

Combining income generation and sustainable resource use

The “Living Landscapes for Market Development in Armenia” project has opted for sustainable tourism as a means to revitalise natural resources for inclusive economic development in the rural settlements of the country. Our authors give an account of success scored in the first two years of the project and remaining challenges.

By Arthur Pokrikyan, Vardan Janazyan, Naire Yeritsyan and Alla Ghazaryan



Tourism provides a good source of income for the communities.

Photo: SDA NGO

Part of the Caucasus ecoregion, Armenia is a land of rich biological diversity. It is home to about 17,700 species of animals and 3,800 vascular plants. With an average elevation of 1,800 metres, the landscape is dominated by vast mountain grasslands, volcanic rocks, highland forests and deep canyons. Unfortunately, poor land-use practices, weak governance of natural resources and climate change impact are severely threatening the rich biodiversity and the regeneration capacity of natural ecosystems.

Despite substantial development gains over the last years, Armenia is still a country with significant poverty and unemployment, made even more acute by an uncertain geopolitical context and influx of refugees from Nagorno-Karabakh in 2023. Poverty was at 23.7 per cent in 2023 and is particularly prevalent in rural areas, with 80 per cent of Armenia’s poor living in regions outside the capital Yerevan. This poverty is further exacerbated and

entrenched by the lack of economic diversification within rural areas and a dependence on traditional sources of income (farming and livestock). To ease the poverty level, especially in the remote rural settlements, given the unique nature, history and culture of Armenia, tourism and hospitality are often considered as a valuable alternative.

Enabling rural communities to capitalise on nature conservation

Against this background, the Swiss-funded “Living Landscapes for Market Development in Armenia” (LILA) project focuses on sustainable tourism as a means to revitalise natural resources for inclusive economic development in the rural settlements of the country (see Box). The project operates in the East Lesser Caucasus Conservation Landscape, encompassing the Tavush, Lori, Vayots Dzor and Syunik provinces, which are rich in biodiversity, making them critical for both ecological conservation and economic development. Adopting a landscape approach is essential in this context as it integrates environmental sustainability with local economic activities, fostering a sense of stewardship among communities. In addition, this holistic approach capitalises on win-win situations and reconciles conflicting demands for resource use by multiple stakeholders such as local communities, businesses, civil society, etc.

LILA builds on synergies with the “Promotion of Eco-Corridors in Southern Caucasus” (ECF) project currently being implemented by WWF-Caucasus. Through the ECF, WWF-Armenia has pioneered the practice of establishing and operating Community Conserved Areas by putting biodiversity-important areas under conservation and sustainable use by the local communities. In doing so, the project draws upon the knowledge of local communities, recognises and respects them as stewards of their lands and natural resources, and promotes equitable natural resource governance, enabling and encouraging participation of stakeholders in decision-making on issues that affect them.

Fostering a positive feedback loop

LILA is structured around two main strategic outcomes, the first of which focuses on developing inclusive economic opportunities centred around sustainable tourism. This includes strengthening value chains related to wild harvesting and small-scale food production, promotion of nature-based tourism experiences and enhancing skills and capacities of tourism market actors. The project supports local businesses by improving their market access, providing technical assistance and enhancing infrastructure. This strategy helps embed economic benefits within communities while reinforcing conservation efforts.

The second outcome emphasises supporting local governments and state agencies in sustainable natural resource management and building resilience against climate change. Irregular and uncontrolled grazing practices, illegal logging, poaching, harmful economic activities such as mining, wildfires and extreme weather events lead to the degradation and loss of the production capacities of natural landscapes and the reduction of their ecosystem services. To help address these challenges, the project supports local self-governing bodies to sustainably manage their communal pastures and hay-lands. This is to be achieved by developing pasture management plans, training local authorities and farmers and construction of pasture infrastructure. The project also builds capacities of the state agencies engaged in the protection of state forest by delivering trainings and providing equipment to fight wildfires. These initiatives seek to build resilience to climate change and create a more supportive environment for nature conservation. Together, these components aim to connect economic growth directly to ecological well-being, thereby promoting a harmonious balance between development and conservation.

The project is hoped to foster a positive feedback loop in which healthy ecosystems with rich biodiversity will increase revenues of nature-based businesses. In return, economic development can directly or indirectly contribute to better nature conservation.

An interconnected network of partners

In order to simultaneously pursue both conservation and economic development, based on the market systems development approach an interconnected network of stakeholders has been activated. The WWF Caucasus and Armenian offices lead the project, facilitating the alignment of conservation goals and strategic planning. The NGO Strategic Development Agency (SDA), which plays a significant role in local capacity building and supporting small and medium businesses in the country's rural regions, promotes sustainable and inclusive tourism through partnerships with the national tourism board – Tourism Committee of the Republic of Armenia and the Armenian Tourism Federation. Leading inbound tour operators are involved as well, supporting the development of tourism packages that incorporate project beneficiaries and sustainable practices.

Key partners also include local governments, community-based organisations and national actors like the Ministries of Environment, of Economy and of Territorial Administration and Infrastructure, the Tourism Committee of Armenia, Armforest SNCO (State Forestry Enterprise) and Ecopatrol service. The latter is a state agency established in 2024 with the mandate to conserve and protect forests, forest lands and specially protected areas in Armenia. These entities are integral to policy development, training and the implementation of conservation agreements. The partnership extends to NGOs such as EcoLur, which fosters community engagement through developing a network of citizen journalists and capacitating them. This network reports on environmental and conservation-related issues, raising awareness and driving community action.

Tailwind for local businesses, relief for the environment

Although the project is relatively new, there are already some noticeable results and achievements. As of the 30th June 2024, the project has positively impacted 178 people (52 % women) involved in activities related to natural resources and ecosystems, boosting their income by 15 per cent. These people are employed or self-employed in sustainable tourism-related businesses including rural guest houses, small restaurants, wild harvesting and nature-based experiences. The local businesses which have grown have created 54 new jobs, further supporting local economies. For example, benefiting from better access to the tourism market and supplying to over 20

local businesses, including hotels, restaurants, wineries and tea houses, the “Art Cheese” in Yelpin village (Vayots Dzor province) has expanded its business and increased the variety and quality of its cheeses. “Art Cheese” is also hosting tourists for cheese degustation experience. The project has established partnerships with eight local tour operators and facilitated their linkages with global markets, increasing the outreach of sustainable tourism in the region. The promotion of tourism activities has attracted approximately 5,271 tourists from mostly Europe, Asia and Russia, and project-supported businesses have collectively hosted nearly 8,500 visitors in recent reporting periods.

Simultaneously, in the same communities, the conservation efforts have been strengthened through agreements with local communities and community-based organisations that place over 118,000 hectares of land under sustainable management. According to the agreements, the local authorities with the support of community-based organisations manage natural resources in grasslands and forests strictly following the requirements of the management plans. Caretakers (community rangers) patrol the area to ensure that sustainable use conditions are maintained. Additionally, the soft infrastructure interventions and capacity building of local authorities have made a notable environmental impact by reducing carbon emissions by 31.5 metric tons and saving over 3.7 million AMD (around 9,000 EUR) in energy costs. Such efforts include the installation of solar panels on public buildings like kindergartens, medical centres and administrative buildings, which operate as revolving funds, and the generated savings are directed to the conservation efforts. For example, through a private-public partnership with one of the local companies, a solar power plant with 40kW installed capacity has been constructed in Yeghegis community (Vayots Dzor



The region is increasingly catering for fully independent travellers.

Photo: SDA NGO

province). The budget savings will be directed to compensating for the damage caused by bear attacks to orchards and beehives, which are quite common in this area. Additionally, more comfortable working conditions are created thanks to energy-efficient reconstruction and transition to renewable energy, which came to substitute fossil fuel (mainly natural gas) and firewood. The construction of pasture infrastructures, the development of pasture management plans and intensive training programmes enabled the sustainable use of pasturelands. The adoption of rotational grazing practices, maintaining proper grazing schedules and adequate and regulated pasture loading improve pasture productivity and CO₂ sequestration capacity, and prevent the degradation of pastures.

Obstacles and remaining challenges

While these results show that significant progress can be made in terms of both income generation and sustainable resource use, the project has faced several obstacles that have impacted its implementation. Geopolitical instability, particularly the border conflicts and large-scale displacement of over 115,000 peo-

Background of the project

The “Living Landscapes for Market Development in Armenia” (LILA) Project is dedicated to preserving the livelihoods of the rural population of Armenia by protecting and sustainably using natural resources in mountainous ecosystems of the country. Running from 2022 to 2029, it is funded by the Government of Switzerland via the Swiss Agency for Development and Cooperation (SDC). The sites for project implementation were chosen to overlap with the geography of the Ecoregional Corridors Program in the South Caucasus (ECF), Phase II. ECF is a regional programme introducing the concept of community-based conservation to the areas of conservation importance: habitats and migration routes of key threatened animals (such as Caucasian/Persian Leopard, Bezoar Goat, Armenian Mouflon, Brown Bear and Caucasian/Caspian Red Deer).



The "Art Cheese" enterprise offers tourists cheese degustation experience.

Photo: SDA NGO

ple from Nagorno-Karabakh in 2023, put a considerable strain on local resources and shifted the focus to humanitarian efforts. This situation discouraged investments in the tourism sector and significantly reduced the number of visitors, especially in high-risk areas. The USA, the European Union and Asian countries designated Armenia as a "red zone", leading to a significant decline in numbers of visitors. However, to maintain growth in tourism and hospitality, which is a priority sector of the Armenian economy and contributed 12.6 per cent to the total GDP and 13.8 per cent to the total employment before the coronavirus pandemic (2019), the tourism board and tour operators make efforts to attract new and less sensitive markets from Gulf Coast Countries and Asia.

Heavy rains and flooding in the summer of 2024 caused severe damage in the northern provinces of Armenia, where several communities were declared disaster zones. The field roads on the project site were also destroyed, hindering the project's construction work on



The project region lies within habitats and migration routes of key threatened animals.

Photo: Aleksandr Matkhasyan / WWF Armenia

pasture infrastructure. Lastly, poor weather during expected high-sunshine periods impacted solar panel productivity, resulting in lower-than-anticipated CO₂ emission reductions and energy output. Supply chain challenges posed another significant obstacle, with inconsistencies in the quality and reliability of local food products interfering with the development of stable supply networks. Dependence on local food supplies made businesses vulnerable to fluctuations in both quality and availability, potentially disrupting business operations. These inconsistencies resulted above all from underdeveloped infrastructure, lack of demand for local produce and a shortage of skilled specialists in rural regions. As a result, hospitality businesses in such regions were often forced to procure food from the capital, driving up costs. Failure to address the supply chains for locally grown food could undermine the growth potential of rural tourism, especially with demand for local food continuing to rise within both domestic and international tourism markets.

Despite the progress so far, several programmatic challenges remain. One key issue is adapting the project to new tourism trends, particularly the increase in fully independent travellers (FITs), who now form the majority of tourists. Initial reliance on tour operators bringing visitors has had to be adjusted, requiring more direct marketing efforts to target FITs. Additionally, integrating refugees into the local economy continues to be a pressing challenge, with the project exploring ways to include these individuals in community and economic activities.

Ensuring the quality and consistency of local food supply remains essential in stabilising the supply chain. The LILA project aims to improve quality and packaging of the local produce, support producers with licensing and certification and increase their production capacity to eliminate supply chain disruptions. Great attention is given to capacity building of local farmers and food producers to achieve long-term impact in establishing consistent supply chains. Political uncertainty also looms as a potential disruptor of project activities. Renewed conflicts or geopolitical instability could impact community engagement, investments and overall project momentum.

Future plans

Looking ahead, the project plans to expand its support to LILA beneficiaries by continuing to involve tour operators, local tourism business-

es and other actors of the tourism and related market systems, including food supply chains. A concerted effort will be made to complete pending infrastructure projects, such as hiking trails and eco-friendly tourism facilities. The project will also continue monitoring renewable energy production and increasing solar power solutions to boost sustainability. Further training for local authorities and residents is planned to build on the progress in sustainable practices and climate resilience.

Direct outreach to FITs will be enhanced through improved digital marketing strategies and promotional campaigns aimed at increasing tourism traffic. Additionally, given more frequent wildlife conflicts, the development of a system to compensate for wildlife damage is on the agenda. One option under consideration is "Solidarity Schemes", a voluntary insurance concept with payments tied to incidents, partially funded by membership payments made by policy-holders before incidents occur. Such measures will support community conservation efforts and maintain the balance between human activity and biodiversity preservation. Through these future initiatives, the LILA project aims to solidify its impact, creating a sustainable model where economic growth and environmental conservation go hand in hand.

Given the positive outcome of this experimental merger of economy and ecology within a single project and the growing pressure for adopting green solutions, the LILA project can serve as a model for boosting local economic development along with maintaining healthy ecosystems within the sites of conservation importance.

Arthur Pokrikyan is the Senior National Programme Officer for Inclusive Economic Development from the Swiss Cooperation Office (SCO) in Armenia. LILA is part of his portfolio.

Naire Yeritsyan is the lead and project coordinator of the LILA from WWF Armenia. She is in charge of the overall coordination of the project and particularly the outcome related to environmental conservation.

Alla Ghazaryan is the project coordinator of the LILA from the NGO Strategic Development Agency. She is in charge of the outcome related to the sustainable and inclusive tourism development.

Vardan Janazyan is the Media and Communication Officer from the Embassy of Switzerland in Armenia and its Cooperation Office (SCO).

Contact: artur.pokrikyan@eda.admin.ch