

Mains Master

A GREEN FISCAL BLUEPRINT

Understanding the landscape:

India's commendable efforts in forest conservation and climate action initiatives have yielded positive results in building community and ecosystem resilience. However, the significant economic costs associated with forest conservation, primarily borne by states, necessitate robust fiscal support mechanisms. This is where the Finance Commission (FC) plays a pivotal role.

Shifting gears: from arbitrator to orchestrator:

Previous FCs (12th-15th) acknowledged this challenge and gradually increased financial incentives for states to maintain and improve forest cover. The 15th FC stands as a global leader in this regard, establishing the world's largest payment for ecosystem services by allocating 10% of taxes based on forest cover and density. However, the 16th FC faces a monumental task – aligning tax distribution with India's ambitious climate goals under the Paris Agreement. This necessitates a significant evolution in the FC's role, transforming it from a conventional fiscal arbitrator to an orchestrator of India's climate readiness.

Designing a fiscal blueprint for harmony:

The 16th FC needs to craft a comprehensive fiscal blueprint that harmonizes economic growth with environmental imperatives. Key recommendations for achieving this include:

1. Climate-centric tax devolution:

- Integrate climate vulnerability and emission intensity as core parameters in the tax-sharing formula. This will incentivize states to prioritize emission reduction through renewable energy adoption, sustainable land management, and efficient transportation systems.
- Develop a nuanced formula that balances fiscal equity with climate action, ensuring support for vulnerable states without discouraging proactive efforts by others.

2. Performance-based grants:

- Allocate sector-specific grants based on states' performance in key areas like decarbonizing crucial sectors like energy and transport, implementing sustainable land and forest management practices, and promoting lifestyle changes to reduce individual carbon footprints.

- Prioritize clean energy initiatives as a means to tackle air pollution challenges.
- Provide specific funding for innovative solutions to address seemingly intractable problems like crop burning, mangrove restoration (critical for mitigating flood risks), and forest fire prevention.

3. Data-driven decision-making:

- Leverage existing studies, pollution inventories at various levels, and remote sensing data to accurately assess state vulnerability and mitigation efforts. This data will be crucial in designing a robust performance-based fund allocation system.
- Collaborate with scientific institutions and climate experts to ensure policy decisions are informed by the latest research and knowledge.

4. Fostering multi-stakeholder collaboration:

- The 16th FC needs to act as a facilitator, encouraging collaboration between the central government, states, local communities, and private sector stakeholders. This collaborative approach will be vital in ensuring effective implementation of policies and efficient resource allocation.

Beyond just numbers:

The 16th FC's success hinges not just on designing an effective financial mechanism but also on fostering a fundamental shift in perspective. It's time to move beyond viewing environmental protection as a cost and recognize it as an investment in long-term sustainability and economic prosperity. By embracing this holistic approach and implementing the recommended strategies, the 16th FC has the potential to become a game-changer in India's fight against climate change, paving the way for a future where economic growth and environmental well-being go hand in hand.

Context

Numbers game

The President of India, Smt. Droupadi Murmu, conferred the Swachh Survekshan awards 2023 in New Delhi, recognizing achievements in categories like Clean Cities, Cleanest Cantonment, SafaiMitra Suraksha, Ganga Towns, and Best Performing State. Surat and Indore were joint winners for the cleanest city award, while various other cities and states were honored for their outstanding contributions to cleanliness and sanitation. The Swachh Survekshan Awards highlight concerns of dominance by top cities, potential dilution in categorization, and underlying biases, proposing solutions like rotating top cities and a shift towards sustainable practices for more effective nationwide sanitation improvement. Success depends on addressing systemic inequalities and prioritizing real progress beyond competitive rankings.



Main Observations:

- Stagnation at the Top: Indore and Surat remain dominant, raising concerns about lack of competition and progress among other cities.
- Sub-category Maze: Numerous categories, while offering recognition to smaller cities, dilute focus and raise questions about relevance (e.g., "Cleanest Cantonment").
- Underlying Biases: Economic disparities, historical constraints, and political connections likely influence outcomes, limiting improvement for disadvantaged cities.
- Motivation vs. Reality: Public sanitation isn't solely driven by local efforts; systemic factors play a critical role, making "competition" an inaccurate reflection of progress.

Proposed Solutions:

- Rotate Top Cities: To encourage broader participation and address inequalities, consistently top-ranked cities could be excluded from future awards for a set period.
- Focus on Underlying Issues: Government intervention is crucial to address factors (poverty, infrastructure limitations) hindering sanitation progress in disadvantaged cities.
- Shift from Numbers to Sustainability: Move beyond awards as simply a competition; prioritize long-term sustainable practices, inclusivity, and accessibility.

Comprehensive Outlook:

The Swachh Survekshan Awards, while fostering positive initiatives, need a significant overhaul to effectively promote nationwide sanitation improvement. Rotating top cities, addressing systemic inequalities, and focusing on real progress beyond awards are crucial steps towards a more effective and equitable system. The initiative's success lies not just in recognizing achievements but also in actively tackling the challenges that prevent many cities from reaching their full potential.

A case diary for the Indian police

The recent police conference in Jaipur highlights a critical juncture for India's law enforcement. While the focus on technology and contemporary issues signals the government's commitment to modernizing the force, the article delves deeper, exposing persistent challenges and suggesting avenues for reform.

Strengths:

- Tech Savvy: Increased education levels among lower ranks and a focus on technology adoption point towards a more efficient and responsive police force.

- Government Attention: The conference itself and Prime Minister Modi's interaction with officers illustrate the government's recognition of the importance of effective policing.

Weaknesses:

- Public Image: The article starkly paints the stark reality of the police's abysmal public image. Lack of trust and confidence stem from issues like:
 - Outdated System: The hierarchical IPS structure favors higher ranks, leaving lower ranks like constables and sub-inspectors with limited opportunity and motivation. This stifles overall effectiveness.
 - Political Interference: Politicization of the force compromises its autonomy and leads to biased actions, further eroding public trust.
 - Lack of Empathy: The article criticizes the absence of genuine empathy for the common man among some officers. This disconnect fuels feelings of alienation and fear.

Prospects for Improvement:

The article proposes comprehensive solutions addressing these weaknesses:

- Restructuring the Hierarchy: Bridging the gap between ranks through improved communication, collaboration, and empowering lower ranks would boost morale and utilize their potential.
- Investing in Training: Senior officers should dedicate time and resources to educate and mentor lower ranks, enhancing their knowledge and public service skills.
- Depolitization: Establishing mechanisms to ensure police independence from political influence is crucial for unbiased and effective law enforcement.
- Community Engagement: Building trust requires proactive steps like public outreach programs, sensitivity training, and addressing issues like custodial violence.

Prelims Booster

Science Ministry team visits Hawaii to take stock of telescope project

- Indian Delegation's Visit to Mauna Kea, Hawaii:
 - Led by Secretary Department of Science and Technology (DST), Professor Abhay Karandikar.
 - Focus on addressing challenges in the progress of the Thirty Meter Telescope (TMT) project.
- About Thirty Meter Telescope (TMT):
 - A 30-meter diameter primary mirror optical and infrared telescope located at Mauna Kea, Hawaii, USA.



- India is a Founder-Member Partner in the project since approval by Union Cabinet in 2014.

- Aims to advance optical and infrared astronomy, opening new windows to the universe.

📌 Meetings and Discussions:

- Delegation met with key figures, including Prof. Henry Yang and Prof. Robert Kirshner of TMT International Observatory (TIO) Board.

- Discussed TMT's status, Mauna Kea site, civil construction, funding situation, progress on in-kind deliverables, and expected timelines.

DRDO conducts successful flight test of Akash missile

🚀 DRDO's Successful Flight-Test of New Generation Akash SAM:

- Conducted on January 12 at 10:30 a.m. at the Integrated Test Range (ITR), Chandipur, off the coast of Odisha.

- The test objective was the successful flight-test against a high-speed unmanned aerial target at very low altitude.

🔍 Result and Validation:

- The target was intercepted and destroyed during the flight-test, validating the complete weapon system, including missile with an indigenously developed radio frequency seeker, launcher, multi-function radar, and command, control & communication system.

📢 DRDO's Statement:

- The DRDO expressed that the successful test has paved the way for user trials and validated the system's performance through data captured by radars, telemetry, and electro-optical tracking systems deployed by ITR, Chandipur.

🌐 Technology Highlights:

- The Akash-NG system is described as a state-of-the-art missile system with the capability to intercept high-speed, agile aerial threats demonstrated in the successful test.

The story of India Meteorological Department's origin

☀️ Origins of IMD:

- Established on January 15, 1875, in response to severe natural calamities in 1864, including two devastating cyclones, notably the Kolkata cyclone.

🌀 Early Calamities:

- Monstrous cyclones in 1864, including the Kolkata cyclone and another hitting the Andhra coast, collectively claimed over one lakh lives, exposing the lack of a monitoring system for atmospheric parameters.

🌐 IMD's Formation:

- Triggered by the 1864 cyclones, the India Meteorological Department (IMD) was officially established on January 15, 1875.

👥 Founding Personnel:

- HF Blanford, the first Imperial Meteorological Reporter employed by IMD, played a pivotal role in studying the climate and meteorology of India, issuing weather forecasts, and providing cyclone warnings.

☁️ Focus on Monsoon:

- IMD's historical obsession with understanding and predicting the monsoon dates back to its inception, striving for efficiency despite changing climate patterns.

👑 Leadership in Cyclone Forecasting:

- IMD Director General, Mrutyunjay Mohapatra, played a pivotal role in enhancing cyclone forecast capabilities, aiming to prevent disasters through investments in time, manpower, and technology.



Chandipur

Chandipur Beach in eastern India unveils a rare and captivating phenomenon where the sea gracefully retreats by up to five kilometers daily, allowing visitors to walk into the sea during low tide. This natural spectacle, occurring twice a day with the ebb and flow of the tide, offers an unforgettable experience. Beyond its scenic beauty, Chandipur boasts a diverse range of biodiversity, with horseshoe crabs and red crabs often spotted along the shore. Despite being less known than its popular counterparts like Puri or Konark, Chandipur stands out as a hidden gem for those seeking a unique and tranquil coastal retreat.

More trouble for shipping sector with Panama Canal drying up

🌐 The Panama Canal:

- A lock-type canal owned and administered by the Republic of Panama, connecting the Atlantic and Pacific oceans through the narrow Isthmus of Panama.

- Completed in August 1914, it is one of the two most strategic artificial waterways in the world, the other being the Suez Canal.

📏 Length and Significance:

- The canal is about 40 miles (65 km) from shoreline to shoreline and about 50 miles (82 km) from deep water in the Atlantic to deep water in the Pacific.

- It provides significant savings in distance for ships traveling between the east and west coasts of the United States, as well as for voyages between North America and ports on the other side of South America, Europe and East Asia, or Australia.

🇺🇸 Transition of Control:

- From its opening in 1914 until 1979, the Panama Canal was controlled solely by the United States, which built it.

- In 1979, control of the canal passed to the Panama Canal Commission, a joint agency of the United States and the Republic of Panama, and complete control passed to Panama at noon on December 31, 1999.

THE STORY OF NASHIK'S KALA RAM TEMPLE, VISITED BY PM MODI

🏛️ Historical Significance of Panchavati:

- Panchavati, where the temple is situated, holds significance in the Ramayana as the place where Lord Ram, Sita, and Lakshman spent the initial years of their exile.

👉 Dalit Agitation Led by Ambedkar:

- The Kala Ram temple was the site of a landmark agitation led by Babasaheb Ambedkar in 1930, demanding access for Dalits to Hindu temples.

🏠 Temple Architecture and Statues:

- The Kala Ram temple, built in 1792, houses statues of Ram, Sita, and Lakshman, along with a black idol of Hanuman at the main entrance.

- The main temple has 14 steps representing the 14 years of Ram's exile and 84 pillars symbolizing the cycle of 84 lakh species.