Community fodder bank (Mia Jan Maroofi)

Community fodder bank for sustaining supplies ( )

Kahdon; Somonkhona

Community fodder banks have been established in villages for the purpose of ensuring supplies of livestock fodder during winter, to prevent loss of livestock and to prevent over-grazing early in spring.

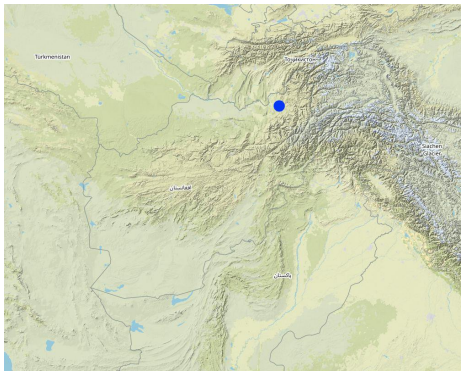
Livestock keeping is one of the key livelihood strategies in rural Rustaq, in addition to cultivation of agricultural crops. Families rely on their livestock not only for consumption of meat and dairy products, but also as means of transportation (donkeys), labour force in agriculture (oxen, donkeys) and a source of cash income. When crops fail to produce enough, families sell their livestock to survive until the next season. Naturally, every family strives to increase their household's livestock as much as they can, which increases pressure on the local pastures, leading to extensive overgrazing.
The pastures in Jawaz Khana, Dashti Mirzai and Sari Joy are characterized by poor vegetation cover, low carrying capacity and severe erosion - with deep rills clearly visible. The quantity and quality of fodder is insufficient for all the livestock, leading to poor animal health. Starting from early spring to late autumn livestock keepers graze their animals on the open grazing lands. During winter months, the animals are kept inside and fed with the fodder conserved during summer. Very often, and especially during droughts, the fodder stocks can be extremely low and inadequate for the animals to make it through to spring - and then farmers lose livestock.
For the purpose of tackling fodder shortages during winter months and preventing livestock loss, the Livelihood Improvement Project in Takhar (LIPT) supported the Natural Resources Management Committees in Sari Joy, Dashti Mirzai and Jawaz Khana to establish community fodder banks. The fodder bank is also meant to compensate for the closure of rehabilitated pastures during the exclusion period of 1-3 years.

The NRMC mobilized the community to construct the fodder bank building. The building is composed of a large single space of 3.5 m x 10 m x 4 m. Generally the location for the fodder bank is chosen in the middle of the village near the mosque or NRMC building. On average, the fodder bank has a capacity of 250 bags of straw and 50 bundles of hay. Durable construction materials, namely stone and cement are used for the walls. The walls are painted for protection from mould. Proper windows and entrance door are installed to ensure insulation and protection from weather events. The construction materials and labour costs are fully covered by the LIPT project. The maintenance works for the building consists of repairing the roof every autumn with a clay layer.

The fodder bank serves as a reserve for the village community. After each harvest the farmers deliver a certain amount of fodder to the fodder bank, and in return they can take out fodder for their livestock needs. The established regulations require that each farmer is obliged to reimburse the fodder bank for the fodder he has taken as a loan. The NRMC appoints persons in charge of accepting, and releasing, fodder from the fodder bank. The persons in charge record the incoming and outgoing fodder in the log book for fodder. The log book registers the name of the farmer and the amount of fodder he has delivered, or taken, from the fodder bank.

The fodder banks have been functioning for only couple of years. The community has been using the fodder bank to feed their livestock during winter mainly, but also when they have shortage of fodder in other months as well. Due to the low capacity of current pastures the farmers produce just enough to feed their livestock and not much is left to store in the fodder bank. The fodder stocks are expected to increase in future as part of the ongoing process of pasture rehabilitation through cultivation of alfalfa and rotational grazing plans.

Women and children are often involved in collecting the hay and carrying it to the fodder bank. This requires long-distance walks with heavy loads since many houses are located far from the fodder bank. Despite this heavy work, women say that they find the fodder banks useful because of the opportunity to borrow hay for their livestock when they need it.



: Dashti Mirzai, Sari Joy, Jawaz Khana Villages, Takhar Province, Rustaq District,

: 2-10

- 69.91936, 37.10954

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: 2014;
10 ( )

(> 50)

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Fodder bank hay reserves provided by LIPT (Mia Jan Maroofi)

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Improve fodder supplies

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: Fodder bank to store hay and wheat straw

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SLM

- (pastoralism)
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SLM

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The building is composed of a large single room of 3.5 m x 10 m x 4 m. Generally the location for the fodder bank is chosen in the middle of the village near the mosque or NRMC building. On average, the fodder bank has a capacity of 250 bags of straw and 50 bundles of hay. Durable construction materials such as stone and cement are used for the walls. The walls are covered with white paint for protection from mould. Proper windows and entrance door are installed to ensure insulation and protection from weather events. The construction materials and labour costs are fully covered by the LIPT project. The maintenance works consists of repairing the roof every autumn with a clay layer.

- (**Building** volume, length: **Measurements: 3.5 m x10 m x 4 m**)
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- ( ) 1 USD = 67.0
- 5.2-5.3 USD

Due to the remoteness of the villages where the Technology has been implemented, all the inputs for establishment, such as agricultural equipment, plant material, fertilizers, etc., are purchased in Rustaq town. The expenses for traveling and delivering the inputs affect the establishment costs.

1. Selection of the site for building the fodder bank (/ : Spring)

2. Preparatory works and excavation of the site (/ : Summer)
3. Construction of walls (/ : Summer)
4. Other construction works and installations (/ : Summer)

			( )	( )	%
Preparatory works and excavation of the site	person-day	2,0	5,3	10,6	
Construction of wall of the facility	person-day	15,0	5,3	79,5	
Other construction works and installations	person-day	15,0	5,3	79,5	
Hummer	piece	2,0	3,7	7,4	
Weel barrow	piece	1,0	37,0	37,0	
Pickaxe	piece	2,0	3,7	7,4	
Big hammer	piece	1,0	13,0	13,0	
Saw	piece	1,0	2,8	2,8	
Shovel	piece	4,0	3,7	14,8	
Gloves	set	10,0	1,5	15,0	
Other tools	piece	10,0	3,2	32,0	
Stone for construction	cubic meter	12,0	16,0	192,0	
Cement	Bag	71,0	3,7	262,7	
Lime	kg	1,0	14,0	14,0	
Gravel	cubic meter	4,0	16,0	64,0	
Oil paint	kg	10,0	1,7	17,0	
Door	piece	1,0	162,0	162,0	
Window	piece	4,0	17,0	68,0	
Plastic color 50% and 100%	kg	48,0	2,45	117,6	
				1'196.3	

1. Repair works of the roof with clay and hay mixture (/ : Autumn)

			( )	( )	%
Repair of the roof	person day	2,0	5,3	10,6	100,0
				10.6	

< 250
☑ 251-500
☑ 501-750
751-1,000
1,001-1,500
1,501-2,000
2,001-3,000
3,001-4,000
> 4,000

☑

580.0

Average annual precipitation for the area was calculated with 580 mm, with minimum in dry years (2000 and 2001) of 270 mm and maximum in wet years (2009/2010) of 830 mm. The absolute maximum rainfall was calculated for 1986 with 1024 mm. The data series covers the time from 1979 to 2014

Reference meteorological station considered:
Climate Forecast System Reanalysis (CFSR), http://rda.ucar.edu/pub/cfsr.html
Derived from the publicly available data set on length of growing period (LGP) (Fischer 2009 / IIASA-FAO). Internet link: http://tiles.arcgis.com/tiles/P8Cok4qAP1sTVE59/arcgis/rest/services/Length_of_growing_period/MapServer

(0-2%)
(3-5%)
(6-10%)
(11-15%)

0-100
101-500
501-1,000
1,001-1,500

(16-30%)
(31-60%)
(>60%)

1,501-2,000
2,001-2,500
2,501-3,000
3,001-4,000
> 4,000

(0-20)
(21-50)
(51-80)
(81-120)
(> 120)

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/ ( )
(,)
/ ( )

(> 20
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/ ( )
(,)
/ ( )

(>3%)
(1-3%)
(<1%)

< 5
5-50
> 50

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SLM

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10%
10-50%
50%

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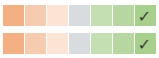
SLM /

Land users learned about the SLM practice through involvement in the process.



Based on the multi-criteria matrix: During the FGD with SLM implementers, a multi-criteria matrix was elaborated, and different SLM practices were rated. In the framework of this exercise, SLM implementers were asked to jointly discuss and rate short term (1-3 years) and long-term (10 years) returns. As the SLM technology was only implemented 1-2 years ago, it is too early to compare benefits to maintenance costs. Farmers have little experience so far on the actual benefits of the SLM technology. The ratings are mostly based on expected benefits and not on actual benefits.

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- ✓
- 1-10%
- 10-50%
- 50%

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- 0-10%
- 10-50%
- 50-90%
- 90-100%

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- ✓

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- Fodder reserves are available during winter and early spring.
- Livestock keepers can borrow fodder from the fodder bank when they need it.
- The fodder is stored in a dry place and is protected from rain and snow.

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- The community learns how to regulate the use of fodder
- By providing fodder reserves, the rehabilitated pastures are protected from early grazing in spring.

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/ / :

- Poor awareness and community participation in storing their fodder in the fodder banks More community awareness and mobilization

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https://qcat.wocat.net/km/wocat/technologies/view/technologies_674/

SLM
Approaches: Watershed Associations (WSA) and Natural Resource Management Committees (NRMC)
https://qcat.wocat.net/km/wocat/approaches/view/approaches_545/

- CDE Centre for Development and Environment (CDE Centre for Development and Environment) -
- Swiss Agency for Development and Cooperation (DEZA / COSUDE / DDC / SDC) -
- Terre des Hommes (Terre des Hommes) -

- Livelihood Improvement Project Takhar, Afghanistan (LIPT)
- Potential and limitations for improved natural resource management (NRM) in mountain communities in the Rustaq district, Afghanistan (Rustaq NRM Study)

- Guidelines for Focus Groups Discussions:
- Methods section of the Rustaq NRM study: