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Integrated Biodiversity Management in the South Caucasus

Diversity for a better future

Commissioned by: Partners:

Current commission:

Budget:

Countries:

organisations; educational institutions December 2015 to November 2019 EUR 20.95 million Armenia, Azerbaijan, Georgia



Challenges:

The local population, the private sector and government are currently exploiting natural resources in ways that place pressure on these resources. There is too little public awareness of the principles underlying the sustainable management of biodiversity and ecosystem services. Nor is such awareness mainstreamed within training institutions or made an integral part of planning and decision-making processes. This is compounded by conflicts of interest between the various sectors involved and land users, poor coordination, and a lack of robust data.

◀Objectives:

We are developing strategies to support the sustainable management of biodiversity and ecosystem services across sectoral and administrative boundaries, based





German Federal Ministry for Economic Cooperation and Development (BMZ) Ministry of Territorial Administration and Development in Armenia; environmental ministries in Azerbaijan and Georgia; other Government ministries; local authorities; non-governmental

An example from the field – how we achieve results:

Current agricultural and livestock farming practices in the South Caucasus mean that heavy rainfall and winds cause severe soil erosion. This is exacerbated by the impact of climate change. The result is an irretrievable loss of productive arable land and pasture, leading to natural disasters and a rural exodus.

We are addressing this problem with our partners, which include the Regional Environmental Centre for the Caucasus (RECC). A manual on integrated erosion control in the South Caucasus documents practical and proven approaches and supports their wider dissemination. The approaches combine bioengineering measures designed to stabilise slopes and erosion gullies, with the introduction of sustainable pasture management and local afforestation. The countries of the South Caucasus address soil erosion by combining training with improved cooperation between the key stakeholders and the adaptation of development strategies and legislation.

on robust data. Through this approach, we are helping safeguard the species and habitat diversity for future generations.

Activities:

We advise our partners on developing cross-sectoral policies, strategies and laws. We also support them in developing and establishing monitoring/inventory systems for forests, as well as biodiversity and ecosystem services, and facilitate inter-ministerial dialogue based on solid data. Here we are drawing on the lessons learned in pilot regions, where we have demonstrated how natural resources can be managed more sustainably and protected while taking diverse interests into account. The project is improving wider public awareness of the importance of biodiversity by supporting the capacity development of training institutions, conducting national campaigns and improving environmental education centres.

Groundbreaking national biodiversity strategies and action plans in line with the obligations arising from the United Nations Convention on Biological Diversity have been adopted. We are acting as partners in the practical implementation of these ambitious plans and their translation into legislation.

Exchange and dialogue are taking place between decisionmakers and experts in the three countries on urgent environmental issues of crossborder significance, such as the sustainable management of ecosystem services and effective environmental policymaking.

Using national environmental information systems, our partners are able to gather, analyse and communicate robust data based on recognised scientific methods.

Results: **≡**

Environmental education campaigns and environmental education in schools are improving public awareness, attitudes and behavior with regard to environmental issues. We regularly measure this improvement by conducting opinion surveys across the South Caucasus region.

> Thanks to improved cropping methods and agrobiodiversity management, agriculture is now able to adapt to climate change. More than 3,000 farmers already apply these approaches.

Preconditions are being established to apply principles of sustainable forest management, modern forest planning methods and satellitebased forest monitoring systems, potentially improving the management of approximately 35,000 km2 of forest in the South Caucasus (an area roughly the size of the German federal state of Baden-Württemberg).

Our contribution in Azerbaijan

Diversity for a better future

Commissioned by: Partners: German Federal Ministry for Economic Cooperation and Development (BMZ) Ministry of Ecology and Natural Resources, Ministry of Education, universities, district administration of Ismayilli, municipality of Ehen

Azerbaijan's Ministry of Education maintains over 50 environmental education centres nationwide whose role is to develop an understanding of the natural environment. At present, 11,000 children and young people are learning to appreciate the environment and take responsibility for it. Since 2014, GIZ has been supporting the Ministry of Education in reforming and restructuring these environmental education centres. Resources are being pooled, teachers are being systematically trained and teaching modules are being made more interesting and interactive. A study trip in 2015 inspired the development of a new vision for the centres. GIZ advised on the development of a new charter for the centres and on the planned use of a new building in the old town of Baku with classrooms, labs and administrative offices. It is also advising on organisational development. An integrated expert collaborated closely with the director of the environmental education centre and worked with her to develop new teaching modules and materials on species, landscape and water resources protection.

Demonstrating sustainable biodiversity management in pilot regions

- » We are advising our political partners in the pilot district of Ismayilli, which encompasses 105 villages, on intersectoral land-use planning.
- » In Ismayilli, we are supporting up to 8 municipalities in piloting innovative erosion control measures on 85 ha.
- » We are helping improve the socioeconomic situation of rural municipalities with a total population of up to 84,000 by identifying income-generating opportunities provided by the conversion of eroded pasture to hayfields (generating additional income of approx. EUR 150 per ha per year), and the improved management of fruit plantations.

Improving frameworks and supporting capacity development

- » We are advising the Ministry of Ecology and Natural Resources and the Ministry of Agriculture on establishing an information system for the integrated management of biodiversity and ecosystem services, so that policy decisions can be taken on the basis of improved data.
- » We are enabling decision-makers to develop capacities for intersectoral management of biodiversity and ecosystem services. This will involve providing





A country-specific example

up to 20 training measures and facilitating the integration of corresponding modules at training institutions.

Education for sustainable development

- » We are advising the Ministry of Education on reforming and restructuring the environmental education centres, of which there are over 50 across the country.
- » We are advising the Republican Centre for the Development of Children and Youth at Baku on training 35 environmental instructors and on designing environmental educational offerings.
- » We are helping improve university teaching in the environmental sector by supporting Baku State University in delivering a new master's degree course in bio-ecology. This involves designing GIS modules, training teachers and creating opportunities for internships and excursions.

Regional exchange and dialogue

- In Georgia, representatives of Armenia, Azerbaijan and Georgia attend conferences and meetings to share and dialogue on urgent environmental issues in the region, e.g. integrating ecosystem services into development planning, or establishment of Man-and-Biosphere Area (UNESCO Man-and-Biosphere programme).
- » In cooperation with RECC, we have created a regional platform that will support long-term virtual exchange and dialogue.