

Forest Planning and Management

PLANSFM

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Two major changes that have taken place in Irish forestry have increased the complexity of forest management (planning). The first has been the introduction of Sustainable Forest Management (SFM) as the national standard. This requires taking into account relevant economic, social and environmental indicators during decision-making. This in turn necessitates the availability of a wide range of data and systems to collect, analyse and incorporate the information in management (planning) decision-making procedures. It has also introduced a need to widen the range of silvicultural and management practices, including the use of mixtures, diverse species, continuous cover systems and retention.

The second major change has been the increase in private forestry, resulting in the need for private owners and management companies to get access to tools to collect, store, analyse and use the information necessary for the management of their estates.

The PLANSFM programme consists currently of research projects that deal with a wide variety of data sources, data collection methodologies and data analysis methods. The programme objective is the production of information and decision-support systems required for the optimal and sustainable management of the Irish forest estate, both in the state and private sectors.

The projects all have an important involvement by University College Dublin (UCD), where a programme manager and a post-doctoral programme statistician will facilitate the co-ordination and integration of the research activities and optimisation of outputs and results. The UCD-based programme and project teams will create a critical mass of forest management (planning) expertise, which will facilitate the development of research proposals and involvement in further national and EU-funded research programmes.

Most of the industrial project partners have had previous involvement in forest research and have been selected based on their specific expertise. Several partners are involved in multiple projects, again facilitating the co-ordination of the programme.

The PLANSFM programme comprises the following projects:

- **FORESTSCAN:** Terrestrial laser scanning technology for multi-resource forest inventories.
- **NATFOREX:** The establishment of a national resource of field trials and a database for forest research and demonstration.
- **PRACTISFM II:** Implementation, communication and optimisation of the PractiSFM tool.
- **STANDMODEL:** Development of dynamic yield models for conifers, broadleaves and mixtures.
- **TREEMODEL:** Development of single-tree volume models and stem profile models.

In addition to the PLANSFM programme, this thematic area includes **CLUSTER**, a stand-alone project examining a cluster-based approach for identifying farm forest resources to maximise potential markets.