

Role of Regulatory Bodies: Forest Survey of India (FSI)

1. Introduction

The Forest Survey of India (FSI) is an organization under the Ministry of Environment, Forest and Climate Change (MoEFCC), Government of India. Established in 1981, its primary mandate is to conduct surveys, assessments, and monitoring of forest resources across the country. FSI plays a critical role in providing reliable data and information on forests to support policy-making, sustainable management, and conservation initiatives.

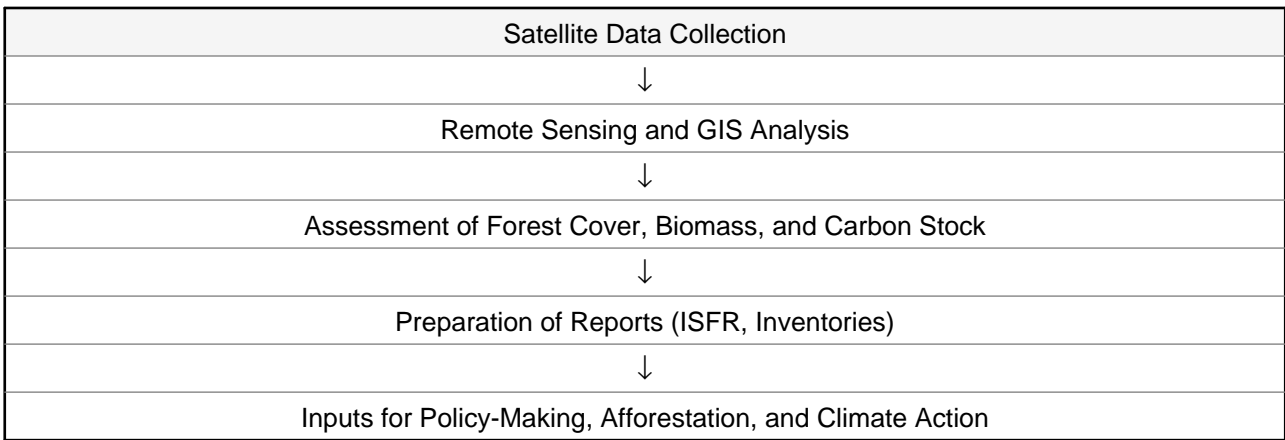
2. Objectives of FSI

- Conduct biennial assessments of forest and tree cover in India through satellite data interpretation.
- Generate accurate information on the extent, condition, and composition of forest resources.
- Support national and international reporting obligations on forests and climate commitments.
- Assist in planning for afforestation, reforestation, and sustainable forest management.
- Promote research and development in the field of remote sensing and GIS for forestry applications.

3. Key Functions of FSI

- Preparation of the India State of Forest Report (ISFR) every two years, providing nationwide forest cover data.
- Monitoring forest cover changes using remote sensing and GIS technologies.
- Forest inventory for assessing growing stock, biomass, and carbon stock of forests.
- Training forestry professionals in modern survey and mapping techniques.
- Providing inputs for policy formulation related to forest conservation and climate change mitigation.

4. Flowchart: Role of FSI in Forest Monitoring and Management



5. Significance of FSI

- Provides reliable data for sustainable forest management.
- Supports India's commitments under international agreements like UNFCCC, CBD, and SDGs.
- Helps in tracking progress of national afforestation and reforestation programs.
- Aids in climate change mitigation through monitoring carbon stock and biomass.
- Facilitates scientific planning for biodiversity conservation and ecological balance.

6. Challenges Faced by FSI

- Dependence on satellite data, which may have limitations in resolution and accuracy.
- Difficulty in ground-truthing due to inaccessible forest terrains.
- Increasing demand for high-frequency monitoring amidst limited resources.
- Need for advanced technological upgradation and skilled manpower.
- Balancing transparency with confidentiality in sensitive forest data sharing.

7. Conclusion

The Forest Survey of India serves as the backbone of forest resource assessment and monitoring in India. By integrating modern technologies with traditional forestry practices, it provides critical inputs for policy-making, afforestation, and climate action. Strengthening the FSI with enhanced resources, advanced tools, and skilled professionals can further improve India's capacity to manage and conserve its forests sustainably.