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LAND TRUSTS AS A COMPLEMENTARY SOLUTION TO NATURE CONSERVATION SYSTEM IN POLAND

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ABSTRACT: This article is a new voice in the debate on the future of nature conservation in Poland. It develops the subject of grass-roots initiatives in the context of the most important contemporary challenges related to area-based nature conservation. In this context, the article introduces land trusts - one of the tools that seems to meet the expectations of social organisations involved in environmental protection. The article's description of the potential place of land trusts in the Polish system of nature conservation is complemented by a review of the seed forms currently emerging without systemic support and by an analysis of the methods used in other countries to finance such initiatives. The research methods used for this type of analysis are heuristic methods based on a comprehensive literature review and a detailed analysis of practical examples and solutions. In conclusion, this article confirms the validity of conducting further research on land trusts as a possible complement to the nature conservation system in Poland.

KEYWORDS: land trust, privately protected areas, nature conservation, financing nature conservation

Introduction to nature conservation in the context of contemporary challenges

The conservation of the resources of nature is very strongly space-based, and there are two key aspects to this relationship: the need to increase the area of protected lands and to maintain their continuity and links between them. The latter remains more difficult due to the differentiated status of land ownership and organisational and financial limitations of the public sector in Poland, on whose shoulders rests the responsibility for the condition of nature as a system supporting social and economic life. This rationale prompts a search for new forms of conservation that could complement public sector activities and provide an alternative source of funding for nature conservation, especially in the context of key challenges such as climate change adaptation, biodiversity conservation and the provision of ecosystem services.

The Polish system of nature conservation does not legally recognise privately protected areas. This lack is repeatedly raised by activists involved in environmental issues, who identify this as a barrier to the development of nature conservation initiatives on private land (Kepel, 2016). The problem is also noted by researchers involved in assessing the performance of the nature conservation system in Poland (Gutowski et al., 2015). At the same time, privately protected areas are a significant tool for nature conservation in many countries around the world. As indicated by the guidelines developed by the International Union for Conservation of Nature (IUCN) (Mitchell et al., 2022), their significant advantage is the possibility of involving more stakeholders in conservation activities and expanding the protected areas. One of the commonly used tools aimed at nature conservation on private land, rapidly growing especially in the United States of America, The United Kingdom and Australia are land trusts.

In this context, the aim of this article is to:

- Define the concept and essence of land trusts: a tool for nature conservation not yet described in the Polish scientific literature,
- indicate how land trusts could complement the Polish system of nature conservation by responding to the challenges of climate change adaptation, provision of ecosystem services and preservation of biodiversity,
- identify directions for future research into the potential application of land trusts in Poland.

The role of privately protected areas in the context of the nature conservation system in Poland

The IUCN is one of the organisations involved in disseminating knowledge and promoting conservation solutions on private land. Poland is a member of this international association. Its *Guidelines for Privately Protected Areas*, published in 2022, highlighted the many public benefits of privately protected areas, such as:

- in situ biodiversity conservation,
- habitat protection, restoration and connectivity,
- providing ecosystem services (such as water supply),
- enabling research on nature conservation,
- providing personal fulfilment of parties involved,
- providing public access to areas of natural beauty.

It has been stressed that privately protected areas secure these benefits at a lower cost than the public sector would do – they reduce the public costs of land acquisition and management. Governments can maximise these benefits by encouraging and supporting privately protected areas. At the same time, while the decision on priority conservation actions will depend primarily on expert knowledge, their implementation will depend on the ability and willingness of stakeholders to participate in these actions (Kamal et al., 2014).

Polish nature conservation system is entirely based on the public sector, which has the power both to designate areas and objects to be protected and to make decisions on how to manage them. The authorities that create, establish or designate a form of nature protection are:

- the municipal councils with regard to nature monuments, documentary sites, natural and landscape complexes and ecological sites,
- voivodeship assemblies with regard to landscape parks and protected landscape areas,
- the Regional Director for Environmental Protection with regard to nature reserves,
- the General Director for Environmental Protection with regard to Natura 2000 sites,
- directors of national parks with regard to national parks.

One of the most important tools of land protection is spatial planning. Sustainable development and environmental protection are addressed in spatial planning systems (Kafka, 2013); however, in Polish legislation, there is no reference to other than above mentioned forms of nature protection. It seems that the only way land trust initiatives could be taken into account in the process of spatial planning is through various forms of public consulta-

tions, which are non-binding for authorities or submission of requests. The situation would be different if an NGO had already acquired land, as property rights are one of the factors that strongly determine the final shape of plans (Drzazga, 2018). But as long as land trusts are not recognised as a form of nature protection – their protection will be weaker than that of legally recognised forms. Taking into consideration that major legislative changes in the Polish spatial planning system were introduced in 2023, it seems that this subject requires further extensive research.

Practically, the role of citizens and NGOs is reduced to merely requesting and filing petitions for proposals to extend coverage to areas they consider valuable. At the same time, the public sector, fully responsible for the financing of nature conservation, faces challenges such as insufficient spending and an unfavourable spending structure (BAS, 2008).

According to the proposal by Kamal et al. (2014), classification of tools for nature protection on private land, all forms of protection currently functioning in Poland should be classified as imposed. Land trust-type tools, on the other hand, belong to voluntary forms, but what is crucial is that they are binding and formalised and, as a result, ensure the maintenance of long-term effects.

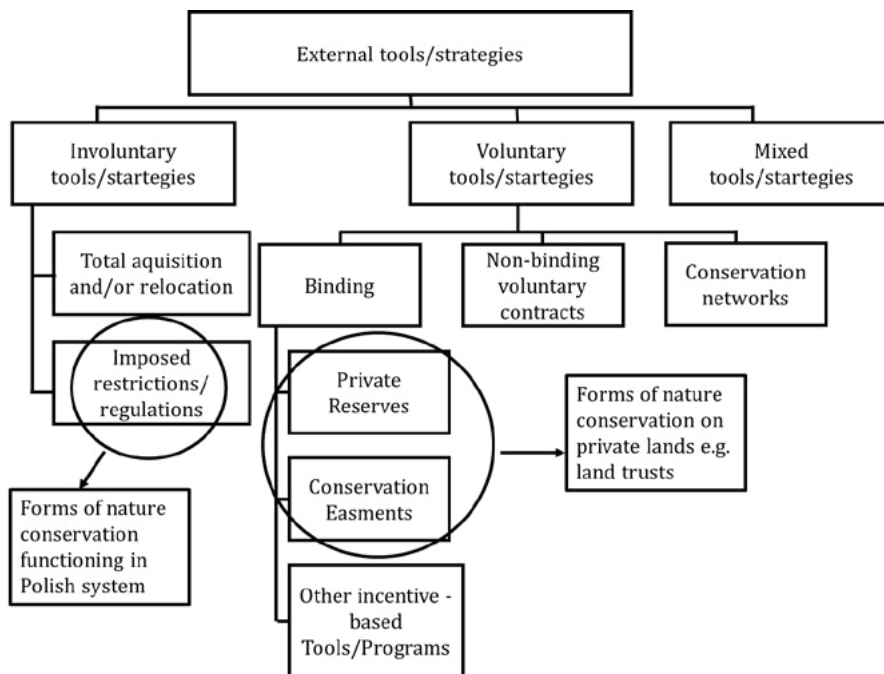


Figure 1. Types of tools/strategies for nature conservation on private land. Context of the nature conservation system in Poland

Source: authors' work based on Kamal et al. (2014).

The issue of organisational or financial participation of citizens in nature conservation is absent from the State Environmental Policy 2030 (Ministry of Climate and Environment, 2019), prompting the conclusion that complementing the nature conservation system with voluntary area conservation on private land is not currently a priority at the strategic level.

At the same time, the *EU Biodiversity Strategy for 2030* (European Commission, 2020), adopted by the European Commission in 2020, sets out a broad catalogue of ambitious targets for the Member States, including:

- legally protecting a minimum of 30% of the EU's land area and 30% of the EU's sea area and integrate ecological corridors, as part of a true Trans-European Nature Network,
- strictly protecting at least a third of the EU's protected areas, including all remaining EU primary and old-growth forests,
- restoring at least 25,000 km of Europe's rivers by re-establishing free-flowing rivers and planting an additional 3 billion trees,
- unlocking €20 billion a year for biodiversity from various sources, including EU, national and private funds.

In the EU Member States, the largest form of nature protection by area is the Natura 2000 network, covering around 18% of their territories. In Poland, the ratio is 20%, but despite its widespread use, the Natura 2000 network is not free from conflicts. These stem, inter alia, from the top-down character of this form of nature protection (similar to all other forms existing in the Polish system of nature protection), which contributes to a sense of exclusion and injustice (Strzelecka et al., 2021).

Analyses carried out by the State Forests suggest that in order to achieve the *EU Biodiversity Strategy for 2030* goal of having 30% of Poland's area under protection, it will be necessary to protect an additional 3 million ha of the country's area (Malinowska, 2023). It seems obvious that extending the catalogue of tools for the creation of protected areas to include voluntary initiatives on private land may be one of the solutions to meet this obligation, which at the same time mobilises private funds.

Research method

The research method adopted was a review of existing documents and their subsequent analysis using heuristic methods. The following materials were examined:

- scientific literature on land trusts and nature conservation on private land,
- polish legislation related to, inter alia, nature protection, spatial planning and development, municipal self-government,

- reports of Polish and foreign NGOs dealing with nature protection, including public participation,
- websites on nature protection,
- websites of:
 - land trusts operating abroad,
 - seed forms occurring in Poland.
- social media, where the most up-to-date information on the development of initiatives is often to be found.

Literature review

The global literature on land trusts dealing with conservation is extensive. Its development follows that of land trusts themselves, which in turn develop where their activities are supported and formalised. Hence, publications on land trusts come mainly from countries where these organisations have been operating for decades: the UK, the US and Australia.

In *A Bibliometric Analysis on Conservation Land Trust and Implication for China*, published in 2022 (Yang et al., 2022), the authors describe the increase in publications on conservation land trusts between 1990 and 2021 as exponential. The number of publications spiked between 2008 and 2015. This was associated with the rapid development of land trusts in the US, and publications from this period focused on the assumptions and improvements of the land trust system. In the following period, until 2021, the increase in the number of publications was even faster, and their nature became more empirical; the research focused on case studies, and their results confirmed the interdisciplinary nature of the issue of land trusts.

An analysis of the number of publications retrieved from the Web of Science shows that the largest proportion focuses on ecology, biodiversity and ecosystem services. By contrast, the economic and financial context of land trusts remains a poorly recognised strand of research, and a minority of publications deal with economic aspects.

Land trusts as nature conservation NGOs were described as early as the 1930s, but it is the 21st century that has brought an ever-increasing number of publications. Published in 2003, Brewer's book *Conservancy. The Land Trust Movement in America* provides a wide-ranging description of the many issues related to land trusts that have been evident after almost a century of their operation in the United States and systematises the ways and areas of their activities. Twenty years later, we can conclude that the literature on land trusts contemplates whether they meet their objectives in protecting ecologically valuable lands (Fisher & Dills, 2012; Crain et al., 2020), whether they are organisations maintained by their members (Sundberg, 2006), and

how to provide access to lands protected by land trusts (Beckman et al., 2023; Lieberknecht, 2009). In the context of land trusts, the two-way relationship between investments in area protection (the acquisition of property rights) and the charitable financing of these investments have been studied (Pinnschmidt et al., 2021) as well as social aspects regarding the emotional attitudes of those involved in land trusts (Seaman et al., 2019). The spatial distribution of areas protected by land trusts and the impact of public sector policy on this distribution is also being explored (Fishburn et al., 2013; Thurman & Parker, 2011). Recent literature on land trusts places, among other issues, social justice themes at the centre of its research (Beckman et al., 2023; Langhans et al., 2023).

Land trusts as participatory forms of nature conservation often appear in the discourse on nature conservation on private land. A study conducted in Poland on attitudes towards public participation in nature conservation revealed that the search for decentralised forms of nature conservation is expected by many stakeholder groups (Niedziałkowski et al., 2018). Land trusts find their place in reviews of conservation strategies on private land (Kamal et al., 2014; Selinske et al., 2022) and publications on conservation management in the spirit of governance (Logan & Wekerle, 2008).

The literature on land trusts as organisations using conservation easements holds a distinctive position in terms of the number of publications. The diversity and depth of the subject matter addressed in the scholarly debate demonstrate that this is a well-researched and interdisciplinary topic. In a 2004 article, Merenlender, Huntsinger, Guthey and Farifax sketched a broad spectrum of issues related to conservation easements, recommending them for further consideration by the scientific world (Merenlender et al., 2004). They drew particular attention to the need to assess who benefits and who stands to lose from the protection of private areas using conservation easements and what is actually protected when contracting out. The objectives of conservation easements were also analysed, particularly in the context of possible uses of properties covered by them (Rissman et al., 2007). Another field of interest of researchers was the share of conservation easements in all forms of real estate rights in a given period (Fishburn et al., 2009), as well as the choices between these tools (Parker, 2004). In 2016, Owley and Rissman described the increased complexity of the conservation easement tool. Most recent publications keep up with the next stages of the socio-economic life of land trusts, analysing, among other things, the aspects of inheritance and acquisition of properties over which conservation easements are imposed (Rissman et al., 2023) and also the adaptation of this tool to the contemporary challenges of climate change (Rissman et al., 2015).

Land trusts are poorly described in the Polish literature, although Polish researchers have identified a lack of conservation solutions on private land.

However, land trusts have not been analysed so far as a way to solve the problem. Among countries with a similar post-communist history to Poland, the Czech Republic is the one where land trusts exist, and their operation is the subject of research (Ratinger et al., 2021). However, as noted by the article's authors, *Public and community conservation of biodiversity-rivalry or cooperation?* (Slavíková et al., 2020). There is a lack of scientific descriptions of newly emerging land trust-type initiatives in post-communist countries in the literature.

Land trusts – a historical overview

The protection of open, natural spaces and valuable landscapes is a challenge that societies have faced since the Industrial Revolution. It was the industrial development in the 19th century that caused large-scale threats to these resources. The lack of social control over the processes of their loss has caused concern among citizens of many countries. Some of them have been able to turn it into action independently of the efforts of the public sector. Facing a lack of large-scale systemic solutions, private initiatives have emerged.

The idea of land trusts developed in parallel in several Anglo-Saxon countries, although it can be argued that 'land (nature) conservation, like jazz, is an American invention' (Brewer, 2003). The origins of the land trust movement can be traced back to 1891, when Charles Eliot began efforts to establish The Trustees of Public Reservations, now known as the Trustees of Reservations, or TTOR, to protect the disappearing natural landscape in Massachusetts (Stein, 2015).

Around the same time in Britain, a group of citizens concerned about the disappearance of traditional rural landscapes with their distinctive architecture took action to preserve them. Thus, in 1895, The National Trust, still in operation today, was founded by Octavia Hill, Sir Robert Hunter and Hardwicke Rawnsley. The founding documents stated that the aims of the organisation are "to promote the permanent preservation for the benefit of the country of sites and buildings of beautiful or historic interest" (Restore Trust, 2021).

Initially, land trusts subsisted on donations and membership fees, but as they expanded in scale, they were recognised by the public sector and mechanisms to support land trusts, such as tax exemptions for donors, operating grants, etc., were developed.

Land trusts: the essence and operating mechanisms

Land trusts are non-governmental organisations currently found in more than 100 countries around the world (Stein, 2015) that aim to (1) protect assets deemed important by society (conservation land trusts) or (2) meet

needs for access to local food or affordable housing (community land trusts). Only conservation land trusts – for the protection of nature or landscape – are the subject of this paper. They operate at all scales – from local organisations focused on a specific spatial or environmental problem to those operating at a national level.

Land trusts operate in a similar way to Polish public benefit organisations. Members of land trusts may provide funds in the form of contributions aimed at reaching the organisation's statutory objectives. Monetary donations may be an additional source of funding. Entities donating real estate, conservation easements or money to land trusts may be eligible for tax relief on income or property taxes.

Three key aspects of land trusts operation distinguish them from other organisations for the protection of spatial resources. Firstly, the activity of land trusts involves the acquisition of rights to real estate:

- the acquisition of property rights (by purchase, donation or inheritance). These properties are then sometimes transferred to public entities or (most often) remain in the organisation,
- acquisition of conservation easements. This occurs by entering into an agreement with the property owner specifying the extent to which the development of the property will be allowed, ways of managing it or rules for making it available to the general public.

Secondly, the whole process – from the recognition of what resources to protect through contracting, financing and property management lies with the NGO. At the same time, it is a voluntary decision for property owners to join this form of land protection.

The third most important principle of their operation is that they seek to preserve resources in perpetuity. In practice, this means that the purchase of property or the acquisition of conservation easements is usually subject to requirements to retain those rights in the hands of the land trust for 99 years. As Parker and Thurman (Parker & Thurman, 2019) point out, land trusts should be analysed in the context of the services they provide rather than simply as owners of the property, as their primary purpose is to undertake conservation activities.

The most important organisational and legal form of land trusts (especially in the US) is the conservation easement. Conservation easements¹ are permanent restrictions on the use of land – they reduce the value of the land and are often regarded by the tax service as charitable donations, generating federal and state income tax benefits.

1 Conservation easements are known under different names in English-speaking countries, e.g., as *conservation easement* in the United States and *conservation covenant agreement* in the UK.

Their mechanism is as follows: the land trust (NGO) and the property owner jointly decide to impose a conservation easement on the property. Such an agreement is negotiated on a case-by-case basis and responds to each specific circumstance. However, it usually has two features – it is concluded in perpetuity, and the easement passes with the property to each individual owner of that property (Merenlender et al., 2004).

In explaining how this mechanism works, the literature often compares property rights to a bundle of sticks (Parker & Thurman, 2019). Each stick represents some action or inaction. The owner conveys some of these ‘sticks’ to the land trust while not transferring the ownership title. The easement can be either an obligation to graze cattle on the land covered by it or to refrain from doing so. It can be an obligation to refrain from developing or subdividing the property, cutting down trees, extending infrastructure and also an obligation to make the land available to the wider public, e.g. for recreational purposes. The easement may also give the land trust the right to undertake conservation activities on the land covered by it.

Due to the financial benefits of conservation easements in Western countries, there has been a surge in the number of such agreements in recent years, going hand-in-hand with questions raised as to whether they are actually fulfilling their conservation objectives or addressing the scale of the actual social benefits. In this context, reliable monitoring and enforcement of agreements remain a major challenge (Parker & Thurman, 2019).

Ways of financing land trust

Apart from the above-mentioned mechanisms, funding for land trusts can come from many sources. The income generated is used both for land acquisition and for ongoing operations and maintenance.

Popular forms of funding include membership fees – land trusts as NGOs may offer memberships that can be purchased. The range of membership types on offer is sometimes wide, with various fee options for seniors or young people. Members may be able, for example, to enjoy free admission to facilities owned by the land trust. An example of a land trust with such an offer is The National Trust in the UK, the first such organisation established in the 19th century in Europe.

Another form of funding for land trusts is entry fees. This form of funding is particularly used in cases where the land trust’s preserved sites or facilities generate high maintenance costs yet are attractive enough to generate a large number of visitors.

Monetary donations are another way to raise funds. They may come from individuals as well as companies or institutions. The US land trust The Nature

Conservancy, the largest in the country, generated revenue of \$760 million from this source in 2018 (Pinnschmidt et al., 2021). Depending on national legislation as well as individual circumstances, donors may benefit from tax exemptions. Land trusts can also acquire real estate by donation. Also, inheritances are an incidental but possible source of funding.

Lottery income is used in Scotland, for example. One of many such programmes is funded by the Scottish government and run in partnership with The National Lottery Community Fund and Highlands and Islands Enterprise². Among other things, it offers grants of up to £1 million to help communities take ownership of land and buildings that are important to them. Resources from the National Lottery Community Fund, which distributes more than £600 million a year for community development across the UK, come from the fees of The National Lottery players.

Public funding, e.g. grants, is available on a varying scale depending on the country. In the United States, for example, since the 1960s, the Land and Water Conservation Fund has been operating with an annual budget of several hundred million dollars. These funds can be granted to organisations to acquire land for conservation purposes. The fund itself, on the other hand, is financed by levies on energy companies and from the sale of state-owned land.

Financial challenges are a daily reality for NGOs, especially those in need of significant resources. Therefore, many of them are taking steps towards acquiring new sources of funding (Wrocklage, 2020). One of those was the Impact Note launched by the Washington Farmland Trust. This is a debt paper with a yield of 2% per annum issued by the land trust. It addresses the need for more flexible financing – as opposed to project-based financing such as grants. It also unlocks other than donations sources of fundraising in prospective investors' budgets. Land trusts in the US are also trying to engage in pilot carbon storage projects using mechanisms similar to the European ETS.

Land trusts in Poland: examples of Seed Initiatives

Among the indications that a land trust-type initiative could find application in Polish conditions are:

- the existence of a developed NGO sector³, including, in particular, public benefit organisations. Almost one in ten of Polish NGOs are public benefit

2 For the list of initiatives that received funding, go to: <https://www.tnlcommunity-fund.org.uk/media/documents/scottish-land-fund/Scottish-Land-Fund-awards.pdf?mtime=20201130144545&focal=none>

3 Between 2010 and 2020 the number of registered organizations increased by almost 20% (GUS, 2021) reaching 95,200.

- ones – a format that could be adapted to create land trusts. Environmental organisations account for 3% of all registered organisations,
- developing bottom-up funded initiatives, including crowdfunding. In 2022, the crowdfunding market was worth PLN 1.1 billion (Duszczyk, 2023), and land buy-back initiatives for nature conservation, e.g. Forest Forever, were financed with its help,
 - climate crisis and its impact on the quality of life. There is a growing public understanding of the co-dependency of the occurrence of smog and challenges to public health, climate change, the occurrence of violent weather events,
 - and the lack of trust in public authorities, especially in the field of nature protection. Situations in which public authorities carry out controversial plans despite public protests jeopardise the cooperation between government and non-government sectors and were negatively assessed by the Supreme Audit Office (NIK, 2019),
 - inefficient and imperfect spatial planning system. *As shown by the audit carried out by the Supreme Audit Office (NIK), the regulations in force since 2003 do not ensure the rational shaping of spatial order in municipalities and their sustainable development and deprive this process of social control. This results in urban sprawl, depletion of green areas and even degradation of the landscape* (NIK, 2023). This was also noticed by the social side,
 - actions taken by NGOs to put in place a form of Socially Protected Nature Areas similar to land trusts into the Polish legal order.

As has been found out, in Poland, there are no systemic solutions that would enable efficient protection of natural or landscape resources on private land by entities of the non-governmental sector. Protection always takes place as an action of the public sector at the governmental or local level, although it may result from the initiative of the local community or the NGO. However, there are seed forms of initiatives focusing on nature conservation. To date, several initiatives have been undertaken in Poland to protect resources on private land. For example, two private conservation sites were established in 2004 on the initiative of private owners (who allocated part of their land for this purpose). These were the Bielecki Family's Ponds Gnojna nature reserve and the Gubinskie Wetlands. Another type of initiative was the 'free forest whip-round' organised in the spring of 2020. More than PLN 150,000 was raised to purchase a piece of forest in the Carpathian Primeval Forest in the Low Beskids, with the aim of creating a hunting and logging-free area there. The initiative did not achieve its intended objective because the State Forests exercised their pre-emptive right to purchase the property.

Among initiatives undertaken by NGOs, the pro-Natura project stands out (Przyroda Dolnego Śląska, 2020). This is a series of smaller and larger

areas located in the northern and eastern parts of the Wińsko municipality in the Wołowski district. These are not officially protected areas but areas purchased by the foundation Polish Society of Friends of Nature “pro Natura”. Over the past 20 years, more than 200 hectares of land have been purchased from private owners, state agencies and municipalities. Most of these are wastelands, wetlands or areas of natural forest succession.

The *Forest Forever Foundation’s* activities are based on a mechanism even more resembling land trusts. The Foundation owns the land on which “Forests Forever” grows. The Foundation’s statutory document ensures that the goal of protecting in perpetuity the forest on the land it owns is obtained:

“§ 11, para. 2 Properties donated to the Foundation and purchased by the Foundation shall not be further disposed of or encumbered, and forested properties shall not be subject to logging or felling unless such an obligation results from applicable laws.”

The Foundation is also taking steps to introduce the tool of Socially Protected Nature Areas into Polish legislation, which would be the first legally recognised form of nature protection on private land in Poland.

Conclusions. Future directions in land trust research

Privately protected areas can make a valuable addition to the nature conservation system in Poland, both in terms of achieving the objectives of preserving the continuity of ecosystems and the possibility of unlocking new sources of financing. The implementation of privately protected areas, including land trusts, will require the involvement of the public sector in creating systemic solutions and incentives for such initiatives. The benefit to the public sector of including privately protected areas among officially registered forms of protection will be the increased chances of achieving the goals set for nature conservation by both international agreements and national policy.

Land trusts, operating and developing as a form of nature conservation in many countries, seem to be a welcome solution, the implementation of which would meet public expectations. Systemic support for initiatives currently emerging as bottom-up initiatives would provide an opportunity to increase their number and effectiveness and ensure the sustainability of their objectives.

In Poland, land trusts should be seen not only as a form of nature conservation but also as an instrument for building local development. Attention should be paid to the possibilities of using land trusts to activate local communities, build trust and co-manage natural resources. It is an excellent tool for implementing the idea of place-based policy and taking into account grassroots needs and specific cultural, social, and economic conditions in

shaping community-based local development policy (Nowakowska et al., 2021). This article is a contribution to further research on the possibilities of implementing land funds in Poland. Future research should have an interdisciplinary character and combine economic, legal and natural aspects. Particularly relevant areas of research include:

- in economics and finance: identifying economic barriers to the establishment of land trusts and identifying the social benefits of land trusts and their funding mechanisms,
- in spatial economy: analyses of the possibility of using land trusts for the protection of naturally valuable resources and adaptation to climate change (especially urban areas),
- in law: analyses of organisational and legal solutions for the functioning of land trusts in the Polish legal system (such as conservation easements), analyses of reformed spatial planning bill,
- in social research: research on barriers to the development of land trusts and their use as a form of community activation and creation of common goods.

The contribution of the authors

Conception, A.N. and A.B.; interpretation of data, A.N. and A.B.; literature review, A.B.; analysis, A.B. and A.N.; acquisition of data, A.B. and A.N.; editing, A.B.; presenting implications, A.N. and A.B.; concluding, A.N. and A.B.

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