5th. Global Conference on Agriculture

Berlin, Germany 13 - 15 March 2025

Comparative Ecological Assessment of Common Village Pastures in Western Azerbaijan

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ABSTRACT

In the mountainous regions of the Lesser Caucasus in Azerbaijan, pastures are subject to soil erosion at varying rates, especially in common village pastures where carrying capacity is unmet. This can be attributed to unsystematic livestock grazing, resulting in overgrazing compound by a lack of pasture improvement measures, leading to a deterioration in the quality and sustainability of the grazing land. The decline in vegetation cover has been shown to accelerates erosion processes, forming gullies on slopes and posing a threat to areas at lower elevations. The primary objective of the present research is a comparative analysis of samples taken from the same area of village pastures in the Lesser Caucasus in 2016 with samples taken in 2022/2023 aiming at an evaluation of ecological changes, vegetation cover, and degradation over time. The ecological assessment method employed adhered to the guidelines outlined in the Monitoring Manual for Summer Pastures in the Greater Caucasus in Azerbaijan by Etzold & Neudert (2013). The present paper sets out the findings of a comparative study of two village pasture areas. The analysis indicates that between 30% and 40% of the areas examined in the study locations have undergone some form of degradation with an increase in pasture degradation by 6-8% between 2016 and 2023. The study suggests a sharp decline in grazing quality within a decade, highlighting urgent action needed. The presentation will therefore also explore the preliminary results from focus group discussions exploring the potential local acceptance of degradation mitigation strategies.

Keywords: Pasture vegetation, Soil erosion, Degradation mitigation, Pasture management