URBAN AND PERI-URBAN FOREST AREA STAKEHOLDER IDENTIFICATION, CASE STUDY OF 'BERNĀTI' AND 'OGRES ZILIE KALNI' NATURE PARKS

*Ieva Kraukle¹, Edgars Jūrmalis^{2,3}, Ilze Stokmane¹, Kristīne Vugule¹

¹Latvia University of Life Sciences and Technologies, Latvia

²Latvian State Forest Research Institute 'Silava', Latvia

³University of Latvia, Latvia

*Corresponding author's e-mail: ieva.kraukle@hotmail.lv

Abstract

Stakeholders and involved parties are crucial in a proper management of forest areas, more so in nature park areas. Urban nature areas and more remote peri-urban areas have objectively the most complex management issues due to the potentially high density of visitors and a diverse range of stakeholders. Such areas can also be valuable nature conservation and biodiversity hotspots, further making stakeholder interactions more complex. In this research, we conduct stakeholder identification for two case study areas — an urban forest nature park and a peri-urban forest nature park, with the aim of developing detailed lists of involved parties, including both public and private entities. We identified three main blocks of stakeholders (regulatory, usage, management), and detailed each group and sub-group for the case study areas. Our main results and conclusions include the identification of minor differences particularly explained by geographical and socio-economic contexts for each of the areas, with the regulatory stakeholder group overlapping the most between the two areas. The potential use of such analysis can improve or develop cooperation between previously unobserved stakeholders, and in research contexts, allow for a greater input from various parties that could have been missed in a more broader analysis of a research area.

Key words: stakeholders, urban forest, peri-urban forest, nature park.

Introduction

In the management of urban and peri-urban forests, in addition to the specific principles of forestry, good governance is also necessary. This applies both to the organization of state, sector or company processes, which are based on their management principles, methods and techniques, and to the principle of good governance as a principle of administrative law (Kovaļevska, 2009). According to Kovalevska and other authors, good governance in any sector or company activity requires transparency, responsibility, accountability, involvement of people affected by decision-making, responsiveness to the needs of the population, efficiency, resource saving, accommodating, constructive and interested attitude, which is directed towards problem solving, equal information for everyone about opportunities, clearly understandable rules and decision-making process, personal disinterest, justification of decisions and substantive responses (Jones, 2007; Kovalevska, 2009). A form of public participation which can also be applied in urban forest planning and management includes the right to submit a request, public investigation, local referendums and consultation committees. residents' discussion communication and discussions on the internet, children's councils, minority representation, open seminars, proactive expression of residents' ideas and desires (Jones, 2007). It is also necessary to use the internal cooperation resources of the forestry sector, cooperation at the local, municipal and regional levels (Kenney, van Wassenaer, & Satel, 2011).

Forest management nowadays is based on the principles of sustainability and focuses not only on timber yields but also strives to integrate and ensure the environmental and social functions of forests. Urban and peri-urban forestry differs significantly, because timber production takes a secondary role or is not employed at all due to nature protection

requirements, with the social function being highlighted as the most important. In Latvia, all forestry work planning and operations take place in accordance with the Forest Law, which requires the development of a forest management plan (FMP) for the actual forestry activities. This is a second-level plan based on forest inventory data, which sets out the basic principles and volumes of forest management and use, and updates the nature conservation and protection action plan for the next ten years until a new forest inventory. Initially, the municipality had no influence on forestry planning. Significant changes were brought about by amendments to the Forest Law - Article 2, Paragraph 5, which stipulates that forest management must not contradict the requirements of territorial development planning documents (Latvijas Republikas Saeima, 2000). Foresters had to reconcile with the rules that introduce a new stakeholder in forest management - the municipality. The greatest dissatisfaction of foresters was with each municipality's 'individual forest policy', which provides for rules different from the Forest Law. Until 2012, the role of foresters in the development of municipal territorial planning was mostly more or less passive, limited to the role of information provider (for example, general data on the forest in the municipality, on logging volume and the like can be found in development plans.

The most interested party in the management of forests and urban forests in Latvia is the state, which forms the general normative base, supervision, and assistance. The Saeima issues laws regulating the forestry sector (Latvijas Republikas Satversmes sapulce, 1922). The Cabinet of Ministers issues binding Cabinet regulations, which more precisely regulate specific activities (Latvijas Republikas Saeima, 2008). The State Forest Service (SFS) within its competence supervises forest management and use and compliance

with regulatory acts regulating hunting, supervises and implements forest fire fighting, and participates in the development and implementation of state forest policy (Latvijas Republikas Saeima, 2000). The State Environmental Service's goal is to ensure compliance with regulatory acts in the field of environmental protection, radiation safety and nuclear safety, and natural resource use, as well as to promote sustainable use of natural resources and energy. One of the functions is to carry out state control of environmental protection and natural resource use in Latvia in the manner prescribed by regulatory acts governing environmental protection (Latvijas Republikas Saeima, 2004). One of the functions of the Nature Protection Board is the management of specially protected nature territories (hereinafter - protected territory) established by the Saeima and the Cabinet of Ministers (Latvijas Republikas Saeima, 2009), many of these territories are also forest territories. The State Police is a direct administration institution under the supervision of the Minister of the Interior, which, within its competence, implements state policy in combating crime and protecting public order and safety, as well as protecting the rights and legitimate interests of individuals (Latvijas Republikas Saeima, 2005), in the Law 'On Police' and other regulatory acts regulating the activities of the State Police (Latvijas Republikas Saeima, 1991). State Fire and Rescue Service. Forest fire fighting is a set of measures that in the forest and forest lands ensures the detection of the forest fire site, containment and extinguishment of the fire, and monitoring of the fire site (Latvijas Republikas Saeima, 2003).

One of the autonomous functions of the municipality is to promote the sustainable management and use of natural capital, as well as to determine the use of municipal property in public use, if not otherwise provided by laws (Latvijas Republikas Saeima, 2022). The Building Authority, in fulfilling one of the autonomous functions of the municipality, ensures the legality of the administrative process related to the construction process (Latvijas Republikas Saeima, 2022), among other things, also in all forest territories. Municipal police. The autonomous function of the municipality is to participate in ensuring public order and safety, including establishing and financing the municipal police (Latvijas Republikas Saeima, 2022). The municipality establishes a municipal police, the duties of which include the prevention of violations, control over the fulfillment of binding regulations of the municipality (Latvijas Republikas Saeima, 1991). In essence, municipalities are tied to forest management in their territory, but in practice, they usually have little influence on the forestry process, including urban forests. Forestry indirectly affects the economic life of the municipality's territory, promotes employment, and maintains or creates traditions. If income from forestry directly affected municipal income, it would more carefully consider a strict stance on the economic use of forests. All forestry work planning and implementation takes place in accordance with the Forest Law, in which the municipality is assigned a negligible role. As mentioned before, Paragraph 4 of Article 2 of the Forest Law provides that additional conditions for forest management in urban and rural areas are also provided by binding regulations of the municipality (Latvijas Republikas Saeima, 2000). Significant for spatial development planning is Paragraph 5 of Article 2, which provides that forest management must not contradict the requirements of territorial development planning documents, (in force from 01.01.2012) (Latvijas Republikas Saeima, 2011), which also imposes an obligation on foresters to consider the interests of municipalities in forest management. A certain problem is caused by the fact that municipalities do not have a convincing opinion on forest territory planning, functional zoning, and appropriate management yet. So far, in most of the Riga agglomerate municipality territory plans, the forest is marked as a continuous green mass, without distinguishing different forest functions; therefore, it is not shown which of the forest functions has a leading role in a particular territory, what level of improvement is needed. Forest improvement, creating parks, forest parks falls on the shoulders of municipalities, but unfortunately, for this purpose, municipalities can afford to allocate limited resources, at best performing negligible improvement work.

An association is a voluntary association of persons established to achieve the goal set out in the statutes, which is not of a profit-making nature (Latvijas Republikas Saeima, 2003). Urban forests are resources that a certain group of people manage to raise the wellbeing of other involved groups, so the mutual communication of these groups is important to achieve the set goals. In city forests, not only forest specialists, but also representatives of other sectors - landscape architects, city planners, spatial development planners, environmental specialists. health institution representatives, and other professionals are gaining more and more influence. The urban forest manager has to work in interaction with other involved professionals and society. Latvia lacks, transparent public discussion and decision-making procedure for the balanced use of the ecological, economic, and socio-cultural value of the forest, the economic viability of forest management is threatened. As a result of poor mutual communication, unnecessary conflicts can arise between all involved participants (forest owners, foresters, municipalities, state administration, society, press), followed by incorrect use of available work resources (for example, emergency actions to resolve conflicts) and a fragmented management system. Such a situation also limits public participation, as it is not clear to the public who is responsible for what and who to turn to in each specific case. All this can affect sustainable urban forest planning and management. Participation is rarely a simple process. In foreign countries, various groups and participants are involved in urban forest management (Konijnendijk *et al.*, 2005), which should also be achieved in Latvia.

Participation of society in decision-making processes in any municipality is an integral part to ensure effective governance. The participation of interest groups at the initial stage of the planning process allows for the development of various compromise options that satisfy the target groups. However, in reality, public involvement still occurs in very small volumes, or in cases of sharp conflicts. The reasons for this can be attributed to societal inertia, low levels of trust in the existing power, formal interest of municipalities in public participation, and the historical secrecy of forestry planning.

Considering all these issues, our research goal includes the identification of stakeholders and setting a baseline for further identification of conflicts or synergies. This is important to not miss a crucial involved party and to draw a holistic picture of the state of management of an area.

Materials and Methods

In this case study, we utilized various base sources and described the state of the stakeholder relationships in the context of our two case study areas. We analyzed the study areas through the following resources – national laws (including Forest Law and others), regulations and municipality level regulations. The 'map' of stakeholders was created by going through the corresponding levels from top to bottom (starting with the national body of regulations, ending with the public use of the area. We consolidated the main stakeholder groups and activities in a single table for both case study areas and checked for subsequent differences in the types of stakeholders or nuanced uses of the forest area. Inferred experiences and observations through the viewing glass of researchers and forest area managers were also employed, but the main body of this case study consists of using formal documents, with the inferred views only adding details to the overall context. For our research, we selected two relatively distinct, yet similar forest areas – *Ogres Zilie kalni nature park* (located in the vicinity and immediate agglomeration of Riga), the area we classify as urban, and Bernāti nature park, located approximately 220 km from Riga, at the coast of the Baltic Sea, see 'Figure 1'.

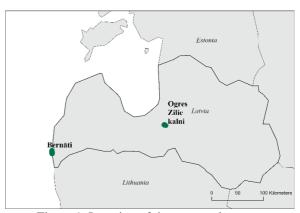


Figure 1. Location of the case study areas.

We classify Bernāti as a peri-urban forest area, since the immediate vicinity of the nature park contains a small village and agglomeration of rural houses, and a major city approximately 15 km away. The two areas share features of the status of a protected nature park but consist of different management and ownership zoning. While the Ogre case study area is a major hotspot for recreational activity and visited by tens of thousands of visitors in the context of Riga agglomerate (capital city of Latvia), Bernāti is less popular on the national scale, thus, inferring population distribution in Latvia and has fewer total visitors. Bernāti nature park is more focused (through zoning and regulation comparisons) on nature conservation and species diversity issues, which are increasingly problematic in the context of an influx of recreational visitors in the past 10 or so years. Foreign tourists and locals increasingly utilize the area for recreational activities, and the land owners and managers are adapting by introducing various infrastructure projects and steering visitors from sensitive nature protection zones.

Results and Discussion

Our main result is the analysis of stakeholder distribution for the two case study areas (the stakeholders we have identified) (Table 1). We divided the identified stakeholders according to the main stakeholder groups, and subdivided by specific case study stakeholders (the ones identified in our research). Thus, we can compare which stakeholders are transient and overlap despite geography or type of area, and which are unique.

Table 1

Identified stakeholders and comparisons between the two case study areas

Stakeholder group	Stakeholder	Function and involvement	Ogre Zilie Kalni nature park (urban)	Bernāti nature park (peri- urban)
National Government	Saeima (Parliament)	Lawmaking and regulations	State and municipal divisions (regional offices) of various regulatory, enforcement or oversight services are functionally the same and with unified standards on the national scale.	
	Cabinet of Ministers	Regulatory rules		
	VMD (Forest Service)	Enforces laws and rules based on forestry management		

Continuation of the Table 1

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	VVD	Environmental protection			
	(Environmental	and regulations concerning forest protection aspects			
	Agency)				
	DAP (Nature Protection	Nature protection enforcement, territory			
	Agency)	management			
	VUGD (Fire and	Fire safety, rescue and			
	Rescue Service)	criminal investigations and			
	and Police	prevention			
	Municipality	•		Dienvidkurzemes	
	council	Local laws and regulations	Ogre municipality	municipality	
Local Government	Construction,			mamerpanty	
	planning and	Oversight and allowances		Dienvidkurzemes	
	inspection	of buildings, proper use of	Ogre municipality	municipality	
	services	territory type			
	Municipal Dalica	Enforcement of public	Oara municipality	Dienvidkurzemes	
	Municipal Police	safety, decency	Ogre municipality	municipality	
	State owners	Management of state	No state owned land	Latvian State Forests and	
	State Owners	owned land	No state owned fand	Government of Latvia	
	Municipality	Management of	Ogre municipality	Dienvidkurzeme	
	owners	municipality owned land	and Riga city	municipality and Liepaja	
	o where	mamerpanty owned land	una raga enty	city	
Landowners		Management of public	Municipality owned	Undefined public or state	
	Public owners	entity land	'Ikšķiles māja'	ownership of smaller land	
		,	, ,	parcels	
	Individual	Management of privately	N	Groups of small (~10ha	
	owners	owned land	None	each) historically privately owned forest parcels	
		Recreational use, sports,		owned forest parcers	
	Individuals, local	hunting, photography,			
	citizens	foraging and others		ve and open to recreational	
Community, society	National scale			cted nature protection zones.	
	citizens	Tourism, as above	Camping (tents, fireplaces) is regulated by lav		
	Foreigners	Tourism, as above			
		Ź	37 ' 1 ' 1	No known organized	
	All-levels of		Various educational	activities by educational	
Educational	educational	Environmental education,	institutions in the Ogre municipality	institutions on a regular	
institutions	system, interest	sports, internships	and from Riga	basis, closest educational	
	based education		actively use the area actively use the area away		
	National Guard,	Field training,	Various National	No activities published or	
Armed Forces	Youth Guard	competitions, other events	Guard or Armed	announced	
	10am Gund		Forces units		
			Proximity to Riga		
	Tourism and	Guided tours, tour services, nature education services	defines broader	Lesser active promotions of guided services	
	guided tour		services and		
	related		organizations offering services		
For-profit business					
-			Not directly in area		
		Craft services, bed and	Not directly in area,	Locally owned caffes (2),	
	Services	breakfast, event spaces,	but proximity to Ogre	large number of lodgings	
	Services	breakfast, event spaces, services related to forest	but proximity to Ogre city and Riga provide	large number of lodgings (private and public) due to	
	Services	breakfast, event spaces,	but proximity to Ogre	large number of lodgings	
		breakfast, event spaces, services related to forest management	but proximity to Ogre city and Riga provide large amount of services	large number of lodgings (private and public) due to proximity to the sea coast	
	Nature	breakfast, event spaces, services related to forest management Involved in oversights on	but proximity to Ogre city and Riga provide large amount of services 'Nature protection	large number of lodgings (private and public) due to	
	Nature protection and	breakfast, event spaces, services related to forest management Involved in oversights on strict nature reserve	but proximity to Ogre city and Riga provide large amount of services 'Nature protection club', other state	large number of lodgings (private and public) due to proximity to the sea coast Residents organization	
	Nature protection and civic activity	breakfast, event spaces, services related to forest management Involved in oversights on strict nature reserve territories, species and	but proximity to Ogre city and Riga provide large amount of services 'Nature protection club', other state wide environmental	large number of lodgings (private and public) due to proximity to the sea coast Residents organization 'Mēs Bernātiem' (local community NGO), other state wide environmental	
NGO's	Nature protection and	breakfast, event spaces, services related to forest management Involved in oversights on strict nature reserve	but proximity to Ogre city and Riga provide large amount of services 'Nature protection club', other state	large number of lodgings (private and public) due to proximity to the sea coast Residents organization 'Mēs Bernātiem' (local community NGO), other	
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NGO's	Nature protection and civic activity related	breakfast, event spaces, services related to forest management Involved in oversights on strict nature reserve territories, species and biodiversity issues Nature education events,	but proximity to Ogre city and Riga provide large amount of services 'Nature protection club', other state wide environmental NGO's State wide events and	large number of lodgings (private and public) due to proximity to the sea coast Residents organization 'Mēs Bernātiem' (local community NGO), other state wide environmental NGO's campaigns for both areas, no	

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Sports, fitness, survival schools	Miscelleanous events, programmes, campaigns and events	Biathlon club, skiing club, orienteering club, bikeriding federation, other sports clubs	Orienteering club, mountain biking club. Events by other state wide organizations rare
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Considering the stakeholder relationships and structures in the context of an urban or peri-urban forest area, we identified three main groups or clusters – regulatory, management and usage stakeholders. As seen in the schematic, see 'Figure 2', the relationships all 'meet' at the center, the forest area itself, and this can also be interpreted as a pressure point, as all of the stakeholders contend or enforce their interests or necessities.

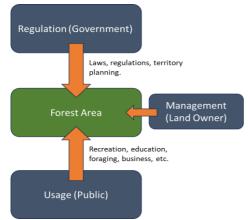


Figure 2. Schematic representation of the stakeholder involvement and role distribution for a general forest area.

As expected, there were miniscule differences in the regulatory aspect of stakeholders - both areas are essentially under the state law as nature parks and contain nature protection reserve. Regulatory stakeholders differ only by their regional location, but are all with the same rules, enforcements, laws. Main differences arise in the land ownership and management aspects – Bernāti nature park is more fragmented, due to either historical or chance factors. In comparison to the Ogre case study area, a more undefined cooperation must exist between the two municipalities, the state owned forest areas and a reasonable amount of small private land holders. We were unable to delve deeper into these relationships in the Bernati case, but in comparison to Ogre Zilie kalni, where the ownership is more homogenous, it is debatable whether this increases or decreases certain development projects or management issues.

In terms of public usage (multitude use by the wider community of both visitors and locals), the characteristics of both forest areas show similarities, yet certain aspects are missing in either case – there are no skiing or other winter sports clubs in Bernati, compared to Ogre, even though the nature park does contain elevation aspects. This could be explained by stricter zoning concerning nature protection areas. In Ogre, no public/local

resident's NGO was identified – this differs from Bernāti. where a reasonably active NGO is present and even organizes the development and community events in the nature park. Few differences arise from certain other aspects, like the use of areas by armed forces. In the Bernāti case, we could not identify any known use by the National Guard, as was in the case for Ogre Zilie kalni. This could be explained once again by the more nature protection centric regime of the Bernāti area. Bernāti also showcases a difference in the use of tourism attractions in the vicinity and the immediate location (including one such site inside the nature park, which is a municipality owned camping/resort site) is filled with guest houses, RV and tenting sites. This differs from Ogre, where the close vicinity to the urban area might have an adverse effect on the willingness to spend a night or develop such housing. As both areas differ by the classification we employed (one is peri-urban, other is urban), these differences also show in a more nuanced analysis of stakeholders. The aspects of forestry management in terms of logging, was unexplored thoroughly, but was not a critical element of this analysis due to the fact that the areas are nature protection areas a priori.

Conclusions

- In both research areas, all relevant stakeholder domains are visible, including regulatory activities and property rights - management and utilization. Uncertainties rise from the public and private use of the areas, as all recreational or other types of uses are difficult to identify.
- 2. No informal resident's association has formed in the Ogre Zilie kalni to address territorial development issues. It can be concluded that the comprehensive development functions of the territory are carried out by the municipal agency, which manages the area and actively communicates with residents/visitors by listening to their opinions and explaining actions.
- 3. Continuing research on the interests of the Ogre Zilie kalni and Bernāti to supplement the specific engagement of interested parties is necessary. Further study of other urban areas would confirm our claims regarding interested parties or expand their enumeration.

Acknowledgements

This paper was prepared within the frames of research project 'Environmental impacts and management implications in forest areas important for recreation in Latvia' (lzp-2023/1-0137), funded by the Latvian Council of Science.

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