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INDIA'S GREEN RECOVERY: PATHWAY TO SUSTAINABLE GROWTH

WHY IN THE NEWS?

The India State of Forest Report 2023 (ISFR 2023) was released by the Minister for Environment, Forest and Climate Change, Shri Bhupender Yadav, at the Forest Research Institute, Dehradun.



KEY FACTS ABOUT FOREST SURVEY OF INDIA (FSI)

Aspect	Details	
Founded	June 1981	
Headquarters	Dehradun, Uttarakhand	
Parent Ministry Ministry of Environment, Forest and Climate Change, Government of India		

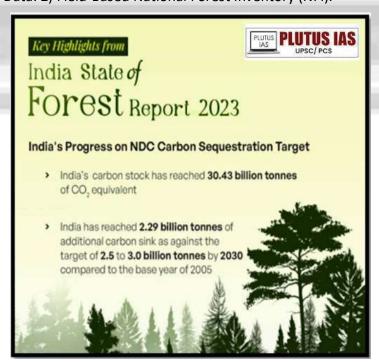
Aspect	Details	
Primary Functions	Conduct forest surveys, studies, and research to monitor land and forest resources and provide data for national planning and conservation.	
Predecessor	Preinvestment Survey of Forest Resources (PISFR), initiated in 1965 with sponsorship from FAO and UNDP.	
Origin	Created based on the 1976 recommendation of the National Commission on Agriculture (NCA).	
Biennial Reports	Publishes the "State of Forest Report" (SFR) every two years since 1987.	
Forest Cover Monitoring	Uses remote sensing satellite data and GIS technology for digital interpretation.	
Forest Fire Monitoring	Active since 2004, uses MODIS (Moderate-Resolution Imaging Spectrometer) and GIS technology.	
Training	Provides training to forester cadres of various Indian states.	
Publications	- "The Indian State of Forest Reports" (biennial).- Area-specific "Inventory and Wood Consumption Studies".	

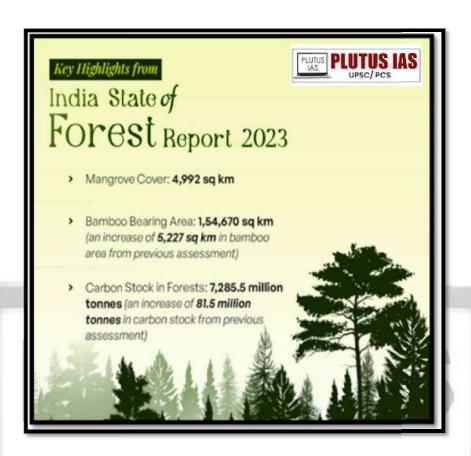
INDIA STATE OF FOREST REPORT:

Biennial Publication: Prepared by the Forest Survey of India (FSI), the ISFR has been published every two years since 1987.

18th Edition: The 2023 report marks the 18th release in the series.

Comprehensive Assessment: It involves a detailed analysis of India's forest and tree resources using: 1) Remote Sensing Satellite Data. 2) Field-Based National Forest Inventory (NFI).





THE FOREST REPORT CONTAINS THE FOLLOWING:

- 1. Forest Cover
- 2. Tree Cover
- 3. Mangrove Cover
- 4. Growing Stock
- 5. Carbon Stock in India's Forests
- 6. Instances of Forest Fire
- 7. Agroforestry.

MAJOR FINDINGS OF THE INDIA STATE OF FOREST REPORT 2023

Category	Details	
Forest and Tree Cover	8,27,357 sq km (25.17% of geographical area), comprising 7,15,343 sq km (21.76%) as forest cover and 1,12,014 sq km (3.41%) as tree cover.	
Increase since 2021 Assessment	Forest and tree cover increased by 1,445 sq km, including 156 sq km of forest cover and 1,289 sq km of tree cover.	
Top States by Forest & Tree Cover Increase	1. Chhattisgarh (684 sq km) 2. Uttar Pradesh (559 sq km) 3. Odisha (559 sq km) 4. Rajasthan (394 sq km)	
Top States by Forest	1. Mizoram (242 sq km)	

Category	Details	
Cover Increase	2. Gujarat (180 sq km) 3. Odisha (152 sq km)	
Largest Forest & Tree Cover (Area-wise)	1. Madhya Pradesh (85,724 sq km) 2. Arunachal Pradesh (67,083 sq km) 3. Maharashtra (65,383 sq km)	
Largest Forest Cover (Area-wise)	 Madhya Pradesh (77,073 sq km) Arunachal Pradesh (65,882 sq km) Chhattisgarh (55,812 sq km) 	
Highest Forest Cover (% of Area)	 Lakshadweep (91.33%) Mizoram (85.34%) Andaman & Nicobar Islands (81.62%) 	
States with >33% Forest Cover	19 states/UTs; 8 of these (Mizoram, Lakshadweep, A&N Islands, Arunachal Pradesh, Nagaland, Meghalaya, Tripura, Manipur) have >75% forest cover.	
Mangrove Cover	Total: 4,992 sq km.	
Growing Stock	Total: 6,430 million cum - Inside Forest: 4,479 million cum - Outside Forest: 1,951 million cum Increase: 262 million cum (91 inside forest, 171 outside).	
Bamboo Bearing Area	Total: 1,54,670 sq km Increase: 5,227 sq km since 2021.	
Timber Production (Annual Potential)	91.51 million cum from trees outside forest.	
Carbon Stock in Forests	Total: 7,285.5 million tonnes Increase: 81.5 million tonnes since 2021.	
Carbon Sequestration (NDC Target)	India's carbon stock: 30.43 billion tonnes of CO2 equivalent Additional sink since 2005: 2.29 billion tonnes Target: 2.5–3.0 billion tonnes by 2030.	
Utility of ISFR Data	Vital for policymakers, planners, State Forest Departments, research organizations, development agencies, academicians, and civil society for conservation and resource management.	

KEY GOVERNMENT POLICIES AND INITIATIVES TO PROTECT AND EXPAND FOREST COVER:

Scheme/Policy	Details
National Mission for a Green India (GIM)	Launched in 2014, focuses on enhancing forest cover through protection, restoration, and expansion initiatives. Rs. 944.48

Scheme/Policy	Details	
	crore allocated to 17 States and 1 UT.	
Nagar Van Yojana (NVY)	Established in 2020 to develop green spaces in urban and peri- urban areas. 546 projects approved with Rs. 431.77 crore allocated across 31 States/UTs.	
School Nursery Yojana (SNY)	Aims to raise awareness about tree planting in schools. 743 projects sanctioned in 19 States/UTs with Rs. 4.80 crore allocated.	
Mangrove Initiative for Shoreline Habitats & Tangible Incomes (MISHTI)	Five-year initiative (2023-2028) to restore mangroves along India's coastline. Rs. 17.96 crore allocated for states like Andhra Pradesh, Gujarat, Odisha, and more.	
National Plan for Conservation of Aquatic Ecosystems (NPCA)	Focuses on conservation and management of wetlands through a cost-sharing model between the Central and State Governments.	
Ek Ped Maa Ke Naam	Launched in 2024 to encourage tree planting in honor of mothers, fostering a personal connection with nature.	
Compensatory Afforestation Fund Management and Planning Authority (CAMPA)	Offsets forest loss by supporting afforestation projects under the Van Sanrakshan Evam Samvardhan Adhiniyam, 1980.	
Twenty-Point Programme (Afforestation Targets)	Sets annual afforestation goals for States/UTs through Central and State schemes, NGO participation, and private sector efforts.	
Awareness and Mass Plantation Drives	Promotes tree planting through events like Van Mahotsav, World Environment Day, and International Day of Forests.	
Indian Forest Management Standard	Part of the National Working Plan Code – 2023, establishes criteria for sustainable forest management and certification for timber producers.	
National Action Plan on Forest Fire (2018)	Provides measures to prevent forest fires, enhance resilience, and improve community capacity for fire prevention and control.	
Joint Forest Management (JFM)	Involves community participation through Joint Forest Management Committees for better forest and wildlife protection, in line with the National Forest Policy, 1988.	
Conservation of Mangroves and Coral Reefs	Supports coastal States/UTs for mangrove protection under the National Coastal Mission.	
Legal Framework for Forest Protection	Enforced through laws like the Indian Forest Act, 1927; Wildlife Protection Act, 1972; and State-specific forest laws for sustainable forest and wildlife management.	

THE SIGNIFICANCE OF THE INDIA STATE OF FOREST REPORT (ISFR):

Comprehensive Forest Monitoring: The Forest Reports provide crucial data on forest cover, tree cover, and various forest-related parameters, allowing for informed policy-making and resource management.

Tracking Environmental Changes: These reports help track changes in the forest ecosystem, such as deforestation, afforestation, and carbon stock variations, which are essential for assessing the impact of environmental policies.

Policy Formulation and Planning: The findings guide the formulation of national and state-level forest policies and the allocation of resources for conservation efforts, contributing to long-term environmental sustainability.

Conservation Efforts: By highlighting areas of concern, such as forest degradation, loss of biodiversity, or declining forest cover, these reports help prioritize conservation actions and ensure effective management of natural resources.

Carbon Sequestration Monitoring: The reports offer insight into the country's carbon stock, crucial for assessing the progress towards international climate commitments, including India's Nationally Determined Contributions (NDCs) under the Paris Agreement.

Encouraging Public Awareness and Participation: The publication of these reports increases public awareness about forest health and conservation, motivating local communities, NGOs, and other stakeholders to engage in sustainable forestry practices.

Global Credibility: As a recognized source of credible data, the ISFR enhances India's standing in international environmental assessments and climate negotiations.

CRITICISM OF THE FOREST REPORT FINDINGS:

Definition of Forest: Forest cover includes areas with a tree canopy ≥10%, regardless of ownership or legal status, incorporating orchards, bamboo, and palm. Experts criticize this broad definition, which may inflate data.

Data Transparency: Granular data, though prepared by the Forest Survey of India (FSI), is not made publicly available.

Inflated Data Claims: Experts like Prakriti Srivastava and Prerna Singh Bindra claim the inclusion of bamboo plantations, coconut groves, and orchards skews forest cover data.

Unexplained Losses: ISFR 2023 does not explain the reported loss of 1,488 sq km of unclassed forests between 2021 and 2023.

Tree Cover Reclassification: Out of 1,445.81 sq km added as forest area, 1,289 sq km is classified as tree cover, including roadside and immature trees. Bamboo clumps and smaller trees (5-10 cm in diameter) were included for the first time, revising previous data.

Carbon Stock Concerns: Despite an estimated increase in carbon stock, experts argue this overlooks permanent forest losses due to infrastructure projects.

Diversion of Forest Land: Permanent conversions of forest land for projects like dams and roads are not removed from records, potentially inflating data.

Hill District Forest Cover: Forest cover in hill districts is only 40% of their geographical area, far below the National Forest Policy's target of 66.6%.

Mangrove Cover Decline: Mangrove cover decreased by 0.15%, while 'moderately dense' and 'open' forests declined by 1,043.23 sq km and 2,480.11 sq km, respectively.

WAY FORWARD:

Digitization of Forest Records: Implement the 2011 Supreme Court order for digitized forest maps, georeferencing, and detailed documentation of diverted forest lands.

Planting Trees: Focus on planting trees along rivers, canals, roadsides, barren hills, and tank bunds, with species suited to local geographies.

Public Awareness: Educate citizens about the importance of forest conservation and sustainable practices.

Technological Interventions: Use remote sensing to monitor forest cover, detect vulnerable areas, and track forest fires effectively.

Agroforestry Promotion: Encourage the integration of trees into farming systems to improve forest cover and farmer income.

Creating Forest Corridors: Develop forest corridors to protect wildlife habitats and facilitate safe animal movement.

Action Against Illegal Activities: Strengthen enforcement to prevent illegal tree felling and forest clearing. Participation in Government Schemes: Leverage schemes like GIM, MGNREGA, and CAMPA for afforestation and conservation efforts.

CONCLUSION:

India is advancing steadily towards environmental sustainability, as highlighted in the 2023 India State of Forest Report. Growth in forest and tree cover, reduced fire incidents, and flourishing agroforestry underscore the nation's commitment to conservation. Through innovative policies and community involvement, India is protecting and restoring its natural resources, setting a strong foundation for a greener future.

PRELIMS QUESTION:

Q.Consider the following:

- 1. Forest Cover
- 2. Tree Cover
- 3. Mangrove Cover
- 4. Growing Stock
- 5. Carbon Stock in India's Forests
- 6. Instances of Forest Fire
- 7. Bamboo Cover

How many of the above are Assessed in India's State of Forest Report 2023?

- A. Only four
- B. Only five
- C. Only Six
- D. All Seven

ANSWER: D

MAINS QUESTION:

Q. In light of the challenges identified in the India State of Forest Report 2023, critically analyze the measures needed to address these challenges. How can India ensure sustainable forest management while balancing developmental and conservation goals?

(Answer in 250 words)

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Munde Dhananjay Navnath

ROLE OF PMO IN SHAPING FOREIGN POLICY

WHY IN THE NEWS?

The tribute by India's External Affairs Minister, Dr S. Jaishankar, to the late former Prime Minister, in which he expressed sorrow over his passing, has made headlines because of its profound acknowledgement of the late leader's dual legacy both in economic reforms and foreign policy. Dr Jaishankar's statement highlights the former Prime Minister's key role in shaping India's economic transformation and strategic foreign policy shifts, marking him as a pivotal figure in India's modern history. In particular, the tribute underlined that the late Prime Minister was not only recognized for his economic reforms but was also instrumental in strategic corrections that influenced India's global positioning. Dr Jaishankar, who had the privilege of working closely with him, emphasized the former leader's kindness and courtesy, which added a personal touch to his public reflection.



LEGACY OF ATAL BIHARI VAJPAYEE:

1. 1998 Nuclear Tests: Vajpayee's government conducted nuclear tests in May 1998, asserting India's position as a nuclear power. The tests were driven by security concerns, particularly from Pakistan and China. While initially met with international condemnation, the decision helped eliminate India's nuclear ambiguity, leading to global recognition of India's nuclear status. Vajpayee's stance on nuclear deterrence was pivotal in shaping India's future security policy.

2. Diplomatic Engagement:

United States: Despite sanctions after the tests, Vajpayee's diplomacy with the U.S., led by Foreign Minister Jaswant Singh, paved the way for improved relations and the eventual Indo-U.S. nuclear deal in 2005.

China: Vajpayee worked to stabilize relations with China, marking a historic visit to Beijing in 2003. He initiated confidence-building measures and secured China's recognition of Sikkim as part of India.

Pakistan: Vajpayee sought peace with Pakistan, exemplified by the Lahore Declaration in 1999. However, the Kargil War later tested his resolve. Despite the conflict, he maintained a peace dialogue with Pakistan, underscoring his commitment to diplomacy.

Israel and West Asia: He also strengthened ties with Israel and engaged strategically with Iran, enhancing India's influence in West Asia.

3. Global Vision: Vajpayee's foreign policy was marked by a balance of security and diplomacy. His leadership solidified India's nuclear deterrence, expanded strategic partnerships, and elevated India's role on the global stage, laying the foundation for its rise as a major power.

MANMOHAN SINGH NUCLEAR TEST AND PAKISTAN ENGAGEMENT:

- **1. India-US Nuclear Deal (2005-2008):** Manmohan Singh's push for the India-US nuclear deal was hailed as a diplomatic breakthrough but also faced considerable opposition.
- 2. Overdependence on the U.S.: While the deal opened up access to nuclear technology and fuel, critics argued that it made India overly dependent on the U.S. for its nuclear energy needs. The agreement required India to place its civilian nuclear facilities under IAEA safeguards, but this was seen as compromising India's strategic autonomy. The deal was viewed by some as a concession to U.S. power, potentially limiting India's freedom in future nuclear policy decisions.
- **3. Strategic Concerns:** The deal was also criticized for essentially legitimizing India's nuclear status without the obligations of the Nuclear Non-Proliferation Treaty (NPT). Many analysts believed this set a dangerous precedent, undermining global non-proliferation efforts. Moreover, Pakistan viewed the agreement as a destabilizing factor in South Asia, as it strengthened India's nuclear capabilities without similar concessions to Pakistan. Critics argued that the deal could fuel an arms race in the region.
- **4. Domestic Fallout:** The deal was highly controversial domestically. Opponents within India, including several political parties, feared it would constrain India's strategic autonomy, tying the country closer to U.S. interests. Despite the approval of the deal by Parliament, many felt Singh had compromised too much for the sake of international recognition.

ENGAGEMENT WITH PAKISTAN: MANMOHAN SINGH'S DIPLOMATIC JOURNEY:

- **1. Early Optimism and Fragile Progress:** Singh's administration aimed to improve ties with Pakistan, restarting peace talks in 2004 and enhancing confidence-building measures, such as resuming transportation links between Kashmir regions. However, these efforts were undermined by unresolved issues like Kashmir, cross-border terrorism, and military tensions.
- **2. Mumbai Attacks:** A Turning Point: The 2008 Mumbai attacks, carried out by Pakistan-based terrorists, marked a significant setback. India's demand for action against the attackers was met with Pakistan's inaction and denial, leading to a sharp decline in bilateral relations. Critics argued that Singh's dialogue-focused approach failed to address Pakistan's reluctance to combat terrorism.
- **3. Stalled Dialogue and Criticism:** Following the Mumbai attacks, the peace process effectively stalled. While Singh's restraint in avoiding military escalation was noted, critics claimed his diplomacy lacked the leverage and strategy needed to compel Pakistan to act against cross-border terrorism, ultimately emboldening Islamabad.

PM MODI'S GREATER ENGAGEMENT AND MULTI-ALIGNMENT:

Prime Minister Narendra Modi's foreign policy is defined by greater engagement with global powers and a multi-alignment strategy aimed at strengthening India's global influence while balancing diverse relationships.

1. Greater Engagement with Global Powers

United States: Strengthened defence ties, trade partnerships, and strategic cooperation, especially to counter China's rise.

Russia: Maintained strong defence and energy ties, ensuring a balanced approach despite closer U.S. ties.

China: Economic engagement tempered by border tensions (e.g., Galwan). India counterbalances China's influence via the Quad.

Japan: Enhanced cooperation on infrastructure and defence, reinforcing India's strategic position in Asia.

2. Multi-Alignment Strategy

South Asia: Focus on regional ties, with strained relations with Pakistan over Kashmir and terrorism. Strengthened ties with Bangladesh and Sri Lanka.

Middle East & Africa: Expanded ties with Gulf countries for energy and security. Deepened relations with Israel

Indo-Pacific: Active in the Quad, positioning India as a counterbalance to China.

3. Economic Diplomacy: Modi's push for trade deals and foreign investment aims to boost India's global economic standing. Initiatives like Make in India seek self-reliance and economic growth, despite challenges like trade imbalances.

CHALLENGES TO MANOEUVRING INDIA'S FOREIGN POLICY:

- 1. Russia-Ukraine Tensions: India faces a dilemma balancing its long-standing defence ties with Russia while aligning with global pressures, especially on energy sanctions and broader geopolitical issues, given its growing ties with the U.S.
- **2.** Energy Insecurity Due to Middle East Instability: India's reliance on Middle East oil makes it vulnerable to disruptions from regional conflicts (e.g., Iran, Saudi Arabia, Iraq) and instability in the Persian Gulf, threatening energy security.
- **3. Tightrope Walking Between Major Powers:** India must balance its multi-alignment strategy—maintaining strong ties with the U.S., Russia, and China, while managing tensions, especially in the Indo-Pacific.
- **4. Upcoming U.S. Administration:** The uncertainty of a new U.S. administration could alter U.S.-India relations, impacting defence cooperation, trade, and regional security, requiring India to adapt diplomatically.
- **5. Tensions in India's Backyard (e.g., Bangladesh):** Regional instability—including issues with Bangladesh, Sri Lanka, and Nepal—poses risks to India's security and economic interests in its neighbourhood.
- **6. Curse of Geography:** China and Pakistan: India's proximity to China (with border disputes) and Pakistan (over Kashmir and cross-border terrorism) forces India to adopt a cautious, defensive foreign policy.
- **7. Voice in Regional Forums:** India's influence in regional organizations like SAARC, BRICS, and SCO is limited by India-Pakistan tensions and strained relations with China, making it challenging to assert its leadership.

FUTURE COURSE OF ACTION:

- **1.** Balancing Relations with Russia and the U.S.: India must strengthen ties with both Russia and the U.S., expanding defence cooperation with the U.S. while maintaining strategic autonomy with Russia. It should also diversify its energy sources to avoid over-dependence on any single region.
- **2. Strengthening Regional Security and Diplomacy:** India should foster peaceful ties in South Asia, particularly with Bangladesh, Sri Lanka, and Nepal, while addressing security concerns. Engagement with Pakistan must be conditioned on countering terrorism and resolving disputes through dialogue.
- **3. Energy Security Strategy:** Diversifying energy sources, including renewables and partnerships with Australia, Africa, and other suppliers, is crucial to safeguard against Middle East instability.
- **4. China Engagement:** India should compartmentalize economic cooperation with China from security issues, strengthen its role in the Indo-Pacific through the Quad, and maintain a strong defence posture against Chinese aggression.

- **5. Global Influence and Multilateral Engagement:** India must assert its global role by engaging in platforms like the UN, BRICS, SCO, and G20, emphasizing leadership in climate change, digital governance, and peacekeeping.
- **6. Economic Diplomacy and Trade Deals:** India should pursue trade agreements focusing on manufacturing, technology, and green energy, leveraging Make in India and Atmanirbhar Bharat to attract foreign investment and boost economic growth.
- **7. Internal Cohesion for External Influence:** Strengthening domestic stability on issues like Kashmir, economic reform, and security will enhance India's global influence, presenting a strong democratic model on the world stage.

CONCLUSION

India's future foreign policy will need to strike a balance between engagement with global powers, regional security concerns, and internal growth. As a rising global power, India's strategic autonomy, economic dynamism, and diplomatic initiatives must align with its national interests. A careful mix of traditional alliances, multilateral engagement, and forward-thinking policies will help India overcome the challenges it faces, ensuring that it remains a prominent player in shaping global affairs in the years to come.

PRELIMS QUESTION:

- Q. Which of the following best describes India's foreign policy approach under Prime Minister Narendra Modi?
- 1. Emphasis on non-alignment and neutrality in global geopolitics
- 2. Greater engagement with global powers through a multi-alignment strategy
- 3. Exclusive focus on strengthening ties with Russia and China
- 4. Isolation from global diplomatic and economic partnerships

Choose the correct answer:

A. 1 and 2

B. 2 and 4

C. 3 only

D. 2 only

Answer: D

MAINS QUESTION:

Q. Discuss the key challenges and strategies that India must adopt to navigate its foreign policy in a multipolar world. How can India balance its relations with major powers while ensuring regional stability and energy security? (250 words, 15 marks)

Ritik singh

