhar Bharat”:**
 - Aim to build **self-reliance** in critical minerals and **export-driven green industries.**
 - Participation in clubs enables compliance with **ESG** (Environmental, Social, and Governance) standards and global competitiveness.
- **Championing the Global South:**
 - **India's diaspora** and historic ties with Africa and Southeast Asia make it a credible bridge between Global North and South.
 - India can push for **inclusive development, scientific sovereignty, and fair global norms.**

Conclusion:

- **India's engagement in mineral mini-laterals** like the Quad and MSP is essential to secure critical mineral supply chains, **reduce dependence on China**, and achieve green technology ambitions.
- As India seeks to become a global green power, it must **balance strategic partnerships with national interests**, negotiate equitable value chains, and ensure capacity building, in line with its developmental ethos.



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NISTAR



- It is the first indigenously designed and constructed **Diving Support Vessel**.

- The ship's name, 'Nistar', originates from Sanskrit and means **liberation, rescue or salvation**.
- The warship has been designed and built as per classification rules of the Indian Register of Shipping (IRS).
- The ship is highly specialised and can **undertake Deep Sea Diving and Rescue Operations**— a capability with select Navies across the globe.

Features of Nistar:

- The ship, measuring 118 m with a **tonnage of nearly 10,000 tons**, is installed with state-of-the-art Diving Equipment and has the capability to **undertake Deep Sea Saturation Diving up to 300 m depth**.
- The ship also has a **Side Diving Stage** for undertaking Diving Operations up to 75 m depth.
- The ship will also **serve as the 'Mother Ship' for the Deep Submergence Rescue Vessel (DSRV)**, to rescue and evacuate personnel, in case of an emergency in a submarine underwater.
- The ship is equipped with a combination of Remotely Operated Vehicles to undertake Diver Monitoring and Salvage Operations up to a **depth of 1000 m**.
- It contains nearly 75% indigenous content, is yet another milestone in the Indian Navy's quest for indigenous construction and is in line with the GoI's vision of Aatmanirbhar Bharat and the Make in India campaign.