

Ecosystem services

What are ecosystem services?

Ecosystem services are the benefits that people get from ecosystems. They include provisioning services (e.g. fresh water, food, wood, fibre), regulating services (e.g. control of water flow, prevention of erosion, climate regulation), cultural services (e.g. opportunity for recreation, spiritual values), and supporting services (e.g. soil formation, water and carbon cycling).

Lydian has conducted stakeholder interviews and focus group meetings in Gorayk, Saravan, Gndevaz and Jermuk, and with seasonal herders from the village of Xndzoresk, to gain an understanding of people's use of and dependence on ecosystem services in the area. In general, dependence on ecosystem services is relatively high because of the rural context and predominance of traditional agriculture as a source of employment and livelihoods.

The most important ecosystem services identified by the study were livestock products, hay, apricots, fresh water, erosion control, culture and tradition (e.g. seasonal herding), and the landscape itself (giving rise to a distinct "sense of place").



What are the potential impacts?

Without proper management there is a risk that the project could affect the supply of ecosystem services to existing users.

There is also a risk that reduced ecosystem services supply could impact project operations, because the project is dependent on some services – for example, supply of water from the Arpa River.

What will Lydian do to manage the impacts?

Where local people's financial benefits from ecosystem services are impacted by the project, these will be addressed as described in the Land Access and Livelihoods Restoration Plan (LALRP). This applies, for example, in cases where land used for growing apricots is needed for project infrastructure, and where access to grazing land will be affected.

Even after implementation of the LALRP, Lydian recognises that there could be impacts on ecosystem services, although these are difficult to predict. The main uncertainty is related to the ability of herders and other farmers to maintain access to sufficient areas of grazing and meadow land. This will be monitored by Lydian throughout the project and remedial actions will be taken as necessary.

An important element of the monitoring programme is continued engagement with all stakeholders including seasonal herders. This will be implemented via the project stakeholder engagement plan.