ENFE Discussion Paper **February 2010 / 2**

Research Agenda 2010

ENFE SUPPORTS RESEARCH FOR FORESTRY CONTRACTORS´ DEVELOPMENT

ENFE is the European umbrella organisation of enterprises which offer services in forest operations. In this role ENFE represents the majority of the mainly small and micro enterprises which today are responsible for the major amount of timber and woody biomass harvested in Europe. The research needs addressed here are based on the actual scientific and practical experience and observations about the increasing demand for competent and viable contractors in forests and rural areas in Europe.

ENFE FOLLOWS A STRATEGY OF ENTERPRISE DEVELOPMENT

Development work is supported by various networks among which the Joint FAO/ECE/ILO Network for the implementation of SFM can be highlighted as one of the most important facilitators for competence development.
A number of European funded projects were carried out by and under participation of ENFE which are designed to support our development strategy:

- providing guidance to good practices (FAO/UNECE: Guide to Good Practice in Contract Labour in Forestry);
- mapping the training for forest workers in European countries (ENQuaFor);
- developing tools to facilitate monitoring and improving health and safety in forest enterprises (COMFOR);
- developing a European standard for qualified forestry contractors with the aim to create a European umbrella certificate for contractors. (EFECT);
- developing a curriculum for entrepreneurial skills for future contractors (ConCert).

RESEARCH PRIORITIES

1) Development of business model for small enterprises

Advanced business models for small enterprises in forest operations have to be developed to facilitate effective and productive timber and biomass supply processes.

Business models shall define development goals for small enterprises to become effective and viable service providers;

- integrate small enterprises in stable business to business networks in the forest based value chain;
- facilitate co-operation between SMEs in forest operations.

2) Development of the technical and logistical processes in timber and biomass harvesting and transport with particular regard to the role of SMEs in forest operations

Among others, IT based decision supporting tools need to be designed which facilitate the efficient integration of small enterprises in the wood and biomass supply chain.

Technological research has led in the recent past to a high knowledge base for the optimisation of timber and biomass flow from the stump to the mill. A knowledge deficit exists on how different actors in the value chain plan and interact with each other to implement complex tasks to optimize the processes for suppliers of raw material and customers of timber and fibre. Particular attention should be paid to the development of standardized IT systems which offer an effective interaction between various existing IT solutions.

3) Knowledge transfer to SMEs in forest operations as a means for enterprise development and capacity building

Research needs to be carried out to define the knowledge demand for actors in the forest value chain and to define appropriate knowledge transfer processes and tools which meet the learning culture and the knowledge demand of SMEs in rural environments.

The forecasted increasing timber demand for industrial and energy use requires more capacities in the forest operations sector, both in human and technical resources. Therefore, enterprise development is needed to cope with the manifold tasks which have to be carried out to ensure sustainable forest management.

Advanced harvesting techniques and logistical processes require higher skills and competences from contractors than forest operations needed in the past.

The dramatic change of forest management due to biodiversity and nature protection goals, changing forest products (e.g. bio-fuel) expected impact of climate change on forest management and operations, and increased society demands for forest services require

more knowledge and competences from contractors, not at least to facilitate their adaptability to changing markets and tasks. To this end curricula for technical and higher education of forest entrepreneurs and technical staff are needed, and should be based on a scientific needs analysis. Work has already started, and there is further need for extensive development work, knowledge dissemination and real application in European countries.

4) Pedagogic Research into the possibilities of e-learning for small enterprises

The possibilities and opportunities of applying e-learning techniques and content to train and educate people in small enterprises need to be analysed further. This shall be based on exciting knowledge about learning cultures in a small enterprise milieu and learning culture which offers some considerable barriers for the direct application of e-learning techniques. Research shall deliver answers to the question how e-learning can be designed as a means for competence development in small enterprises.