

National Parks and Protected Areas

Innovative Approaches, Technologies, and Current Practices in Azerbaijan

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Introduction

National parks and protected areas are considered among the most effective means of conserving natural environments and protecting biodiversity, particularly endemic and endangered species. Azerbaijan and the Caucasus are recognized internationally as a significant country of interest for biodiversity and ecosystems. The region is not only designated as one of the World Wildlife Fund’s 35 priority areas but is also recognized by Conservation International as one of the globe’s 36 biodiversity “hotspots” (a biodiversity hotspot is a biologically rich area with high diversity and a large percentage of endemic species).

James Jackelman and Shahin Isayev—the lead international consultants of a Food and Agriculture Organization project, funded by the Global Environment Facility (GEF), titled “Conservation and Sustainable Use of Biodiversity: Strengthening Azerbaijan’s System of Protected Areas Through Improved Governance and Management”—were the guest speakers of a roundtable organized by the Institute for Development and Diplomacy that took place on 28 September 2023. A summary of their comments is presented below.

Country Overview

Azerbaijan’s protected areas encompass 10.3 percent of the country’s territory, with a total coverage of Key Biodiversity Areas reaching up to 15 percent. These protected areas are categorized according to the International Union for Conservation of Nature

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(IUCN) classification, falling into the 1st category (Strict Nature Reserves), 2nd category (National Parks), and 4th category (Habitat/Species Management Areas). In terms of their distribution, 24 percent of these areas are designated as Strict Nature Reserves, 22 percent as National Parks, and 54 percent as Habitat/Species Management Areas. A crucial prerequisite for maintaining the sustainability of these protected areas is to comprehensively assess their landscape-ecological diversity.

While Azerbaijan has relatively newly started organizing and managing national parks, the country has an established history of establishing and managing reserve areas dating back to as early as 1910. Since regaining independence, the country has achieved significant milestones, including the legal protection of more than 10.3 percent of its land achieved through the establishment of extensive reserves like National Parks. The first national parks—Ordubad, Shirvan, and Aghgol—were established in 2003. This marked the beginning of a broader effort to establish and expand national parks in the country. Subsequently, the national park system in Azerbaijan grew to include Hirkan National Park, Altiagach National Park, Absheron National Park, Shahdagh National Park, Goygol National Park, Samur-Yalama National Park, and, lastly, Kyzylagaj National Park. Nevertheless, despite these endeavors and the government’s acknowledgment of the importance of preserving the country’s ecosystems and biodiversity, along with its dedicated efforts to safeguard them, the decline in biological diversity persists. This decline is primarily attributed to anthropogenic activities and climate change.

Protected Areas vs. Area-Based Conservation

In Azerbaijan, protected areas are managed by government, however there are different management types such as involving stakeholders, renting to profit or non-profit institutions, and community management.

Protected areas are often established opportunistically, based on factors such as their low development potential, natural attractiveness, and public pressure to preserve those areas. These areas are designated to conserve the environment, biodiversity, and the natural beauty of a region, especially when there is significant interest and demand from the public for their protection. These areas often have strict regulations and management plans in place to limit human activities that could harm the environment. Human activities in protected areas are often limited, and they may be established for various reasons, including habitat conservation, scientific research, and recreation.

Area-based conservation is a broader concept that encompasses various strategies and approaches aimed at conserving and sustainably managing specific geographic areas. While it includes protected areas, it also considers other conservation measures and approaches, such as landscape-level conservation, community-based conservation, and

sustainable land and resource management. Area-based conservation recognizes that conservation efforts may need to integrate with human activities and development goals to be effective and sustainable. It often involves collaboration among various stakeholders, including local communities, governments, and non-governmental organizations, to achieve conservation goals while addressing socio-economic needs.

Challenges

A significant challenge hindering the effectiveness of protected areas in Azerbaijan, and a major reason for its limited capacity, is the absence of sustainable, long-term financing for the entire protected area network. The opportunities for innovative financing mechanisms in protected areas, such as water charges and other payment for ecosystem services (PES) schemes or carbon trade exchange, remain underdeveloped. Government funding is insufficient and reliance on irregular external international donor funding is not a sustainable solution. Additionally, there is minimal private sector funding for protected areas and also little exploration of investment opportunities from the business sector in Azerbaijan. Present funding levels are considered to cover only the very basic management requirements and do not enable the development and full realization of their economic possibilities. Although there is a mechanism for collecting tourist fees, the bureaucratic processes involved make the use of these funds challenging. The potential for raising funds for the protected areas system through this mechanism has not been effectively utilized. Furthermore, while the number of tourist visits and the total collected fees have risen over the past five years, these amounts remain insufficient to cover the costs associated with maintaining and managing the protected areas.

Another challenge is related to the buffer zones around protected areas. In Azerbaijan, protected area management planning often fails to incorporate the management of buffer zones. The current buffer zone plans primarily focus on the protection of individual habitats, often following a limited approach. In many instances, the boundaries of buffer zones are unclear, and their management is either too complex or entirely absent. This issue is compounded by a lack of adequate expertise among protected area personnel to engage in management planning for their area and the associated buffer zones, as well as in land, water, and natural resource planning within the larger surrounding landscapes.

This lack of expertise is intertwined with another challenge faced by protected areas, namely: the absence of an integrated management approach. The fragmented nature of buffer zones hinders the migration routes of animals as well.

The management of information of protected areas also needs to be improved to achieve effective decisionmaking and management. Information systems are primarily paper based, making data less accessible, scattered, inconsistently formatted, inadequate, and often outdated. Data harmonization and processing facilities are weak, further hampering effective data management. Capacities and tools for conducting

technical analyses to support decisionmaking and planning for protected areas and their surrounding landscapes, such as ecosystem valuation and cost-benefit/trade-off analyses, are insufficient. National learning and information-sharing related to protected area management are limited, too.

Recommendations

To overcome the aforementioned challenges, the implementation of integrated area-based conservation measure focusing on preserving the country's diverse ecosystems and biodiversity is among the priority recommendations. There is a need for developing an integrated approach to policy, planning, and decisionmaking for land, water, and natural resources to ensure a comprehensive approach that also covers the protected areas (but is not limited to them). This would also ensure cross-sectoral coordination and harmonization between various planning approaches such as land use, water resources, forestry, urban development, biodiversity conservation and other related areas.

Developing buffer zones around the protected areas to reduce human impact on the core conservation areas whilst ensuring animal migration routes are optimally protected is another important recommendation.

As opposed to the protected national park approach, the area-based conservation sees community involvement vital for the long-term success of nature preservation. Involving various stakeholders, including governmental agencies, NGOs, academia, and local communities in a collaborative approach to protected area management ensures that diverse perspectives are considered in decisionmaking processes. Taking another look at this type of approach is also a recommendation.

Generating income through appropriate financing mechanisms is vital for supporting sustainable financing of the protected areas and enhancing their management effectiveness. Developing plans for and implementing sustainable visitor management plans to minimize the impact of tourism on protected areas can be one of the sources of income. This too is a recommendation. In this regard, sustainable visitor management should include plans setting visitor limits, maintaining trails, and providing environmental education. Such fees could help cover the costs of management activities, infrastructure maintenance, and conservation efforts. Establishing concession agreements with responsible operators for activities within protected areas (e.g., eco-tourism services, sustainable resource utilization) can provide revenue, too. Concessionaires can contribute financially while adhering to environmental sustainability guidelines. Sharing revenue generated from the sustainable use of natural resources within protected areas with local communities or stakeholders can incentivize conservation efforts. This approach fosters community engagement and support for the management of protected areas. Allocating funds

for capacity building among protected areas staff, providing training in effective management, conservation, and financial planning is another important aspect of this mechanism.

Overall, Azerbaijan's efforts to protect biodiversity and establish protected areas can be regarded as positive. Nonetheless, there exist certain deficiencies that must be resolved to guarantee the long-term sustainability of these natural resources.