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## ACRONYMS AND ABBREVIATIONS

|        |   |   |
|--------|---|---|
| CD     | - | Compact Disc  |
| CNFA   | - | Culturable Non-Forest Area                            |
| dbh    | - | Diameter at breast height                             |
| DF     | - | Dense Forest  |
| DIP    | - | Digital Image Processing                              |
| FAO    | - | The Food & Agriculture Organisation of United Nations |
| FCC    | - | False Colour Composite                                |
| FDC    | - | Forest Development Corporation                        |
| FPC    | - | Forest Protection Committee                           |
| FSI    | - | Forest Survey of India                                |
| GA     | - | Geographic Area                                       |
| GCP    | - | Ground Control Point                                  |
| GIS    | - | Geographical Information System                       |
| GPS    | - | Global Positioning System                             |
| IRDP   | - | Integrated Rural Development Programme                |
| IRS    | - | Indian Remote Sensing (Satellite)                     |
| ISRO   | - | Indian Space Research Organization                    |
| JFM    | - | Joint Forest Management                               |
| LISS   | - | Linear Imaging and Self-scanning Sensor               |
| MDF    | - | Moderately Dense Forest                               |
| MPFD - | - | Madhya Pradesh Forest Department                      |
| MSS    | - | Multi Spectral Scanner                                |
| NAEB   | - | National Afforestation and Eco-development Board      |
| NDVI   | - | Normalized Difference Vegetation Index                |
| NF     | - | Non-Forest  |
| NRSA   | - | National Remote Sensing Agency                        |
| NSSO   | - | National Sample Survey Organization                   |
| NWDB   | - | National Wasteland Development Board                  |
| NWFP - | - | Non-Wood Forest Products                              |
| OF     | - | Open Forest   |
| PA     | - | Protected Area  |
| PAN    | - | Panchromatic  |
| PF     | - | Protected Forest                                      |
| RF     | - | Reserved Forest                                       |
| SFD    | - | State Forest Department                               |
| SFR    | - | State of Forest Report                                |
| SOI    | - | Survey of India                                       |
| TM     | - | Thematic Mapper                                       |
| TOF    | - | Trees Outside Forests                                 |
| UFS    | - | Urban Frame Survey                                    |
| UT     | - | Union Territory                                       |
| VDF    | - | Very Dense Forest                                     |
| VFPC   | - | Village Forest Protection Committee                   |
| Vol.   | - | Volume  |
| WP     | - | Working Plan  |

## GLOSSARY

### **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 horizontal 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.

### **Dense Forest**

All lands with a forest cover having a canopy density of 40 percent and above.

### **Digital Image Processing (DIP)**

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

### **Error Matrix (Confusion matrix)**

It is a means to quantitatively assess the accuracy of classification of a 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.

### **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.

### **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.

### **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.

### **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 wavelength 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 of 1 ha. Such small patches comprising block, linear and scattered trees are not delineated as forest cover during interpretation of satellite data. The areas of scattered trees are computed notionally.

### **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.

### **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.