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THE SOCIAL ACTIONS OF THE STATE FORESTS IN POLAND

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Poland is in one of a leading position in Europe in terms of forested area. Forests grow over 9.4 million hectares, which is 29.5% of the territory of Poland. The vast majority of this area is forests owned by the state, out of which almost 7.6 million hectares are under the management of the State Forests Holding. Educating society about forestry and environment is one of the main priorities of the State Forests. The State Forests' educational offer is aimed at children, youths and adults, including people with disabilities. It is all about popularising knowledge about forestry and sustainable forest management. This article focuses on the social actions of the State Forests' operations based on an analysis of the data obtained from reports made by the State Forests. These information and materials were analysed to identify the social aspects of actions carried out by the State Forests in Poland. The authors analysed various kinds of activities of the State Forests connected with social aims. The results of the analyses were presented in table format. The results were used to analyse and describe the social aspects of the State Forests' operations in the forested area in Poland. The social actions of the State Forests in Poland have been very positively evaluated by the authors based on the achieved analyses.

Keywords: forests, social aspects of forests, the State Forests

INTRODUCTION

For many people, forest areas are associated with wood production for the economy. Recently, there has been dynamic development of forestry tourism and recreation. This is caused by an increase in social forest functions, including recreational, educational and tourism functions (Mandziuk, Janeczko, 2009). The importance of forests for achieving sustainable development objectives in the context of the future development agenda for the UN beyond 2015 was widely recognised at the Rio+20 Conference (Sandström et al, 2017). The sustainable use of renewable resources has become an important issue worldwide in the move towards a less fossil-fuel-intensive future. Forest resources are often thought to contribute partially to achieving a "carbon-neutral society" (Karvonen et al, 2017). Temporal changes in forest ecosystem functions are analysed in different countries, for example in Turkey, Keles et al (2017), where it was estimated that functions based on the three pillars of forest sustainability: economics, ecology and socio-culture. Willis et al (2003) noticed that "...forests in Britain produce social and environmental benefits, in addition to marketable timber outputs. These non-market benefits include open-access non-priced recreation, landscape amenities, biodiversity, carbon sequestration, pollution absorption, water supply and the quality, and protection of archaeological artefacts." The social functions of forests in the USA were also noted and analysed, for example by Shindler et al (2002). The importance of the social functions of forests is also growing in Poland. Since 2004, when programmes of forest education of society in forest districts came into force, the State Forests significantly stepped up their activities in this field (Referowska-Chodak, 2017).

This article focuses on the social actions of the State Forests' operations based on an analysis of Polish law and the data obtained from reports prepared by the State Forests. The obtained information and materials were analysed to identify and evaluate the social aspects of actions carried out by the State Forests in Poland. The results of the analyses were presented in table and figure format. The authors have compared some information from various years to show the changes in the analysed subject. In the end, the authors evaluated the social actions of the State Forests in Poland.

MATERIALS AND METHODS

Poland is in one of a leading position in Europe in terms of forested area. Forests cover 9.4 million hectares, which is 29.5% of the territory of Poland. The vast majority of this area concerns forests owned by the state, out of which almost 7.6 million hectares are under the management of the State Forests Holding. There are more and more forests in Poland, with the total forested area increasing from 21% in 1945 to 29.5% at present. From 1995 to 2016, the forest area was

enlarged by 504 thousand hectares. Forests in Poland grow on the poorest soils, mostly as a result of developing farming in previous centuries. This also affects the spatial distribution of forest site types in Poland. Coniferous forests occur in more than 55% of the total forested area. The remaining part is taken by broadleaved, mostly mixed forests. A small part is occupied by alder and riparian sites – a little more than 3%. In the lowland and upland areas the most frequent species is pine. It overgrows 64.3% of the forests area in the State Forests Holding and 57.7 % of private and commune-owned forests. In the mountains, spruce is predominant in the western part, along with spruce with beech in the eastern part. (Raport o stanie ... 2017). The average forestation in Poland, by average forestation in particular voivodships, is presented in Figure 1.

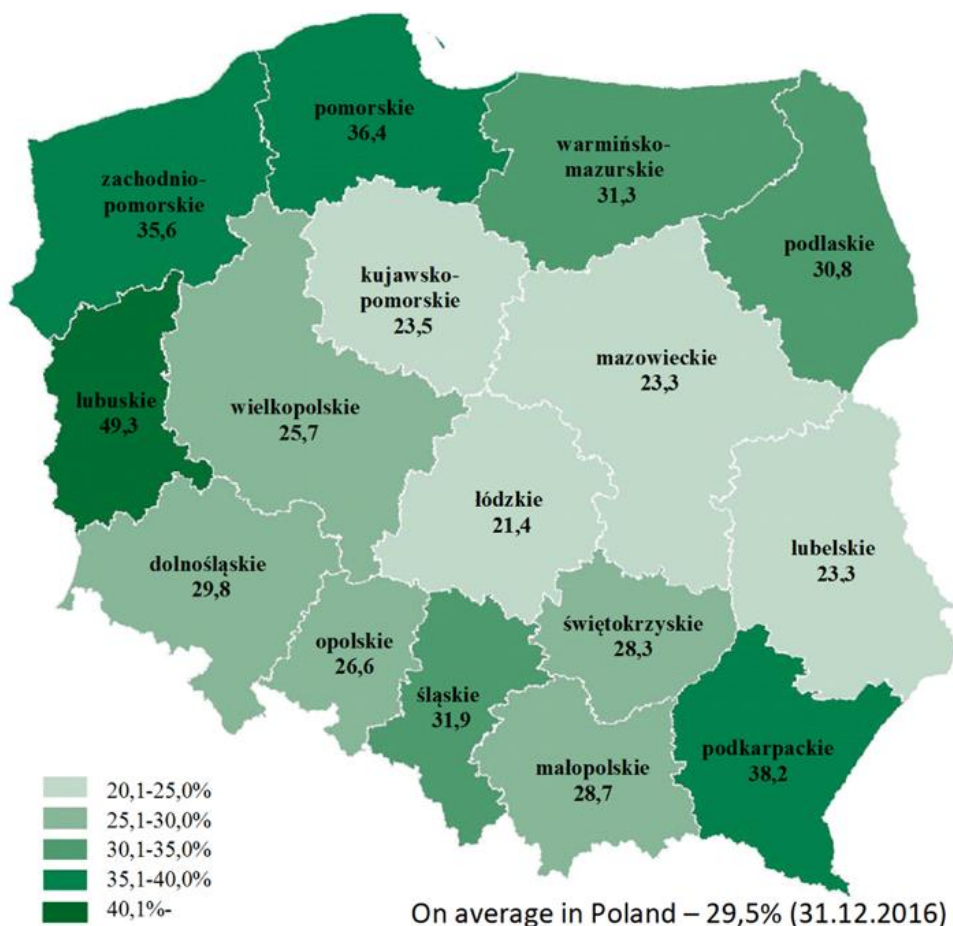


Figure 1. Average forestation in Poland (Raport o stanie ... 2017)

Figures 2 and 3 present information about Poland's forests compared to other selected European countries.

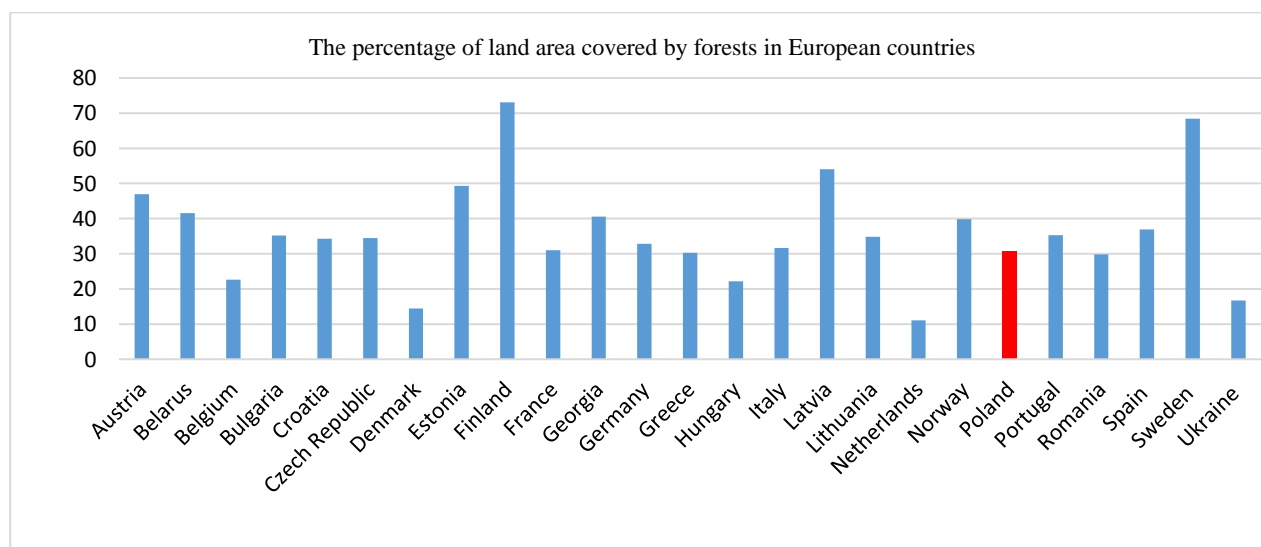


Figure 2. The percentage of land area covered by forests in European countries (Forest Europe, 2015)

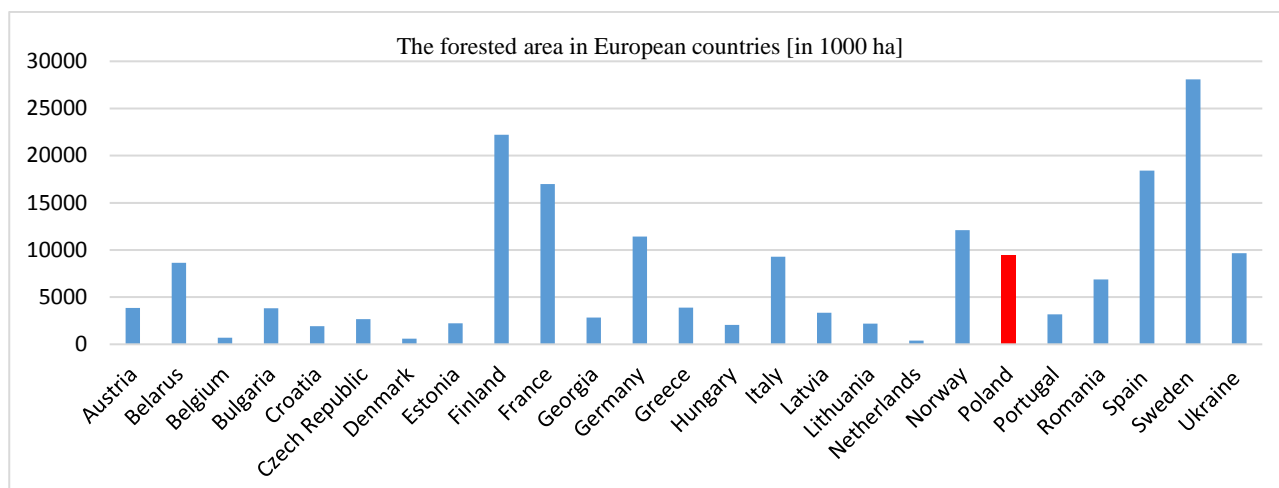


Figure 3. The forested area in European countries (Forest Europe, 2015)

Poland belongs to the European countries with a relatively large area of forests, though it comes in as average in terms of percentage forest cover.

The large area of forest in Poland, in conjunction with the global trends in sustainable development of space, forms the basis for the analyses carried out in this article. The vast majority of forested area in Poland is forests owned by the state, out of which almost 7.6 million hectares are under the management of the State Forests Holding, so the authors decided to conduct analyses on that forested area. Initially, the authors analysed the relevant provisions of Polish law, to identify the obligations of the State Forests in terms of social action. In accordance with Article 32 of the Law on Forests, the State Forests is a national organisational unit without legal personality, which represents the State Treasury in the area of property management. In accordance with Article 7 of that law, State Forests must carry out the sustainable management of the forests. This is understood as activities aimed at forming the structure of the forests and using them in a manner and at a rate to ensure the persistent maintenance of their biological wealth, high productivity and regeneration potential, and with vitality and a capacity to fulfil, now and in the future, all important conservation, economic and social functions at local, national and global levels, without damage to other ecosystems. So the law has a direct reference to the obligation of the State Forests exercising social functions.

In the next step, the authors examined the reports on the activities of the State Forests, to determine whatever and to what extent the social activities are performed. Three main groups of activities were identified: education, tourism and recreation and promotional activities. Using the collected information, each group was analysed to conduct an assessment of the social activities of the State Forests. Where possible, data from the years 2005, 2010 and 2016 were analysed to show changes in the studied phenomenon. The results were presented in the form of tables and charts. Everything allowed in the final stage to assess the activities of the State forests in Poland in terms of performing social activities.

RESULTS AND DISCUSSION

As mentioned above, three main groups of activities of the State Forests in Poland of a clearly visible social nature were identified and analysed. The analysis revealed that most of the social action of the State Forests is connected with educating society.

Educating society on forestry and environment is one of the main priorities of the State Forests. The State Forests' educational offer is aimed at children, youths and adults, including people with disabilities. This is all about popularising forestry and sustainable forest management.

For the purpose of education, foresters created almost seven thousand infrastructure facilities. They are presented in Table 1.

Table 1. Infrastructure facilities created for the purpose of forestry education (Raport z działalności... 2006, 2011, 2017)

Infrastructure facilities	Quantity in years		
	2005	2010	2016
forest education centres	25	46	66
forest education rooms	202	243	278
educational shelters (known as "green classes")	225	480	595
educational paths (didactic)	688	910	1037
education points	584	1632	1999
other facilities	780	2470	2947
Total	2504	5781	6922

As you can see, over the analysed years, the number of all objects systematically increases. About 2 million people of various ages visit those objects every year. This is presented in Table 2.

Table 2. Participants in forest education by age (Raport z działalności... 2006, 2011, 2017)

The age of participants (years)	Quantity of participants in years		
	2005	2010	2016
3-6	169605	235597	409858
7-12	827103	713929	801440
13-15	369943	286355	280899
17-19	173022	144039	152850
20+	326614	290131	500231
Total	1866287	1670051	2145278

Most participants are children aged 7-12. On the other hand, these kinds of activities are also popular with adults (aged 20+). It very interesting that the largest increase can be seen in the case of small children (aged 3-6) and adults (aged 20+).

Forestry education in 2016 cost PLN 30,340.5 thousand (PLN 27,926.2 thousand were the own costs of the State Forests). This was almost three times more than in 2005.

One-third of people who make use of the State Forests' educational offer visit the Promotional Forest Complexes (PFC). The Promotional Forest Complexes are large and dense forested areas located in one or more forest districts. They were created throughout the whole country in order to show the variability of site conditions, the diversity of species composition and the multitude of forest functions. Within the framework of PFCs, the foresters promote sustainable forest management, support scientific research and organise forest education. The PFCs show that it is possible to reach a balance between the most important objectives of the forestry, i.e. forest management aimed at wood harvesting, nature conservation, scientific studies and widely comprehended education. The PFCs also prove that sustainable multifunctional forest management counteract threats to forests resulting from developing civilization. Figure 4 shows the location of PFCs in Poland.



Figure 4. Promotional Forest Complexes in Poland (Raport z działalności... 2017)

The PFCs are a forum for cooperation between foresters and society. Each PFC has its own scientific and social council consisting of representatives of local authorities, non-governmental organisations, the wood industry and local

media, as well as science experts and respectable members of local communities. It is noteworthy that the idea of promotional forest complexes is an extraordinary and indigenous promotion of ecological forestry.

The next social activity of the State Forests is connected with tourism. The State Forest areas are accessible for everyone and very often become a hiking destination. The beauty of wildlife, the peace and quiet and the pure air are all factors that attract tourists. Foresters do their best in order to meet the expectations of this particular group of forest users. Foresters encourage everyone to rest in the bosom of nature. In the most attractive spots, tourists may find forest sheds, tables and benches that are great for leisure or picnics. Foresters also prepare platforms and viewing stations for nature lovers. These are favourite places among an ever increasing number of tourists-photographers. Special landings make it possible for tourists to access forest wetlands. If it was not for the infrastructure prepared by the foresters, most tourists would not be able to admire those more inaccessible fragments of the forest. The number of places like this is still growing.

There are numerous tourist trails and educational tracks in the State Forest areas. They are set out and marked in cooperation with foresters in order to lead you to the most charming forest recesses, and give you a chance to get acquainted with specific things about the forest and the work that the foresters carry out. Hiking and walking are the most popular leisure time activities.

Bike lovers are becoming a more and more numerous tourist group, which is why the cycling route network has been developed. Every year, the number of those routes in the State Forests goes up. There is also thought for those forest-goers who prefer riding on horseback, though it is worth mentioning that horse riding is only permissible on forest roads specifically marked by the forest district manager. For the purpose of tourists, the State Forests gives access to its accommodation facilities. The State Forests is able to accommodate about 4.5 thousand guests in training and recreation centres, guest rooms and hunting lodgings.

The State Forests also offer some informational and promotional activities connected with social functions. They are also delivered by the State Forests Information Centre (CILP). Its publications (including *Głos Lasu* and *Echa Leśne* magazines) are aimed at people interested in forest management and nature protection. Information regarding the meaning of forests in our lives can be found in numerous catalogues, brochures and folders published by the State Forests Information Centre. Some regional directorates of the State Forests have their own publications too.

Additionally, online promotion is becoming ever more significant. The State Forests reports broadly about its activity and promotes environmental knowledge on the website www.lasy.gov.pl. The State Forests also created the Forest Educational Vertical Portal "Las Rysia eRysia". This is developed in cooperation with the National Fund for Environmental Protection and Water Management and has become remarkably popular. Designed from the start with the forest and environmental education in mind, it offers an insight into forest biodiversity and forest management, as well as its impact on the environment and climate with the use of multimedia tools.

"Las Rysia eRysia" has three web sites: for primary school children, classes 4-6, for junior high school youths and for teachers. Content on those websites are adjusted to various groups of recipients. For students, the web designers prepared games and plays, multimedia presentations, a multimedia encyclopaedia of the forest entitled *Leśnoteka*, competitions, blogs, galleries and a forum. Teachers can find class scenarios based on the portal's content. The substantive side of this portal was created by foresters who conduct educational classes in the State Forest's centres every single day.

CONCLUSIONS

The analysis reveals a positive assessment of the activity of the State Forests in Poland in the implementation of their social functions. This is particularly confirmed by the data on educational activities. The varied offer attracts more and more people of various ages. It is attractive both for children and adults, which is proven by the growing number of participants of the various forms of activity in this field. The State Forests have increased funding of activities in the field of education almost three times since 2005 levels. Also very significant is that 92% of these funds are the own funds of the State Forests. The State Forests also have a rich tourist offer, adapted to participants with a wide range of needs and expectations. The various promotional offers allow many new people to be reached, and is interesting in the subject of the forest even for the youngest children. The response to the needs of the present time is an interesting and diverse offer available on the internet, adapted to the needs of various age groups. In conclusion, the State Forests in Poland is correctly carrying out their social functions in accordance with the requirements of the law and of social expectations. This is reflected in the growing popularity of topics connected with forests among the public.

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