

Livestock fodder collection for the winter time (Toirov Safar)

# Sustainable livestock and pasture management (Tajikistan)

Pasture Users Unions

# DESCRIPTION

Sustainable livestock and pasture management is implemented through creating Pasture Users Unions (PUU) which design and implement pasture and livestock management plans.

The Government of Tajikistan is implementing a project, funded by the Pilot Program for Climate Resilience (PPCR) and the Global Environment Facility (GEF), with the objective of enabling rural people to build up their productive assets in ways that sustainably improve natural resource management, and build resilience to climate change in selected climate-vulnerable sites. Livestock are an integral part of the agriculture sector, although there has been a shift to more extensive livestock grazing from the intensive livestock farming system practiced before independence. Today, more than 90% of livestock are held in household farms, indicating the importance of livestock to rural livelihoods, and the system is based primarily on grazing, supplemented by limited cultivated fodder crops and minimal use of concentrates.

Pastures comprise about 35% of Tajikistan's total land area and 80% of its agricultural land however substantial degradation is taking place. Pasture degradation may be exacerbated by climate change, which is likely to increase variability in water availability and temperature, and may result in local droughts and floods. Properly managed pasture helps control water flows in ways which contribute to mitigating floods and droughts, maintaining soil conservation and fertility, and providing habitats for wild plants and animals. The aim of the activity is to introduce sustainable community-managed pasture/fodder-based livestock production systems in villages in the Faizobod district of jamoat Dustmurod Aliev, situated in the mid-hills of Tajikistan. Approximate membership of the Pasture Users Unions (PUU) is between 50 and 200 households per village depending on size, with between 6 and 10 villages per jamoat. Comprehensive pasture and fodder assessments and evaluation of the feed/fodder balances are carried out, followed by the development of Pasture and Livestock Management Plans (PLMP) for various interventions including; improvement of pasture productivity through rotational grazing, protecting areas for regeneration, pasture rehabilitation, improving access to remote pastures, and supplementary fodder production; animal health requirements and breed improvement measures; infrastructure to access and use remote pastures, such as spot road improvements, and stock watering points. By virtue of the fact that users will welcome this approach in their jamoats, they will be able to manage the broad issues of pasture degradation, animal health and fodder production. Above all it will help farmers to control the balance between livestock and fodder.

# LOCATION



**Location:** Jamoat Dustmurod Aliev, Faizobod district, Tajikistan

#### Geo-reference of selected sites

- 69.31926, 38.5291
- 69.31925, 38.52905

**Initiation date: 2017** 

Year of termination: n.a.

#### Type of Approach

traditional/ indigenous recent local initiative/ innovative

project/ programme based



Pasture road rehabilitation (Toirov Safar)

# APPROACH AIMS AND ENABLING ENVIRONMENT

#### Main aims / objectives of the approach

To help mitigate the effects of climate change on the rural population and slow pasture degradation processes through introducing and demonstrating sustainable pasture/fodder-based livestock production systems;

To support the development of a Pasture and Livestock Management Plan (PLMP) for Pasture User Unions (PUU), in a participatory, inclusive and gender sensitive way: to

- Serve as tool to organize the management of community managed pastures in such a way that it will
- increase pasture yields in quantity and quality, without causing land degradation & erosion;
- Serve as a tool to improve livestock management, and;
- $\mbox{\sc Bring}$  the number of livestock in balance with the available fodder;
- Increase animal off-take through better yielding pastures, adoption of improved

feeding practices & improved animal management and through better animal health;

- Increase the income of the rural population from livestock keeping, and;
- Reduce downstream flood risk in mountain areas, due to improved land management.

# Conditions enabling the implementation of the Technology/ ies applied under the Approach

- Social/ cultural/ religious norms and values: The land users are livestock keepers thus all the approaches are welcome as it will directly affect them
- Availability/ access to financial resources and services: As the Pasture Users Unions are equipped with the agriculture tractors and excavators, they process the lands and rehabilitate pasture roads and also bank stabilization works and from all of these activities earn money. The other sources is their membership fees that collect every month from the members.
- Institutional setting: A Pasture Law was passed on 19 March 2013 (Law No 951) that will enable the formation of Pasture User Unions for the joint use and management of pasture resources.
- Collaboration/ coordination of actors: The Pasture User Unions collaborate with the local district hukumat and all its departments, non-governmental and donor organisations in the process of implementation of Pasture and Livestock Management Plans. PUU also have very good cooperation with the land users and livestock keepers.
- Legal framework (land tenure, land and water use rights): Pasture User Union of "Sorkho" is established in Faizobod district, registered at jamoat level, and has their charter, stamp and other office equipment and an office.
- Policies: Pasture laws are passed that supports pasture managament activities.
- Knowledge about SLM, access to technical support: The project also includes training and technical support of the PUUs on budgeting, SLM
  approaches, and administration
- Markets (to purchase inputs, sell products) and prices: Materials are broadly available at an affordable price
- Workload, availability of manpower: Local people understand the importance of the activity and are ready to contribute cash and power for its implementation

# Conditions hindering the implementation of the Technology/ ies applied under the Approach

- Social/ cultural/ religious norms and values: Pasture User Unions do not have their own certificated lands under their control
- Land governance (decision-making, implementation and enforcement): The main issue that is PUUs haven't ownership of the pasture land.

# PARTICIPATION AND ROLES OF STAKEHOLDERS INVOLVED

Stakeholders involved in the Approach and their roles

What stakeholders / implementing bodies were involved in the Approach?	Specify stakeholders	Describe roles of stakeholders
community-based organizations	The head of each PUU has been involved in the process of preparation	The Pasture User Union of "Sorkho" that was established by the project ELMARL. Support with the photos and information

SLM specialists/ agricultural advisers		
N(¬()	Mountain Societies Development Support Programme (MSDSP)	They was partner organisation that did facilitation during the establishment and implementing Pasture User Unions plans

# Involvement of local land users/ local communities in the different phases of the Approach

	none passive external support interactive self-mobilization	
initiation/ motivation	<b>✓</b>	Awareness raising and introductory meetings, training, seminars and other with the local livestock keepers
planning	<b>✓</b>	Local land users participated in the process of the preparation of plan (PLMP)
implementation	<b>✓</b>	Local land users and livestock keepers contributing in cash or as labor during the implementation of their plan
monitoring/ evaluation		Assessments, field observations, monitoring and controlling of the process of implementation
None		Fully involved during the operation and maintenance of the pasture infrastructures, and research

#### Flow chart

Structure of the Pasture User Union



Author: Project and PUU

# Decision-making on the selection of SLM Technology

## Decisions were taken by

- land users alone (self-initiative)
- mainly land users, supported by SLM specialists
- all relevant actors, as part of a participatory approach
- mainly SLM specialists, following consultation with land users
- SLM specialists alone politicians/ leaders

Decisions were made based on

- evaluation of well-documented SLM knowledge (evidence-based decision-making)
- research findings
- personal experience and opinions (undocumented)

# TECHNICAL SUPPORT, CAPACITY BUILDING, AND KNOWLEDGE MANAGEMENT

The following activities or services have been part of the approach

- Capacity building/ training
- Advisory service
- Institution strengthening (organizational development)
- Monitoring and evaluation
  - Research

## Capacity building/ training

# Training was provided to the following stakeholders

Iand users

field staff/ advisers

## Form of training

on-the-job

farmer-to-farmer

demonstration areas public meetings

courses

## Subjects covered

ToT on environmental management of pasture lands, accounting, planning

#### Institution strengthening

# Institutions have been strengthened / established

no

yes, a little yes, moderately

yes, greatly

# Type of support

financial

capacity building/ training

equipment

# at the following level

local

regional

# Describe institution, roles and responsibilities, members, etc.

Pasture Users Unions

Local hukumat departments:

Ministry of Agriculture, Committee for Environmental Protection and Committee of Women Affairs

# Further details

The representatives of mentioned departments participated in the trainings, conferences and meetings during project implementation and helps participants with the recommendations and guides

#### Monitoring and evaluation

The main tasks of monitoring relative to the livestock and pasture improvement activities; (a) Activities required to improve livestock management (animal health, housing, feeding, breeding), (b) activities required to improve pasture production (rotational grazing, protecting pastures, pasture rehabilitation through spot planting with legumes, improving access to remote pastures, supplementary fodder production, set stocking rates), (c) investment needs1 & sources of funding, (d)an implementation plan showing responsibilities/targets/indicators

## FINANCING AND EXTERNAL MATERIAL SUPPORT

# Annual budget in USD for the SLM component

< 2,000

2,000-10,000 10,000-100,000 100,000-1,000,000

> 1,000,000

Precise annual budget: 100000.0

The project funded by the Pilot Program for Climate Resilience (PPCR) and the Global Environment Facility (GEF) with the objective of enabling rural people to build their productive assets in ways that sustainably improve natural resource management and build resilience to climate change in selected climate vulnerable sites

# The following services or incentives have been provided to land

Financial/ material support provided to land users

Subsidies for specific inputs

Credit

Other incentives or instruments

### Financial/ material support provided to land users

The grant amount would average US\$ 100,000 for each of the 8 PUUs with the specific amount depending on pasture area and existing number of livestock units (to be finalized during implementation)

partly financed fully financed

#### labour

Beneficiaries would contribute at least an additional 25% match of the grant amount (partly in cash and/or in kind as labour or equipment costs).

# Labour by land users was

voluntary

food-for-work

paid in cash

rewarded with other material support

# Other incentives or instruments

The Pasture User Unions have equipped with the high volume machines to improve the pasture roads and riverbanks

## IMPACT ANALYSIS AND CONCLUDING STATEMENTS

#### Impacts of the Approach

No
Yes, little
Yes, moderately
Yes, greatly

Did the Approach empower local land users, improve stakeholder participation?

The ELMARL project used this approach in 4 pilot districts and established 8 PUUs that improve and rehabilitated 12600 hectares of pasture lands. Results showed that PUUs have made significant progress in implementing their activities. As a result of the use of machinery, more than 120 km of roads for livestock and hazardous areas were repaired and rehabilitated, and conditions of pastures improved over an area of 6,750 hectares. As a result of construction of watering points for livestock, PUUs were given the opportunity to graze livestock in summer pastures for more than one month and conditions for 1050 hectares of pastures were improved. As a result of the use of bridges for livestock, the PUU members obtained an access to 470 hectares of pastureland, construction of kashars provided the opportunity for pasture users to use 3900 ha of pasture lands, 1.86 ha of area was rehabilitated by establishing demonstration plots, the area of 75 hectares of land was processed and improved through the use of small agricultural tractors, 250 hectares of pastureland have been improved through sowing grasses as fodder, 100 hectares of pasture lands have been improved through the installation of irrigation pump.

/ Did the Approach help land users to implement and maintain SLM Technologies? Of course, establishing PUUs and designing Pasture and Livestock Management Plans that directly adopted to the SLM will help land users to manage their lands. Some of examples from the PUUs activities contribute to the SLM; construction of 'kashars' (Animal and herder shelters) Implementing these activities has made great profit to PUUs. Cattle breeders were able to extend period for cattle grazing in summer pastures and reduce the burden of livestock in pastures around the village; Improvement of cattle breeding leads to increased productivity and reduce degradation; Improvement of the roads condition – situation of roads for livestock is being improved due to the fact that PUUs in Faizobod district have purchased technique, which guarantees the safe keeping of livestock and also lands that are around the road; sowing perennial grasses was the only activity, which occupied 250 hectares of pasturelands for fodder, and not all PUUs pay attention to these problems. The activity can provide livestock with fodder and prevent lands from erosion as well. / Did the Approach improve coordination and cost-effective implementation of SLM? Using of machinery is the one of activities that was supported by PUUs to rehabilitate roads for livestock and hazardous areas. If PUUs rent this machinery it will be too expensive and organisations does not have such kind opportunity, but machinery helps them to repair their lands in regularly base. 1 Did the Approach mobilize/ improve access to financial resources for SLM implementation? The PUUs equiped with the needed machinery and office where they could organise meetings, so they can construct, rehabilitate and generally support their members(livestock keepers, land users). Presently the PUUs in a very good relationship with their members and collect membership fees regularly, also they have another source of money from the mashinary services. PUU regularly maitaining systems. 1 Did the Approach improve knowledge and capacities of other stakeholders? The PUUs are the member of the GIZ 'Pasture Management Networking Platform' and participated in the meetings regularly. The main task of the meetings is to exchange information and experience on SLM and pasture management projects among various implementing partners. Did the Approach improve gender equality and empower women and girls? 1 PUUs appraised for gender and their inclusion of women and the poor, and possible actions identified to address inequities. Where inequitable arrangements are found that exclude or marginalize vulnerable groups, opportunities will be sought where possible to address these inequities, e.g., targeting a proportion of certain types of production investments to groups of vulnerable households (wool processing, poultry development). Gender and social issues to be addressed during capacity building will mainly relate to an identified need to increase awareness and strengthen capacity of peer-to-peer learning and community mobilization, particularly focusing on increasing the level of participation of nondirect beneficiaries and members of marginalized groups. / Did the Approach improve issues of land tenure/ user rights that hindered implementation of SLM Technologies? The regulation of land allocation, lease and management is under the jurisdiction of the local level authorities together with the district representation of the Land Committee, but also needs to be approved by the provincial and central authorities. Most PUUs quoted that provision of land certificates for Dekhkan Farms on pastureland and PUUs have made attempts to acquire land use right on pastureland and some became successful.

#### Main motivation of land users to implement SLM

increased production

increased profit(ability), improved cost-benefit-ratio

reduced land degradation

reduced risk of disasters

reduced workload

payments/ subsidies

rules and regulations (fines)/ enforcement prestige, social pressure/ social cohesion

affiliation to movement/ project/ group/ networks

environmental consciousness

customs and beliefs, morals

enhanced SLM knowledge and skills

aesthetic improvement

conflict mitigation

#### Sustainability of Approach activities

Can the land users sustain what hat been implemented through the Approach (without external support)?

yes

uncertain

The approach is a sustainable mechanism itself as it has almost all needed resources and capacity to continue their activity. As an example PUU has found a new sources of income today one of the PUUs, "Sorkho" participated in the district competition to implement the program "Prevention of Land Refinement by using biosynthic methods" conducted by the MSDSP Aga Khan Foundation in Surkhdara area of D. Aliev jamoat in Fayzobod district and succeeded in that so in further that will be a lesson to be learnt by other PUUs. The PUU has now established cooperation with this organization on the basis of mutual agreement and is trying to improve the state of pastures at the jamoat level, and nowadays its work is already in progress.

# **CONCLUSIONS AND LESSONS LEARNT**

Strengths: land user's view

Weaknesses/ disadvantages/ risks: land user's viewhow to overcome

- Office and all needed equipments for the operation of PUU Membership fees
- Machinery for land and infrastructure Income from the machinery

## Strengths: compiler's or other key resource person's view

- Confidence between the PUU and its members Availability of Pasture and Livestock Management Strategy (includes planned activities for the 3 to 5 years) Availability of needed pasture and livestock Infrastructure; veterinary infrastructure, machinery to improve pasture roads and bridges, livestock watering points.
- Needed knowledge and capacity to improve pasture production (rotational grazing, protecting pastures, pasture rehabilitation through spot planting with legumes, improving access to remote pastures, supplementary fodder production, set stocking rates
- Mechanism of controling to improve livestock management (animal health, housing, feeding, breeding) Livestock and pasture management; feeding practices, housing, breeding, disease control, marketing of products, usage of the different type of pastures

· Sufficient source of funding

# Weaknesses/ disadvantages/ risks: compiler's or other key resource person's viewhow to overcome

- As it is new the approach needs more support and collaboration on behalf of other government and nongovernment organisation Government needs to support them to be more capable Non governmental organisation need to design project to train
- PUUs does not have their own certificated lands in their balance

## REFERENCES

Kamolidin Abdulloev

Compiler

**Editors** 

Reviewer

Farrukh Nazarmavloev William Critchley Rima Mekdaschi Studer

Date of documentation: May 14, 2018 Last update: May 17, 2022

Resource persons

Kamolidin Abdulloev (kamoliddin75@mail.ru) - SLM specialist

Full description in the WOCAT database

https://qcat.wocat.net/en/wocat/approaches/view/approaches\_3713/

Linked SLM data

Technologies: Meadows and pastures https://qcat.wocat.net/en/wocat/technologies/view/technologies\_6195/

#### Documentation was faciliated by

Institution

- · Committee for Environment Protection of Tajikistan (Committee for Environment Protection of Tajikistan) Tajikistan Project
- Environmental Land Management and Rural Livelihood Project

#### Key references

ELMARL Project: Faizobod district, PUU "Sorkho"

### Links to relevant information which is available online

• ELMARL Annual Report 2017: None

This work is licensed under Creative Commons Attribution-NonCommercial-ShareaAlike 4.0 International





