FINDER

08th January 2026

FORTUNE IAS NEWS DAILY EXPLAINER

FORTUNE IAS ACADEMY
More than just an academy

'Natgrid', the search engine of digital authoritarianism

Prelims: General Studies Paper - 1
Indian Polity and Governance - Constitution, Political System, Panchayati Raj, Public Policy, Rights Issues

Mains: General Studies - 2
Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

1. Background

- The **26/11 Mumbai attacks (2008) exposed an intelligence failure**-the inability to integrate fragmented data despite clear trails left by **David Coleman Headley**((visa records, travel, hotels)
- This led to the creation of the **National Intelligence Grid (NATGRID)**, announced on **December 23, 2009** as a **data-integration platform.**
- NATGRID, a **middleware search platform**, allowed **11 central agencies** to query databases across **21 categories** (identity, assets, travel, financial intelligence, telecom).
- It was **approved in June 2012 by executive order,** not legislation, with **₹1,002.97 crore**
- Long delays led to perceptions of NATGRID as **"vaporware,"** but recent reports (December 2025) show it is now operational and expanding rapidly.

Vaporware refers to a product or project that is **repeatedly announced but remains non-functional** or unimplemented in practice for a long time, **existing largely on paper** rather than in reality.

2. Challenges

- **Scale and access expansion:** NATGRID now handles about **45,000 queries/month**, with access extended to State police up to SP rank, **shifting from counter-terrorism to routine policing.**
- **Population-wide surveillance:** Integration with the National Population Register (NPR) covering 1.19 billion residents tr**ansforms intelligence from event-based tracking to mass profiling.**
- **Algorithmic risks:** Use of **"Gandiva"** (analytical tool) for entity resolution and facial recognition enables inference of intent at scale, increasing false positives.
- **Bias amplification**: Existing **caste, religious, and geographic biases** in policing risk being hardened and **legitimised by analytics**.
- **Oversight deficit:** Safeguards such as access logging and sensitivity classification **lack credibility** without **independent or parliamentary oversight**.
- **Constitutional neglect**: Courts have not enforced the privacy principles of **Justice K.S. Puttaswamy (Retd.) & Anr. vs. Union of India & Ors**., despite expanding surveillance.
- **Misdiagnosis**: Intelligence failures often arise from **institutional weakness** and **unaccountability**, not merely data shortages.

3. Way Forward

- Strengthen **professionally autonomous investigations**, free from political interference.
- Mandate **transparency and accountability** for intelligence failures.
- Institutionalise **parliamentary and judicial oversight** over surveillance systems.
- Ensure security frameworks uphold **constitutional liberties**, preventing drift towards digital authoritarianism.

Fine-tune this signal to sharpen India's AMR battle

Prelims: General Studies Paper - 1
Current events of national and international importance

Mains: General Studies - 2
Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

1.Context

- Antimicrobial resistance **occurs when bacteria, viruses, fungi, and parasites evolve to resist drugs designed to kill them, rendering standard treatments** like antibiotics ineffective and complicating infections.
- H**igh antibiotic misuse in India, via self-medication and over-prescription, drives AMR,** especially for pneumonia and urinary tract infections
- The **Indian Council of Medical Research (ICMR) recently reported declining antibiotic efficacy against these infections**, a trend Prime Minister Narendra Modi highlighted in the 129th 'Mann Ki Baat' episode on December 28, 2025.

2. Mainstreaming AMR

- **PM Modi's 'Mann Ki Baat' remarks elevate AMR from specialist domains (hospitals, infectious experts) to mainstream public discourse**, linking it to everyday behaviors like antibiotic misuse.
- **Unlike prior efforts (e.g., National Action Plan on AMR, colistin ban), this broad public outreach could drive behavioral change** and reduce AMR trajectory more effectively.
- **AMR's hydra-like growth demands a One Health approach,** integrating human, animal, and environmental health interconnections for comprehensive solutions.

4. AMR Surveillance Gaps

- **Critical Expansion Need:** Enhancing surveillance sites is essential to track AMR trends accurately across India's diverse regions, as current data lacks exhaustiveness.
- **Urban-Centric Bias:** National AMR Surveillance Network (NARS-Net) **sites are concentrated in urban and tertiary care centres,** excluding most non-urban areas and skewing national averages.
- **Community Data Deficit:** Urgent expansion required for representative community-level AMR prevalence, beyond hospital-focused monitoring.
- **NARS-Net Overview:** India's NARS-Net, established in 2013, monitors magnitude/trends of AMR via 60 sentinel medical college laboratories, reporting on nine priority bacterial pathogens and select fungi.
- **GLASS Reporting:** For the 2023 Global Antimicrobial Resistance and Use Surveillance System (GLASS) report, NARS-Net contributed data from 41 sites across 31 States/Union Territories.

5. Way Forward

- **Include secondary/primary care centres and private hospitals in National AMR Surveillance Network (NARS-Net)** for balanced, representative national data.
- **Extend monitoring beyond tertiary/urban sites** to capture community-level Antimicrobial Resistance (AMR) prevalence in non-urban areas.
- **Implement WHO Global Plan 2015 objectives:** awareness, surveillance/research strengthening, infection reduction, antimicrobial optimisation, and investment in new tools.
- **Capitalise on PM Modi's 'Mann Ki Baat' awareness push to drive public behaviour change** against antibiotic misuse.
- **Require sustained funding, strategies, monitoring, enforcement, and political commitment** for comprehensive AMR surveillance expansion.

India's progress on its climate targets

Prelims: General Studies Paper - 1
General issues on Environmental ecology, Biodiversity and Climate Change.

Mains: General Studies - 3
Conservation, environmental pollution and degradation, environmental impact assessment.

1. Context: India's Climate Commitments and Environmental Governance

- India's climate trajectory is being re-examined in light of **recent judicial scrutiny (Aravalli judgment)**, mining pressures, and regulatory gaps in **ecologically sensitive zones**
- At the **Paris Climate Summit (2015)**, India committed to **four quantified targets** under the principle of **Common but Differentiated Responsibilities (CBDR)**, reflecting its historically low **per-capita emissions**, despite being the **third-largest absolute emitter** today.

- Core pledges included **33–35% reduction in emissions intensity by 2030 (from 2005 levels)**, **40% non-fossil power capacity**, **175 GW renewable energy**, and **2.5-3 billion tonnes of carbon sequestration through forests**.
- Over a decade later, the key question is whether **headline achievements translate into real ecological outcomes**.

2. Emissions Intensity: Success with Structural Limits

- India achieved a **36% reduction in emissions intensity by 2020**, meeting its Paris target **a decade early**.
- This was driven by:
  - **Rapid expansion of non-fossil power** (solar, wind, hydro, nuclear).
  - **Shift in economic structure** toward services and digital sectors.
  - **Efficiency programmes** such as **Perform, Achieve and Trade (PAT)** and **UJALA**, reducing energy demand.
- However, **absolute emissions remain high** (≈2,959 $MtCO_2e$ in 2020) due to **partial decoupling- GDP growth has outpaced emissions growth**, so intensity has declined **without an economy-wide absolute fall.**
- **Carbon-intensive sectors** like **steel, cement, and transport** continue to expand, while **coal dominance** limits deep decarbonisation.
- For the **2070 net-zero pledge** to be credible, **intensity gains must convert into absolute emissions reduction**, requiring a **coal phase-down plan** and **industrial decarbonisation**.

3. Renewable Energy: Capacity–Generation Mismatch

- India crossed **50% non-fossil installed capacity by mid-2025**, a major milestone.
- Yet, **renewables contribute only 22% of electricity generation**, while **coal still supplies over 70%**, due to:
  - **Low capacity factors** of solar and wind.
  - **Intermittency** and **lack of storage**.
  - Continued reliance on **coal baseload capacity (~250 GW)**.
- The **175 GW renewable target (2022)** was missed, and the **500 GW by 2030** goal faces execution challenges.
- **Energy storage is the critical bottleneck**: projected need of **336 GWh by 2030**, but only **500 MWh operational** as of 2025.
- Government schemes have accelerated installations, but **grid connectivity delays, land acquisition issues, and state-level bottlenecks** limit real impact.

4. Forests and the Way Forward: Numbers vs Ecology

- Official data suggests India is **close to meeting its forest carbon sink target**, with only **0.2 billion tonnes CO_2e remaining**.
- However, the definition of **"forest cover" is broad**, including **plantations, monocultures, and roadside trees**, not just **natural forests**.
- **Afforestation funds (₹95,000 crore)** suffer from **uneven utilisation** and weak ecological outcomes.
- Climate stress (heat, water scarcity) is reducing **actual carbon absorption**, especially in the **Western Ghats and Northeast**.
- The road ahead requires:
- **Scaling battery storage** and grid integration.
  - A **transparent coal transition roadmap**.
  - **Reformed forest governance** prioritising **biodiversity and natural regeneration**.
  - **Greater data transparency** across regions and sectors.
- In essence, India has delivered on **quantified targets**, but **real climate success lies beyond metrics**, in converting **capacity into sustained generation** and **intensity gains into absolute emissions moderation**.

KEYWORDS

National Mission for a Green India (GIM)

- The **National Mission for a Green India (GIM)** is **one of the eight missions** under the **National Action Plan on Climate Change (NAPCC)**.
- Launched in **February 2014**, the Mission seeks to **protect India's biological resources and the livelihoods dependent on them** from the adverse impacts of **climate change**.
- It also recognises the **central role of forests** in ensuring **ecological sustainability, biodiversity conservation, and food, water, and livelihood security**.
- The Mission aims to **protect, restore, and enhance declining forest cover** and to address climate change through **both adaptation and mitigation strategies**.
- Importantly, GIM adopts a **holistic approach to greening**, extending **beyond mere tree plantation** to focus on **ecosystem-based restoration**.

National Quality Assurance Standards (NQAS)

- The **National Quality Assurance Standards (NQAS)** have been developed to address the **specific operational requirements of public health facilities** in India, while aligning with **global best practices**.
- At present, NQAS apply to **District Hospitals, Community Health Centres (CHCs), Primary Health Centres (PHCs), and Urban PHCs**.
- These standards are designed primarily as a **self-assessment and quality improvement tool** for healthcare providers, enabling facilities to **evaluate service quality against predefined benchmarks** and prepare for **formal certification**.
- The NQAS framework is organised into **eight "Areas of Concern"**: **Service Provision, Patient Rights, Inputs, Support Services, Clinical Care, Infection Control, Quality Management, and Outcomes**.
- The standards are International Society for Quality in Health Care - **ISQua-accredited**, meeting **international benchmarks** for **comprehensiveness, objectivity, evidence base, and rigour in development**.

INSV Kaundinya

- INSV Kaundinya is a **stitched sailing vessel inspired by a 5th-century ship depiction in the Ajanta Caves paintings.**
- It is **named after the legendary Indian mariner Kaundinya, believed to have sailed from India to Southeast Asia** around 2,000 years ago.
- The **ship is built using traditional stitching techniques, without metal nails,** employing coconut fibre, coir rope, wooden joinery, natural resins, and cotton sails, crafted by artisans from Kerala.
- It is a **joint initiative of the Indian Navy, the Ministry of Culture, and Hodi Innovations.**
- The **vessel features rich symbolic motifs, including the Gandabherunda (mythical two-headed eagle of the Kadamba dynasty), the Sun, a Simha Yali carved on the bow, and a Harappan-style stone anchor on the deck.**

Places in News

Somnath Temple

- Somnath Temple, located at **Prabhas Patan near Veraval, Gujarat**, on India's western coast, is revered as the **first among the twelve Jyotirlingas of Lord Shiva**.
- It is associated with the **legend of Chandra (Moon God),** who was relieved from Daksha Prajapati's curse after worshipping Shiva at Prabhas Teerth
- The site is a **Triveni Sangam of Kapila, Hiran, and Sarasvati rivers**, making it an ancient pilgrimage centre.
- The temple **faced repeated destruction** between the 11th and 18th centuries, yet was rebuilt each time.
- The present temple, built in **Chaulukya (Solanki) architectural style,** was reconstructed after Independence under **Sardar Vallabhbhai Patel**.
- The **Pran-Pratistha of the present Somnath Temple** was performed on 11 May 1951 by **Dr. Rajendra Prasad**, the first President of India.

Jabarkhet Nature Reserve (JNR)

- Jabarkhet Nature Reserve (JNR), near **Mussoorie**, completed 10 years in 2025 and is **Uttarakhand's first privately owned and operated nature reserve**.
- Spread over 100 acres, it demonstrates **how habitat restoration** (removal of 500 kg of garbage and 3 tonnes of invasive Eupatorium) **can enable wildlife recovery**.
- The reserve now supports leopard, goral, barking deer, black bear, sambar, over 150 bird species, 40+ fern species, 300+ flowering plants, and diverse fungi and grasses.
- JNR follows a **low-impact, slow tourism model** with affordable ticketed trails, prioritising wildlife's right of way over mass tourism.
- **Local communities are central:** villagers are trained and employed as guides and restoration workers, linking livelihoods with conservation.
- JNR serves as a **critical refuge and research site** amid increasing **habitat fragmentation in the Himalayas**, offering a replicable model for **responsible private reserves in India.**

Species in News

Rufous Sibia

- The Rufous Sibia (Heterophasia capistrata), also known as the **Black-capped Sibia**, is a **medium-sized bird** belonging to the **babblers and laughingthrush** group.
- It is characterised by a black cap, rufous nape, underparts, rump and uppertail coverts,.
- The species measures abou**t 21-24 cm in length** and weighs **28-47 g**, roughly comparable to a bulbul in size.
- It inhabits **terrestrial forest ecosystems**, preferring mixed evergreen and oak forests.
- The Rufous Sibia is distributed across the **Western and Eastern Himalayas**, with a global range covering **Pakistan, Nepal, Bhutan, India, and parts of China.**
- In India, it is mainly found in **Arunachal Pradesh and occurs as a migrant in Assam.**
- The species is considered **near-endemic to the Himalayan** region
- It is currently classified as **Least Concern on the IUCN Red List,** with population trends remaining unknown.