

Focus on Grand Est (France)

Background

The Grand Est model region covers three French metropolitan areas: Champagne-Ardenne, Franche-Comté and Lorraine. Together they cover 65,335 km² in the north-east of the country.



There are 2,274,000 ha of forests (35% of land cover). Broadleaf forests (oaks and beech) are very common in this part of France. The timber can be of high quality, but the stands are often located on fragile soils (i.e. sensitive to compaction) due to the fact that the climate is quite wet. Coniferous stands are located in two mountainous sub-regions (Jura and Vosges) and also on poor soil (limestone/chalky soils) in the sub-region Champagne.

Two storms struck the area in the last 20 years, which resulted in un-balanced forest age-classes.

The timber industries are well represented all over the region and part of the timber is processed outside the region.

Privately owned forests represent 46% of the productive forest area, and there are around 112,000 private forest owners. There is (or was) a real forestry tradition in this region but private forest owners are becoming less and less rural. Private forests are managed by different structures: cooperatives (like Forêts et Bois de l'Est (F&BE)), forest owners associations and forest experts. Public forests are all managed by the state company, ONF. Most of unused resource that is potentially harvestable is located in deciduous forests owned by private individuals.

Among the usual barriers preventing wood mobilisation, there are three specific issues:

- Fragmented ownership (the mean size of private properties is around 2 ha). Private forest owners are numerous and they often don't know how to manage their forests or who can help them.
- Reluctance towards (mechanized) forest operations in deciduous forests due to the uncertain economic balance and expected damage to the soil.
- Questions on proper silviculture schemes for deciduous forests, especially young or poor forest stands in the context of climate change.

SIMWOOD's work in the region

Within Grand Est area, the SIMWOOD project has been focusing on two territories.

The **Champagne Crayeuse natural region** is characterized by intensive open field agriculture established in the middle of the 20th century by deforested poor forest stands. Forests are seen as unproductive land by farmers and are underexploited. Nevertheless, many stands have a real potential and this has to be explained to the forest owners.

The other territory is mainly in **Franche Comté** but also concerns areas in the other regions where forest soils are particularly sensitive to soil compaction. In these areas private forest owners are often reluctant to harvest because of the fear of soil damage.





Pilot project 1

Challenges and alternatives in management and harvest of "poor" forest stands

In the Grand Est area of France, superficial limestone soils cover an important part of the territory. Forest owners are reluctant to improve forest stands in this area because of low incomes from wood products, the cost of any improvement actions and uncertainty concerning their results. Our regional profile for Grand Est highlighted the need to find solutions to develop efficient silvicultural schemes (for both the costs and the incomes).

The current private forest area in *Champagne crayeuse* is 45,000 ha. This forest has various origins (old pine plantation, recent reforestation of agricultural land, natural stands), and generally the quality of the trees is very bad. The 1999 storm deteriorated the stands, and many forests have not been cleaned since this event - the windfalls are hardly valuable. Therefore, the replacement of these stands is very expensive.



Landscape of Champagne Crayeuse. Photo: F&BE

Until recent years this forest resource was not considered valuable. But the relatively new development of wood boilers in the area gives an opportunity. The development of efficient mechanical tools allows the harvesting of these stands in a cost-efficient way. The SIMWOOD pilot project aims to demonstrate, document and disseminate current possibilities for harvesting and improvement of forest stands. The first meeting of the Regional Learning Lab (RLL) in January 2015 aimed to enable local stakeholders to share their understanding of the status quo and identify possibilities to improve wood mobilization. The RLL tried to take into account all the forest stands diversity known by the RLL members (hunting federation, forestry companies, forest owners' regional centre, forest owners, farm bureau and forest managers).

The SIMWOOD team then found owners motivated by field trials and characterized the stands and the technical possibilities for improvement. During a second RLL meeting, participants gave their perception of the different possibilities and a schedule for field trials was established.

Two field trials were realized by F&BE between summer 2015 and spring 2016 and two others are planned before winter 2016. A third RLL meeting is planned in July 2016 to discuss the technical and economical results of the field trials and to formalize dissemination tools and events for forest owners in the autumn of 2016.

Pilot project 2

Enhanced environmental friendly logging systems on sensitive soils

Forest owners are often reluctant to let traditional machines (harvester, skidder and forwarder) work in their forest: they fear the impacts of these quite heavy machines (15 T for a skidder to 30-40 T for a loaded forwarder) on the trees, on the soil and on the landscape. There is a real need to find solutions which have low impacts on sensitive soil.

Harvesting machines have to be adapted to perform high environmental logging operations, moreover improvement of the preparation of the harvesting work (e.g. marking trees, organization of the skidding trail...) has also to be taken into account.

The first RLL meeting took place in January 2015 in Besançon. Three different forestry companies,





the PEFC regional chapter, forest managers (F&BE – ONF) and institute of technology (FCBA) were represented. This group was deliberately focused on practitioners. This meeting aimed to enable the local stakeholders to share their understanding of the status quo.



Tracks tested in the Pilot Project. Photo: F&BE

Step two involved the identification of relevant technical equipment (for example synthetic tracks or large tracks on a forwarder), followed by experimental actions in the field with forestry companies. These tests were performed by a private company working for F&BE in different forest properties.

In January 2016, the RLL members came together again to discuss the results of the different field trials, and the technics proposed in order to improve the set-up of skidding trails. New field trials operations were also agreed and also to use the PRESS BOOK dialogue tool.

The third meeting of the RLL takes place in June 2016, with a presentation of all the results of the different field trials and studies. Based on these results participants will prepare some dissemination events and documents for autumn 2016.

A training session for the technicians of F&BE is planned, in order to improve the satisfaction of forest owners concerning this topic (using the PRESS BOOK and the different technics used in the project). These results will be widely spread in the forestry sector.

Who to contact in the region

The SIMWOOD local team includes staff from FCBA and F&BE

To get involved in SIMWOOD's activities, please contact: Cyrille PUPIN (F&BE) cyrille.pupin@foretsetboisdelest.com +33 6 30 89 14 32

Philippe RUCH (FCBA) philippe.ruch@fcba.fr



This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 613762.





The logging PRESS BOOK

(PRESS for Performance and Results Environmentally Super Satisfactory)

A survey carried out in France stressed that three main conditions are necessary to motivate a forest owner to harvest: the price of course, but also trust in professionals and the quality of the logging operation.

The satisfaction of the forest owner, in compliance with sustainable management of the forest, has to be the prime objective of a logging operation.

A satisfied forest owner is an owner who will dare to launch other logging operations in the future and he will speak about it positively to his circle of acquaintances.

The objective of this SIMWOOD focus study was to build a dialogue tool. The logging PRESS BOOK is a support document which facilitates the dialogue between the forest technician and new forest owner (for whom a logging operation is a first), by enabling the identification of individual "High Environmental Quality" criteria.

The PRESS BOOK is for the forest technicians and managers who are in touch with forest owners.

Its objective is to be able to identify clearly expectations (and also fears) of the owner, to reassure him/her and explain to him/her what is going to take place in his/her forest.

The document also highlights preventive measures that might be relevant, and how to take them into account, because they can definitely have an impact on the financial balance of the operation.

The PRESS BOOK was tested during the summer of 2015 by three Simwood partners in different regions:

- South-Eastern Ireland by the company Irish Wood Producers
- Grand Est by the cooperative Forêts et Bois de l'Est
- Bavaria and Lower Saxony by the German Centre of Forest Work and Forest Technology KWF.

The book will now be disseminated to forest technicians.

