FOREST MANAGEMENT AS AN ELEMENT OF SUSTAINABLE REGIONAL DEVELOPMENT. PEDAGOGICAL AND LEGAL ASPECTS
Abstract

The subject-matter of this paper is to perform an interdisciplinary analysis of the processes related to the growing role of forest management as an element shaping the process of sustainable regional development, from legal and pedagogical points of view. The development of legal forms of exercising supervision over the forest policy in the European Union, combined with diverse approaches to education for sustainable development, trigger the need for specific action at the level of Member States, in this case – Poland. Two specific objectives will serve this purpose. The first of these concerns legal regulations governing forest management, arising from both Polish and EU legal systems, and the second pertains to the pedagogical dimension of forest education as a component of education for sustainable regional development. The statement that legal regulations governing forest management must have a solid legal foundation, making it possible to implement the corresponding educational components, was adopted as a research hypothesis. The analysis of the research area thus identified requires a brief legal and pedagogical analysis, which will result in concrete solution proposals.

Keywords: Sustainable forest management, education for sustainable regional development, forest education, forest policy strategy

Introduction

Contemporary development trends related to a broader concept of sustainable development are limited to presenting general principles applicable to environmental education, suggesting that sustainable development is fully confined to the environmental domain. However, this approach is incomplete, as the concept of sustainable development must be viewed from a much broader angle than just the environmental domain, encompassing in particular issues of socio-economic development. This broader view also includes sustainable forest management, the most important features of which should be conveyed to the public through various forms of forestry education. It should be indicated that the issues mentioned above have hardly constituted a broader spectrum of scientific research to date. There is a clear research gap, especially in the interdisciplinary approach to these issues, the adoption of which appears indispensable for a comprehensive
analysis of the problem. In literature, scientific works referring primarily to environmental education in the broadest sense, rather than specifically to forest education, are prevalent. Issues concerning the legal aspects of forest management are also found in the publishing market [Habuda, 2016; Rakoczy, 2018; Dobkowski, 2021]. This makes it all the more important to carry out interdisciplinary research in the domain in question, especially in the context of the legal changes announced both at the EU level and in national law. The purpose of this article is to analyse the processes related to the expansion of the role which forest management plays as an element shaping sustainable regional development. Two specific objectives will serve this purpose. The first of these concerns legal regulations governing forest management arising from both Polish and EU legal systems, and the second pertains to the pedagogical dimension of forest education as a component of education for sustainable regional development. The statement that legal regulations governing forest management must have a stable legal foundation in the Polish law, making it possible to implement the corresponding educational components, was adopted as a research hypothesis. As regards forest education, these regulations should be included in the Forest Act. The analysis of the proposed research issue will be carried out using the legal dogmatic method and, to some extent, the historical method and the legal comparative method.

**Sustainable forest management – legal aspects**

Issues related to forest education cannot be analysed without consideration of sustainable forest management, which must be approached from two angles – national and European.

Under national law, forest policy issues are implemented by the public administration within the framework of standards primarily established in the Forest Act. The legislator has introduced the concept of sustainable forest management, defining it as the activities aimed at shaping the structure and use of forests, in a manner and at a pace ensuring the permanent preservation of their biological diversity, high productivity and regeneration potential, as
well as vitality and ability to fulfil, both now and in the future, all the major functions – protective, economic and social – at the local, national and global levels, without detriment to other ecosystems (Article 6 (1)(1)(a) of the Forest Act). This definition broadly indicates the scope of activities combining economic processes with the protection of nature. The implementation of sustainable forest management is carried out in line with the specific objectives arising from the Forest Act, i.e., a) to preserve forests and their beneficial impact on the climate, air, water, soil, living and human health conditions, and on the natural balance, b) to protect forests, especially forests and forest ecosystems constituting natural fragments of native nature, and forests particularly valuable due to the preservation of natural diversity, the conservation of genetic forest resources and landscape values, and for scientific purposes; c) to protect soils and areas particularly vulnerable to pollution or damage, and considered to be of particular social importance, d) to protect surface and deep waters, retention of catchment areas, in particular water divide areas and areas supplying groundwater reservoirs, and the production of timber and raw materials, based on reasonable economy, as well as by-products of forest use (Article 7(1) of the Forest Act). The above-mentioned objectives constitute a road map for the implementation process of sustainable forest management. The legislator went even further, as it also made an axiological justification by formulating the principles governing the execution of sustainable forest management tasks. Under the Forest Act, forest management is carried out based on the following principles: general protection of forests, sustainable forest maintenance, continuity and sustainable use of all forest functions, and expansion of forest resources (Article 8 of the Forest Act). These principles unambiguously make forest management a process characterised by a uniform adjective – sustainable, as they not only refer to a selected area or timeframe but they also cover the entire forest management sector, both from the present and future perspectives. This appears important from the point of view of the role that forestry education plays, which is aimed in particular at educating future generations on sustainable development in relation to forest management. The Polish legislator can be said to have exhausted the issues related to the shaping of sustainable forest management, providing a stable basis which allows the proper implementation of forest management.
tasks. Nonetheless, international considerations, especially those arising from EU law, also need to be recognised in relation to forest management.

Under the currently binding EU law, resulting from the division of powers in the Treaty, forest management issues remain within the powers of individual Member States (Article 4 of the TFEU). However, the European Union has taken measures to provide directions for the strategic development of forest management by adopting the EU Forest Strategy 2030 – Sustainable Forest Management in Europe.

It is worth noting that the document adopted by the European Commission addresses the issues of forest management within the European Union, as part of the overall European Green Deal – the new EU Forest Strategy aims to overcome these challenges and unlock the potential of forests for our future, in full respect for the principle of subsidiarity, best available scientific evidence and Better Regulation requirements. It is anchored in the European Green Deal and the EU 2030 Biodiversity Strategy and it recognises the central and multi-functional role of forests, and the contribution of foresters and the entire forest-based value chain for achieving by 2050 a sustainable and climate-neutral economy while ensuring that all of ecosystems are restored, resilient, and adequately protected (Strategy, p. 2). This is a process that, despite the European Union’s lack of power to take legal action on forest policy, leads de facto to the strengthening of its role in this area and the transfer (not so much legal as practical) of some of these powers precisely to the EU level.

The Strategy recognises the central role of forests, foresters and the entire forest-based value chain for meeting the European Green Deal objectives, and that the implementation of the Strategy will be underpinned by a strong and inclusive governance framework that allows all parties involved to engage and shape the future of forests in the EU. The Commission will ensure that the Strategy is implemented in close coherence with other policy initiatives, including those adopted under the European Green Deal and proposals presented as part of the Fit-for-55 package (Strategy, p. 31). A fundamental question arises here, namely, which legal entity will have responsibility for implementing and managing the above process? If it is the EU administration, how does this relate to the current legal situation in which the powers to determine the forest policy rest with individual Member States? And if the Member States are responsible,
can they *selectively* apply some unacceptable elements of the European Green Deal? These are crucial questions, since the scope of action by the European institutions in the shaping of, so to speak, European forest management is apparently heading towards a conflict with current EU law.

To provide a response to the strategic document, the European Parliament stipulated, by way of a resolution, that it *welcomes the new EU Forest Strategy and its ambition to increase the balanced contribution of multifunctional forests to the targets of the Green Deal and its EU 2030 Biodiversity Strategy, particularly the goals of creating sustainable green growth and green jobs, and of achieving a carbon-neutral, environmentally sustainable and fully circular economy within planetary boundaries and climate neutrality by 2050 at the latest;* [as well as] highlights the importance of a solid science-based strategy, considering the environmental, social and economic dimensions of sustainability in an integrated and balanced way, given that, in addition to contributing to climate and biodiversity goals, including through the protection of soils and water, forests provide economic and social benefits and a wide range of services, from a means of livelihood to recreation (Resolution, Point 1). The above standpoint of the European Parliament may be seen as an approval for the issues regulated in the Strategy.

Furthermore, in its Resolution, the Parliament indicates the need to take measures aimed at establishing a joint approach to implementing forest management at the EU level. *Inter alia, it welcomes the Commission’s and the Member States’ ongoing cooperation on voluntary ‘closer-to-nature’ forestry guidelines by the Working Group on Forests and Nature; believes that to ensure added value, guidelines on this concept should fully respect the subsidiarity principle and should incorporate a broad range of results-oriented, scientifically proven sustainable tools and forest management practices, particularly taking into account local-level and regional-level needs, to give forest owners and managers the tools and relevant financial incentives to improve connections and cooperation so as to better integrate biodiversity protection into improved management practices that at the same time aim to provide other ecosystem services and products […];* [as well as] highlights that forests do have very different characteristics within the Union and that there is therefore a strong need for different policy and management approaches, working from a strong common basis (Resolution, Point 32). At this point, reference is made to the
existing legislation reflecting, in a realistic way, the division of powers in the implementation of forest policy.

It should also be highlighted that the European Parliament has firmly established the legal framework for the creation of a new forestry strategy. More specifically, it notes that several Member States already have national strategies for forests in place, which cannot be assessed in a uniform manner by the Commission, and that these should be established or further developed in a way that supports the objectives of the EU Forest Strategy; underlines that this proposal should avoid an excessive increase in the administrative burden and costs; highlights that the exact purpose and need for such plans should be clarified, and emphasises the obligation to respect Member State competence in forest matters; calls on the Commission to ensure that the legislative proposal fully respects existing national strategies at the Member State level and, where relevant, at the local level, emphasising that strategic planning at the EU level should dovetail with and avoid contradicting or duplicating the existing national strategies (Resolution, Point 53). While cooperation between these strategic documents is certainly a positive aspect, questions arise whether these Member States which do not have such documents in place will be able to adopt them and whether these will only be documents with very limited binding force, with the European Forestry Strategy acting as the ultimate document governing the forest policy.

Two trends emerge from the above-mentioned legal framework, created by the European institutions in relation to forest management. On the one hand, we are facing a slow process of transferring the powers which currently rest with individual Member States to the EU administration. On the other hand, it has been considered indispensable to respect the existing strategic documents relating to the processes of implementing forestry tasks by individual Member States.

Within the framework of the above analysis, a brief summary of the legal basis for forest management implementation under Polish national law was made, together with the analysis of the development processes of the EU powers relating to the forestry sector (understood as a whole within the European Union). The underlying and principal link between these issues is the effort to integrate forest management issues into the process of creating a sustainable regional development system.
From the point of view of Polish law, the Strategy for Responsible Development acts as the key instrument for managing the development policy implemented by the public administration. This document contains a definition of the concept of responsible development. It stipulates that it is *development in which the needs of the present generation can be met without diminishing the opportunities for future generations. Responsible development is conditioned on the appropriate shaping of the relationships between the competitiveness of the economy, care for the environment, and the quality of life. It therefore refers to economic, social, environmental, territorial and institutional issues. It is a socio-economic development in which there is a process of integrating political, economic and social activities while preserving the natural balance. It refers to the economic growth based on solid foundations such as entrepreneurship, industriousness, resources and skills of Polish people. Responsible development is also a multidimensional social solidarity aimed at caring for the common good – solidarity between the present and future generations, between individual regions, cities and rural areas* [Szewczak, 2020, p. 48]. The definition provided above is one of the foundations for shaping sustainable regional development that fits into the notion of Administration 4.0, which *assumes the existence of intelligent and responsible network systems, connected vertically to other processes inside the administration and horizontally to external networks, creating specific value which can be managed at each functional stage by the coordinating entity, using intelligent digital solutions* [Szewczak, 2020, p. 188]. We can therefore see that the process related to the implementation of sustainable forest management tasks is intrinsically linked to the creation of a sustainable regional development system. This makes it necessary to use the solutions referred to as Administration 4.0, in particular to create robust connections between the EU administration and the administrations of individual Member States.
Forest education as a means of education for sustainable regional development

The concept of education for sustainable development (Szewczak, 2020, p. 189), which is consistent with the idea of integral education, is an extremely important issue from the point of view of the development of the entire sustainable regional development system. Education for sustainable regional development is one of the fields which, jointly with other domains, such as political, social, patriotic, aesthetic, moral and religious education, constitutes education for values. The above-mentioned domains of education are referred to in literature as indicative points of reference of a normative character, associated with diverse values including spiritual values (knowledge, law, religion), perpetual values (truth, goodness and beauty), and fundamental values (marriage, family, market economy) (Brezinka, 2005, p. 25). Referring to Wolfgang Brezinka’s concept of education, it should be stated that the art of education lies in discovering the potentialities of a person, inducing them through education, relating to them and, finally, allowing them to take effect (Szewczak I., 2018, pp. 92-93).

It should be noted that there are three basic elements that play an important role in the education process – family, school and the Church. Education in the family begins at an early age. According to Edmund Bojanowski’s concept, early education is about building the foundations of the child's personality and supporting the child in getting on the path of independent and responsible care for his/her own development (Opiela, 2013, p. 295). The development of educational attitudes by the school and the Church leads to a full-fledged and integral education of a young person – one that also includes specific educational elements, such as those of forest education.

In literature, the term education for sustainable development is associated with ecological or environmental education, with the introduction of extended content into educational curricula aimed at developing learners’ ecological awareness. Meanwhile, it appears that reaching out for a new tool to consider changes in children’s education, which is provided by the idea of sustainable development, makes it possible to ‘open up’ the instructional system of teaching, to introduce the values that are most often neglected into the discourse,
and to find new practical solutions for establishing the learning environment (Bałachowicz, 2017, p. 36). It should be noted that the perception of education as presented above narrows the entire concept. Education for sustainable development should be understood in a broader way as education for sustainable regional development, encompassing not only environmental but also social and economic aspects. In this broader approach, there is room for forestry education as the pedagogical dimension of processes related to sustainable forest management.

It is noteworthy to consider sustainable development from the point of view of the Church, in particular that of the Holy Father Francis, presented through the Encyclical Letter Laudato Si or the new Apostolic Exhortation Laudate Deum. In his reflections contained in the Encyclical Letter, Pope Francis refers to the issue of common good. He claims that underlying the principle of the common good is respect for the human person as such, endowed with basic and inalienable rights ordered to his or her integral development. It has also to do with the overall welfare of society and the development of a variety of intermediate groups, applying the principle of subsidiarity. As further stated by Pope Francis, [t]he notion of the common good also extends to future generations. The global economic crises have made painfully obvious the detrimental effects of disregarding our common destiny, which cannot exclude those who come after us. We can no longer speak of sustainable development apart from intergenerational solidarity. Once we start to think about the kind of world we are leaving to future generations, we look at things differently; we realize that the world is a gift which we have freely received and must share with others (Encyclical Letter, pp. 125-126). The common good also implies taking care of regional sustainable development, and one of the elements exerting a major impact on this issue is the application of educational processes.

Pope Francis appeals, Once we start to think about the kind of world we are leaving to future generations, we look at things differently; we realize that the world is a gift which we have freely received and must share with others. Since the world has been given to us, we can no longer view reality in a purely utilitarian way, in which efficiency and productivity are entirely geared to our individual benefit. Intergenerational solidarity is not optional, but rather a basic question of justice, since the world we have received also belongs to those who
will follow us. An integral ecology is marked by this broader vision (Encyclical Letter, p. 159). The integral ecology is one of the key elements that influence the shaping of education for sustainable regional development. Pope Francis's deliberations contained in the Encyclical Letter *Laudato Si* are constantly challenged when confronted with new geopolitical events such as the war in Ukraine, the migration crisis, the conflict in the Middle East or the organisational instability of the European Union. Considering the above, eight years after the Encyclical Letter, the Holy Father presented his new reflections in the Apostolic Exhortation *Laudate Deum*, again dedicating it to the problems of the climate crisis. He notices that *a broader perspective is urgently needed, one that can enable us to esteem the marvels of progress, but also to pay serious attention to other effects that were probably unimaginable a century ago. What is being asked of us is nothing other than a certain responsibility for the legacy we will leave behind, once we pass from this world* (Apostolic Exhortation, Point 18). The indicated responsibility is an element of the process of education for sustainable regional development, with sustainable forest management acting as its important instrument. Pope Francis points to the unsuccessful conclusions of the climate conferences held to date, as well as indicates the far-reaching expectations of the upcoming conference which will take place in 2028 in the United Arab Emirates, pointing to the need to launch a new process that could *recover its [international policy's] credibility, since only in this concrete manner will it be possible to reduce significantly carbon dioxide levels and to prevent even greater evils over time* (Apostolic Exhortation, Point 59).

Pope Francis's deliberations presented in the Apostolic Exhortation should be understood as a further call for action to take care of climate issues and to properly shape sustainable regional development, in particular by international organisations and global powers. Although forestry is not specifically mentioned in the Apostolic Exhortation, its text should be seen as also referring to this issue, as it is one of the most essential elements of sustainable regional development. This shows how important issues related to education are for sustainable regional development in the contemporary world.

Issues related to the shaping of a process of education for sustainable development can be supported by activities in the field of forest education. It is important to note that, as research has shown, forest education in the
pre-school period brings excellent pedagogical results reflected in creative thinking, concentration or good quality of sleep (Sella, 2023, p. 24). It therefore seems that the issues of forest education, understood as one of the elements of environmental education, should become crucial in the process of education for sustainable regional development. However, a key element that would significantly facilitate the promotion and development of forest education would be the introduction of an appropriate legal instrument. Issues related to environmental education have been included in the Environmental Protection Law – more specifically, in the Environmental education, environmental research and publicity section regulating the following three issues: 1) ecological education, 2) environmental protection studies, and 3) advertising. In the legal doctrine pertaining to environmental protection, it is assumed that all legal institutions regulated in the above section of the Act constitute, in their essence, instruments of ecological education, understood as organised and conscious forms of influencing individual people aimed at shaping their awareness and behaviour related to environmental protection (Szalewska, 2021, p. 70). While the introduction of the above legal solutions to the Act is obviously a positive aspect, their character is very general, covering the entire system. It seems that an indispensable element in relation to forest education is the introduction of this legal instrument to a specific legal act, namely, the Forest Act. Educational issues in the Forest Act can only be found in relation to the functioning of promotional forest complexes which, under the Forest Act, are functional areas of ecological, educational and social importance, for which activities are determined by a uniform management and protection programme, developed by the competent regional director of the State Forests (Article 13b of the Forest Act). This is obviously a positive instrument that certainly influences the development of educational activities, but it requires significant legal strengthening. Legal regulation of forest education issues would certainly enhance these activities, also from the point of view of the educational process.
Conclusion

The adoption and commencement of the process of implementing the strategic document relating to forest management at the European Union level indicates the need to establish appropriate legal provisions, which would lead to amending the normative acts currently regulating the issues of sustainable forest management at the national level.

Firstly, a *de lege ferenda* postulate is to legally regulate the operation of a sustainable forest management system in the Forest Act, by introducing a statutory obligation to prepare a national forestry strategy and regional forestry strategies. The effect of introducing the above provision would be to systematise procedures related to the implementation of sustainable forest management by public administration. Furthermore, it would serve as a legal response to the European Union’s efforts to shift forest management powers from individual Member States to the European Union.

Secondly, the process of regulating the above issues should be intrinsically linked to the introduction of legal solutions in the field of forest education in its broadest sense. Hence, a *de lege ferenda* postulate is to legally regulate the concept of forest education in the Forest Act, together with the addition of this concept to the set of tasks in the field of ecological education within the current legal state in the Environmental Protection Law.

The implementation of the two mentioned postulates will allow the development of a model of education for sustainable regional development with forest education considered one of its instruments. This will make it possible to carry out tasks related to the educational component.

To sum up, the political and legal changes taking place in the European Union require specific measures to be taken within the national law. A key task is to create an appropriate legal instrument, both in the legislative and executive domains. The lack of key legal solutions in these areas may lead to legal stagnation in the implementation of sustainable forest management or the need to recognise the solutions adopted at the EU level, which are not always seen as beneficial to a given Member State. An important element in the development of sustainable forest management will be to integrate it into the process of sustainable regional development, thus making the entire development a responsible process with a tangible impact on national development policy.
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