



EUROPEAN NEIGHBORHOOD
AND PARTNERSHIP INSTRUMENT
EAST COUNTRIES FOREST LAW
ENFORCEMENT AND GOVERNANCE
II PROGRAM



The Program is funded by the European Union and implemented
by the World Bank in partnership with WWF and IUCN

www.enpi-fleg.org

SUMMARY (MYKOLA SAVUSHCHYK)

Relevance. Sustainable forestry management at the present stage is based on an intensive model. The main priorities in its implementation are to improve the quality and cost of stands provided that sustainable forest management is secured. Thinning is a key element of forest growing. Its use significantly improves the quality of stands, substantially increases timber harvesting volumes per unit area and yields valuable assortments.

An intensive forest management model is successfully used in Finland, Sweden, Germany and other European countries. Analysis of current forest growing practices, testing and implementation of certain elements that they use, has become more acute, given the need to enhance the efficiency of national forest management and due to European integration processes, which were launched in Ukraine.

Objective. The main objective of the study is to give an impetus to the evaluation and review of approaches to growing plantations, using the domestic forestry achievements, research work and the European experiences.

To implement new approaches to growing plantations, methodological guidelines on production testing in Ukraine of modern European practices of growing stands of pine and oak have been developed in the framework of the study.

Expected result. By drawing upon the “Methodological recommendations of production testing in Ukraine of modern European practices of growing stands of pine and oak” a network of research test sites will be established as the basis of forest growing improvement in Polissya and Forest-Steppe.

Analysis of current European forest growing practices in comparison to that of used in Ukraine. Based on the fact that forest plantations of pine and oak are dominating in Ukraine’s forest fund, it is precisely the current practices of growing plantations of these species that have been analyzed. The main attention was paid to the peculiarities of planning and approaches to thinning.

The objects of analysis were sustainable and intensive forest management practices, and forest site conditions comparable with the Ukrainian ones. The analysis of pine plantations growing experience was conducted in the countries with forest site similar to that of in Polissya, where the main pine areas in Ukraine are located. Attention was paid to intensive thinning practices to increase income per unit of forest area.

Of special interest for oak stands are practices to produce high-quality, large-sized assortments.

1. Growing pine plantations in the intensive thinning mode. The European practices are based on programmed forest growing regulations. At that, thinning models are widely used. The growing modes are based on a set of signs attributable to forest plantations. The main ones are: productivity represented by the upper height, absolute completeness and age. Forest growing regulations do not include categorical prohibition of thinning on plantations. They are based on provisions of a recommendation character and suggest general approaches to growing forest plantations. The choice of silvicultural techniques is entrusted to professionals planning and carrying out works at their own discretion. Modern practices of growing pine plantations are based on conducting one or two young stand thinnings and two or three intensive commercial logging in the middle-aged stands.

2. Growing high-value oak stands. To obtain a maximum of large industrial wood, growing of productive oak forest plantations is based on the individual care of the best trees. Candidates in the best trees up to 100-150 pcs./ha are selected on plantations in the period of expressed growth differentiation that corresponds to the age of around 20. Over time the candidates among 60-90 pcs./ha are selected as trees of the future, and cared for till the main felling. When selecting growing modes, the targeted diameter; cultivation period; number of trees of the future; desired length of the branchless part of the stem are considered. To improve the quality of wood, pruning of twigs and branches is made on the best trees.

3. Comparing Ukrainian and European forest growing practices. The European forest growing practices consider thinning as an important reserve of increase in the forest use volumes. In the countries with intensive forest management their share reaches 40-50% of the total mass of wood harvested. Due to intensive thinning in pine stands, the mass of wood harvested per forest growing cycle in Finland has increased by 20-30%, and the yield of industrial wood in the main use reaches 90%. Unlike European countries volumes of thinning in Ukraine have been significantly reduced and their share is about 10%.

In Ukraine, thinning at 0.7 density and checkpoints cutting at 0.8 density and below are not

planned and carried out. European forest growing practices do not provide for such regulatory prohibitions.

Improving the implementation of the newest forest growing developments in Ukraine.

The main areas are as follows: legislative consolidation of the status of scientific forests, the procedure for their selection and use. Primarily, they have to include forests that are used by enterprises subordinated to research and educational institutions and universities. Changing arrangements of forest use under the authority of research and educational institutions. Granting them to be available for research and development purposes should provide for experiments in the woods, retreating from certain provisions of acting regulations; creating and maintaining a single state register of scientific objects embedded in the woods. The availability of such a data bank will involve substantial amounts of information contributing to reliable results, save money due to avoiding duplication in determining the topics and laying experiments, facilitate continuity in research.

Methodological guidelines on production testing in Ukraine of modern European practices of growing pine and oak stands have been developed. Testing of modern practices of growing pine and oak stands in Ukraine is suggested based on forest enterprises in Polissya and Forest-Steppe zones.