

# NEED ASSESSMENT OF NON-INDUSTRIAL PRIVATE FOREST OWNERS IN LITHUANIA

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## ABSTRACT

The current empirical study, which is presented in this paper, was done in Lithuania and aims at assessing the needs and expectations, as well as attitudes towards cooperation, of Non-Industrial Private Forest Owners (NIPF-owners) in achieving Sustainable Forest Management, oriented between social and economic efficiency as well as protection of environmental values in the long run.

NIPF-owners in Lithuania value forest mostly for its aesthetic and environmental values. Analysis has also shown the majority of forest owners are taking care of their holdings themselves. Only a small share of forest owners has asked for advice or service from a professional specialist/company.

A high level of bureaucracy was indicated as the biggest problem. Forest owners have also complained about illegal cuttings and lack of specialised information.

Respondents think the most effective and convenient way to obtain appropriate knowledge in forestry activities, are articles in regional press, informational leaflets, and special TV or radio programs.

NIPF-owners might join the forest owners' co-operative if they had some advantages from the EU (as a support) and tax privileges.

**Keywords:** non-industrial private forest owners, need assessment, forest holding, forest owners' cooperative.

## INTRODUCTION

For more than fifty years after the Second World War, forests in Lithuania were the exclusive property of the State. However in 1990 the constitutional environment changed and the central planning system swiftly transformed into a mixed-type market economy. In January 2003 there were 185 000 forest owners and 673 900 ha of private forests in Lithuania with the average less than 4 hectares per holding. Private forests and those reserved for the restoration of owners' property rights cover respectively 23 and 27% of all forests (NTKD, 2003). Most of the new private forest owners have few or no experience at all in forestry.

The current empirical study, which is presented in this paper, was carried out during October-December 2003, in Lithuania, one of the former Soviet countries. The study aimed at assessing the needs and expectations, as well as attitudes towards cooperation, of Non-Industrial Private Forest Owners (NIPF-owners) in achieving Sustainable Forest Management, oriented between social and economic efficiency as well as protection of environmental values in the long run.

## OBJECTIVE

As recent empirical studies show, Non-industrial private forest owners differ in their values, attitudes and objectives concerning the management of their holdings. Empirical studies suggest that general forest values and long term objectives in forest ownership are not strongly correlated, although the majority of forest owners in different countries usually express their strong commitment to manage their forests for the long-run (for details see Bliss and Martin 1989, Järveläinen 1982, Karppinen 1998, Kurtz and Lewis 1981, Lönnstedt 1989, 1998, Lönnstedt and Rutegård 2000, Lönnstedt and Svensson 2000, Mizaraite 2001, Törnqvist 1997).

Nevertheless, the present study obtained its general objective, as seen in its two main outcomes, reached through making analyses of:

- current status of ownership, and
- needs and expectations of the non-industrial private forest owners, related to forestry services and cooperation.

## METHODOLOGY

The first step of the empirical survey was to specify a target group when choosing the statistical sample. It was defined "Non-industrial private forest owners that are not the members of any forest-based organisation" (co-operative or association).

The example for surveying NIPF-owners was taken from information obtained from The State Land Cadastre of Lithuania. The main criteria of our representative survey, was to sample NIPF-owners according to the size of their forest holdings and geographical location.

Thus, NIPF-owners from most of the 25 representative regions in Lithuania, where forest owners' co-operatives and local branches of Forest Owners Association of Lithuania are working, were chosen.

The second step was to group respondents according to the size of forest holding into different stratas. The selection was done as follows:

- 1<sup>st</sup> strata.* NIPF-owners having less than 5 ha;
- 2<sup>nd</sup> strata.* NIPF-owners having from 5 to 25 ha;
- 3<sup>rd</sup> strata.* NIPF-owners having from 26 to 50 ha;
- 4<sup>th</sup> strata.* NIPF-owners having 50 ha and more (see Figure 1).

In the third stage, representative respondents were selected by setting the sample of chosen stratas and defining a fraction of selection ( $k$ ), where this fraction of selection is calculated as follows:

$$n (k=N/n);$$

where  $N$  is the number of stratas, and

$n$  is the number of samples.

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*In: Baumgartner, David M.; ed. Proceedings of Human Dimensions of Family, Farm, and Community Forestry International Symposium, March 29 – April 1, 2004. Washington State University, Pullman, WA, USA. Washington State University Extension MISC0526. ISBN Number 0-9721994-5-4*

However, the process of selecting respondents required three more steps:

1. A randomly selected number from 0 to k were chosen.
2. To every unit of strata (Non-industrial private forest owner) the number was ascribed.
3. The first chosen respondent from each strata got the specific number from 0 to k, simultaneously. Every second respondent obtained the number following the number of the first chosen respondent attached the randomly selected number and so on.

The overall selection was done when the necessary number of respondents was chosen (Vencloviene, 1999). Following this systematic approach 18 NIPF-owners were selected from every representative region.

All in all, during the survey there were 450 NIPF-owners selected as the representative strata. When surveying NIPF-owners the method of telephone questioning was used.

Interviewing was processed by an independent public survey company, which specialises in environmental issues. This method was chosen because of the large number of respondents and the fact that surveying by way of mailed written questionnaires would be imprecise, since many questionnaires would not be returned.

The questions were developed in closed, as well as opened format, in order to achieve maximal standardization and comprehensibility. By its nature, this empirical survey would be both a quantitative and a qualitative one.

Statistical information for empirical investigation was processed using a data processing program SPSS.

### Possible Errors of the Study

- Errors of data processing may occur because of false transferring of data onto the computer. The risk could be minimized using computer data screening.
- Errors by interviewer could occur because of purposive or unwitting actions by the interviewer. Interviewers could purposively or unwittingly cause the respondent to give inaccurate or wrong answers. The risk of interviewers' errors may occur because he (she) can bias the respondent through the situations of the logics, sequence of questions, lead the respondent to the needed answer, etc. It is impossible to eliminate the interviewers' errors when using the method of interview survey.
- Respondents may be aware of distribution of confidential information, thus it is very hard to test the reliability of given information during the answering session.

### Difficulties and Limitations of the Study

- Not all respondents were willing to participate in the study. That is why the instrumentation of the survey was prepared regarding this limitation and questions were chosen to be appropriate to the respondents. Many respondents were not willing to answer the questions relating to financial issues and personal experience in the management of forest holdings.
- The degree of subjectivity. The opinion of respondents might be subjective, and it is very difficult to avoid this. The interviewer was aiming, not to get a direct answer based on facts, but rather to get knowledge about attitudes on different aspects of forest management.

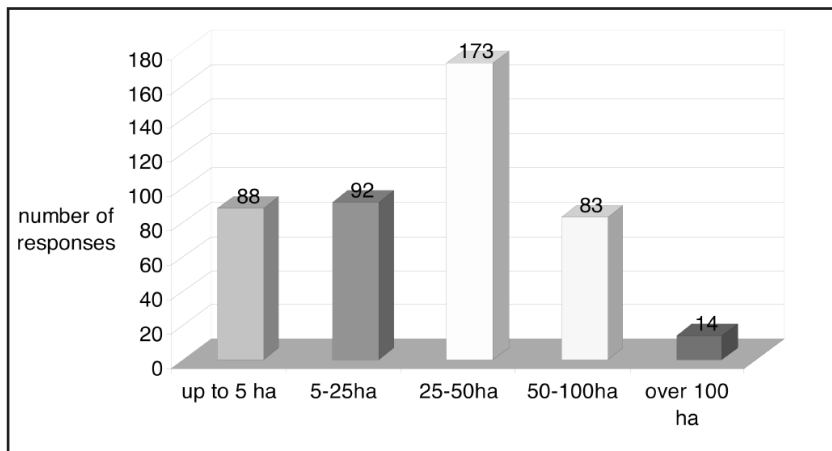


Figure 1. Respondents According to the Size of Forest Holding

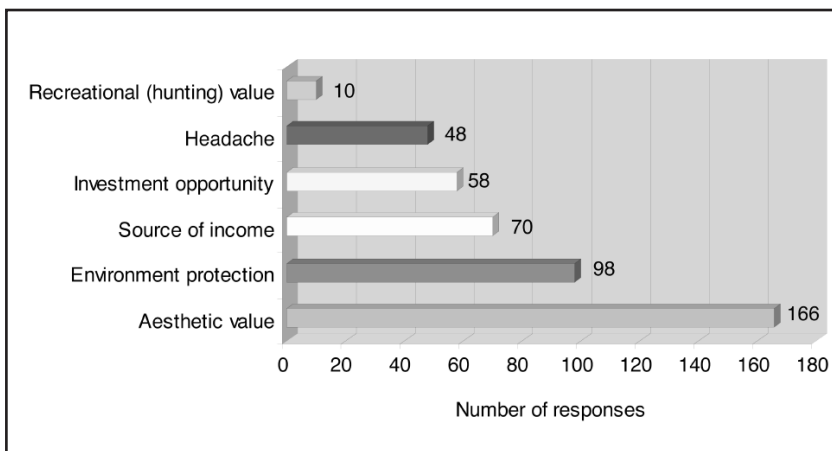


Figure 2. What Does the Forest Mean for Owners

## RESULTS

### Current Status of Ownership

When trying to understand the current status of forest ownership in Lithuania, we have decided to ask a simple question "What does the forest mean for you?" and started our empirical investigation at this point.

Figure 2 shows NIPF-owners in Lithuania think forest basically provides them with aesthetical value (37%). For 22% of respondents forest is a source for environmental protection. Usually those two groups of owners are smaller-scale owners. However, the results indicate for almost 11% of forest owners in Lithuania forest is a "headache".

Moreover, an absolute majority of NIPF-owners that have more than 50 hectares, said forest is a good way to invest. For those owners timber trade is of greater importance.

When answering the question “Who is currently taking care of your private forest holding?” the majority of NIPF-owners in Lithuania (73.3%) answered they are doing it by themselves. This negative attitude towards delegating the management of forest forest holding to somebody else is illustrated in Figure 3.

Nevertheless, 7.3% do permanently hire private persons, who are managing private forest holdings, whereas 13.1% said their

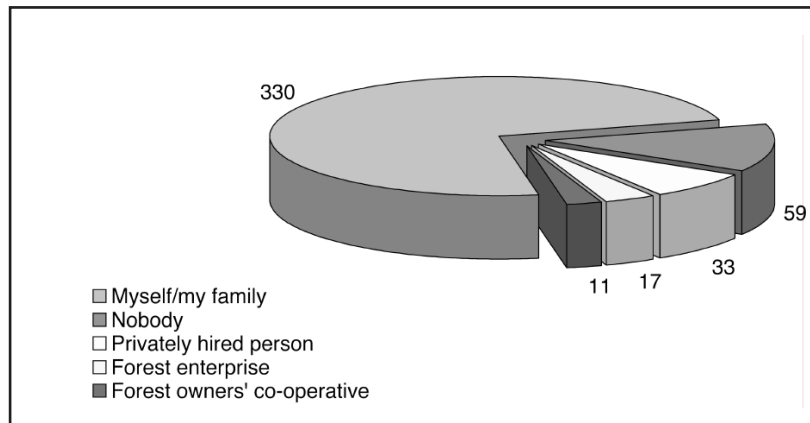


Figure 3. Current Status of Forest Management

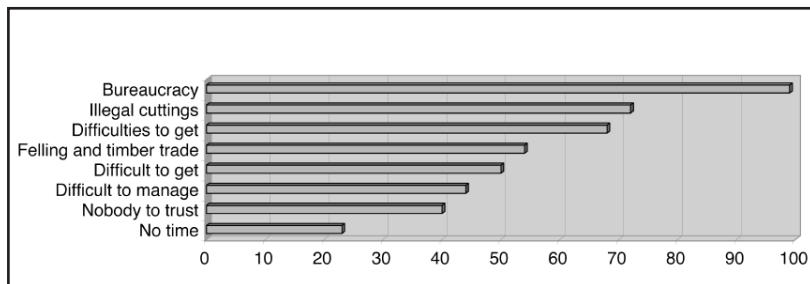


Figure 4. Problems of NIPF-Owners

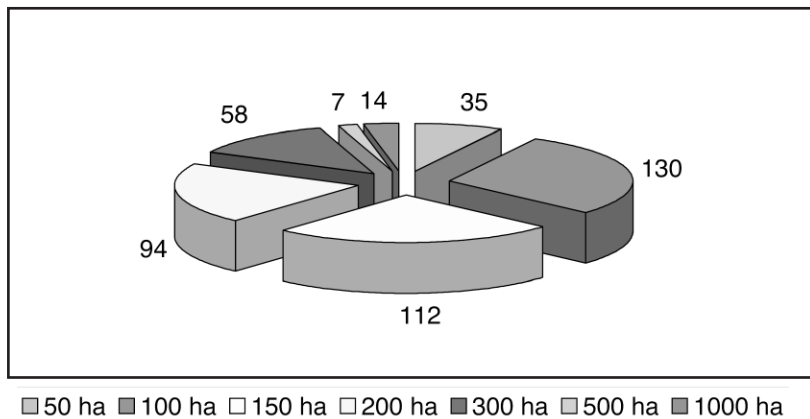


Figure 5. How Big the Forest Holding Should Be

forest is not managed at all. Only 6.2% of NIPF-owners have recently asked forest enterprises and forest owners’ co-operatives for professional service.

When surveying the problems that are met by forest owners in Lithuania, a high level of bureaucracy (22% of all respondents) was cited as the biggest problem. Forest owners have also complained about illegal cuttings (16% of all respondents) and lack of specialised information. For more detailed answers, see Figure 4.

One of the main questions that was given to NIPF-owners to answer, was related to the type of services they would be most interested in. There were several possible answers to choose from, and as Figure 2 shows, the main interest for NIPF-owners in Lithuania is to protect the forest holding from fires, forest diseases, and illegal cuttings (58% of all answers).

NIPF-owners were also asked to answer the question “How big should the forest holding be to ensure a stable income for the family?”. The majority of respondents (29%) think this estate should be at least 100 ha. 25% of all asked NIPF-owners argue it should be more than 150 ha. For these results, see Figure 5.

### Needs and Expectations Related to Forestry Services and Cooperation

Since we have got a rough picture of the current status of NIPF-owners in Lithuania, the second step was to make an analysis on forest owners’ needs and expectations in relation to the management of forest holdings.

When answering the question “What kind of services are you most interested in?”, 44% of NIPF-owners said they would like to gain more knowledge about forest and its management. Moreover, analysis shows owners are lacking specialised informational brochures, training courses and other awareness raising materials.

As Figure 6 shows 27.7% NIPF-owners would like to ask somebody for aid in relation to managing private forest holdings. However, only a small share (11 %) of NIPF-owners in Lithuania feel the need to be represented by a public organisation.

A related question concerns the NIPF-owners’ attitudes towards hiring a forest specialist for any type of service. As Figure 7 shows, 38.3% of forest owners in Lithuania are not willing to ask somebody (even a forest specialist) for a service. One third of asked respondents argue they are ready to hire a professional that could take care of their forest holding and provide them with forest management services. 25.5% of all NIPF-owners have no opinion about this.

NIPF-owners were asked about the need to get information on forestry issues. As Figure 8 shows, 44% of all respondents think the most effective and convenient way to obtain appropriate knowledge in forestry activities is through articles in regional press and informational leaflets.

Thirty-three percent of NIPF-owners think special TV and radio programs are a good idea. Such specifically targeted educational products as personal advice, short courses or educational materials for forest owners are seen as less preferable sources of information.

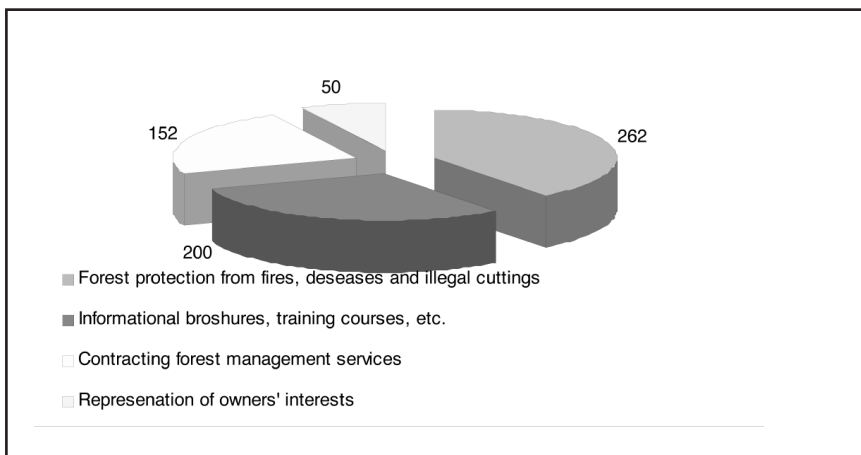


Figure 6. Services Needed by NIPF-Owners

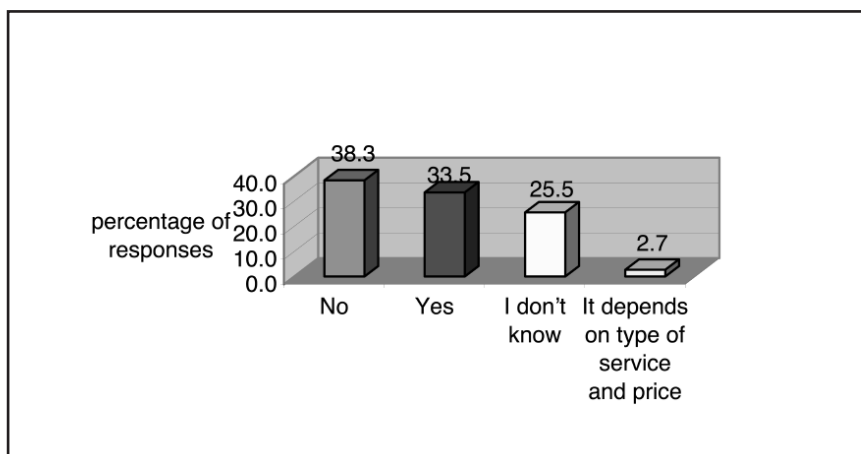


Figure 7. Asking for Forest Specialist's Service

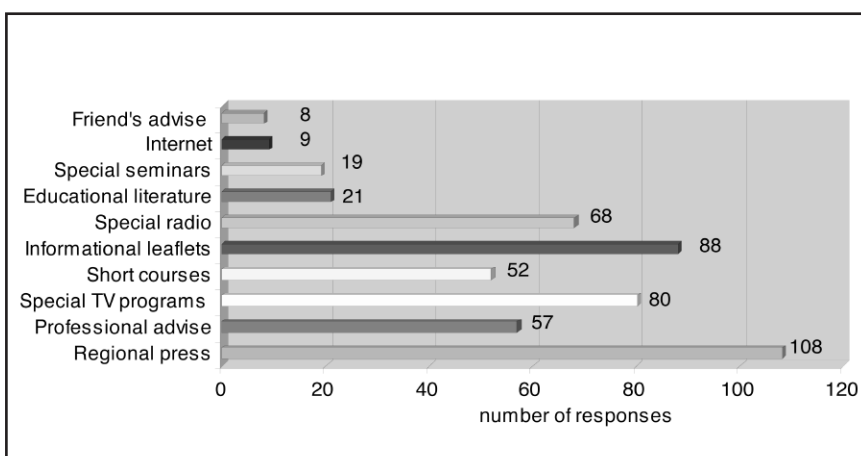


Figure 8. Most Preferable Source of Information

Although NIPF-owners think forest owners' co-operatives might be beneficial in terms of economic performance, the word "co-operative" for an absolute majority of respondents reminded them of Soviet times.

Figure 9 shows the highest share of respondents (56%) might join the forest owners' co-operative if they had any benefits from EU funds and tax privileges. It should be noted that it doesn't matter what kind of described privileges might be generated by the cooperative—the matter is that it should be something. A more efficient forest management service would be most important for 18% of NIPF-owners.

## CONCLUSIONS

As the current empirical study shows, NIPF-owners in Lithuania value forest mostly because of its aesthetical and environmental values, and those factors seem to be an important determinant and requirement of private forest management.

Analysis has explained that the majority of forest owners are taking care of their holdings themselves or with the help of family members. Only a small share of forest owners have asked for advice or service from a professional specialist/company. Moreover, the results argue almost every tenth holding is not managed at all.

When surveying the problems that are met by forest owners in Lithuania, a high level of bureaucracy was indicated as the greatest problem. Forest owners have also complained about illegal cuttings and lack of specialised information.

On the other hand, the main interest for NIPF-owners in Lithuania is to protect the forest holding from fires, forest diseases, and illegal cuttings. Moreover, analysis shows owners are lacking specialised informational brochures, training courses and other awareness raising materials.

Respondents think the most effective and convenient way to obtain appropriate knowledge in forestry activities are articles in regional press, informational leaflets, and special TV or radio programs.

One of the main factors, concerning why forest owners' co-operatives were not successful in getting a large number of members, is that forest owners' cooperatives in Lithuania do not meet the needs and expectations of forest owners.

Lithuanian NIPF-owners think forest owners' co-operatives might be beneficial in terms of economic performance, although the word "co-operative" for an absolute majority reminds them of Soviet times and this is one of the barriers for forest owners to cooperate.

However, NIPF-owners might join the forest owners' co-operative if they had some benefits from the EU (as a support) and tax privileges. It should be noted that it doesn't matter what kind of described privileges might be generated by the cooperative—the matter is that it should be something.

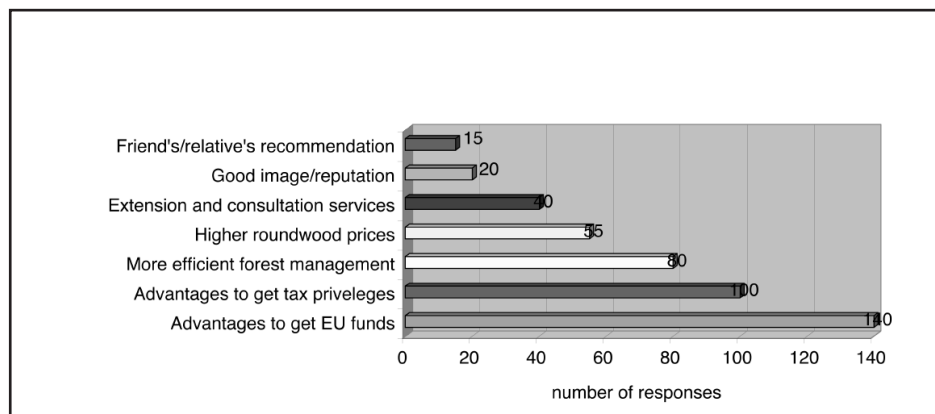


Figure 9. Arguments for Joining Forest Owners' Co-operative

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