The challenge: Overgrazed pastures and reduced livestock productivity

In Tajikistan, a land dominated by majestic mountains covering 93 percent of its territory, the Khatlon region accounts for 78 percent of its population living below the poverty line. Climate change compounds the challenges, with the Eastern and Central parts of Khatlon showing higher vulnerability, impacting livestock productivity. Soaring temperatures test animals’ health while shifting precipitation patterns demand new feeding strategies.

Increases in the livestock caused overgrazed pastures, which reduced livestock productivity, caused erosion and weakened ecosystems. Other constraints faced by the livestock sector are lack of technical knowledge and veterinary services, deteriorating breeds, inefficient management of community livestock, shortage of fodder during winter, environmental degradation and poor infrastructure. Despite governance reforms, smallholders struggle with limited land access and insecure land tenure.
The innovation:  
The establishment of Pasture User Unions

In the pursuit of sustainable rural development, the LPDP-II project embraced a bottom-up planning approach, centered around active participation from local communities. The project's primary goal was to empower both rural women and men, enabling them to establish Pasture User Unions (PUUs). These PUUs were instrumental in formulating Community Livestock Pasture Management Plans to address the degradation of pasture resources and the decline of pasture infrastructure. Additionally, they focused on climate adaptation strategies for sustainable pasture management and restoration, enhanced winter feeding, livestock health, and production.

The impact of the PUUs and community plans was significant, leading to reduced overgrazing and erosion and the restoration of pasture carrying capacity and productivity. The implementation of rotation plans for pastures and the involvement of PUUs in restoring degraded pastures showcased their commitment to preserving valuable resources for future use.

Furthermore, the provision of mechanized equipment proved to be a game-changer. It not only improved labor productivity but also facilitated fodder cultivation and conservation. The introduction of communal infrastructures such as roads further contributed to the enhancement of rural life. The availability of mechanized equipment also played a vital role in mobilizing communities, as it directly benefited PUUs' members, solidifying their commitment to pasture management initiatives. The success of the project can be attributed to the recognition and acknowledgment of the PUUs' benefits by local communities.

LPDP-II was aligned with national development strategies and agricultural policies. The project addressed the pressing issue of pasture degradation and ecosystem resilience in the face of climate change pressures. Moreover, the emphasis on poverty reduction through improved livestock productivity and grazing land management made the project highly relevant.
Results and impacts

The impact assessment data highlights the positive influence of the LPDP-II project on livestock farmers. Beneficiaries were more inclined to use pasture rotation plans and rely on pastures managed by pasture unions. Moreover, the treatment villages displayed a proactive approach to restoring degraded pastures, preparing them for future grazing — an outcome not observed in the control group.

There was a significant decrease in shocks faced by project participants. This is likely linked to beneficiaries being better adapted to climate change or to animal disease thanks to better quality herds, veterinary services, technical support, significant investments in climate resilient infrastructure, equipment and technical assistance for fodder production and storage.

The LPDP-II project also contributed to policy dialogues in Tajikistan. One of the project's key accomplishments was its pioneering approach to climate change and natural resource management, particularly in pasture lands. With the implementation of Pasture User Unions (PUUs) and Community Livestock Pasture Management Plans (CLPMPs), LPDP-II created a model that can be expanded and adopted nationwide. This success played a crucial role in supporting the revision of the 2013 Pasture Law. Through strengthening the operational and organizational capacities of the Pasture Meliorative Trust (PMT) institution, the project facilitated an inclusive policy dialogue process that led to the adoption of the revised Pasture Law in June 2019.

LPDP-II Footprint

The weight of cattle per animal of LPDP-II beneficiaries was estimated to be 30% higher compared to the control group.

Cattle kept by LPDP-II households had more total milk production (+120%) and productivity (+99%) than households in the control group.

LPDP-II livestock farmers are 45% more likely to use preventive treatment (especially vaccinations), spend 36% less on preventative treatment per cattle.

50% decrease in shock faced by LPDP-II farmers and relates this to increase know-how on livestock management.

LPDP-II project participants' livestock incomes increased by 109% compared to the control group.

Women headed households in the treatment group have much higher livestock income (661%), crop income (114%),
Adaptation for Smallholder Agriculture Programme

ASAP

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