

# ECF conservation measures: Example of Khachik

## Target species and ECF objectives



### By 2025 increase the range of Bezoar goat by 30% and the number by 100%

There is a core population of around 200 Bezoar goats (Source: Gnisikh Intercommunal Environmental Foundation) in the Gnisikh Protected Landscape (PL) conservation area, of which 20 specimens occur in the administrative territory of Khachik Community. The expansion of their range outside the conservation area depends on availability and productivity of their habitat, and absence of poaching.

### By 2025 secure at least temporary presence of Mouflon in the area of Khachik

High mountain grasslands above Khachik in the Gnisikh Protected Landscape (PL) conservation area are a Mouflon habitat, but Mouflon haven't been observed in the area in the recent years for the reasons of poaching in the past, military presence on the border with Nakchichevani and presence of cattle in the mouflon habitat.

**By 2025 secure at least temporary presence of Mouflon in the area of Khachik**

High mountain grasslands above Khachik in the Gnisikh Protected Landscape (PL) conservation area are a Mouflon habitat, but Mouflon haven't been observed in the area in the recent years for the reasons of poaching in the past, military presence on the border with Nakchichevani and presence of cattle in the mouflon habitat.

Main Mouflon habitat are open mountain grasslands with limited disturbance by humans or domestic animals. At the moment, Mouflon may reappear in the area if their habitat is not disturbed by extensive presence of cattle.

## Problems to be addressed:

### Availability of habitats for Bezoar goat and Mouflon

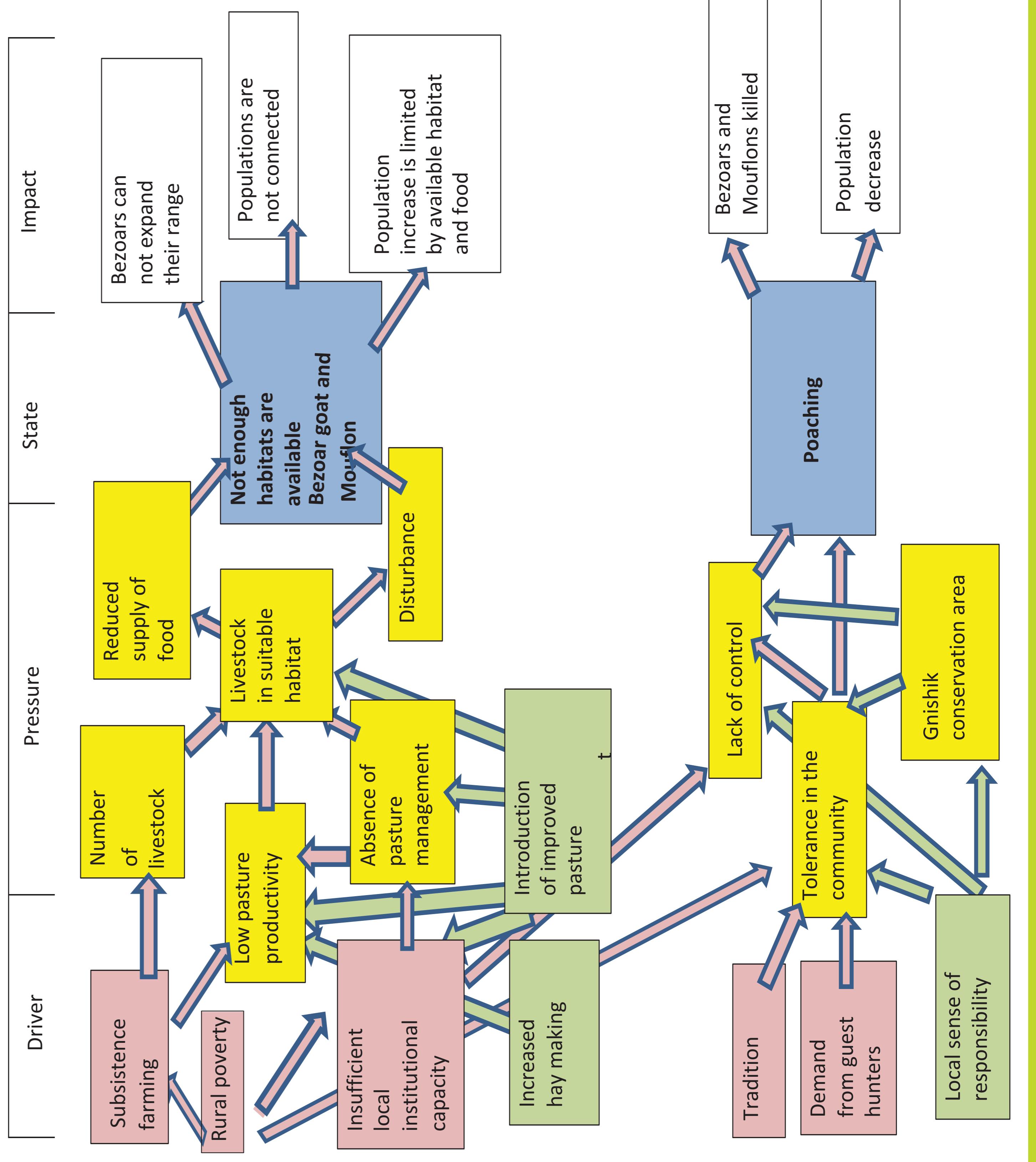
Bezoar goats seek mainly rocky habitats to avoid disturbance, but also depend on the overall grassland productivity within their range. If the degree of disturbance is limited and sufficient carrying capacity is available, it is expected that the Bezoar goat population will expand also along the corridor outside the Gnisikh conservation area.

Main Mouflon habitat are open mountain grasslands with limited disturbance by humans or domestic animals. At the moment, Mouflon may reappear in the area if their habitat is not disturbed by extensive presence of cattle.

### Poaching

Poaching is an important factor for population density of Bezoar goat far below the carrying capacity of the habitat outside the conservation area and disappearance of Mouflon. A regulated and managed regime of grazing implemented by the community with assistance of the Gnisikh PL will contribute to lower motivation for poaching among the local population and improve the success of enforcement related to outside poachers.

## Problem tree



## Beneficiaries

A trilateral conservation agreement will be signed between the WWF-Armenia, Gnisikh Intercommunal Environmental Foundation responsible for management of Gnisikh Protected Landscape

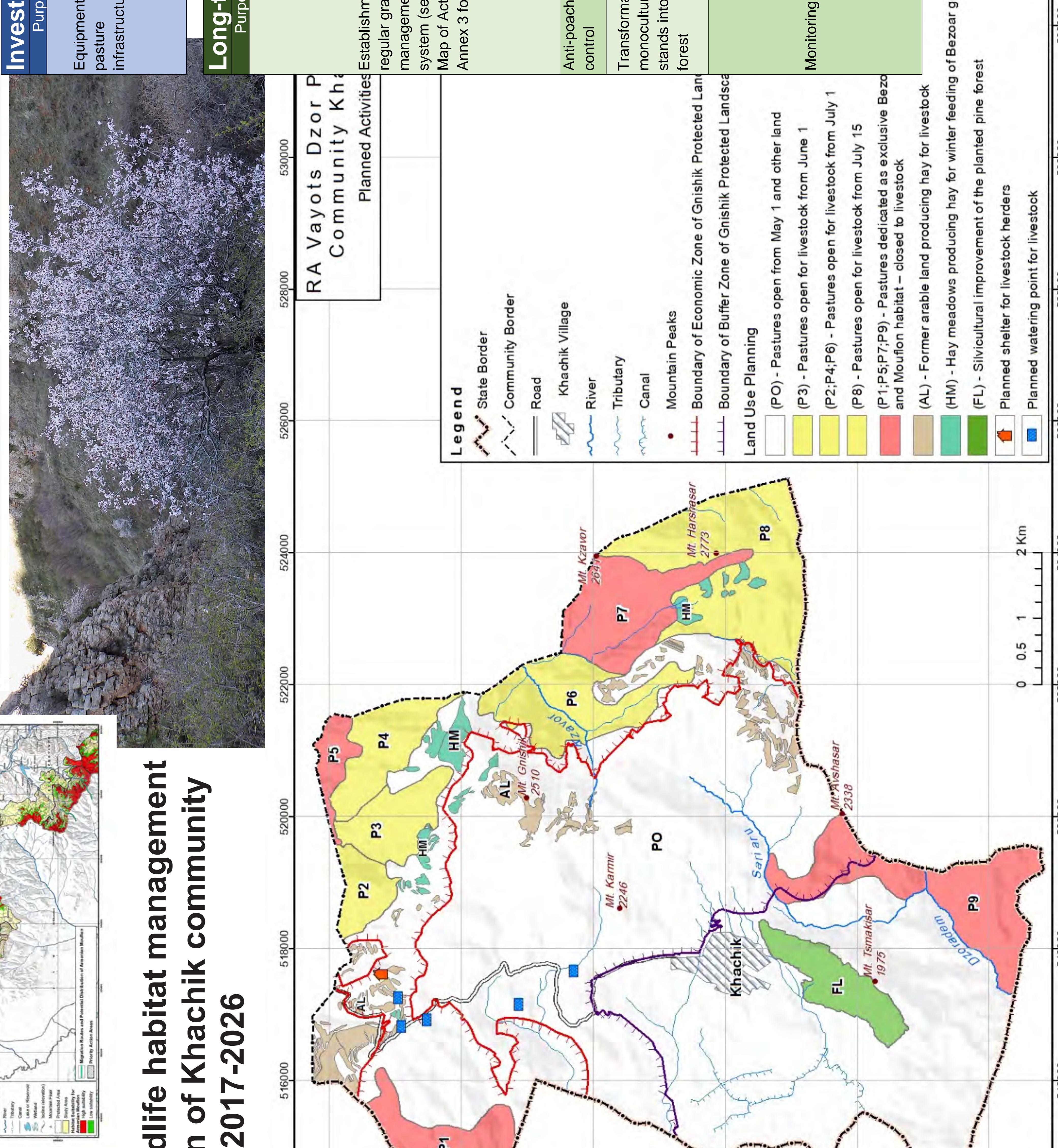
## Purpose and objectives

The purpose of the Agreement is to provide financial resources to secure ecologically sustainable land and use in the Khachik Community within the South-Eastern Lesser Caucasus ecological corridor in Armenia. This is to contribute to the sustainable use of land and of biological diversity without reducing the income of the local rural population.

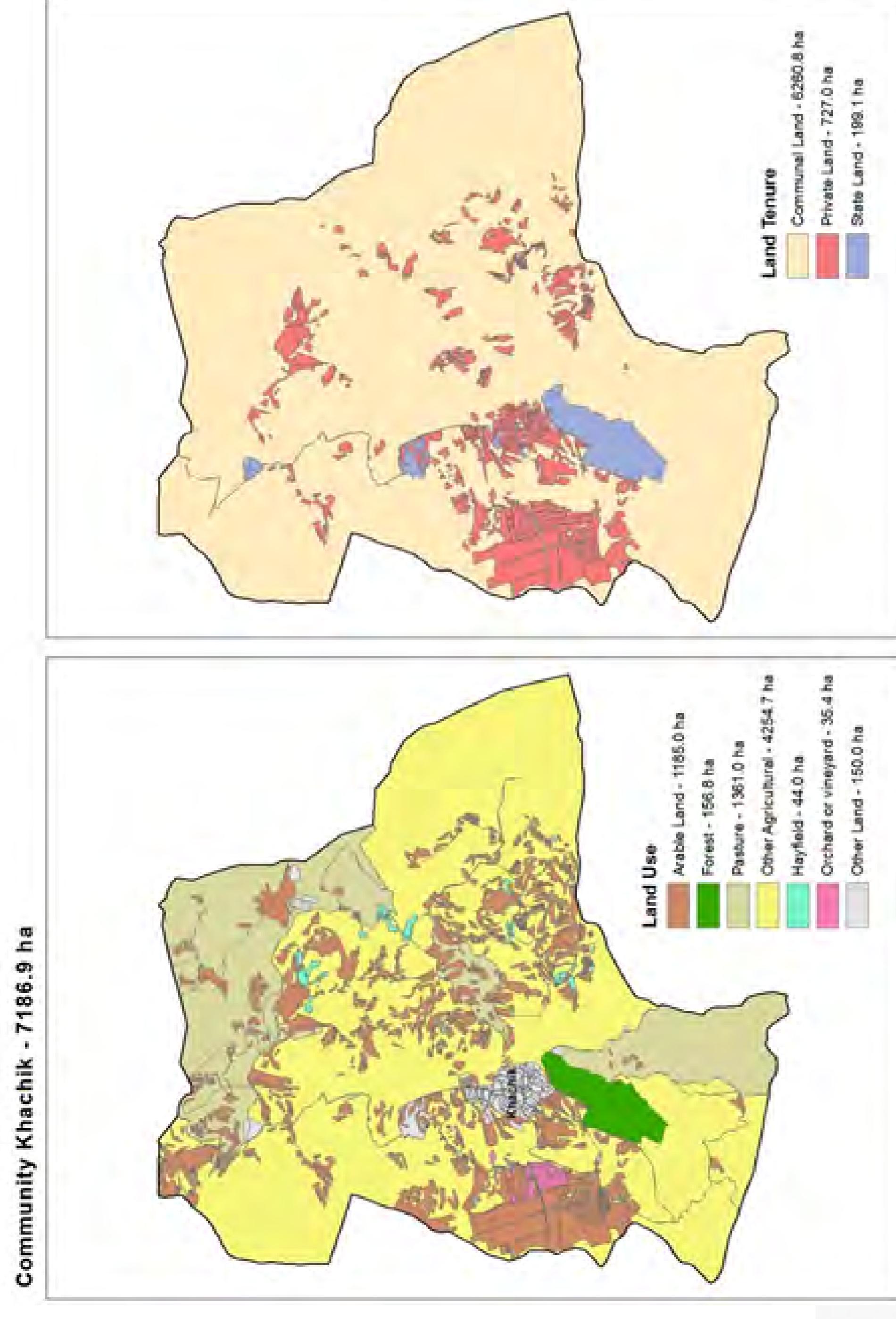
The objectives of the Agreement are to:

- Maintain high biodiversity in landscapes, in particular improve habitats of Bezoar goat, Armenian Mouflon, Brown Bear and Caucasus Leopard within administrative boundaries of Khachik Community
- Provide the services and coverage of the Gnisikh PL rangers within the administrative boundaries of Khachik Community
- Improve the productivity of animal husbandry performed by the village community
- Improve biodiversity and resilience of the planted forest next to the Khachik
- Village by transformation of monoculture pine stands into natural forest composition.

Investment actions	Purpose	Objective	Description of measures to be carried out	Time
	Purchase of agricultural equipment and pasture infrastructure	Purchase of agricultural equipment	Purchase of tractor Belar 82.1, mowing machine KLOP 21 E4, 2(two) steep slope mowing-machines №60-70 similar, rotary割り機 RP-700, baler ITT-165, how ITIH-335 swing machine CTRV 4x4.	2017 March - April
	Setting up of livestock watering points	Setting up of livestock watering points	Construction of 5 (five) livestock watering points, laying of pipelines, earthworks	2017 March-May
	Construction and furnishing of shelter for stockbreeders	Construction and furnishing of shelter for stockbreeders	Mobile shelter (20 square meter), toilet, sink, stove, furniture	2017 May-August
Long-term actions	Purpose	Objective	Description of measures to be carried out	Time
	Production of forage on currently abandoned arable lands	Production of perennial crops grass and clover (not less than 50 ha per year)	Planting and sowing of perennial crops grass and clover (not less than 50 ha per year)	June-September
	Regular cutting of designated high diversity hay meadows	Harvest of hay to individual stockbreeders (not less than 50 tons per year)	Transport of hay to the village	June-September
	Establishment of regular grassland management system see the Map of Activities in Annex 3 for details	Distribution of hay to individual stockbreeders (not less than 50 tons per year)	Continuous	2017 and continuous
	Regulation of grazing	Cutting, drying making paystacks in the field (not less than 40 ha per year)	Cattle access to the pastures in the field (not less than 40 ha)	June-September
	Anti-poaching control	Start of the grazing season	No earlier than May 1 2018 and continuous	2017 and continuous
	Prevent poaching in Khachik Community	Cattle access to the pastures in the plot P3 (see Map in Annex 3)	No earlier than June 1 2018 and continuous	2017 and continuous
	Transformation of moniculture stands into natural forest	Cattle access to the pastures in the plots P2, P4 and P6 (see Map in Annex 3)	No earlier than July 1 2018 and continuous	2017 and continuous
	Monitoring	Ranger service in relation to wildlife management and poaching on all the lands of the Khachik Community and the forest lands within the Gnisikh PL	Ranger service in relation to wildlife management and poaching on all the lands of the Khachik Community and the forest lands within the Gnisikh PL	2017 and continuous
		Foraging inventory and management plan	Foraging inventory and management plan	2017 and continuous
		Training of prime herders to support natural regeneration processes	Training of prime herders to support natural regeneration processes	2017 and continuous
		Establishing regeneration infrastructure (forests, picknick areas...)	Establishing regeneration infrastructure (forests, picknick areas...)	2017 and continuous
		Conduct full-scale and enrichment planning according the management plan	Conduct full-scale and enrichment planning according the management plan	2018 onwards
		Removing fence when not needed	Removing fence when not needed	2018 onwards
		Day to day management and coordination, ranger presence in the area	Day to day management and coordination, ranger presence in the area	2017 and onwards
		Documenting and reporting implementation of pressland management plan (area ploughed, area cut, hay produced)	Documenting and reporting implementation of pressland management plan (area ploughed, area cut, hay produced)	2017 and onwards
		Setting up permanent sample plots for monitoring grasslands (pastures, meadows and restricted areas) for monitoring species diversity, productivity and carbon storage	Setting up permanent sample plots for monitoring grasslands (pastures, meadows and restricted areas) for monitoring species diversity, productivity and carbon storage	2017 and onwards
		Monitoring of permanent sample plots	Monitoring of permanent sample plots	2017 and onwards
		Setting up constant plots for summer (post-pasture) and early winter (wintering period counts)	Setting up constant plots for summer (post-pasture) and early winter (wintering period counts)	2018 and onwards
		Summer (post-pasture) and early winter (wintering period counts)	Summer (post-pasture) and early winter (wintering period counts)	2018 and onwards
		Observation and reporting of moulting, brown bear, leopard	Observation and reporting of moulting, brown bear, leopard	2017 and onwards
		Initial forest inventory	Initial forest inventory	2017
		Limited area (part of the forest)	Limited area (part of the forest)	2018, 2022, 2026



## Armenia, South Eastern Lesser Caucasus, Vayots Dzor, Khachik



## Wildlife habitat management plan of Khachik community for 2017-2026

Long-term actions	Purpose	Objective	Description of measures to be carried out	Time
	Production of forage on currently abandoned arable lands	Production of perennial crops grass and clover (not less than 50 ha per year)	Planting and sowing of perennial crops grass and clover (not less than 50 ha per year)	June-September
	Regular cutting of designated high diversity hay meadows	Harvest of hay to individual stockbreeders (not less than 50 tons per year)	Transport of hay to the village	June-September
	Establishment of regular grassland management system see the Map of Activities in Annex 3 for details	Distribution of hay to individual stockbreeders (not less than 50 tons per year)	Continuous	2017 and continuous
	Regulation of grazing	Cattle access to the pastures in the field (not less than 40 ha)	Cattle access to the pastures in the field (not less than 40 ha)	2017 and continuous
	Anti-poaching control	Cattle access to the pastures in the plot P3 (see Map in Annex 3)	No earlier than June 1 2018 and continuous	2017 and continuous
	Prevent poaching in Khachik Community	Cattle access to the pastures in the plots P2, P4 and P6 (see Map in Annex 3)	No earlier than July 1 2018 and continuous	2017 and continuous
	Transformation of moniculture stands into natural forest	Ranger service in relation to wildlife management and poaching on all the lands of the Khachik Community and the forest lands within the Gnisikh PL	Ranger service in relation to wildlife management and poaching on all the lands of the Khachik Community and the forest lands within the Gnisikh PL	2017 and continuous
	Monitoring	Foraging inventory and management plan	Foraging inventory and management plan	2017 and continuous
		Training of prime herders to support natural regeneration processes	Training of prime herders to support natural regeneration processes	2017 and continuous
		Establishing regeneration infrastructure (forests, picknick areas...)	Establishing regeneration infrastructure (forests, picknick areas...)	2017 and continuous
		Conduct full-scale and enrichment planning according the management plan	Conduct full-scale and enrichment planning according the management plan	2018 onwards
		Removing fence when not needed	Removing fence when not needed	2018 onwards
		Day to day management and coordination, ranger presence in the area	Day to day management and coordination, ranger presence in the area	2017 and onwards
		Documenting and reporting implementation of pressland management plan (area ploughed, area cut, hay produced)	Documenting and reporting implementation of pressland management plan (area ploughed, area cut, hay produced)	2017 and onwards
		Setting up permanent sample plots for monitoring grasslands (pastures, meadows and restricted areas) for monitoring species diversity, productivity and carbon storage	Setting up permanent sample plots for monitoring grasslands (pastures, meadows and restricted areas) for monitoring species diversity, productivity and carbon storage	2017 and onwards
		Monitoring of permanent sample plots	Monitoring of permanent sample plots	2017 and onwards
		Setting up constant plots for summer (post-pasture) and early winter (wintering period counts)	Setting up constant plots for summer (post-pasture) and early winter (wintering period counts)	2018 and onwards
		Summer (post-pasture) and early winter (wintering period counts)	Summer (post-pasture) and early winter (wintering period counts)	2018 and onwards
		Observation and reporting of moulting, brown bear, leopard	Observation and reporting of moulting, brown bear, leopard	2017 and onwards
		Initial forest inventory	Initial forest inventory	2017
		Limited area (part of the forest)	Limited area (part of the forest)	2018, 2022, 2026