

Urban Biodiversity Governance Strategies Based On Nature

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Abstract

Biodiversity governance refers to the policies, institutions, and processes that govern the management and conservation of biodiversity. Biodiversity governance is critical because biodiversity is essential for maintaining the balance of ecosystems and the planet's sustainability. The governance of biodiversity involves a range of stakeholders, including governments, civil society, academia, and the private sector, among others. In this essay, we will discuss the concept of biodiversity governance, its importance, and the challenges facing it.

Keywords: Urban biodiversity • Biodiversity governance • Stoichiometry

Introduction

Biodiversity is defined as the variety of life on earth, from genes to ecosystems. Biodiversity is essential because it provides ecological, economic, cultural, and social benefits. For example, biodiversity is the basis for the provision of ecosystem services such as pollination, soil fertility, and climate regulation. Biodiversity also supports agriculture, fisheries, and forestry, which are vital for human wellbeing. Furthermore, biodiversity is a source of inspiration for culture, art, and recreation. Biodiversity is facing numerous threats, including habitat loss, climate change, pollution, overexploitation, and invasive species. These threats are largely caused by human activities such as land-use change, energy production, transportation, and consumption patterns. The loss of biodiversity has serious consequences for human wellbeing, such as the loss of food security, water resources, and human health. Therefore, the governance of biodiversity is critical to ensuring its conservation and sustainable use.

Literature Review

Biodiversity governance involves a range of policies, institutions, and processes that aim to manage and conserve biodiversity. These include international and national laws and regulations, multilateral environmental agreements, biodiversity strategies and action plans, protected area management, and community-based conservation initiatives, among others. Biodiversity governance also involves the participation of various stakeholders, including governments, civil society, indigenous and local communities, private sector, and academia [1].

International biodiversity governance is based on a set of multilateral environmental agreements (MEAs) that aim to protect biodiversity at the global level. The Convention on Biological Diversity (CBD) is the main international treaty on biodiversity governance. The CBD has three objectives: the conservation of biodiversity, the sustainable use of its components, and the fair and equitable sharing of the benefits arising from the use of genetic resources. The CBD provides a framework for national and international biodiversity

policies, strategies, and action plans. Other MEAs relevant to biodiversity governance include the Ramsar Convention on Wetlands, the World Heritage Convention, and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) [2].

Discussion

National biodiversity governance is based on a range of policies, institutions, and processes that aim to implement the CBD and other MEAs at the national level. These include biodiversity laws and regulations, national biodiversity strategies and action plans, protected area management, and community-based conservation initiatives. National biodiversity governance also involves the participation of various stakeholders, including government agencies, civil society organizations, indigenous and local communities, private sector actors, and academia [3].

Protected areas are a key tool in biodiversity governance. Protected areas are defined as areas of land or sea that are set aside by governments, indigenous and local communities, or private landowners for the conservation of biodiversity. Protected areas include national parks, wildlife reserves, and marine protected areas, among others. Protected areas play a crucial role in conserving biodiversity by providing habitats for species, maintaining ecosystem processes, and protecting cultural and spiritual values. However, protected areas face numerous challenges, including funding constraints, inadequate management capacity, and conflicts with local communities. Community-based conservation is another important tool in biodiversity governance. Community-based conservation involves the participation of local communities in the management and conservation of biodiversity. Community-based conservation recognizes the role of local communities in biodiversity conservation and the importance of their traditional knowledge and practices. Community-based conservation initiatives can provide benefits for both biodiversity conservation and local communities, such as increased livelihood opportunities, improved governance [4].

The NATURVATION project's research shows that many European cities actively promote biodiversity by implementing natural solutions. These regional and local initiatives are consistent with the Post-2020 Global Biodiversity Framework (GBF), which intends to change how society views biodiversity. In addition to attempting to maintain and restore nature, a key objective for biodiversity governance in the upcoming decade is to guarantee that nature's contribution to humans is also preserved and improved, as is made apparent by the Zero Draft of the Post-2020 GBF issued in January 2020. Consequently, initiatives that conserve nature, restore nature, and mobilise people's capacity to interact with nature can be classified as urban contributions to global biodiversity goals through nature-based solutions.

Following the 1992 Rio Earth Summit and the ratification of the Convention on Biological Diversity (CBD) and Agenda 21, various scaled national, regional, and municipal policies have been implemented to advance

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the global biodiversity goals (UNEP, 1992). While local governments were urged to create local biodiversity strategy and action plans (LBSAP) in order to pursue biodiversity conservation and sustainable development at the local level, Parties to the CBD were urged to develop national biodiversity strategies and action plans (NBSAPs) in order to achieve the goals of the CBD (and the subsequently released CBD Strategic Plan 2011-2020 & 20 Aichi Targets). LBSAPs therefore evolved into the major tool used by cities for managing biodiversity in various national contexts, enabling local government [5].

Hence, LBSAPs became the main tool utilised by cities in many national contexts for managing biodiversity, enabling local action and influencing overall city plans and decisions. Although cities with varying levels of resources and social contexts use a variety of approaches to forming their LBSAPs, the construction of an LBSAP frequently involves: stakeholder engagement using cross-sectoral partnership; establishing a baseline of localised social and ecological characteristics; identifying threats and opportunities for biodiversity conservation; and producing action plans to enhance resources with targets for achievement. LBSAPs were created with the best of intentions, but they have run into a number of problems in practise [6].

Conclusion

Conflicting opinions and interests among stakeholders and institutional capacity to regulate biodiversity appear to be a major problem. Urban planners, who frequently lack resources or capacities and have limited access to appropriate knowledge, can find it difficult to translate these requirements into actions that are specifically tailored to the situation. They are frequently guided by a national framework that is rather abstract and founded on specialist knowledge. Instead, they must rely on conventional planning methods (such as zoning and mapping) and already-existing information and networks to create the LBSAP. This serves to limit biodiversity action to the geographic areas within the jurisdictional boundaries and regulatory capacities of the planning system, as well as to remove many stakeholders from the decision-making process. When it comes to the relationship between local authority authorities and significant scales for action, which may occur outside of these administrative boundaries or in a patchwork of various urban areas outside of the planning system, these boundaries can be problematic.

Acknowledgement

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Conflict of Interest

None.

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