

Afghanistan: Watershed management for improved food security



Case Study Summary

Since 2009 HELVETAS Swiss Intercooperation supports rural communities in mountainous regions of northern Afghanistan with two rural development projects addressing relevant disaster risk reduction (DRR) aspects. The two projects - "Green Saighan" (GS) and "Improving Livelihoods of Rural communities in Afghanistan" (ILRC) are based in a sustainable livelihoods approach. The projects support local communities to improve the self-subsistence and income of rural households by diversifying farm and farm-related activities, to reduce the vulnerability of communities to natural disasters and strengthen their resilience by an integral and socially inclusive water and land use management.

Intervention Context

The majority of the afghan population lives in remote rural areas, mostly relying on agriculture and livestock. The population sustains on very limited fertile irrigated land in narrow valleys. People tend to exploit the fragile uplands for livestock grazing, shrub collection for firewood and rain fed wheat. The livelihoods of the rural population are increasingly threatened due to unsustainable use of upland areas which leads to more destructive runoff water, reduced water infiltration and reserves and loss of soil fertility, amplified by the climate change that increases the frequency and severity of floods and droughts. The supply of water for agriculture is the though most important factor contributing to food security and income of the rural poor.

Intervention / Project Description

- **Rationale:** Natural disasters, especially floods and droughts constantly threaten rural livelihoods and jeopardize development efforts. The overuse of the upland pastures, inappropriate agriculture practices and the effects of climate change contribute negatively to reduced agricultural production, loss of harvest, community assets and lives. The project aims at improved rural communities' livelihoods and reduced food insecurity by reducing disaster risks and improving resilience.
- **Expected Results:**
 - Reduced vulnerability and protected livelihood assets from floods and droughts through watershed rehabilitation and sustainable use of uplands.
 - Increase of agricultural production and income through farm and non-farm activities.
 - Establishment and capacity building of local partners.
- **Main Implementation Components and Activities:**
 - Development of a model for watershed rehabilitation as prevention measure: Implementation of bio-engineering measures in combination with capacity building of local committees for a participatory management of soil and water resources.
 - Economic development for resilience building: Introduction of improved seeds and production techniques for the intensification, diversification and improvement of agricultural practices to increase production and food security.

The Intervention in a Nutshell	
Country/Area	Afghanistan / Saighan, Kahmard, Ruy-e-Doab, Tala-wa-Barfak districts
Beneficiaries	230 rural communities
Main Partner	Community Development Councils (CDC; – local civil society organizations)
Duration	GS: phase II: 2013-15 ILRC: phase III 2012-16
Budget (per phase)	ILRC: phase III, 10 Mio. CHF (Swiss Gov.- SDC) GS: phase II, 2.1 Mio CHF (Gov. Lichtenstein - LED)

Afghanistan: Watershed management for improved food security



- Governance and capacity building to improve local disaster risk management: Enhancement of capacities of local civil society institutions (CDC and local committees) for inclusive and participatory planning and management of their resources and assets.
- Participatory elaboration of local development and resource management plans and its implementation.

Examples of Science and Technology Used in the Intervention

- Implementation of sustainable land use management practices (SLMP) using local construction material (stones, soil, wood) for bio-engineering measures to reduce water runoff, erosion and increase infiltration, thus reduce floods and droughts. Systematization and documentation of measures for knowhow transfer and replication.
- Establishment of community bakeries to reduce local fire wood consumption and to reduce pressure on upland.
- Establishment of local flood early warning systems: provision of key equipment (loudspeakers, first aid kits), training of preparedness committees.
- Participatory definition of tasks and resources for local task forces to (e.g. saving box mechanism for maintenance of infrastructure measures)
- Participatory multi-hazard and risk mapping: assessing natural disaster risks, climate change, overuse of pastures/ agricultural land and identifying vulnerable groups and assets in order to raise awareness and to prioritize intervention areas.

Key Achievements and Lessons

- Consider governance aspects by ensuring participation and ownership of the local population, especially women, ethnic minorities and other vulnerable groups.
- Combine infrastructure works with soft elements, such capacity building on technical and management aspects for local development planning.
- Involve all relevant stakeholders to define management, operational and financial mechanisms for maintenance and replication of infrastructure measures. Support local task forces (e.g. DRR, early warning, maintenance committee) with clearly defined and institutionalized tasks based on local resources and capacities.
- Promote simple DRR measures with co-benefits e.g. cultivation of fodder and medical plants on terraces for improved income and reduced erosion.

References and Acknowledgments

- HELNETAS (2013) SLM Technologies and Approaches from Afghanistan https://www.wocat.net/fileadmin/user_upload/documents/Books/Afghanistan_fact_sheets.pdf
- HELNETAS (2014) Training Modules for Upland measures, https://afghanistan.helvetas.org/en/publications/training_modules/training_uplands/
- HELNETAS (2016) Training Modules on Climate Change and Disaster Risk Management https://afghanistan.helvetas.org/en/publications/training_modules/climate_change_and_disaster_risk_reduction/resource_persons.cfm
- HELNETAS (Project website) Green Saighan project, https://afghanistan.helvetas.org/en/projects/project_b/
- HELNETAS (Project website) Improving Livelihoods of Rural Communities in Afghanistan (ILRC) <https://afghanistan.helvetas.org/en/projects/ilrc/>

Afghanistan: Watershed management for improved food security



-
- HELNETAS – (Project website) Sustainable Land Management Project (SLMP)
<https://afghanistan.helvetas.org/en/projects/slmp/>