The Integrated Forest Management Toolbox is a forest management planning model, developed with an objective to assist senior and mid-level officers in India's state forest departments to develop working plans in accordance to the National Working Plan Code, 2014 (NWPC) that calls for management of forests for a range of ecosystem services.

**Purpose of IFMT**
Over the years, Indian forestry has witnessed a paradigm shift in the approach to forest management, which has moved away from sustainable utilization of timber to environmental stability, biodiversity monitoring and management, protecting ecosystem services rendered by forests and sustained delivery of socio-economic benefits. These goals are enshrined in the National Working Plan Code 2014. The NWPC also promotes major technological as well as analytical advances in forest data collection and analysis, including in the field of GIS and remote sensing. IFMT aims to address these requirements of NWPC by supporting forest officials in sustainable management of forest and its resources by providing data and tools for informed planning and preparation of Working Plans.

The Integrated Forest Management Toolbox consists of a suite of tools that together collect and collate geo-spatial and ground level data, identify potential forest management activities based on flow of ecosystem services and assist in finalizing working plan prescriptions. The individual tools that constitute the toolbox were developed to meet the requirements of NWPC.

**Tools of IFMT**
- **Forest Resources Observatory (FRO)** - A repository of data from publicly available open data sources that can provide certain mandatory spatial layers as required by NWPC.
- **Forest Data Kit (FDK)** - A mobile android application that provides a digital platform for collection of field data. The data is further analysed and processed to create geo-spatial layers for visualization.
- **Composite Land Assessment and Restoration Tool (CLART)** - Tool for classifying areas based on water recharge potential and identify areas for soil moisture conservation working circle activities that can improve yield of water.

**Species Distribution Model (SDM)** – Tool for planning of plantation working circle and NTFP working circle as per the local agro-climatic and edaphic factors. It will assist in finding areas suitable for specified tree species. It can also assist in locating biodiversity hot-spots for conservation working circles.

**How does IFMT work?**
The Forest Data Kit is customised for each division by adding lists of local floral species and administrative units. Primary ecological data from plots and socio-economic data from forest fringe villages is collected through this customised tool and analysed along with the secondary data form Data Platform. Following this, reports and maps are generated as per the recommendations of the National Working Plan Code 2014. These reports and maps form the basis of the prescriptions of working plans. CLART and SDM will further provide support for planning re-vegetation and soil-water conservation measures.

**Impact and Way Ahead**
Integrated Forest Management Toolkit (IFMT) is being implemented in developing ‘working plans’ in three forest divisions in collaboration with state forest departments of Rajasthan, Telangana and Himachal Pradesh.

Automation of IFMT is in progress and an online portal that will provide access to the tools of IFMT is being developed. After registering to this portal a user will be able to: customize and download Forest Data Kit, clean the collected data and download analysed data, spatial layers, report and maps. IFMT will also be modified to assist in the preparation of Management Plans for Protected areas.

IFMT will be further enriched with other datasets and tools like: water yield estimation, biomass estimation, assessment of carbon sequestration potential, invasive species, fire proneness etc. to facilitate the preparation of working plans as per the National Working Plan Code 2014.