

# Forest Management Planning as a Tool to Enhance Biodiversity Protection



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## INTRODUCTION

One-fourth of NIPF owners emphasize recreation, nature, and landscape protection. The share of these “non-timber sale”-oriented owners will presumably grow in the future as the forest owners’ lifestyles and attitudes towards forests change<sup>1</sup>. Forest management planning (FMP) is one of the main tools or occasions to gather information and conduct forest counselling services. Hence the FMP practices play a crucial role in securing the protection of biodiversity and the multi-objectivity of forest management in privately owned forests (Picture 2).

The aim of this study was to examine which FMP and advisory practices enhance or hinder the emphasizing of biodiversity protection in planning. The research question is specifically formulated as follows: How can forest management planning on holding level be developed to better capture multiple forest use objectives and purposes?

## MATERIALS AND METHODS

The study is based on nine focus group discussions<sup>2</sup> with forest conservation interest groups organized in three locations (Picture 1) in May and November 2014. Landowners, forest professionals, scientists, forest and environmental authorities and NGOs participated in the discussions. There were 59 participants altogether.

The discussions lasted about two hours each. They were recorded and transcribed. The data-driven analysis method was used. The analysis was directed by a conceptual framework formed by the analysis question: Which FMP and advisory practices enhance or hinder the multi-objectivity or nature management emphasizing in holding level planning and how?



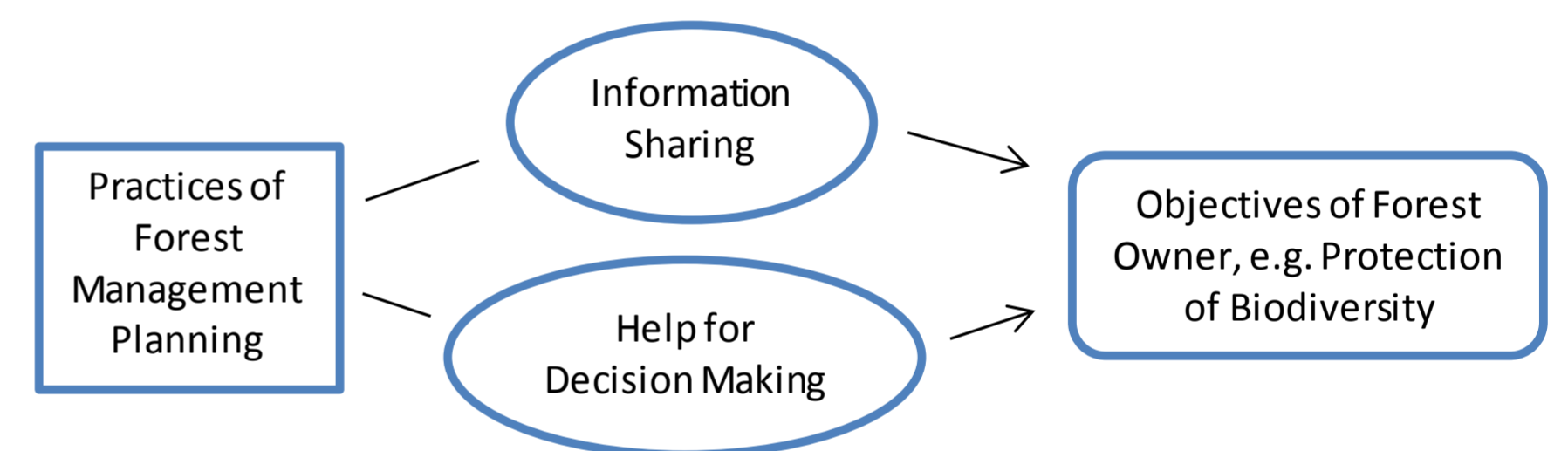
**Picture 1.** Map of study areas and locations of focus group discussions (Rekijokilaakso, Virrat, Joensuu). Map: National Land Survey of Finland

### FMP PRACTICES ENHANCING BIODIVERSITY PROTECTION

Practice	Excerpts from the focus group discussions
Integrating nature management to other operative forest activities	"Nature management should be taken care somehow alongside some other operative work, or at least that would be wise and maybe even cost-effective" (Forest advisor, woman, Joensuu)
Offering alternatives to the forest owners when deciding about their forest use	"(It is) very important that landowner gets the biodiversity consulting as an alternative to other FMP and counselling" (Environmental authority, woman, Joensuu)
Tight co-operation or communication between forest owner and forest professional	"I myself have always been there when drafting the FMP, and therefore I can have an influence on the spots that could be worth protecting"(Forest Owner, man, Joensuu)
Clear criteria for selection of high-conservation value forests	" Metso-programme is becoming in a way universal criteria for forest conservation, or a standard on how foresters evaluate the forests in the field, [...]. Before it was not been clear what and how, but in Metso all the criteria is so clear, it goes over the programme, they are used to evaluate other forests too" (NGO, man, Virrat)

### FMP PRACTICES HINDERING BIODIVERSITY PROTECTION

Practice	Excerpts from the focus group discussions
Insufficient information flow between different actors	"Environmental centres do not have the forest inventory data at their use. So actually, if we want give the holding level biodiversity information to the owner more systematically, the way is by FMP"(Environmental authority, woman, Joensuu)
Emphasis on economics before other aspects	"It just is an economic fact that when starting the FMP on an estate, the hundred-year-old half-decayed spruce copses are the ones to start the cutting with" (Forest advisor, man, Rekijokilaakso)
Insufficient marketing and advising about means of BD protection tools	"Now 100 000 euros [of means for environmental aid] were given to other regions, because we had not enough suitable spots. So Forest owners' association being active [in marketing the aid] would have been helpful"(Forest authority, man, Virrat)
Knowledge gaps about biodiversity protection of forest advisors and planners	"They are not at all clear for forest professionals, what a Metso-area is. Those who are interested in that, they find them, but those who are not, there is still work to do to make them learn."(Forest planner, man, Virrat)



**Picture 2.** FMP as a tool to reach the objectives of forest owner

## CONCLUSIONS

FMP offers many possibilities to enhance the biodiversity conservation in the forests, as it is a tool to gather and share information and to help decision-making.

Gaps in information flow between actors, lack of knowledge and resources and emphasis of economics as a main objective of forest management are key challenges to tackle in order to make the most of FMP in ensuring the biodiversity protection.

Better co-operation and information sharing between different authorities, forest advisers and planners as well as with forest owners would ensure the acknowledgement of valuable conservation spots.

Education and experience sharing of forest professionals ensure that the forest owners are informed about all alternatives and features of their forests when decision making.

Integrating nature management into the conventional forest management and harvesting operations will lessen the dependency of nature management on external funding and make it more cost-effective way of protect biodiversity.