

# Forms of cooperation of Lithuanian forest owners: a case review

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## Abstract

There are many ways for private forest owners to manage their properties. One way is to manage property by oneself, using an individual approach; however, this case study focuses on cooperative solutions, which, in many cases, are much more challenging due to the incorporation of multiple players and the structures of their forests, not to mention the needs and objectives related to forest management. Cooperative forest management has different forms, as shown by numerous theoretical and socioeconomic empirical findings. This case study discusses the operations of traditional and new organisational forms of cooperation among Lithuanian forest owners.

**Keywords:** forest, owners, management, organisations, cooperation, case

## Introduction

During 1918–1932, cooperation among landowners in Lithuania rapidly developed like in the entire Baltic region. After annexation by the Soviet Union, individuals lost their ownership rights and collective ownership was introduced instead. For nearly 50 years after World War II, forests in the Baltic States were the exclusive property of the State. The less positive period for cooperation was during the Soviet times, when the theory of cooperation was perverted, and classical cooperatives were destroyed.

The land restitution process, which started in the early 1990s, is now coming to an end, ownership patterns and tenure rights are slowly settling within Lithuanian society. Privatization has developed simultaneously with the restitution process. Primary industries, such as agriculture and forestry, have overtaken with the privatization of infrastructure.

All three of the Baltic States have reported on the lack of organisational structures to carry out forestry in private forest holdings and the lack of information on legal requirements and recommended forestry activities (Lazdinis et al. 2005).

By solving the economic and social problems of the forestry sector, the role of forestry-based cooperation will significantly increase, since solving these problems provides possibilities to accumulate forestland and support making decision pertaining to forest ownership. Considering the aforementioned factors, among others, private forest owners (PFOs) in the region seem to be increasingly unable to manage their forests in a rational way and unable to handle complex and public dilemmas. Lithuania is a

country where both dimensions of privatization have been employed, i.e. the restitution and the reorganisation of forestry (Carlsson and Lazdinis 2004).

The cooperative theories of Barton (1989), Schrader (1989), Van Dijk (1997) and Bijman (2002) argue that cooperation has the advantages of being much cheaper for accumulating larger volumes of timber to be sold, and also making it easier to hire forest contracting services, administer the paperwork of forest management, utilize institute marketing services, and to gain credits. Kurtz and Lewis emphasized that PFOs consider it to be very important for them to have organisations managed by themselves, which can help them with solving forest-related issues and provide forest management services to members of the organisation, as well as non-members (Kurtz and Lewis 1981).

Thus, forest owner associations or cooperatives could be an ideal solution for the implementation of cooperative private forest management measures.

Recent studies, like those of P. Põllumäe and H. Korjus, who presented a very detailed review of research and development in the Estonian private forest sector in 2017, have enlightened different forms of cooperation among Estonian PFOs, concluding that despite managerial efforts, organisations of PFOs, like cooperatives, are still very small in terms of their membership numbers, and that this is possibly due to a lack of organisational skills and the low profitability of forest management (Põllumäe and Korjus 2017).

There could other reasons why organisations of PFOs experience challenging times. For example, in the Nordic

region, S. Pynnönen et al. showed that there is a distinct difference between the services offered for forest owner associations and the service interests of Finnish PFOs (Pynnönen et al. 2018). In Sweden, T. Kronholm identified the need for management activities among members of the forest owner associations due to their decreasing knowledge of silviculture (Kronholm 2017). These two examples naturally lead to the concept that there is a market for services needed by PFOs. Existing organisational forms of PFOs are not taking advantage of these potential services and struggle to respond by using tools that could be well understood by PFOs.

Another reason for difficult cooperation was discovered in the Czech Republic. M. Hrib, H. Slezová, and M. Jarkovská found that PFOs are very reluctant to cooperate in private forest management due to the lack of funding from the government (Hrib et al. 2018). More importantly, the daily existence and survival of PFO associations deeply depends on having sustained government support, either through monetary incentives and supportive regulations, as in the Czech Republic, or through the government continuous need to have a single representative for policy negotiations, as shown in a Slovakian case (Sarvašová et al. 2015). A study carried out by many authors from central and eastern Europe improved the understanding of the development of PFO associations, considering the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Romania, and Slovakia. The study revealed that PFOs feel they do not have a need for direct joint action with the State.

It has also been concluded that policymakers view associations as important means for representing the interests of PFOs in policy processes and improving forest management practices (Sarvašová et al. 2015). The recent study by Lawrence and other authors revealed the links between the tenure structure and legislative framework at the national level when PFO organisations are formed. This could include bottom-up organisations of PFOs, private business entities (usually top-down or mixed, like forest owner associations), and forest owners cooperatives. In terms of membership status, these organisations are voluntary, as in the case of PFO associations, or obligatory. Membership of a forest owner cooperative is typically obligatory (Lawrence et al. 2019).

## Materials and methods

Lithuania faces a fragmented structure of forest holdings as well as PFOs themselves: In 2018, the number of PFOs in the country totalled almost 250,000, with 3 hectares as the average size of a forest holding (State Forest Service 2019). The smallest (up to 1 ha) holdings make up less than 6% of the total private forest area and are managed by 39% of PFOs. Holdings from 1 to 10 ha make up 55% of the total area and are managed by 55% of owners. Holdings from 10 to 20 ha make up 16% of the total area and are managed by 4% of owners. Holdings larger than

20 ha (or 23% of all the private forests) are managed by 2% of owners.

Before Lithuania joining the European Union (EU) in 2004, only companies registered in the country were entitled to purchase forest; however, today, all registered legal entities, including individuals, can do so (Weiss et al. 2012).

In 2019, despite the large number of PFOs, there were two non-commercial national private forest owner associations that were established under the Law of Associations and four forest owner cooperatives that operate under the Law of Cooperative Enterprises (SECR 2019).

A variety of different types of companies provide silvicultural services for PFOs in Lithuania: These include state forest enterprise regional units, individuals, private share companies, and forest owner cooperatives. The latter typically delivers nearly 20% of the total roundwood (nearly 7 million m<sup>3</sup>) to the market (Pivoriūnas and Girdziušas 2019). S. Mizaras and D. Mizaraitė performed a comprehensive study, showing that the most important resources of forests to PFOs in Lithuania are economic (39%), ecological (32%), and social resources (29%) (Mizaras and Mizaraitė 2015). In 2017, the first private forest certification group manager was established with the aim of certifying the private forests of Lithuania.

With the complexity of seeing forests from different perspectives, a number of concerning issues are arising within the private forest sector. The main ones are related to the growing number of PFOs, the small average area of private forest holdings, the lack of self-organised business structures for PFOs, and the different attitudes towards forest management and forests themselves.

The objective of this paper is to understand the current state of the private forest sector in Lithuania in general, and, more specifically, to understand the existing organisational elements of PFOs. This paper assesses how PFO organisations respond to cooperation, facilitating the development of the private forest sector.

Due to the frequently changing statuses of forest ownership, the increasing number of certified forests, and the growing focus of the public towards forest management, Lithuania presents an interesting case. By the nature of an empirical study design, this research supplements the study carried out by Brukas et al. (2018), which explored Lithuanian forestry stakeholder perceptions about environmental considerations; however, the difference is that in this particular case study, the target of research here is elucidating the development patterns of different forms of cooperation among PFOs in Lithuania.

When implementing the empirical study, qualitatively focused interviews were selected as a data collection strategy. As the first step in the selection of respondents, the target group was specified. The target group was defined as leaders of PFO member organisations that are active in private forest management that also possess a private forest certification, i.e. a certification of sustainably managed forests. One forest owner association, one forest owner co-

operative, and one certification group manager (both forest management certificate holders) were identified, making it possible to completely cover a national sample.

By carrying out qualitative, in-depth, audio-recorded interviews with three leaders, empirical material was gathered by the author of this paper during March and June of 2019. The persons interviewed were the board chairmen from the Private Forest Owners Association and the forest owner cooperative “Miško draugas (A friend of the forest)”, as well as the managing director of the group certification private forest manager “Darnūs miškai (Sustainable forests)”. The adapted versions of the interviews (in Lithuanian) can be found at PMSA (2019).

With this relatively small number of interviews, naturally, this study has specific potential limitations. One of the potential errors with this type of survey is that respondents may be reluctant to provide information which they perceive as confidential or sensitive. Another limiting factor is the small number of PFO organisations in Lithuania considered here, reflecting half of the operating PFO associations, a quarter of PFO cooperatives, and the only group certification manager. On the other hand, all three respondents showed keen interest and openness to the interviews, which is reflected in the findings here.

The interviews, having a clear structure, took between two to four hours and focused on the internal and external factors that influence PFO cooperation. The respondents were asked to freely elaborate on and discuss the following: 1) to describe the history and reasons behind the establishment of their respective organisations; 2) to give a general appreciation about the cooperation status among PFOs in Lithuania; and 3) to explain how their respective organisations respond to PFO needs in terms of cooperation. This supported understanding of the perceptions of the respondents in terms of cooperation among PFOs within their daily practices, without imposing certain perspectives. The answers of the interviews were qualitatively analyzed using a storyline technique, based on traditional grounded theory, during the period of August to November in 2019.

## Results

Joint private forestry and cooperation within the forestry sector have both been experiencing steady development in countries in Western Europe, which have managed to avoid major economic and political shifts. The transition period from a centralized economy to a market economy has brought about varied experiences, however.

Cooperation and decision-making theory suggest that, usually, members have incentives other than economic ones to join an organisation that jointly takes care of their forests. L. Lönnstedt studied Swedish forest owner associations and concluded they are experiencing large losses in their membership numbers. The main reason behind this is that organisations, over time, tend to increase the “distance” between themselves and their members (Lönnstedt 2014).

S.A. Bergmann and J.C. Bliss proved that the collaborative, cooperative, or joint management of private forests helps PFOs when they shift parts of management to external bodies (Bergmann and Bliss 2004). This statement is strengthened by the Confederation of European Forest Owners, who claims that it is mainly cooperation that enables individual PFOs to be well-informed and actively participate in the wood market (CEPF 2018).

However, farmers are reluctant to join cooperatives or associations and to give up their newly acquired property rights (Čaplikas and Ramanauskas 2001). S. Mizaraitė and A. Pivoriūnas indicated that PFOs in Lithuania have a relatively positive attitude towards joining non-government organisations for the representation of interests or forest owner cooperatives (Mizaraitė 2001, Pivoriūnas 2004).

At the beginning of 2000, PFO organisations in Lithuania started operating at an unfavourable time when state forest and larger private forestry enterprises possessing a substantial material base had already been successfully carrying out their activities occupying a significant place in the forestry market.

When analyzing the Lithuanian sociodemographic environment, where PFOs are operating in, A. Pivoriūnas discussed that when it comes to natural resource management, it is of great importance to have a common vision or understanding among stakeholders for joint action. In successful cases, cooperation that is based on trust could favour members and provide more efficient economic performance (Pivoriūnas 2013). Adding to this, T. Hansen discovered that there is a pool of extension services, like training and consulting, in Lithuania that could be provided by self-organised non-governmental PFO institutions (Hansen 2016).

Regarding private forestry in Lithuania in the eyes of direct industry players, the respective findings are presented below. This case study summarizes the organisational development of three different cooperative forms of Lithuanian PFOs.

### *Association of forest owners*

This non-governmental, non-profit organisation was established in 2003 under the Law of Associations. This is a self-governed type of organisation that has one key objective: to represent the interests of PFOs. The association has been established by a group of PFOs that wanted to have an organisation as an efficient tool for representing their interests. The association mainly acts as a lobbying organisation with a focus on defending the needs of private industrial forestry and sound sustainable private forest management. The chairman describes it as the organisation of a political act. Over the years, this objective together with the understanding of its key role has been kept as the most important one and has never been revised or changed.

The association has a board, consisting of three members, including the chairman. They appoint the managing director, who runs the daily business and is the only staff member, although working on voluntary basis. This job

mainly consists of participation in meetings of a higher political level in parliament or ministries, writing papers, and jointly working with lawyers to comment on legal acts that are related to private forest management. Not mixing political representation with commercial activities is another key decision made by the founders of organisation, and that is why the association provides (non-paid) voluntary services, although all board members and staff are professional foresters.

The membership of the association consists of all types of PFO, including small individual ones, as well large investment companies and forest contractors. There are nearly 40 members in the association, and these members own and manage over 40 thousand ha of private forestland in Lithuania.

Annual membership fees differ from between 20 euros for private persons and 200 euros for companies, despite the amount of forestland the owner or company owns or manages. Threshold payments (Entrance fees) also exist, namely, 20 euros for private persons and 300 euros for companies. The association is purely financed via membership. Annual membership fees or strategic investments from members may cover, for example, the cost for hiring a lawyer. There is a clear understanding that the association is by no means to ask for any support from the State, as providing critique to the Ministry of Environment if the association receives subsidies from it would present a conflict of interest, for example.

It worth noting that only Lithuanian PFOs are currently members of the association. Large foreign PFOs have chosen to either not be a member of any organisation of PFOs or have decided to be a part of another national association that focuses less on forest certification.

According to their chairman, the association has never had the goal to have as many members as possible. In fact, the opposite is the truth. Quality versus quantity is the general narrative that leads this kind of membership approach. Adding to this, the different interests of various kinds of PFOs might lead to misleading managerial issues, like properly answering the needs and questions of members, e.g. who is the more important member, who is the one owning 100 ha in one parcel or a family of five, or who owns 20 ha each, etc. Moreover, PFOs in Lithuania are not very fond of joining any kind of self-governed organisation. The reason for this is the rather dark memories from the Soviet times, where people were forced to join professional unions, and cooperatives and “play democracy”.

As the process of land reform started in the late 1990s, the functions of state forest enterprises have also changed. During the formation of private forestry, state institutions played a special role, as in the early stages of independence they provided full support for PFOs, including training and extension services. With this, an image was produced among PFOs that it is only the State that can manage forests in a proper manner.

### *Forest owners cooperative*

As a forest management enterprise, this company started in 2004, registered according to the Law of Cooperatives. Five professional foresters who previously worked for a regional state forest enterprise decided to take the chance to work on something on their own and saw a business opportunity to operate in the newly emerging private forest sector as a service provider. According to their chairman, the idea to register a specific form of an enterprise, i.e. a forest owner cooperative society, came naturally, as the founding members did not have sufficient start-up capital, thus forest holdings were used as membership fees. Having received them as compensation during the process of land restitution as their relatives were landowners before World War II, all founding members of the co-op owned mature forest stands of at least 5 ha each.

According to Lithuanian legislation, only cooperative societies can establish a business having a classic “one member, one vote” principle. Since all forest holdings that are owned by members of the forest owners cooperative are unique, it is impossible to compare the respective monetary values, thus this principle was agreed at the very beginning with the promise that the possible profits that will appear in the future will be equally shared among the members, no matter how much forestland each member owns.

During the period of the last fifteen years, the spouses of the founding members also became members of the co-op, bringing the total membership to ten.

As of 2019, the co-op could be characterized as a joint family venture, since five families control the businesses that own more than 2,600 ha of forestland. The cooperative has a board of five members that is elected every two years. Each board member is a managing partner of the enterprise that is responsible for the daily forest operations, including managing silviculture, planning and accounting, forestland and stumpage acquisitions, logistics, contractors, certification, etc.

In order to secure a continuous workflow for the enterprise, the co-op provides various private forest management services not only to its members but also to other PFOs as well, including the preparation of forest management plans, forest thinning services, harvesting operations, reforestation, afforestation, forestry extension, timber trade, timber removal, logging documentation, and roundwood transportation.

As with the other forest owner cooperatives that operate in Lithuania, the membership for outsiders is closed due to fear of being betrayed by new members of the co-op. Acting mainly as an agent for silvicultural operations, the co-op accumulates 80% of its total turnover from non-members. As pointed out by their chairman, it is true that, in Lithuania, forest owner co-ops mostly act as agents or middlemen for selling services and timber products on behalf of PFOs, rather than trying to increase their membership. Another motivation to successfully run the cooperative is to achieve the highest possible quality of forestry.



The legal framework for the recognition of a forest owner co-op as an agricultural one might stimulate the existing business environment, which could then benefit from having a more favourable tax system and subsidies, for example, for fuel. It is worth noting that by tradition and conforming to the Lithuanian mentality, forestry is not a part of agriculture or rural development, where it instead stands on its own. Therefore, co-ops engaged in forestry activities cannot benefit from the possibility to be recognized as agricultural cooperative enterprises. The only aid co-ops receive is due to European support. Forest-related activities, like the afforestation of agricultural land, are supported via the Ministry of Agriculture, whereas the administration of forests is under the domain of the Ministry of Environment. This “double-headed” governmental administration of forest resources and silviculture might create misleading perceptions for PFOs towards forest management in general, as well as market players, like forest owner cooperatives.

### ***Group certification manager***

The group certification manager was established in 2017 as a non-profit, non-government organisation under the Law of Public Institutions. The founders of the organisation were five local wood processing companies that needed roundwood for their production marked with the logo of a premium forest certification scheme. The founders provided a 31,500-euro donation to cover the annual running costs of the organisation. It has been set that by the fourth year of operations that the group manager has to be financed by the influx of the new members, i.e. PFOs that want to be certified.

There are several primary objectives for the manager. These include promoting responsible and sustainable forest management, advising PFOs and forest managers on the implementation of certification requirements, and developing cooperation between PFOs themselves, forest managers, and industries.

However, the most important objective of the organisation is to help PFOs to comply with the principles and criteria for the sustainable forest certification scheme and, by doing this, to help certified forest managers obtain better market access for roundwood deliveries. It is important to know that the group manager is not allowed to participate in any political debates related to forest management or commercial activities that could conflict with the interests of group members. The manager is not represented in commercial activities, such as timber trade or logistics.

The steering committee, consisting of seven representatives who are interested stakeholders, including PFOs, forest contractors, environmental non-governmental organisations, and timber processing industries, supervises the annual performance of the manager, as well as setting strategic development goals. In this way, the steering committee replaces the traditional board.

Regarding the certification and administration costs of PFOs, group members are linked to the size of forestland

owned or managed by the respective PFO or forest manager. There is a scheme that explains the membership fees: In 2017, PFOs having less than 100 ha of forestland had to pay 1.50 euro/ha per year. Members that joined the group in 2018 had to pay 3.5 euro/ha per year. Starting from 2020, the amount to be paid is 4.50 euro/ha per year. PFOs having more than 1,501 ha of forestland had to pay 0.15 euro/ha per year 2017. Members that joined the group in 2018 had to pay 0.3 euro/ha per year. Starting with 2020, the amount to be paid will be 0.45 euro/ha per year (there are specific figures that are set in between these values as well). The logic behind this is that the founding partners of the group manager covered 75% of the certification costs during the first year of performance, 50% during the second year, and 25% during the third year, respectively.

Since its establishment, the group certification manager has been able to bring together the largest group of PFOs in the history of Lithuania to date. More than 180 individual and legal persons have joined the group, all in all representing 90,000 ha of managed private forestland in Lithuania.

The next step in the organisational development of the group certification manager is to develop a chain of custody certification scheme. Chain of custody certification is required if PFOs are trading wood with other owners. The chain of custody is organised on the same principle as the forest management certification. Group members must follow internal rules and forest stewardship standard requirements. Depending on specifics of each member of the group, separate guidance procedures could be developed. Note that a member of the chain of custody group does not necessarily have to be a member of the forest management certification group.

It is estimated that the combined timber deliveries by members of this group in 2019 reached 1.5 million m<sup>3</sup>, which is almost 70% of the total annual deliveries from private forests in Lithuania.

### **Discussion and conclusions**

The Confederation of European Forest Owners, the European umbrella organisation for major national private forest owner associations, has developed the most important reasoning for why joint or cooperative actions by PFOs are crucial for sustainable forest management policy realization. Specifically, these statements by the confederation advocate the practice of joining cooperatives or associated organisations for forest owners as a good and efficient tool to mobilize the management of unmanaged private forest resources and to enable these organisations to act on behalf of PFOs to provide a reliable source for the representation of member interests. These organisations largely depend on the growth of membership (CEPF 2018). As brought up by J. Staatz, an influx of new members is a fundamental necessity for the continued existence of cooperatives over time (Staatz 1984).

However, as this empirical study has shown, the development of the cooperation of PFOs in forestry may be

impeded by factors other than economic ones. A. Portes, among other authors, has defined the impact of socially driven performance as the capacity of individuals to command scarce resources by virtue of their membership in networks or broader social structures (Portes 1995). It could be true that this magical non-material concept gives power over someone's abilities to influence others, and, by doing this, to establish mutually beneficial relationships. The organisational performance of the group certification manager shows that the organisation has sufficiently gained recognition among Lithuanian PFOs.

These assumptions are supported by J. Pretty and H. Ward, who declared that working together is good for the broader scale of individuals as it lowers costs. These authors also pointed out that people will have the confidence to invest in collective activities when knowing that others will also do so (Pretty and Ward 2001).

The administrative framework and legal environment that sets the requirements for the private forest sector is believed to be another important aspect of cooperative performance. A. Raupelienė and E. Petrauskas discovered that the existing tax system in Lithuania does not support PFOs in terms of operating forest owner co-ops (Raupelienė and Petrauskas 2014). On the other hand, A. Gargasas and J. Ramanauskas concluded that agricultural cooperatives are facing managerial difficulties and are less effective business-wise than other organisational forms (Gargasas and Ramanauskas 2009).

The very recent developments of cooperation in Lithuania show a classic axiom that could be applied to the forestry sector as well, namely that if you want to be successful, you have to take risks and try to penetrate the market with new types of managerial solutions or create and offer unique services that would provide a competitive advantage. The rapid and continuous growth of membership numbers of organisations in the area of managed forests and related market power is an example of the success of the group manager of certified forests, which is a new cooperative form of PFOs and is completely different to other associations or cooperatives of PFOs.

This is where the new types of cooperative forms of PFOs may find their niche in the forestry sector. Naturally, a focus on activities other than traditional silvicultural activities will provide more tangible social and environmental benefits delivered by any of the cooperative forms of PFO organisations. These benefits will increase and will establish a solid platform for PFOs that are not a part of any organisation to join an organisation.

It may be expected that the demand for services in private forestry will have a special focus on communication with neighbouring forest community activities, and that this demand will increase. PFOs and their representative organisations, as well forest management enterprises, including forest owner co-ops in general, are passive, and if this trend continues, the role of and need for sustainable and responsible forestry might diminish.

To better respond to PFO needs and maintain balance between the environmental (ecological?), social, and economic functions of private forest management, PFO organisations must develop a broader range of services.

However, as this empirical study has shown, the development of the cooperation of PFOs in forestry may be impeded by reasons other than economic ones. It could be true that this magical non-material concept gives power over someone's abilities to influence others, and, by doing this, to establish mutually beneficial relationships. The case of the group certification manager shows that the organisation has succeeded in building trust among Lithuanian PFOs. This success is based on the knowledge of the effects of working together and the objectives for such a process.

The results of the study clearly show that someone wanting to act in the forestry industry has to offer different approaches or services than what the existing market players currently provide. The emerging focus on non-timber forest products by environmentally concerned societies could potentially lead to a substitution of traditional sources of revenue from the sales of roundwood into other sources, i.e. recreation, ecosystem services, or biofuel production.

Lithuanian PFOs have been reluctant to join self-governed organisations and owning a greater area of forestland does not automatically guarantee more success in terms of finding organisation members. Here, the cases of forest owner associations and forest owner co-ops have proven that forestry co-ops can operate (function?) well with very limited membership. Moreover, the existing members do not want to have an influx of new members due to the possible loss of managerial power over the company.

Another case, arising from the group certification manager, has empirically suggested that a PFO organisation may succeed if it has clear objectives to attract membership and produce benefits for existing members by reducing the membership costs via doing so; however, there is a second condition that may be derived from this example, specifically, to focus the activity of the organisation on not gaining direct economic returns from forest management but rather simultaneously delivering value added services and not relying on pure administrative frameworks or financial means from the State.

Self-governed PFO organisations that can attract and retain members that mutually share one core concept behind sustainable forest management will succeed. For example, the concepts of certifying private forests or providing good silviculture sanitation services (e.g. forest protection from fires, diseases, and windfalls). By doing so, this practice will not only respond to the needs of PFOs but also possibly support reaching the desired economies of scale.

This case review indicates that, in general, the theoretical background of cooperation theory has some severe limitations when it comes to the practical implementation of the development of cooperation among PFOs in Lithuania.

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