

PLANSFM

PRACTISFM II

PractiSFM: Implementation, communication and optimisation

PROJECT TEAM

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COMPLETION DATE: December 2013

BACKGROUND

The Irish National Forest Standard, published in 2000, applies to all forest in Ireland. Since its implementation, private forest owners and managers are required to evaluate forests for economic, social and environmental sustainability through the quantification and qualification of multiple resources. Such requirements place additional demands on data collection methods, beyond the traditional, timber-orientated forest inventory. For private woodland owners in Ireland, the

lack of reliable, up to date and affordable forest inventory data providing information related to their own properties represents a considerable obstacle in the assessment, monitoring and implementation of Sustainable Forest Management (SFM). The original PractiSFM project resulted in a prototype multi-resource inventory protocol and decision support system (Figure 1), and the PractiSFM2 project will build on this success to implement the system and enhance its usefulness in terms of improved forest management and the provision of a reporting capacity to provide the forestry sector with up to date information on planned outputs from private woodlands.

OBJECTIVES

- Field testing and validation of the PractiSFM system with the help of management companies;
- Further development of the existing system in co-operation with management companies;
- The development of a communication system enabling the uploading of PractiSFM management plan information into a central database;

PractiSFM Forest Inventory, Management Planning and Forecasting

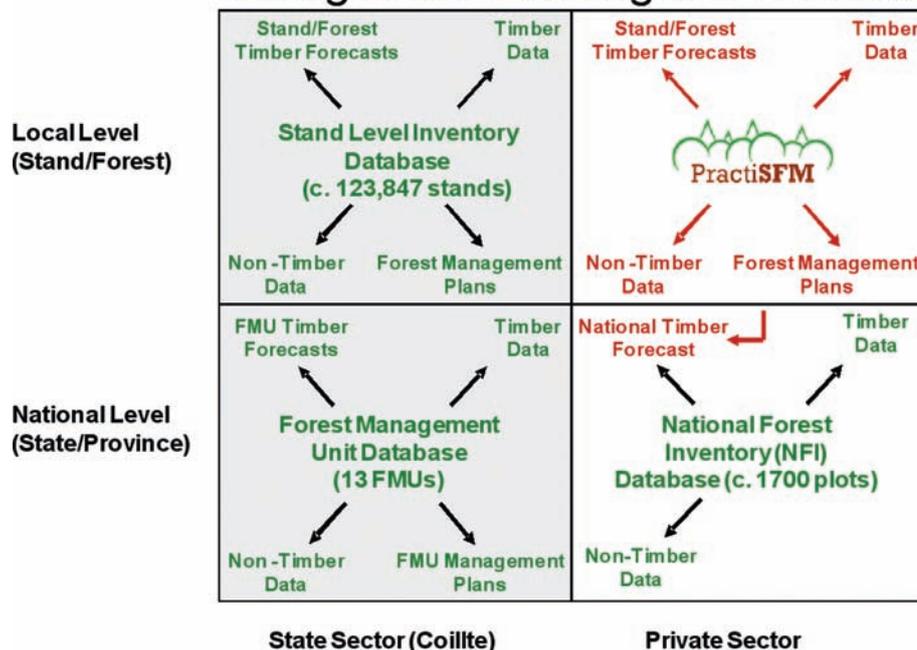


Figure 1: The role of PractiSFM positioned in the private forestry sector for forest planning and management.

- The introduction of a wider range of management options that move towards flexible, user-defined management strategies;
- Development of an optimisation component to the PractiSFM system;
- Implementation of the completed system in the private forest management sector.

PROGRESS

Following on from the PractiSFM project, a number of publications and presentations were produced which deal with the potential of PractiSFM to act as a template for the reporting of forest inventory, management and timber forecast information that incorporates owners' objectives.

ACTIVITIES PLANNED

A revised plan will be drawn up and PractiSFM will be introduced to a number of management companies and, based on their feedback, modifications and additions will be made to the inventory protocol and the data analysis and decision support system. At the same time, the development of a reporting and communication system to enable the uploading of PractiSFM management plan information into a central database will be initiated. This will be done in consultation with the Forest Service. The development of an optimisation module will commence by investigating methods to capture stakeholders' preferences and translation of these into optimisation goals and weights (Figure 2).

OUTPUTS

Barrett, F., Somers, M. and Nieuwenhuis, M. 2007. *PractiSFM – an operational multi-resource inventory protocol for sustainable forest management*. In: Sustainable Forestry: from Monitoring and Modelling to Knowledge Management and Policy Science. (Editors: Reynolds et al.) CABI publishing. Pp 224 – 237.

Barrett, F. and Nieuwenhuis, M. 2008. *A decision support system linking forest policy with sustainable forest management planning in private forests in Ireland*. In: Forest Management. Nova Science Publishers, NY, USA (in press).

Barrett, F. and Nieuwenhuis, M. PractiSFM – multi-resource inventory protocol and decision support system: a model to address the private forest resource information gap in Ireland. *Irish Forestry* (in press).

Nieuwenhuis, M. 2008. PractiSFM II – a link between the inventory and management needs of the private forestry sector and the need for production forecasts. Presented at the COFORD technical workshop *Forest growth modelling and wood production forecasting*. Portlaoise, Ireland (12 May 2008).

<http://www.coford.ie/iopen24/pub/120508practisfmii.pdf>

Current Internet Presence

<http://www.ucd.ie/forestry> website describing PractiSFM2 in the context of the PLANSFM research programme (due for launch in March 2009).

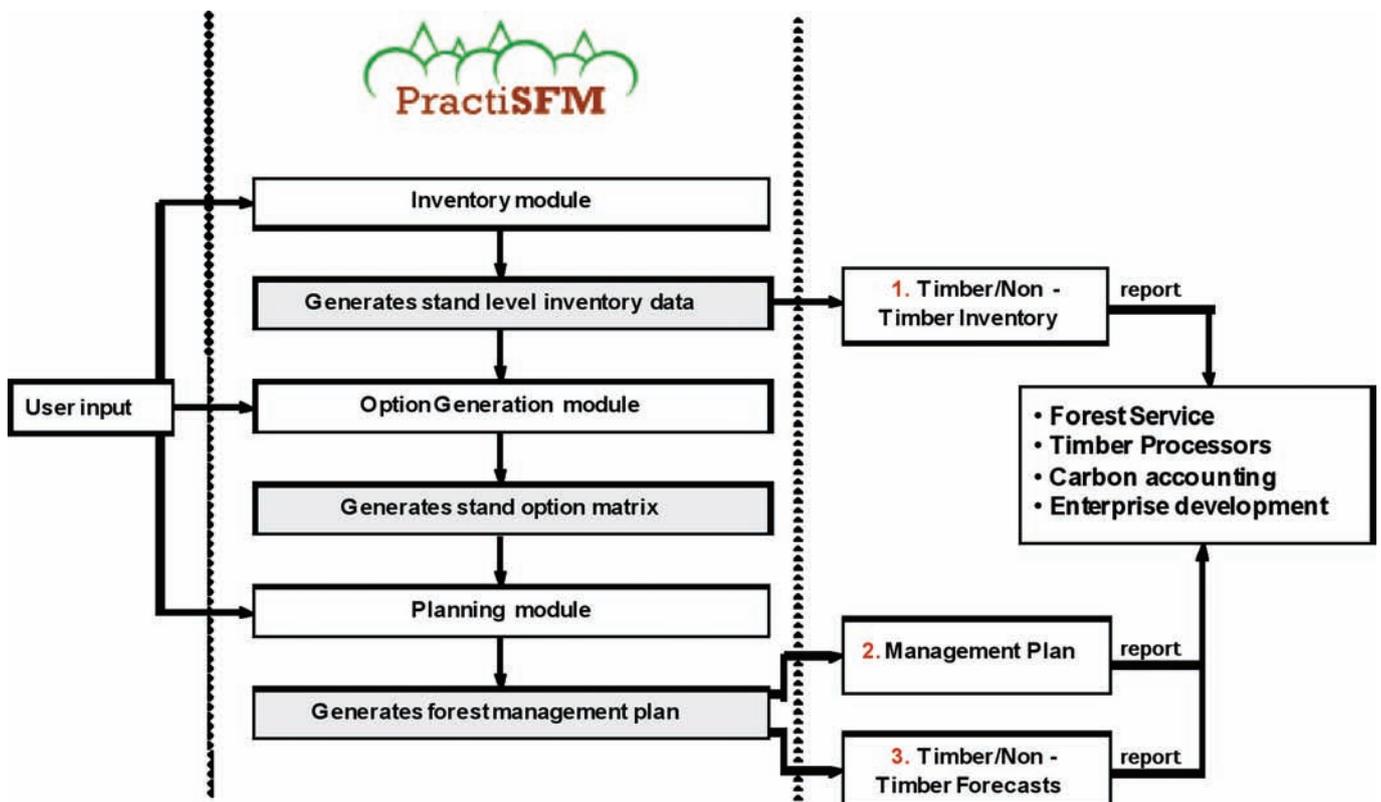


Figure 2: PractiSFM – The link with information needs of the forestry sector.