

NATIONAL ECOSYSTEM ASSESSMENT OF AZERBAIJAN



As part of the project, "Supporting decision-making and building capacity to support the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) through National Ecosystem Assessments", under the National Ecosystem Assessment Initiative, Azerbaijan embarked on a grand endeavour of national ecosystem assessment, a dedicated effort to develop a comprehensive synthesis of knowledge on biodiversity and ecosystem services to inform the country's future policymaking, planning and actions. The project began in 2019 and concluded in 2024.

A [Summary for Policymakers Report \(SPM\)](#) is an important outcome from the Azerbaijan National Ecosystem Assessment. The SPM draws on the [Technical Report](#), highlighting key messages, policy recommendations and important findings to form an essential knowledge ground for the management, use and conservation of biological diversity and ecosystem services.

This information sheet presents the main findings and recommendations from the assessment that aim to support policymakers and decision-making at all levels of environmental governance in Azerbaijan.

FINDING



Azerbaijan is a center of origin for several globally important food crops, including wild rye, wheat, barley, millet, wild pears, cherries, and more than 200 varieties of grapes.



RECOMMENDATION

Utilize genetic resources sustainably in agriculture including protecting species, landraces, breeds, cultivars, varieties, and gene diversity.



The lakes and wetlands of Azerbaijan

support high numbers of waterfowl species that migrate through or winter here, including the White-Headed duck and the globally threatened Lesser White-fronted Goose.



Fifty-one Important Bird Areas have been identified, hosting:



1

Maintain environmental flow needs of river ecosystems through **applications of EU directives** or other available approaches.

2

Integrate water resource management and landscape planning, including through **increased protection** and connectivity of freshwater ecosystems.

3

Support collaborative water management, foster equity between water users (while maintaining environmental flows for river ecosystems), **engage** stakeholders and **ensure** transparency to minimize environmental, economic and social conflicts.

4



Azerbaijani watercourses are the preferred spawning grounds for valuable Caspian sturgeons, which account for nearly **90%** of the world's sturgeon populations.

Rivers and small streams are under extreme pressure due to intensive water withdrawals for agriculture, particularly during the low-flow period, when some of them run dry—a situation which is not natural in this region.



Intensive water withdrawals in many small streams have led to significant changes in flow regime downstream.

Support community-based participatory water management schemes that take into consideration community interests and interests of marginalized groups.

FINDING



Land degradation is being further exacerbated by the weak regulation of building and construction activities, illegal urbanization, as well as the limited capacity for effective controls on mitigating the environmental impacts of industrial developments.

The conversion of the lowland grasslands into agricultural land, through ploughing and scrub removal, is fragmenting many remaining areas of natural steppes.



Several steppe ecosystems are also being further fragmented by the extensive network of irrigation channels, particularly in the central lowland part of the country.



Local and transboundary pollution in the Kura Basin is one of the main causes of pollution in the country's main waterways.



RECOMMENDATION

1

Promote environmentally friendly land use activities in agricultural sectors and urban planning.

Promote natural or semi-natural habitat areas inside and outside of intensively managed production systems, as well as repairing or reuniting damaged or fragmented habitats as needed.

2

3

Encourage the use of sustainable farming methods, such as agroecology, multifunctional landscape planning, and cross-sectoral integrated management.

Implement incentive schemes such as Payment for Ecosystem Services, application of grazing norms and tax exemptions to prevent overgrazing in summer and winter pastures.

4

1. Reduce transboundary pollution and transboundary water withdrawals of watercourses through tailored international bilateral agreements with upstream countries of the Kura-Araz basin.

2. Improve transboundary water cooperation and management, addressing the impacts of fragmentation caused by dams and diversions.

3. Facilitate data sharing and technologies to enhance transboundary water cooperation and address shared challenges.

4. Negotiate and establish bilateral agreements with upstream countries in the Kura-Araz basin to regulate transboundary pollution and water withdrawals.



Forests of Azerbaijan

have significant ecosystem services. These services may play a key role in supplying sustained sources of long-term gains, if proper approaches will be applied. These approaches may ensure not only sustained gains, but also protection of forest resources. However, there are challenges that prevent shifting from traditional approaches to sustainable management in the forestry sector. These challenges include both institutional and legal aspects.

1

Timber harvesting by local communities can be one of the options to be involved in forest management.

2

Make changes to existing legislation to strengthen public and community-based management, implementing incentive solutions to expand community-based forest management.



Illegal timber production, unsustainable tourism and overgrazing are the major threats to sustainable forestry. These factors notably reduce quality of ecosystem services provided by forests.



Allocation of financial resources is not sufficient and most of local forestry units do not have adequate capacity to improve forest governance.



Current legislation has insufficient capacity to ensure public and community participation in the governance of forests. Communities located close to forested areas have no special rights in the governance of forests.



Current Forest Code reduces options for public participation in the forest management. Although the code tries to balance economic, social, and environmental factors to ensure sustainable forestry, local forestry departments do not strictly follow the relevant requirements due to lack of capacity and qualified staff.

3

Support multifunctional, multiuse, and multi-stakeholder approaches as well as strengthening community-based approaches to forest governance and management are crucial for achieving sustainable forest management.

4

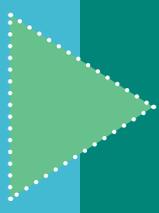
Reduce the negative effects of unsustainable logging by combating illegal logging and improving and implementing sustainable forest management.

5

Conduct capacity building projects and trainings for government representatives on ecosystem-based solutions. The projects should involve international donors and local businesses to provide nature-based solutions in ecosystem management.



Azerbaijan's Intended Nationally Determined Contributions (INDC) has no adaptation component.



It is necessary to set clear adaptation goals in the next INDC for all sectors, taking into consideration children and youth issues. It is also important to encourage youth engagement in the review of INDC.

ILK RELATED RECOMMENDATIONS



I Institutionalize the use Indigenous and Local Knowledge (ILK) and promote the use of this knowledge through different management approaches.



II Safeguard ILK through the protection of the traditional lifestyle of Indigenous and local communities in mountainous regions.



III Support community-based disaster management schemes that take into consideration community interests and interests of marginalized groups.



IV Ensure that marginalized groups and Indigenous communities actively participate in the development and implementation of schemes.

The National Ecosystem Assessment of Azerbaijan highlighted significant knowledge gaps that need to be addressed to contribute to the conservation and sustainable use of biodiversity and ecosystem services in the country. Decision-makers should take these knowledge gaps into account when planning future research work.

The Assessment identified the following knowledge gaps, among others:

- 1 **The lack of information and data** limited the scope of this assessment; therefore, **further research is needed**, and it may include developing primary data baselines.
- 2 **The level of information support for forestry** and forest management has **decreased significantly**.
- 3 The main **sources of information on forests** are now **outdated**.
- 4 A significant part of the **forest inventory data** has not been **updated for decades**.
- 5 The **main problem in pasture management** is the **lack of a systematic management plan**.
- 6 **Control rules and mechanisms** are **missing or inadequate**, which increases the main gap in complex legislation (i.e., lack of incentives for sustainable development).
- 7 An **urgent program is needed to adapt forests to future disturbance regimes**, including those caused by climate change.
- 8 **New silvicultural strategies** are needed to **protect dominant tree species** in the face of climate change.
- 9 There is a **need to improve the monitoring of the state of forests** and their economic services as **a basis for decision-making** on forest management in the face of climate change and mitigating the effects of climate change.



Download Azerbaijan National Ecosystem Assessment – Summary for Policymakers (available in Azerbaijani and English) and Technical Report (available in English).

Supported by:



In partnership with:

