



The research programmes of the Department concern forests and forestry, forest industries and their markets, as well as multiple use and rural development. The basic forest sciences, statistical and social sciences form the mainstay of the department's methodology. Cooperation with other research institutions, both domestic and international, is part of the daily routine.

Continuous Monitoring of Export Markets

The Finnish economy remains dependent upon the export of forest industry products, hence continuous monitoring of export markets and specific studies on related matters is one of the main concerns of the Department. A model of the international trade in forest products, developed with international co-operation, offers a tool for simulating alternative futures for the forest industries. The model has also been employed to evaluate economic impacts of pollution-induced forest damage. Evaluation of European Integration, from the forestry-related point of view, is of great current interest.

Modelling the Domestic Roundwood Market

The domestic roundwood market is logically another main subject area. Traded quantities and unit prices of

roundwood are monitored, and improvements in demand and supply models are sought. Due to the central position the nonindustrial private forests play in wood supply, structural changes of forest ownership and their possible impacts are under investigation.

Research on Economics of the Forest Enterprise

Research on economics of the forest enterprise follows several approaches: a comprehensive planning model containing all the elements of a forestry enterprise has been developed; the profitability of nonindustrial private forestry is being monitored and the profitability of different forest investments are being evaluated.

Forest Sector's Role in Development

Through its investigations, the Department examines agricultural and



forestry policies which would contribute to the maintenance of social and economic vitality in rural areas. A multi-discipline investigation in this field has contacts to European research institutions also involved with the diversification of rural livelihoods and with the development of multiple activities in agriculture and forestry.

The Department is investigating deforestation and policies supporting the sustainable development of forestry in developing countries, with case studies being undertaken in Chile, Ethiopia and the Philippines.

Surveys of Finland's Forests

Department of Forest Resources is obliged by law to continuously monitor Finland's forest resources. The 1st National Forest Inventory was completed in 1924. Today, the 8th National Forest Inventory is under way. The results indicate an increase in growing timber stock. In addition to systematic data collection on the ground,

satellite imagery and digital map-data are techniques regularly employed. The production of information concerning smaller areas than earlier is therefore feasible. Promising experiments have been made even at the level of individual stands. Parallel studies on wood consumption, also dating back to 1920's, have produced accurate information concerning increment/drain relationships of growing stock.

Timber Production Planning

To meet the needs of timber production planning for large areas, a planning model and the corresponding software package have been developed. It has been particularly useful for calculating timber production alternatives for national programmes concerning long-term forestry development. The software package is capable of simulating the future development of forests, and it can be used also for up-dating information on for-

est resources. Of course, a great amount of tree and stand modelling work is behind the package.

Forest Statistics

The forest statistics information service annually compiles the Yearbook of Forest Statistics, which provides data concerning recent developments in forestry and the forest industries. In addition, the information service produces statistical bulletins monthly covering, e.g. roundwood sales, prices, fellings and exports of forest industry products. Some 100 bulletins were published in 1992. In "the Forest Sector Annual Review", published in November, recent trends in the Finnish forest sector are summarized and analyzed. The prognoses of future developments are supported by enquiries to the forest industries and private forest owners.



THE FINNISH FOREST RESEARCH INSTITUTE METLA

Unioninkatu 40 A
00170 Helsinki, Finland
phone +358-0-857 051
fax +358-0-625 308

Director General Eljas Pohtila
Administrative Director Tero Oksa
Head of Communications Unit
Marja Ruutu

DEPARTMENT OF FOREST RESOURCES

The Department is led by Professor Risto Seppälä, Research Director

- demand for forest industry products
- econometric model for roundwood market
- structural changes of private forestry
- planning models for a forestry enterprise
- profitability of forestry investments
- forest sector's role in rural development
- national forest inventory
- timber production planning