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INTEGRATING ECOSYSTEM SERVICES INTO SUSTAINABLE DEVELOPMENT PROGRAMMES. A CASE STUDY OF SELECTED COMMUNES IN LUBELSKIE VOIVODESHIP LOCATED IN LANDSCAPE PARKS

SUMMARY

The world's population continues to grow, and with it the demand for natural resources. Excessive consumerism of environmental goods and services is contributing to environmental and climate damage, as well as significant depletion of natural resources. On the other hand, there is a growing awareness of the global environmental crisis and the need to change existing development patterns to more sustainable ones. In this context, attention is increasingly turning to ecosystem services, their identification and assessment as a useful tool for sustainable development policy-making. This paper therefore attempts to assess the relationship between the potential of a site to provide ecosystem services and the sustainability of municipalities. In doing so, three research hypotheses were adopted. The first assumed that ecosystem services are neglected in the programming process of sustainable municipal development, leading to insufficient consideration of ecosystem values and resources and an imbalance between socio-economic and environmental aspects in development planning and decision-making. The second suggested that there is a positive relationship between the potential of a site to provide ecosystem services and the level of sustainability of municipalities, with municipalities with higher site potential tending to show higher levels of sustainability. The third, on the other hand, assumed that municipalities with a significant share of landscape park area in the municipal area achieve a higher level of sustainability than other municipalities.

The study used a range of statistical and publicly available geospatial data. A review and critical analysis of the planning and strategic documents of the studied communes was carried out, statistical methods were used and mapping of ecosystem services was carried out. The spatial scope of the study included nine communes of Lubelskie Voivodeship with a high share of landscape parks in the total area, i.e. the communes of Kazimierz Dolny, Wąwolnica, Janów Lubelski, Dzwola, Kraśniczyn, Skierbieszów, Stary Zamość, Krasnobród and Susiec. In addition, when estimating the development level of the sustainable development indicator, the analysis took into account the remaining rural and urban-rural gminas of Lubelskie voivodeship (total of 193 territorial units). The temporal scope of the study of the level of sustainable development and the identification of the potential of the area to provide ecosystem services referred mainly to the year 2019. In turn, the analyses concerning the evenness of development of communes in particular dimensions of sustainable development covered the years 2004, 2009, 2014 and 2019.

The analysis showed that the concept of ecosystem services is not sufficiently integrated into the sustainable development programming process at the local ('commune') level. The studied communes generally pursued a development policy inadequate to their development needs, which manifested itself in a strong stimulation of activities for the development of the unit in only one of the three dimensions of sustainable development. Rural and urban-rural municipalities in Lubelskie Voivodeship with a significant share of landscape parks in the total area generally achieved a higher level of sustainable development than the other communes. Areas with the potential to provide multiple ecosystem services were generally located within the boundaries of landscape parks. The study showed that there is a significant positive relationship between the average potential of a site to provide selected ecosystem services and the level of sustainability achieved by the commune. Municipalities with high land potential

to provide a variety of ecosystem services achieved higher levels of sustainable development than other communes. The results presented in this thesis indicate that integrating ecosystem services into the sustainable development programming of municipalities, particularly in strategic and spatial planning, can be an effective way of managing and protecting environmental resources. Furthermore, it can be used to create sustainable development, provided that the potential of a site to provide ecosystem services is examined in detail, the relationships between the various services are taken into account and the objectives associated with them are consistent across all programming studies.