

LEGAL FRAMEWORK OF URBAN FORESTRY MANAGEMENT IN LATVIA

*Ieva Kraukle, Ilze Stokmane, Kristine Vugule

Latvia University of Life Sciences and Technologies, Latvia

*Corresponding author's email: ieva.kraukle@hotmail.lv

Abstract

Urban forestry is a relatively new branch where such issues as planning, governance and management of urban forests play an important role considering spatial planning of urban or suburban territory. The aim of the article is to find out the extent to which urban forests are reflected in European and Latvian regulatory enactments and planning documents, as well as to define the main recommendations for further actions; therefore, the regulatory enactments and planning documents of the European Union and Latvia were studied. Research showed that urban forests do not have any specific regulatory and planning framework at a European or Latvian scale. The standards that apply to urban forests can be found in regulatory enactments applicable to forest management, environmental protection, preservation of biological diversity, protection zones, plant protection, etc. In both European and local strategies, the forest issues as such and the issues of urban forests in particular appear as general, indirect issues, usually as the matters of biodiversity preservation or environmental sustainability. At the scale of Latvian legislation (laws and regulations of the Cabinet of Ministers), forests are mentioned in general, except for certain forestry laws, where forests are the main subject, which contain some provisions that are also directly applicable to urban forests. Urban forests are not reflected in these documents; to some extent they only appear in the plans as forest protection zones around cities.

Key words: Urban forests, urban forestry, legislation, planning documents, management of urban forestry.

Introduction

Compared to the general history of forestry, urban forestry planning and management is a new branch not only for Latvia, but also in the world scale. Urban forests do not have any specific regulatory standards and planning framework, it can be seen within the regulatory context of European Union, state and municipal forest management and development planning. The European Commission (EC) recognizes green infrastructure as one of the planning tools that contributes to the implementation from many field of the policy, such as biodiversity and nature protection, regional development, climate change adaptation, catastrophe risk management, etc. (EC. Green Infrastructure (GI) – Enhancing Europe's Natural Capital. Communication From the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Region, 2013). EU member states are expected to contribute to the implementation of these policies. Green infrastructure is defined as 'a strategically planned network of natural and semi-natural areas with other environmental features designed and managed to deliver a wide range of ecosystem services' (EC. Green Infrastructure (GI) – Enhancing Europe's Natural Capital. Communication From the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, 2013).

Forest legislation has always been and still is a part of forest policy. Forest legislation is a set of legal rules regulating the relationship between the forest and a human. As it follows from Heinrihs Strods (Strods *et al.*, 1999), forestry policy is a part of the economic policy of the state or its influential

groups, a set of management tools and methods of action. Forest legislation has always been particularly closely linked to public economic policy. In Latvia, more serious actualization of nature protection issues in forest legislation began only shortly before the 1990s. Respecting of public interest in forestry has only begun in recent decades. Public participation in forestry processes is a topical issue that is still difficult for conservative foresters to accept, but it is increasingly a matter of solving difficult situations.

The aim of the article is to find out the extent to which urban forests are reflected in European and Latvian regulatory enactments and planning documents, as well as to define the main recommendations for further actions.

Urban forestry has become a professional and scientific field and partly horticulture, and it is used for urban management and the management of urban forests (Konijnendijk, 2003).

This concept gradually acquired importance in Europe in the 1990s (Konijnendijk, 2003; Krajter & Konijnendijk, 2015). However, there are different interpretations of what is or should be considered urban forests and urban forestry (Randrup *et al.*, 2005).

It is widely acknowledged that urban forestry is a cross-sectoral and cross-disciplinary concept, and the forestry sector is only a stakeholder in the urban forestry mosaic (Randrup *et al.*, 2005). An important role in this belongs to forestry and foresters, a number of other industries and / or disciplines, such as landscape architects, urban planners, gardeners, arborists (Krajter Ostoi *et al.*, 2020).

The authors believe that an urban forest is a natural, semi-natural or artificial ecosystem at all stages of its

development, dominated by trees that can reach a height of at least seven meters and have a current or potential crown projection of at least 20% of the forest stand. Forest, which serves as a public outdoor space within and outside urban administrative boundaries, where the primary social and environmental functions require regular maintenance and renewal, preserving or enhancing the social, aesthetic, cultural and economic value of the territory (Kraukle, 2013).

In terms of urban forests, nowadays we can no longer talk about traditional forestry but about social forestry, whose main tasks are related to the provision of social functions and services (Konijnendijk *et al.*, 2006), as well as environmental education (Akmar *et al.*, 2011).

More and more studies provide data that there are areas in urban forests with relatively high biodiversity (Alvey, 2006); it is also considered to be one of the functions of urban forests.

Materials and Methods

To investigate the level of understanding and implementation of regulatory frameworks and policies of the European Union and Latvia applicable to the forestry sector, especially to urban forest issues, the policy documents were reviewed and analysed. In order to assess the regulations and policies related to urban forests and the effectiveness of institutional arrangements to enforce them, available and documented policies, legislations and strategic plans of three local counties of Latvia – Ikšķile, Ogre and Jūrmala, were reviewed. The planning documents of Ikšķile, Ogre and Jūrmala were selected for the study, because the urban forest areas are located in a large part of the territory of these municipalities; therefore, it is useful to study the local planning documents of these territories, taking into account that Ikšķile county has merged with the new Ogre county.

Results and Discussion

International framework. The international and especially EU regulatory framework is also a regulatory instrument in Latvia; it sometimes serves as a basis for the provisions of local laws.

The Rio Convention on Biological Diversity, which has been in force in Latvia since 1995, stipulates that Latvia must take measures to ensure the preservation of biological diversity. Existing national strategies, plans and programs for biodiversity preservation must be developed or adapted (The Rio Convention on Biological Diversity, 1995). Urban forests are not explicitly mentioned in the convention, it is mentioned only in the context of preserving environmental diversity.

The Berne Convention on the Conservation of European Wildlife and Natural Habitats, the aim

of which is to protect wild species and their natural habitats, has been in force in Latvia since 1996. Urban forests are not explicitly mentioned in the Convention, they are mentioned only in the context of the protection of wildlife and natural habitats. These are just two of a number of international documents to which Latvia has acceded and which indirectly and generally regulate the sustainable management of all forests, including urban forests.

The aim of the European Landscape Convention is to promote landscape protection, management and planning, and to organize cooperation on landscape issues in Europe. The Convention applies to the territories of all the parties and includes natural, rural, urban and suburban areas. It includes land and sea areas and inland waters. It applies to landscapes that can be considered outstanding, as well as to everyday or degraded landscapes (European Landscape Convention, 2000).

Green Paper on Forest Protection and Information in the EU: Preparing forests for climate change; the aim of this Green Paper is to launch a debate on the EU's approach to forest protection and forest information in line with the EU Forest Action Plan. Forest protection in the EU must be planned to ensure that all the productive, social economic and ecological functions of forests are maintained in the future (Green Paper, 2010).

Law on the Convention on the European Forest Institute (EFI), acceding to the Convention is necessary for Latvia to become more actively involved in international cooperation in forestry and the research of forest, including urban forest. The tasks of the EFI is to promote, lead and cooperate in research on forests, forestry and forest products at European scale, and to report on the results of research, in particular in the field of policy formulation and implementation, to promote the preservation and sustainable management of forests in Europe (Convention on the European Forest Institute, 2005).

The area of the development of forests and urban forests is also influenced by various statements and decisions of the European Commission and the Parliament.

Vienna Resolution – The MCPFE Ministerial Conference on the Protection of Forests in Europe in Vienna in 2003 emphasized the interrelationship between the forest sector and other sectoral policies. The documents of this conference mark the necessity to balance the economic, ecological and social role of forests and to continue working to protect European forests and ensure their sustainable management. The role of sustainable forest management in overall sustainable development was stated in Vienna. The Vienna Declaration on European Forests – Common Benefits, Shared Responsibilities and a number

of resolutions were signed on this conference, including: strengthening synergies for sustainable forest management in Europe through cross-sectoral cooperation and national forest programmes; preserving and enhancing the social and cultural dimensions of sustainable forest management in Europe (Ministerial Conference on the Protection of Forests in Europe, 2003).

On 11 December 2019, the European Commission presented the European Green Deal, proposed as a new EU growth strategy to transform the EU into a climate-neutral, fair and prosperous society with a modern, resource-efficient and competitive economy (European Green Deal, 2019). The Green Deal is a cornerstone of the European Commission's (EC) strategy to achieve the United Nations 2030 Agenda and the sustainable development. The issue of forests is considered indirectly, through the prism of climate neutrality. United Nations Forum on Forests (UNFF) Subdivision of the United Nations ECOSOC organization, a Working Party on Forestry. <https://www.consilium.europa.eu/lv/council-eu/preparatory-bodies/working-party-forestry/>

In the European region, voluntary cooperation at the political (ministerial) level takes place within the framework of the Ministerial Conferences on the Protection of Forests in Europe (Forest Europe). As part of the Forest Europe process, the Oslo ministerial decision was taken at the 2011 Oslo Conference and a new EU Forest Strategy for the State of Europe's Forests 2020 was developed in 2013, (EU Forest Strategy for 2030, 2021).

Under the auspices of the United Nations, various internationally important documents have been developed, which indirectly include the conservation and development of forests and urban forests. There are many protocols to the United Nations Framework Convention on Climate Change. For example, the Kyoto Protocol to the United Nations Framework Convention on Climate Change of 11 December 1997 stipulates, among other issues, that a specific target is set for forest management, the so-called forest management reference level of 16.302 million tonnes of CO₂ eq.

National framework. In Latvia, with the legislation related to planning, it is difficult to find any indications about the forest, especially on planning of urban forests. Forests in Latvia, including urban forests, are planned and managed in accordance with the guidelines for forest management in the documents mentioned further on.

The Sustainable Development Strategy of Latvia for 2030 generally determines the need for the development of the forest sector while preserving biological diversity (Sustainable Development Strategy of Latvia until 2030, 2010).

The National Development Plan of Latvia 2021-2027 generally determines the need for the development of the forest sector. Direction 'Nature and environment – The Green Deal', Preservation of biological diversity, Implemented environmental, sustainable management of natural resources and energy policy, creation of green zones in urban environment (National Development Plan of Latvia 2021-2027, 2020).

Latvia's Forest Policy - adopted in 1998 defines the long-term strategic and tactic goals of forest sector development and the basic principles which among others included objectives such as to ensure avoiding of reduction of the forest areas by defining the limits of forest land transformation; to ensure the preservation and increase of the productivity and value of the forest lands; to promote afforestation of lands which are not used in agriculture of other unused lands, to apply the promotion mechanisms at the disposal of the state. The economical goal of the Forest Policy is to ensure the sustainable development and profitability of the forest sector considering the ecological and social requirements, as well as to create the higher possible growth of added value (Latvia's Forest Policy, 1998).

One of the most important principles included in the Forest Policy is that forest management needs to be improved, considering the role of the forest ecosystems in local and global processes – carbon sequestration and stabilization, protection of watercourses and water bodies, soils and landscapes, etc. In forestry, methods reproducing natural processes are desirable, bringing ecosystems closer to their natural structure and preserving elements that maintain biodiversity (Latvia's Forest Policy, 1998).

There are also some social principles issued within the Forest Policy, for example, that in forest management, the cultural and historical value and the protection of landscapes should be taken into account, or that the state promotes the development of social infrastructure in forest.

Guidelines for the development of the forest and related sectors for 2015-2020 - a medium term policy planning document, which formulates the medium term (2015-2020) strategic goals (development policy) for the development of forests and related sectors, the basic principles of the development policy, directions for actions to achieve the goals of development policy, problems hindering the achievement of these goals, as well as the results of the policies and activities, thus marking the future development of the forest sector.

Forest and its products and services are an important source of social welfare. Forest gives wood for construction and furniture making, as well as wood biomass for energy production, a place for living and also food. Forest protects water resources and soil from erosion, it is also a home for a significant part of

biodiversity. Forest is the source of income for people and their families, as well as it provides recreation possibilities. Due to these functions, forest policy and forest management at the global, national and regional levels are changing along with the change of society needs.

Environmental Policy Guidelines for 2021-2027 generally determine the need for the development of the forest sector based on sustainable development activities, preserving the quality of the environment and biodiversity, ensuring the sustainable use of natural resources (Environmental Policy Guidelines for 2021-2027, 2021).

Landscape Policy Guidelines for 2013-2019 generally determine the need for the development of the forest sector. One of its goals is creation of multifunctional and high-quality landscapes that improve the life quality throughout Latvia, promote economic activities and recognition of places, regions and the state, as well as ensure biodiversity (Landscape Policy Guidelines for 2013-2019, 2013).

The Law on Forests - its aim is to regulate the sustainable management of all Latvian forests by assuring equal rights, inviolability of property rights, independence of economic activity and defining equal obligations to all forest owners or legal possessors. (Law on Forests, 2000). References to urban forest planning and its link with spatial planning are given in Section 2 Paragraph 4 of the Law, which provides that 'Binding regulations of local governments shall also provide for additional conditions for the forest management in city and village territories' and in Section 2 Paragraph 5 (Law on Forests, 2000) – 'Forest management may not be in contradiction with the requirements specified in the spatial development planning documents'.

The Protection Zone Law, among other things, defines forest protection zones around cities (Protection Zone Law, 1997).

The Law on Specially Protected Nature Territories provides for the activities in specially protected nature territories located in forest lands (Law on Specially Protected Nature Territories, 1993).

The Environmental Protection Law, the Law on Protection of Species and Habitat, the Plant Protection Law – forest and urban forest issues are included indirectly through environmental and habitat protection issues (Environmental Protection Law, 2006).

Applicable Cabinet regulations are usually linked to a specific sector of forest issues, which they define specifically.

- Cabinet Regulations No.248 'Procedure for Assessment of Sustainable Forest Management' define the procedure for sustainable forest management (Cabinet Regulations No. 248

'Procedure for Assessment of Sustainable Forest Management', 2003).

- Cabinet Regulations No.63 'Methods of Establishing Forest Protection Belt around Cities' define the methodology for the establishing of forest protection zones around cities (Cabinet Regulations No. 63 'Methods of Establishing Forest Protection Belt around Cities', 2003).
- Cabinet Regulations No.264 'General Regulations on Protection and Use of Specially Protected Nature Territories' define the actions on the specially protected nature territories in forest lands (Cabinet Regulations No.264 'General Regulations on Protection and Use of Specially Protected Nature Territories', 2010).
- Cabinet Regulations No.628 'On Local Government Territorial Development Planning Documents' relates to the forest, urban forest, more often – to specially protected nature territories included in the planning documents (Cabinet Regulations No.628 'On Local Government Territorial Development Planning Documents', 2014).

The hierarchy of regulatory enactments and planning documents related to urban forests is presented in Figure 1.

Territorial planning documents have been selected from Ikšķile, Ogre (within the territorial reform 2021 Ikšķile is included in the territory of Ogre county) and Jūrmala city, as these areas contain territories of urban forests (right now they do not have a specific title of urban forest territories though), and they can be used as pilot territories in Latvia to examine urban forestry management in the future. Besides the territories of Ogre and Jūrmala urban forests are located on specially protected nature areas. During the research the guidelines for territorial planning of certain territories in relation to urban forests were studied (Table 1).

The documents on territorial planning contain a very limited and general information on forest areas. The long-term development strategy of Ikšķile county for 2011-2030 determines that the main values of the county are natural and landscape resources (The long-term development strategy of Ikšķile county for 2011-2030, 2011).

The strategy of sustainable development of Ogre county for 2013-2037 sets the goal-of responsible nature management. The use of natural resources (forests and natural resources, including those found in swamps and waters) must be careful and complex, making maximum use of all the extracted materials and performing high-quality restoration / development of forest stands or transforming the used areas into other economically usable territories (Ogre 2013). The strategy of sustainable development

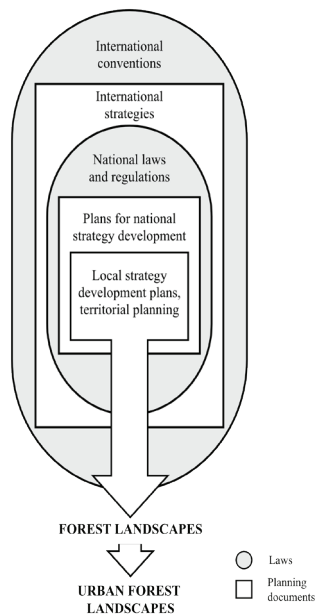


Figure 1. The hierarchy of regulatory enactments and planning documents related to urban forests.

Source: Created by author.

of Ogre county for 2013-2037 guidelines that in the long run Ogre county will take care of the reasonable, complex and reduced-impact use of natural resources in the economic activities and will protect landscapes and biotopes that are important for the preservation of the biological and landscape diversity of the county and high-quality living environment (The strategy of sustainable development of Ogre county for 2013-2037, 2013).

Sustainable Development Strategy of Jurmala City for 2010-2030 states that the city successfully combines careful use of local rich natural resources (forests, vast beaches, mineral water and healing mud, coastal climate), the preservation of cultural and historical heritage and gaining economic benefits from resorts, sports, health, cultural and conference tourism services. Priority sets the protection of natural values insuring the preservation of the resort environment, without fragmenting large forest massifs (Jurmala, 2010). Forests appear on the map of Jurmala resort possibilities, Appendix 2 ‘The Resources for the Development of a Resort Town’ and Appendix ‘Green Areas of the City’.

Concerning the local spatial development programmes forest areas as such do not appear in the title of the such programmes, it refers to specific actions that appear under the section Specially Protected Areas as a general description.

- Ikšķile County Development Program for 2019-2025 – action ‘Natural resources and environmental protection’ provides the implemented environmental protection projects in the nature park ‘Ogres Zilie kalni’ (Blue Mountains in Ogre)

(Ikšķile County Development Program for 2019-2025, 2019).

- In Ogre County Development Programme for 2014-2020, in section ‘Forests and swamps’, notes that the diversity of bedrock, relief forms and the differences in rainfall resulted in great diversity of soils and vegetation. Forests play an important role in the formation of landscape and economic activity (Ogre, 2014). The areas of the Blue Mountains are mentioned in Specially Protected Areas section and are also marked as a recreation area (Ogre County Development Programme for 2014-2020, 2015).
- The Development Programme of Jurmala City for 2014-2022 only provides for certain activity Implementation of the infrastructure improvement plan of the Nature Reserve ‘Ragakapa’, which envisages the creation of walking paths, observation tower, information signs, toilets provided by the Nature Protection Plan, which will be implemented by Jurmala City Council (Development Programme of Jurmala City for 2014-2022, 2013).

The territory planning documents in Latvia usually show forest areas and specially protected nature areas, but, in some cases, they include only nature areas without separating forest areas. Forest protection zones of adjacent cities appear in regional plans.

- Ikšķile County Territory Planning documentation contains regulations for the use and building development of the territory, where nature and greenery territories and forest territories appear, as well as other forest protection zones around the

Table 1

Representation of forests in the territorial planning documents

| Territory planning | Representation of the forest protection zone | Representation of the specially protected areas | The forest territories are shown in the plan |
|--------------------|--|---|--|
| Ikskile county | The planned use of the territory on the map | The planned use of the territory on the map | Forest territories |
| Ogre county | The planned use of the territory on the map | The planned use of the territory on the map | Green areas |
| Jurmala city | Encumbrances on the map | Encumbrances on the map | Natural territories and green spaces |

- cities; the explanatory article briefly mentions the nature park ‘Ogres Zilie kalni’ (Blue Mountains in Ogre) (Ikskile County Territory Planning, 2021).
- In the Territorial Plan of Ogre County, only the green areas appear on the map, while forests are not even singled out. The map also shows the forest protection zone around the city of Ogre (Territorial Plan of Ogre County, 2012).
 - The Territorial Plan of Jurmala defines only natural area and green spaces, which include also forests (Territorial Plan of Jurmala, 2016).

Conclusions

EU scale resolutions, conventions and conferences, as all strategic documents, are very general and therefore can be applied in general to the necessary areas, including urban forests. Latvia has ratified and actively supports many resolutions and conventions and is using them in its legislation and strategic planning; ideas on urban forests are also indirectly and generally expressed in these planning documents, as it is used to be in strategic documents. It would be important to mention the role of forests already in the top-level documents, such as the Berne Convention on the Conservation of European Wildlife and the Rio Convention on Biodiversity, emphasising the topicality of forests and urban forests in maintaining and preserving biodiversity and natural habitats as well as in the main governing documents. It is important because forest is relatively stable ecosystem, and it requires much less resources to maintain than man-made parks.

Considering the international conventions and resolutions, national scale planning documents are also very general and mention forests in some cases only, never singling out urban forests, which in some

cases are more important than regular forests, given their location in the urban environment, where their contribution to biodiversity is especially important.

Laws and Cabinet regulations already contain more specific information on forests, but the concept of urban forests does not yet appear although forests located in or near urban areas are definitely mentioned (forest protection zones around cities). Failure to single out urban forests makes it difficult to identify their specific functions and, consequently, to manage ensure their further proper management.

Local planning documents and binding regulations at the strategic level mention forests in general terms when referring to the forests located on the territory, and also indirectly mentioning specially protected areas. As indicated in Table 1, separately allotted forest areas may not appear in the territorial plans at all, they are included in the maps under other names - green spaces or natural and green areas. The name ‘urban forests’ does not appear at all, but it would be the most precise way to define the forest areas located in a city or nearby, also demonstrating the special functions of urban forests.

When reviewing the above regulatory enactments and planning documents, it is necessary to introduce a unified definition of urban forests in general. There is a lack of legislation identifying and regulating urban forests although urban (suburban) forests actually exist. The issues of urban forest management may need more comprehensive regulation with less emphasis on strategic planning. Forests, including urban forests, should be more specifically mentioned in the international and local legislation and planning documents, considering their substantial significance in reducing CO₂ emissions, providing biodiversity and social services.

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