

## Community Participation and Governance in European Threatened Biosphere Reserves: Exploring the Influence of Social Movements on Conservation Policies

Jimmy, U.J<sup>1</sup>; Ozoh, S.I<sup>2</sup>; Udousoro, E.E<sup>3</sup>; Angela, N.U<sup>4</sup>; Abasifreke, E.E<sup>5</sup>; Jimmy, I.J<sup>6</sup>

<sup>1</sup>Department of Geography & Natural Resources Management, University of Uyo, Nigeria

<sup>2</sup>Department of Environmental Management, University of Calabar, Nigeria

<sup>3</sup>Curriculum Studies and Educational Management and Planning, University of Uyo, Nigeria

<sup>4</sup>Educational Management and Planning, University of Uyo, Nigeria

<sup>5</sup>Educational Management and Planning, University of Uyo, Nigeria

<sup>6</sup>Akwa Ibom State College of Health Technology, Etinan

\*Corresponding Author: Jimmy, U.J

DOI: <https://doi.org/10.5281/zenodo.17094270>

| Article History  | Abstract  |
|--|---|
| <b>Original Research Article</b>   | <p><i>Recently, there has been a considerable attention in biosphere reserves in Europe due in part to the uprising in biodiversity loss, land use policy, changing migration pattern associated with competition for land resource ownership, habitat fragmentation and changing climate scenario with its attendant effect on landscape modifications in some of European ecosystem reserves. The central argument in this research is that from the mountainous Alps, to the temperate Scandinavian forest and the Mediterranean ecosystems, the outcome of social behavioural change among indigenous community dwellers has shifted from resource conservation towards resource consumption with little regards to sustainability principles. The wanton raping of virgin ecosystem had pushed environmental concerned groups and governmental institutions to initiate policies and programs that aimed to resuscitate the consciousness of individuals in the management of biodiversity. Urban greening and New land use policies are some of the strategies adopted in biosphere reserves protection. However, numerous emerging challenges are resurfacing particularly community engagement and stakeholders' conflict. This study uses theoretical discourses to explore the role of social movement, effectiveness of institutional reform, perceived successes and future challenges in the management of Threatened Biosphere Reserves in Europe. The Theory of socio ecological change and participatory governance consolidated and foster clarification of the concept. It was revealed that socio-economic dynamics, institutional capacity and interest likewise disjointed coordination between stakeholders were the major hindrances affecting sustainable management of biosphere reserves and it was recommended that a more holistic approach be adopted that encourage participatory governance and meaningful community engagement.</i></p> <p><b>Keywords:</b> Community Participation, Governance, European Threatened Biosphere Reserves, Social Movements, Conservation Policies.</p> |
| <b>Received: 20-08-2025</b>  |   |
| <b>Accepted: 06-09-2025</b>  |   |
| <b>Published: 08-09-2025</b>   |   |
| <p><b>Copyright © 2025 The Author(s):</b> This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.</p> <p><b>Citation:</b> Jimmy, U.J; Ozor, S.I; Udousoro, E.E; Angela, N.U; Abasifreke, E.E, Jimmy, I.J, (2025). Community Participation and Governance in European Threatened Biosphere Reserves: Exploring the Influence of Social Movements on Conservation Policies, UKR Journal of Economics, Business and Management (UKRJEBM), volume 1(5), 10-17.</p> |   |

### Introduction

Biosphere reserves, established under the United Nations Educational, Scientific and Cultural Organization (UNESCO) Man and the Biosphere (MAB) Program, are designated areas that aim to promote sustainable development, biodiversity conservation, and environmental management (UNESCO, 2021). These areas are of immense importance for preserving biodiversity, especially

in the face of growing environmental threats such as climate change, deforestation, and habitat fragmentation. In Europe, many biosphere reserves are under threat due to various anthropogenic pressures (Gómez-Baggethun et al., 2010). While traditional top-down conservation policies have often been critiqued for their ineffectiveness and lack of local engagement, a new wave of governance is

emerging that seeks to integrate community participation into the management of these reserves.

Community participation in biosphere reserves involves an active involvement of local populations in the decision-making processes and the management of natural resources within the designated areas (Gómez-Baggethun et al., 2010). This concept reflects a shift from traditional conservation methods, which were often characterized by exclusionary practices, to more inclusive and collaborative approaches. Community participation is grounded in the belief that local knowledge and stakeholder engagement are essential for effective conservation. According to the MAB program, biosphere reserves should be places of experimentation for sustainable development, integrating conservation efforts with the needs and aspirations of local communities (UNESCO, 2021).

The importance of community participation in biosphere reserves is particularly evident in Europe, where many such reserves are located in regions of high human activity, such as agriculture, tourism, and forestry. In these areas, conservation goals often conflict with local economic interests. As a result, the success of conservation efforts often depends on the degree to which local communities are involved in the decision-making process (Young et al., 2015).

Studies have shown that effective community participation leads to more sustainable outcomes in biosphere reserve ((Berkes, 2009; Young et al., 2015). By involving local stakeholders in planning and management, conservation efforts become more aligned with the social, economic, and cultural realities of the communities they aim to protect.

## 2.0 Literature Review

Social movements, particularly those related to environmental and sustainability issues, have increasingly played a key role in shaping conservation policies in Europe. These movements often arise in response to perceived injustices, such as environmental degradation, loss of biodiversity, or the marginalization of local communities. Social movements can influence conservation policies in several ways, including by raising public awareness, advocating for policy changes, and challenging existing governance structures.

In the context of biosphere reserves, social movements have been particularly effective in advocating for more inclusive and participatory governance structures (Pathak, 2019; Polman, 2017; Reed & Dougill 2017). These movements often mobilize local communities, environmental organizations, and activists to demand greater transparency, accountability, and inclusivity in conservation decision-making. They challenge traditional top-down conservation models, which have often been criticized for prioritizing

scientific expertise over local knowledge and for excluding local communities from decision-making processes.

One example of the influence of social movements in biosphere reserves can be seen in the case of the Upper Tisza Biosphere Reserve in Hungary. In this case, a local grassroots movement led by environmental NGOs and local residents successfully advocated for more sustainable water management practices that incorporated both conservation goals and the needs of local farmers. This movement was able to leverage public pressure and gain support for the adoption of more integrated, community-driven management practices that addressed both environmental concerns and local economic needs (Kovács, 2017; Lazaridou, 2020; O'Riordan, & Stoll-Kleemann, 2015).

Similarly, in the United Kingdom, the establishment of the Cairngorms National Park, which includes several biosphere reserve areas, was significantly influenced by local social movements. These movements were instrumental in pushing for the inclusion of local communities in the governance of the park. They also advocated for policies that balanced conservation with local livelihoods, including sustainable tourism and agriculture (MacKinnon et al., 2011; Kenter, O'Brien & Hockley, 2016; Zogakis, 2022).

The governance of biosphere reserves in Europe is often complex due to the interplay of multiple actors, including national governments, local authorities, conservation organizations, and local communities. Traditional top-down models of governance, which have been predominant in many biosphere reserves, have been criticized for being ineffective and exclusionary. In many cases, these models have led to tensions between conservation authorities and local communities, particularly when conservation policies are perceived as limiting economic opportunities or imposing strict regulations on land use (Berkes & Folke, 2000; Rodríguez-Labajos & Carballo, 2018; Shani & Mwai, 2021).

However, the growing influence of social movements has prompted a rethinking of governance models in biosphere reserves. Many European countries have begun to experiment with more collaborative and participatory governance approaches, which allow for greater local involvement in decision-making. These approaches are based on the principles of co-management, where local communities and conservation authorities share responsibility for managing natural resources.

One notable example of such governance innovation can be seen in the case of the Sierra de Guadarrama Biosphere Reserve in Spain. Here, a collaborative governance model has been implemented that involves local communities, municipalities, environmental organizations, and

government agencies. This model has been credited with improving the effectiveness of conservation efforts, fostering a sense of ownership among local stakeholders, and facilitating the integration of conservation with local development goals (Gómez-Baggethun et al., 2010; Jones & Green, 2021).

The influence of social movements on conservation policies and practices in biosphere reserves has led to a number of positive outcomes, both for biodiversity conservation and for local communities. In many cases, social movements have helped to bridge the gap between environmental conservation and local development by advocating for policies that promote sustainable livelihoods alongside biodiversity protection.

For instance, in the case of the Doñana Biosphere Reserve in Spain, a strong social movement has been instrumental in pushing for sustainable agricultural practices that are compatible with conservation goals. The movement has been successful in advocating for policies that encourage the adoption of organic farming, agroecology, and other sustainable practices that reduce the environmental impact of agriculture while supporting the local economy (Hernández-Morcillo et al., 2013; Hiemstra, 2019).

Similarly, in the region of the Loire Valley Biosphere Reserve in France, social movements advocating for the preservation of traditional agricultural practices have played a crucial role in maintaining biodiversity. By promoting local, small-scale farming methods that prioritize ecological sustainability, these movements have contributed to the conservation of the region's unique landscapes and ecosystems (Lescot et al., 2018; Glavic, 2020; Hayden, 2017).

## **2.1 Factors influencing Biosphere Reserves Management in Europe**

Europe is widely recognized as a home to a diverse range of ecosystems, and has been at the forefront of implementing biosphere reserves. However, their sustainability is influenced by a multitude of factors that can either support or undermine their objectives. These factors include ecological conditions, socio-economic dynamics, governance structures, and external pressures such as climate change.

The first and most fundamental factor influencing the sustainability of biosphere reserves is the ecological condition of the designated area. A biosphere reserve's ability to conserve biodiversity is largely determined by the health of its ecosystems, the presence of rare or endangered species, and the quality of habitats (UNESCO, 2011). If a reserve's ecological integrity is compromised due to pollution, invasive species, deforestation, or habitat fragmentation, its capacity to serve as a sustainable

environment for both human and wildlife populations diminishes.

For instance, the Lake Neusiedl-Seewinkel Biosphere Reserve in Austria and Hungary is a key example of how ecological conditions affect sustainability (Emmerson, Jones, & Smith, 2016). The reserve's unique wetland ecosystem is home to diverse bird species, many of which are migratory. However, overexploitation of water resources for agriculture and urban development has led to decreasing water levels and altered habitats. This has necessitated greater management efforts to restore and protect the hydrological systems that sustain biodiversity, highlighting the importance of ensuring ecological balance to maintain long-term sustainability (UNESCO, 2011).

In addition to ecological conditions, in some cases socio-economic dynamics play out. In fact, sustainable development within biosphere reserves depends heavily on the socio-economic conditions of surrounding communities. These reserves are meant to bridge conservation efforts with local economic needs, allowing for sustainable livelihoods while ensuring environmental protection. The success of biosphere reserves often hinges on the level of local engagement and the compatibility of economic activities such as agriculture, tourism, and traditional land-use practices with conservation objectives.

A typical example is the Sierra de las Nieves Biosphere Reserve in Spain. The region has a rich tradition of olive cultivation and forestry, both of which are integral to local economies. The challenge lies in reconciling these traditional activities with conservation goals. In this case, there has been significant progress in integrating sustainable farming practices, such as organic olive farming and sustainable forestry management, with biodiversity conservation efforts. These approaches help maintain the socio-economic viability of the reserve while preserving the region's unique ecosystems (Gómez-Baggethun et al., 2010; De Koning, Hiemstra & Halsema, 2018).

The governance model emphasizes the involvement of local stakeholders in decision-making processes, ensuring that policies reflect local needs while aligning with broader conservation goals (Zogu et al., 2020).

In contemporary time, climate change poses a significant threat to the sustainability of biosphere reserves in Europe. Rising temperatures, changing precipitation patterns, and extreme weather events are altering ecosystems and their ability to support biodiversity. For instance, the Danube Delta Biosphere Reserve in Romania and Ukraine is experiencing shifts in its hydrological regime due to climate change, which is affecting both the distribution of aquatic species and the livelihoods of local fishing communities (Căpraru et al., 2021).

In brief, case studies drawn from biosphere reserves like Lake Neusiedl, Sierra de las Nieves, and Vjosa-Aoos illustrate that with effective management, community engagement, and cross-border cooperation, biosphere reserves can thrive even in the face of these challenges.

## **2.2 Theoretical Underpinning**

### **2.2.1 Socio-Ecological Theory and Participatory Governance**

Socio-ecological theory emphasizes the interdependent relationship between human societies and the ecosystems in which they are embedded. It recognizes that ecological systems are not isolated from human activities but are influenced by social, cultural, economic, and political dynamics (Borrini-Feyerabend et al, 2014). This holistic perspective is crucial when considering the sustainability of biosphere reserves, where human practices often shape, and are shaped by, the ecological landscape.

In the context of European biosphere reserves, socio-ecological theory can help explain the persistence of environmental degradation despite conservation efforts. The theory suggests that the resilience of ecosystems within biosphere reserves is not solely determined by their ecological characteristics but is also deeply influenced by the surrounding socio-economic factors, governance structures, and cultural practices. For instance, agricultural activities, tourism, and local industries can either support or undermine conservation efforts. The model helps explain that these pressures are often the result of economic incentives, policies, and practices driven by market demands, such as the need for food production, tourism revenue, and industrial growth.

In addition, socio-ecological theory draws attention to the role of social institutions, norms, and values in shaping these pressures. For example, communities may prioritize short-term economic benefits from unsustainable practices over long-term environmental conservation. The theory also points out that ecosystems affected by these human-driven pressures may experience reduced biodiversity, diminished ecosystem services, and declining resilience, making it harder to recover from environmental shocks.

Socio-ecological theory also highlights the concept of feedback loops, where changes in ecological systems can influence human behavior and vice versa. For example, the degradation of natural resources within biosphere reserves may lead to economic losses in sectors like agriculture and tourism, which in turn can drive more unsustainable practices as communities seek alternative livelihoods. Conversely, improved management practices that prioritize sustainability can enhance both ecological and socio-economic resilience, fostering a cycle of positive feedback.

In the case of European biosphere reserves, socio-ecological theory can guide an understanding of the dynamics between ecosystem health and the socio-economic conditions of local populations. These reserves often straddle diverse ecological zones, with both protected areas and zones of human activity. A clear understanding of these interconnected systems enables a more comprehensive approach to conservation that considers both the environment and human well-being.

### **2.2.2 Concept of Participatory Governance**

Participatory governance entails decision-making processes that cut across multiple stakeholders, including local communities, government agencies, NGOs, and private sector actors, in the management and conservation of natural resources. This approach fosters inclusive, democratic, and transparent governance, ensuring that the interests, knowledge, and needs of all stakeholders are taken into account.

In the context of European biosphere reserves, participatory governance is crucial for addressing the complex social-ecological challenges that threaten these areas. By actively involving local communities in the governance process, participatory approaches can foster a sense of ownership and responsibility for conservation efforts, making it more likely that local populations will adopt sustainable practices.

One of the fundamental principles of participatory governance is that local communities, who often have intimate knowledge of the land and ecosystems, should be involved in decision-making processes related to the management of biosphere reserves. European biosphere reserves typically encompass areas of cultural and historical significance, and the livelihoods of many communities depend on the sustainable use of these resources.

Participatory governance can help address conflicts between conservation goals and local economic interests. For example, in biosphere reserves where agriculture or forestry is a dominant economic activity, participatory governance ensures that local farmers, foresters, and other stakeholders are involved in designing conservation strategies that are compatible with their needs. This collaborative approach helps to create a balance between ecological conservation and socio-economic development.

Participatory governance mechanisms can foster collaborative decision-making, which is crucial for managing the competing demands on biosphere reserves. By including diverse stakeholders—such as environmental organizations, local businesses, government officials, and scientists—in the planning and management process, it is possible to ensure that all perspectives are considered, and

that conflicts are addressed through negotiation and consensus-building.

For instance, if a biosphere reserve is threatened by over-tourism, participatory governance allows local communities to collaborate with policymakers to design sustainable tourism practices that protect the reserve's ecological integrity while supporting local economies. Similarly, if industrial development poses a threat to a biosphere reserve, a participatory approach can help find solutions that balance economic growth with environmental conservation, through strategies such as eco-tourism or the development of green technologies.

One of the key benefits of participatory governance is the opportunity it creates for building trust among different stakeholders. In the context of biosphere reserves, trust is essential for fostering cooperation and ensuring the long-term success of conservation efforts. When stakeholders have a say in the decision-making process, they are more likely to be committed to the outcomes and to work together to address challenges.

Social capital, seek to explore the networks of relationships, trust, and shared norms within a community, plays a vital role in the sustainability of participatory governance efforts. In biosphere reserves, building social capital through inclusive governance can lead to stronger community bonds, increased social cohesion, and a greater sense of shared responsibility for managing natural resources. Several European biosphere reserves have successfully applied participatory governance and socio-ecological approaches to address threats and ensure sustainable management, particularly the Central Highlands Biosphere Reserve in Scotland. In the Central Highlands Biosphere Reserve, participatory governance has been used to engage local communities, landowners, and conservation organizations in managing the reserve's natural resources. Through collaborative initiatives such as the "Biosphere Partnership," stakeholders have worked together to promote sustainable tourism, nature conservation, and community development. The success of these initiatives demonstrates how participatory governance can lead to more effective and inclusive conservation strategies.

Secondly, in the Veluwe Biosphere Reserve, a participatory governance model has been employed to address the impacts of urbanization and land use changes. Local communities, businesses, and policymakers collaborate on strategies to manage urban growth while protecting biodiversity.

### **2.3 Innovative Strategies to Effective Biosphere Reserves Management in Europe**

A novel approach to managing biosphere reserves in Europe should focus on two main pillars: community participation and inclusive governance. These principles not only improve the management process but also enhance the long-term sustainability of biosphere reserves by fostering local ownership, reducing conflicts, and promoting adaptive management. Inclusive engagement will consider a wide range of stakeholders, from local farmers and fishermen to indigenous groups and women. This is particularly important in Europe, where many biosphere reserves are located in rural or semi-rural areas where traditional livelihoods such as farming, forestry, and fishing still play a crucial role. Ensuring that these social groups are actively involved in decision-making can help identify local needs and challenges that might otherwise be overlooked.

For community participation to be meaningful, local stakeholders need the knowledge and skills to engage effectively. This can be achieved through capacity-building programs, which could include training in sustainable resource management, conflict resolution, and environmental education. By investing in local knowledge and leadership, biosphere reserves can empower communities to become stewards of their natural environments.

While inclusive governance is essential, transparency and accountability are the basic pillars to inclusive governance. Regular public meetings, transparent decision-making processes, and accessible information about the goals and outcomes of biosphere reserve management are essential to build trust among local communities. When people understand the reasons behind conservation policies and see that their input has been taken into account, they are more likely to support those policies.

### **3.0 Materials and Methods**

This study employs a qualitative research design, relying on a comprehensive desk-based review of existing literature to explore the multifaceted relationship between community participation, governance, and social movements within European threatened biosphere reserves. The research is fundamentally a theoretical discourse, structured to synthesize and analyze prior scholarly work rather than to collect new empirical data.

The materials for this study were sourced from a wide range of academic and institutional publications. The selection of literature was guided by the central research themes, including community participation, environmental governance, social movements, and conservation policies, with a specific focus on their application within the context of European biosphere reserves. The search for relevant literature was conducted across several databases and

platforms, including but not limited to, academic journals, books, conference proceedings, and reports from international organizations such as UNESCO, the European Union, and various environmental NGOs. Key search terms used to identify relevant documents included:

- i. "Biosphere reserves Europe"
- ii. "Community participation conservation"
- iii. "Environmental governance Europe"
- iv. "Social movements and conservation policy"
- v. "Theories of socio-ecological change"
- vi. "Participatory governance natural resource management"
- vii. "Resource curse"

The analysis is anchored in a dual theoretical framework: the Theory of Socio-Ecological Change and the Concept of Participatory Governance. These theories serve as the primary tools for interpreting the literature and structuring the arguments. The Theory of Socio-Ecological Change was used to understand the complex, interdependent dynamics between human social systems and the ecological systems of the biosphere reserves. This perspective allowed for an exploration of how social and economic pressures, such as land-use policies and changing migration patterns, influence ecosystem health and biodiversity loss.

The Concept of Participatory Governance was applied to analyze how power and decision-making are distributed among various stakeholders. It provided the lens to assess the effectiveness of institutional reforms, the role of community engagement, and the sources of conflict among different interest groups. The data analysis followed a qualitative, thematic synthesis approach. This involved several key steps:

1. **Systematic Review:** Relevant literature was systematically reviewed to identify key themes, arguments, and findings related to the research questions.
2. **Thematic Coding:** The findings from the literature were categorized into thematic groups. These themes included, but were not limited to, drivers of biodiversity loss, the role of social movements, challenges in governance, and examples of successful and unsuccessful management strategies.
3. **Cross-Case Synthesis:** Insights from various case studies (e.g., the Upper Tisza Biosphere Reserve, Sierra de Guadarrama, and the Central Highlands) were synthesized to draw broader conclusions about common challenges and effective practices across different European contexts.

4. **Discourse Analysis:** The study engaged in a critical discourse analysis of the theoretical frameworks to consolidate and clarify core concepts, such as the effectiveness of institutional reform and the challenges of stakeholder conflict.

This methodological approach enabled a robust exploration of the research questions by building on the established knowledge base, thereby providing a comprehensive and theoretically grounded understanding of community participation and governance in European biosphere reserves.

## 4.0 Results and findings

From samples of reviewed literatures, it has been revealed that socio-economic pressures seriously undermine sustainability of biosphere reserves in Europe. In the Donana Biosphere Reserve in Spain, agricultural expansion and industrial development near the wetlands have led to water scarcity and habitat degradation, posing a significant challenge to long-term ecological sustainability. The local communities often rely on agriculture for their livelihoods, which creates a tension between economic growth and environmental preservation. Efforts to implement water management strategies and promote eco-tourism have shown promise, but the balancing act between socio-economic development and environmental conservation remains a critical issue.

It has also been revealed that governance and institutional capacity had undermine the effort of conservation policies in various part of Europe. A key aspect of governance is the implementation of policies that support sustainable land use, resource management, and conservation. In some reserves, there have been cases of disjointed coordination between national and local authorities and this hinder the implementation of effective conservation measures. The Kamniško-Savinjske Alps Biosphere Reserve in Slovenia, for example, has faced challenges related to fragmented management structures and conflicting interests between conservationists and developers. This has led to delays in implementing sustainable land use practices, highlighting the importance of integrated governance in ensuring the sustainability of biosphere reserves

However, the Vjosa-Aoos Biosphere Reserve in Albania and Greece provides a good example of collaborative governance. The reserve spans both countries and involves cross-border cooperation between multiple stakeholders, including local governments, environmental NGOs, and local (Zogu et al., 2020). Through joint management efforts, the reserve has successfully implemented conservation measures to protect its river ecosystems while also promoting eco-tourism as a sustainable economic activity. Hence, governance structures should promote

collaboration between local communities, governmental bodies, scientific institutions, and NGOs.

#### 4.1 Concluding Remark

The integration of community participation and the influence of social movements have played a significant role in reshaping the governance and conservation policies of threatened biosphere reserves in Europe. By advocating for more inclusive, participatory, and collaborative governance models, social movements have helped to address the tensions between conservation objectives and local development needs. These movements have demonstrated that effective conservation is not solely a top-down process but requires the active involvement of local communities, whose knowledge and interests are vital for long-term sustainability.

As European biosphere reserves face increasing threats from climate change, land use change, and economic pressures, the role of social movements in shaping conservation policies will likely become even more critical. Moving forward, there is a need for continued collaboration between local communities, social movements, and conservation authorities to ensure that biosphere reserves can fulfill their role as both ecological sanctuaries and sustainable development hubs.

#### REFERENCES

1. Berkes, F. (2009). Governance for sustainability: Beyond the community-based conservation agenda. *The Journal of Environmental Management*, 90(4), 1403-1412.
2. Berkes, F., & Folke, C. (2000). *Linking social and ecological systems: Management practices and social mechanisms for building resilience*. Cambridge University Press.
3. Borrini-Feyerabend, G., Dudley, N., Jaeger, T., Lassen, B., Pathak Broome, S., Phillips, A., & Sandwith, T. (2014). *Governance of protected areas: From theory to practice*. IUCN.
4. Căpraru, A.. (2021). Climate Change Adaptation in the Danube Delta Biosphere Reserve. *Environmental Science and Policy*, 115, 1-12.
5. De Koning, J. M. E., Hiemstra, Y., & Halsema, J. (2018). The role of social movements in shaping land-use policy and conservation in the Wadden Sea Region. *Journal of Environmental Policy & Planning*, 20(6), 724-740.
6. Emmerson, A., Jones, L., & Smith, J. (2016). Stakeholder perceptions of participatory governance in the North Devon Biosphere Reserve. *Journal of Rural Studies*, 45, 112-121.
7. Glavic, P. (2020). The role of social learning in promoting sustainable practices in biosphere reserves. *Sustainability*, 12(11), 4612.
8. Gómez-Baggethun, E., de la Fuente, J. D., & Lema, J. (2010). Co-management for sustainability: Experiences from Spain. *Environmental Science & Policy*, 13(2), 118-129.
9. Hayden, J. (2017). The politics of nature conservation in Germany: From top-down management to participatory governance. *Geoforum*, 81, 14-25.
10. Hernández-Morcillo, M., Plieninger, T., & Bieling, C. (2013). The role of social movements in the promotion of sustainability and conservation in the biosphere reserves of Spain. *Conservation Biology*, 27(2), 280-288.
11. Hiemstra, Y. (2019). *Environmental governance and justice in European protected areas*. Routledge.
12. Jones, C. A., & Green, P. A. (2021). The influence of community land trusts on conservation outcomes in the Scottish Highlands. *Land Use Policy*, 100, 104928.
13. Kenter, J. O., O'Brien, L., & Hockley, N. (2016). What motivates people to participate in environmental governance? Insights from England's protected areas. *Environmental Science & Policy*, 60, 1-10.
14. Kovács, E. (2017). The role of local movements in the development of sustainable water management in the Upper Tisza Biosphere Reserve. *Environmental Management*, 59(4), 539-550.
15. Lazaridou, M. (2020). Multi-level governance in transboundary biosphere reserves: The case of Prespa. *European Journal of Spatial Development*, 77, 1-15.
16. Lescot, P., Allaire, G., & Gasselin, P. (2018). Social movements and local agriculture: Sustainable farming practices in the Loire Valley Biosphere Reserve. *Agriculture and Human Values*, 35(2), 365-379.
17. MacKinnon, K., & Givens, M. (2011). The Cairngorms National Park: A case study in community-driven conservation. *Environmental Planning Journal*, 43(5), 988-1004.

18. O'Riordan, T., & Stoll-Kleemann, S. (Eds.). (2015). *The future of biosphere reserves: From theory to practice*. Routledge.
19. Pathak Broome, S. (2019). The human-nature relationship in protected areas: A look at European models of co-management. *Journal of Outdoor Recreation and Tourism*, 28, 100223.
20. Polman, M. (2017). Conflict resolution in biosphere reserves: A case study of the Rhön Biosphere Reserve, Germany. *Journal of Environmental Planning and Management*, 60(8), 1335-1350.
21. Reed, M. S., & Dougill, A. J. (2017). A typology of stakeholder engagement for environmental research. *Journal of Rural Studies*, 52, 1-10.
22. Rodríguez-Labajos, B., & Carballo, V. (2018). Local communities, social movements, and resistance to unsustainable development in protected areas. *Environmental Research Letters*, 13(12), 125008.
23. Shani, A., & Mwai, K. (2021). The role of women in the informal maritime tourism sector of coastal Kenya. *Gender, Place & Culture*, 28(8), 1157-1175.
24. UNESCO (2011). Lake Neusiedl-Seewinkel Biosphere Reserve, Austria-Hungary. Retrieved from <https://whc.unesco.org/en/list/209/>
25. UNESCO. (2021). Man and the Biosphere (MAB) Programme. Retrieved from <https://en.unesco.org/themes/Man-and-Biosph>
26. Young, T., Zander, K., & Williams, A. (2015). Community-based conservation and the involvement of local populations in biosphere reserves in Europe. *Environmental Management*, 57(6), 1356-1370.
27. Zogakis, C. (2022). Power dynamics and stakeholder conflict in the management of the Pindus National Park, Greece. *Conservation Biology*, 36(1), e13795.