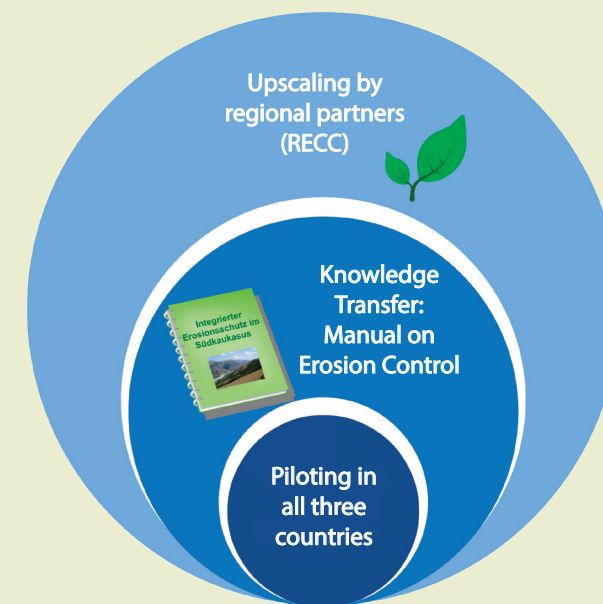


# Integrated Biodiversity Management in the South Caucasus

## Diversity for a better future

Commissioned by:	German Federal Ministry for Economic Cooperation and Development (BMZ)
Partners:	Ministry of Territorial Administration and Development in Armenia; environmental ministries in Azerbaijan and Georgia; other Government ministries; local authorities; non-governmental organisations; educational institutions
Current commission:	December 2015 to November 2019
Budget:	EUR 20,95 million
Countries:	Armenia, Azerbaijan, Georgia



### ◀ 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.

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### ◀ 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

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.



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Groundbreaking national bio-diversity 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 decision-makers and experts in the three countries on urgent environmental issues of cross-border significance, such as the sustainable management of ecosystem services and effective environmental policy-making.

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.

Preconditions are being established to apply principles of sustainable forest management, modern forest planning methods and satellite-based forest monitoring systems, potentially improving the management of approximately 35,000 km<sup>2</sup> of forest in the South Caucasus (an area roughly the size of the German federal state of Baden-Württemberg).

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

## Our contribution in Armenia

### Diversity for a better future

Commissioned by:  
Partners:

German Federal Ministry for Economic Cooperation and Development (BMZ)  
Ministry of Territorial Administration and Development, Ministry of Nature Protection, Ministry of Agriculture, non-governmental organisations, academic institutions, selected municipalities in northern and southern Armenia

#### ◀ A country-specific example

*Since 2014, GIZ has been supporting six mountain municipalities in the provinces of Shirak and Aragatsotn in rehabilitating eroded pastureland. In participatory processes with pasture users, the project is using erosion hazard maps to identify land threatened by erosion. Appropriate rehabilitation methods are then selected and piloted: these include fencing-in areas to support natural regeneration, afforestation activities and bioengineering measures to control erosion. These rehabilitation measures have so far been implemented on approximately 150 ha of land with the active involvement of local pasture users. A further pilot aspect is that this is the first time that measures have been implemented on community land.*

*Growing importance is now being given to sustainable pasture management for erosion prevention at the local level. The pasture management and pasture monitoring manuals for local actors produced with GIZ support are being used in pilot municipalities in their planning processes. Improved pasture management is counteracting soil degradation sustainably and helping preserve biodiversity.*

#### ◀ Demonstrating sustainable biodiversity management in pilot regions

- » In Aragatsotn, Shirak and Sisian, we are supporting municipalities in piloting an integrated pasture management approach designed to prevent soil degradation in the long term.

#### ◀ Improving frameworks and supporting capacity development

- » We are supporting our political partners in establishing intersectoral biodiversity management coordination structures.
- » We are advising the Ministry of Nature Protection 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 supporting the Ministry of Nature Protection in raising policy-makers' awareness of the integration of ecosystem services into development planning and payment for ecosystem services.
- » The principles of sustainable forest management play a prominent role in our cooperation with our Partners. An IT-based forest management

and information system has been developed. The government forest enterprise (Hayantar) and the State Forest Monitoring Centre are using this system.

#### ◀ Education for sustainable development

- » We are advising the Environmental Education Network (an association of more than 30 local and international organisations) and the Ministry of Education and Science on incorporating elements of environmental education into secondary school curricula.
- » We are supporting the Ministry of Nature Protection on conducting campaigns to raise public environmental awareness and to train multipliers (e.g. journalists).

#### ◀ 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.