GLOSSARY OF IMPORTANT TERMS

Block Plantation

Tree plantations in compact blocks of more than 0.1 ha on lands outside recorded forest areas.

Canopy

The cover of branches and foliage formed by the crowns of trees.

Canopy Density

Percent area of land covered by the canopy of trees. It is expressed as a decimal coefficient, taking closed canopy as unity.

Cartographic Limit

The minimum area of a feature which can be presented on a map at a given scale.

Change Matrix

It presents change in forest cover classes for a given region (State or UT) during the period of two consecutive assessments in a matrix form by showing the changes of area from one class to another.

Crown Area

It is the area of vertical projection of a tree crown on the ground.

Culturable Non Forest Area (CNFA)

It is the net geographical area, lying outside recorded forest and forest cover, which can support tree vegetation (thus, excluding areas under wetlands, riverbeds, perennial snow covered mountains, etc.). CNFA is the area over which the sample data on tree cover is aggregated for the assessment of tree cover.

Digital Image Processing (DIP)

Interpretation and classification of digital satellite data using computer and a DIP software.

Error Matrix (Confusion matrix)

It is a means to quantitatively assess the accuracy of classification of interpreted satellite data. Under this, the reference data (ground truth) is compared with the corresponding results of the classification on the randomly selected locations on category-by-category basis. It is presented in a square matrix.

False Color Composite

The image generated by projecting any three spectral bands of the satellite data on the red, green and blue channels and does not show features in true colours.

Farm Forestry

The practice of cultivating and managing trees in compact blocks on agricultural lands.

Forest Area

The area recorded as a forest in the Government records. It is also referred to as "recorded forest area".

Forest Blank

A patch within a forest which bears few or no trees.

Forest Cover

All lands, more than one hectare in area, with a tree canopy density of more than 10 percent irrespective of ownership and legal status. Such lands may not necessarily be a recorded forest area. It also includes orchards, bamboo and palm.

Forest Inventory

The measurement of certain parameters of forests to assess the growing stock and other characteristics of forests.

Forest Type

Forest type is defined as a unit of vegetation which possess broad characteristics in physiognomy and structure sufficiently pronounced to permit of its differentiation from other such units (Champion and Seth 1968).

Geographic Information System (GIS)

A computer based system for capturing, storing, manipulating, analysing and displaying data, which are spatially referenced to the earth.

Green Wash

The extent of wooded areas generally shown in light green colour on the SOI toposheets.

Growing Stock

The sum (by number or volume) of all the trees growing / living in the forest or a specified part of it.

Hill District

A district with more than 50 percent of its geographic area under "hill talukas" based on criteria adopted by the Planning Commission for Hill Area and Western Ghats Development Programmes.

Land Cover

Broad land use classes interpreted from satellite data. It includes very dense forest, moderately dense forest, open forest, scrub and non-forest for the purpose of this report.

Mangroves

Salt tolerant evergreen forest ecosystem found mainly in tropical and sub-tropical coastal and/or inter-tidal regions.

Mangrove Cover

Area covered under mangrove vegetation as interpreted from remote sensing data. It is included in the forest cover.

Moderately Dense Forest

All lands with forest cover having a canopy density between 40 to 70 percent.

Net Change (in Forest Cover)

The sum of positive and negative changes in forest cover over a period of two assessments for a given area.

Non Forest Land

Land without forest cover.

Open Forest

Lands with forest cover having a canopy density between 10 to 40 percent.

Polygon

A multi-sided figure representing an area on a map.

Protected Forest (PF)

An area notified under the provisions of the Indian Forest Act or other State Forest Acts, having limited degree of protection. In protected forest all activities are permitted unless prohibited.

Physiographic Zone

A physiographic zone constitutes geographical areas that exhibit broad similarities in factors responsible for the growth of tree vegetation. Physiographic zones have been used as strata for assessing tree cover in the country.

Raster

A regular grid of cells covering an area.

Raster data structure

A database containing all mapped, spatial information in the form of regular grid cells.

Recorded Forest Area (RFA)

Same as "forest area"; i.e., geographic areas recorded as forests in Government records.

Reserved Forests (RF)

An area so constituted under the provisions of the Indian Forest Act or other State Forest Acts, having full degree of protection. In Reserved forests all activities are prohibited unless permitted.

Scrub

Degraded forest lands having canopy density less than 10 percent.

Shuttle Radar Topography Mission

The Shuttle Radar Topography Mission (SRTM) is an international research effort that obtained elevation data from 56°S to 60°N on a near-global scale to generate the most complete high-resolution digital topographic database of Earth. It is an international project spearheaded by the National Geospatial-Intelligence Agency (NGA) and the National Aeronautics and Space Administration (NASA).

Spatial Resolution

The minimum area on earth's surface that can be captured by a satellite sensor as being separate from its surroundings and is represented by a "pixel".

Spectral Resolution

The range of wave lengths that a satellite imaging system can detect. It refers to the width and number of spectral bands. The narrower the bands, the greater the spectral resolution.

Thematic Maps

Maps, generally on 1:50,000 scale, showing forest types, major species composition, crown density and other land uses prepared by interpretation of aerial photographs and verified by ground truthing.

Tree

A large woody perennial plant having a single well defined stem (bole or trunk) and a more or less definite crown. It also includes bamboos, palms, fruit trees, etc and excludes non-perennial non-woody species like banana and tall shrubs or climbers.

For the purpose of assessing growing stock and tree cover, only those trees having diameter at breast height (dbh) of 10 cm or more are measured.

Tree Cover

It comprises tree patches outside the recorded forest area exclusive of forest cover and less than the minimum mappable area (1 ha). Such small patches comprising of block, linear and scattered trees are not delineated as forest cover during interpretation of satellite data. The areas of scattered trees are computed by notional numbers.

Trees Outside Forests (TOF)

Trees growing outside recorded forest areas.

Tribal Districts

Districts identified as tribal districts under Tribal Sub-Plan (Government of India).

Unclassed Forests

An area recorded as forest but not included in reserved or protected forest category. Ownership status of such forests varies from state to state.

Vector

The representation of spatial data by points, lines and polygons.

Vector data structure

A means of coding and storing point, line and areal information in the form of units of data expressing magnitude, direction and connectivity.

Very Dense Forest

Lands with forest cover having a canopy density of 70 percent and above.

Visual Interpretation

A manual method of satellite data interpretation, normally by using magnifying glass and light table