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PREFACE

In the year 1985 Forest Survey of India (FSI) was given, as the main task of the organization, the preparation of country's forest cover map, at a regular interval of two years. This was felt necessary for the purpose of monitoring the forest and tree cover aimed at better planning of the forest resources and environmental security of the country. The first State of Forest Report was brought out in 1987. With the publication of India State of Forest Report 2009, the FSI has completed twenty-two years of biennial forest cover assessment using remote sensing techniques. This report is the eleventh in the series. Over these years, there has been a considerable advancement in the remote sensing technology and mapping techniques which FSI has used to produce this report. It started with producing the forest cover map using Landsat (American satellite) imagery on one million scale and interpreting the forest cover visually. The smallest identifiable area by the satellite (the pixel) was 80 m x 80 m. The smallest mappable area was 400 ha. Today, we use the data obtained by indigenous satellites and interpret the same on 1:50,000 scale, wherein, the minimum mappable area is one hectare and the work is done digitally. The FSI personnel, over the years, have also gained valuable experience, which is reflected in the quality of this report. Despite all these advancements in the technology, techniques, hardware and the software, there are limitations in the methodology mentioned in Chapter 2.

The term 'Forest' is defined differently under different contexts. Generally, 'forest' means an area having trees and other vegetation, while ecologically the areas without tree cover not put to human use, like grassy blanks in a wildlife sanctuary or the rocky areas in the forests constitute an integral part of the forested eco-system. The satellite based technology which uses the distinctive reflectance of tree cover area to distinguish from other areas, does not discriminate between blank areas (without tree cover) of ecological importance from other areas without trees. This is stated as a necessary clarification to avoid confusion that may emanate from reading record of forest area as maintained by the State Forest Departments and forest / tree cover as found in this report.

India SFR 2009 presents the regular features like forest cover, tree cover, mangrove cover, and growing stock along with a few new features. Chapter 1 provides information about the methodology adopted and the new features of the report. Chapter 2 gives findings of the forest cover assessment of 2007 and describes the methodology adopted for the forest cover assessment.

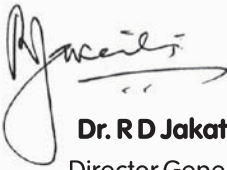
Chapter 3 describes the extent and density of mangroves, a sensitive inter-tidal ecosystem that can be delineated with ease due to distinct tone and texture in the satellite imagery and due to expected location (on coastlines and islands).

The role of trees outside forests (TOF) in carbon sequestration, employment generation and supply of timber &

other products is well established. Chapter 4 covers the methodology and findings of tree cover assessment. Chapter 5 attempts to provide an estimate of the growing stock (volume) of the country's forests and trees outside forests.

The data in India SFR 2009 on forest cover change has been verified on the field by officials of FSI and State/UT Forest Departments, and reinforced by an analysis of accuracy of assessment presented in Chapter 6. This has enhanced the accuracy of the forest cover assessment of the report, and has helped in the harmonization of the forest cover of previous assessments. Chapter 7 provides State/UT wise information of forest resources. Apart from the district-wise forest and tree cover the information of basic geography, land use pattern, the JFM activities and the protected area network has also been provided for all the States/UTs.

I am grateful to Mr. Jairam Ramesh, Hon'ble Minister for Environment and Forests, Government of India, for his guidance and support in the timely presentation of this report. I am also grateful to Mr. Vijai Sharma, Secretary, Environment and Forests, Dr. P J Dilip Kumar, Director General of Forests & Special Secretary, Government of India for their guidance in the preparation of the report. I am thankful to Dr.P B Gangopadhyay, Additional Director General of Forests, Mr. R K Goel, Inspector General of Forests and Mr. A M Singh, Deputy Inspector General of Forests, in the Ministry of Environment and Forests, for their support in the publication of this report. I would like to acknowledge, gratefully, the contribution made by Dr. D Pandey, the former Director General of FSI, during whose tenure substantial work of this report was completed. Finally, I would also like to place on record my appreciation for the sincere efforts made by the officers and the technical staff members of FSI towards the completion of this report.



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