





# **Policy Brief**

Pastures, Hayfields and Commons: How to achieve sustainability?

**ECOserve** Environmental Programme



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## 1. Context

Like many other countries, Azerbaijan has recently developed strategies on socio-economic growth and sustainable development1 as well as for the agricultural sector2. A special focus is on food security for the population and increased productivity per unit using innovative technologies and digital tools.

And as many countries have done, Azerbaijan has also signed the United Nations 2030 Agenda for Sustainable Development with its 17 goals. Out of these, the following sustainable development goals (SDGs) are especially important for the agrarian sector: SDG 2 - end hunger, achieve food security, 6 - sustainable management of water, 12 - sustainable consumption and production, 13 - combat climate change and 15 - sustainable use of ecosystems, halt and reverse land degradation, halt loss of biodiversity.

The programme "Management of natural resources and safeguarding of ecosystem services for sustainable rural development in the South Caucasus" (ECOserve)3, implemented by GIZ, focuses on sustainable use of agricultural lands including pastures in Azerbaijan. ECOserve supported the national partner organization, Ministry of Agriculture (MoA), in pasture biomass assessment, development of pasture passports and developed a digital structure of the indicator on pasture degradation to foster its monitoring (see AEIMS Policy Brief).

Based on the observed gaps and problems in pasture management, ECOserve has developed a policy brief to address the main problems and possible solutions to the relevant decision makers.

### 2. Introduction

According to the Strategic roadmap on agriculture, Azerbaijan ranks among the countries with limited land resources - per capita agricultural land (grassland, pastures, cropping area) is 0.46 ha, while per capita cropping area (arable land) is 0.19 ha. Per capita area of pastures and hayfields is even smaller<sup>4</sup>. Permanent pastures, hayfields and common grazing areas form an important part of the fodder basis for livestock keeping in Azerbaijan. Both, family farmers in rural mountainous areas as well as bigger farming entities with large numbers of animals rely on winter and summer grazing areas. This results more often in competition on pastures as well as overgrazing through inappropriate management practices. Significantly higher demand of meat consumption (lamb, not mature sheep) increases the necessity of keeping more animals, in order to meet the requirement for meat supply. Thus, land degradation and erosion processes, loss of biodiversity and declining land productivity ask for suitable measures to ensure sustainable practices and food safety in the country.

### 3. Observed problems

The current institutional structure for pasture management is not efficient and doesn't ensure duly control and monitoring to define and improve the observed negative trends (see above). Several state bodies are engaged in the management of pastures, who have different authorities and responsibilities, whereas no strong coordination and joint/collaborative management practices are in place. As a result, no authority is effectively controlling the sustainable use of pastures. There are no clear provisions in the regulations of the Ministry for Ecology and Natural Resources (MENR) regarding the monitoring and use of pastures, and we don't observe their tangible role in this area. The State Service for Property Issues (SSPI) is responsible for the documentation of the pasture use by farmers, but maps and databases reflecting the current state of pastures (carrying capacity, topsoil quality, stocking rate, watering status etc.) have not yet

<sup>&</sup>lt;sup>1</sup> Azerbaijan 2030 National Priorities for Socio-Economic Development

<sup>&</sup>lt;sup>2</sup> Strategic Roadmap Agriculture 2025

<sup>&</sup>lt;sup>3</sup> https://biodivers-southcaucasus.org/about

<sup>&</sup>lt;sup>4</sup> Strategic Roadmap on Agriculture

been properly compiled. Neither the rural communities nor other land users, who are negatively affected by the degradation of pastures, have a reliable and effective point/centre to address the complaints and get a prompt reaction. There is not yet established an accurate data obtaining and exchange system for the pastures, including changes in the land quality, erosion processes, and assessment of the biodiversity. This data is essential to develop special restoration program for pasture land improvement. The livestock farmers do not have sufficient knowledge on the pasture use and protection and are not fully aware of the pasture degradation process which results in reducing the pasture productivity and consequently their incomes. Finally, no sufficient public funds are allocated for restoration of the degraded pastures or a mechanism to reinvest part of the profit made by pasture users. This policy brief presents some problems observed in pasture use and proposes possible solutions that the corresponding policy makers could consider in a decision-making process.

#### 4. Recommendations

- A key state body shall be designated in legislation for pasture management. This body shall be authorized to design and implement policies for efficient use and protection of pastures. The scope of responsibilities shall be defined for all other stakeholders engaged in pasture use.
- Establish and train land user committees with both, rural population in the respective regions and external experts to assess fodder productivity and maximum number of animals at a given time period in all relevant regions and for all pastures. These committees should be organized under the above-mentioned key state body.
- The structure of the above recommended bodies must come with a clear set of responsibilities and control mechanisms including sanctions if and when non-compliance with regulations is detected. It has to be transparent and communicated to the wider public.
- Consider measures to reduce total numbers of ruminants in Azerbaijan based on land carrying capacity together with awareness raising campaigns on reduced meat consumption in people's diet based on EAT Lancet Commission's study. This would not only reduce the negative impact on pastures, but also improve the general health of Azeri population.
- Land carrying capacity must be defined for several time periods during vegetation period as land productivity will be higher in spring as it is in summer and autumn. Starting dates should be defined as time slots and exact dates assessed by the land committees every year. Same applies for end dates. Too early grazing in springtime will negatively affect fodder productivity especially in already degraded areas with thin and less divers' sods.
- Committees should assess the quality of pastures in addition to timelines as yet another important indicator to assess land carrying capacity. Quality meaning soil type, precipitation patterns, sod density and diversity of grasses and herbs.
- Base maximum number of ruminants kept in Azerbaijan on in-country fodder production of roughage (grass, hay, silage) at minimum of 90% of total fodder needs per animal and year.
- In addition to already existing legal framework, develop the necessary by-laws which should contain details of the above-mentioned maximum number of ruminants in a given time period per region / area and make references to the respective documentation and control bodies. The links between the laws and the relevant by-laws and regulations should be made clear with references.
- The knowledge and awareness of the livestock farmers on the pasture use, the causes and effects of pasture degradation and the relevant conservation measures shall be increased.
- Develop a grievance mechanism for both, land users and rural communities utilising the pastures, hayfields and commons.

- Consider establishment of a revolving fund in order to make money available for the restoration of degraded pastures.
- The monitoring of pastures shall be digitalized: the newly developed AEIMS shall be implemented to better monitor the situation of pastures and make necessary decision for improvements. This may include the already started usage of the pasture passport. All necessary data requested by the system shall be available and accessible (see AEIMS Policy Brief).



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