

Evaluation

Final Report

Efficiency in Farming

and

Energy Consumption

Consolidating the watershed approach in Baljuvon

Tajikistan

PROJECT NUMBER

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Project Holder



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1 Brief description of the project and framework conditions

The EU-funded project "*Efficiency in Farming and Energy Consumption Consolidating the watershed approach in Baljuvon (TJK-1071)*" implemented by *Welthungerhilfe* in the Baljuvon district aims to contribute to the reduction of poverty of the population in the Baljuvon district in Southern Tajikistan through efficient use of natural resources and rehabilitation of unproductive land.

To reach this overall aim, this project has the specific objective of widening and reinforcing the model of sustainable natural resource use by building on successful interventions of the past, with the goal of a) reversing the processes of land degradation, b) increasing agricultural yields and c) decrease costs for adaptation measures.

The project focused on the three dimensions: *scope*, *scale* and *sustainability*, which are in line with the results and recommendations from experiences of previous projects:

The implementation in the period from December 01, 2010 to November 30, 2013 (36 months) had direct costs of EUR 942,016.

2 Relevance

2.1 Relevance to core problems of the target group

The objective of this project is relevant to the needs of the vulnerable groups and is in line with the general policies of Tajikistan and with the MDG objectives.

The project is relevant to the *Welthungerhilfe* objectives of improving living conditions, as set out in its statutes, by reducing hunger and poverty and helping people help themselves.

The project is in line with the aim of the European Commission's Assistance Strategy Paper for Central Asia (2007-13).

3 Effectiveness

The selection of the target region and target groups was based on prior field assessments conducted to identify the needs of the beneficiaries. The beneficiaries were actively involved in the assessment, identification and prioritisation of needs. The project approached the community of beneficiaries through local leaders and district administrations, e.g. *Hukumat*, *Jamoats*.

All stakeholders cooperated and the project has a very good reputation in the target region and beyond. The project activities are very much appreciated by the representatives of the target group, local authorities and international donor organizations.

Stakeholders within the communities (e.g. Village Development Councils (VDC)) were actively involved in the implementation of the project and participated in need assessments and identification and in the prioritisation of project activities, which led to a strong ownership of interventions. The communities were able to mobilize manpower, source construction material locally and participate in project planning.

The project has qualified staff members, some with *Welthungerhilfe* experience, to carry out the project in accordance with requirements. A local Project Manager is the formal leader of the project. The quality of project steering and execution is good. However, the highly committed national Project Manager needs still the support of the *Welthungerhilfe* Project Advisor who is very experienced and advises the project team in important technical questions.

A summarised impact assessment has not so far been delivered by the project staff in terms of the overall goal. A Baseline and Endline survey was conducted which can and should provide

a database for future impact assessments in the region, after a more professional elaboration of the surveys.

The target group appreciated the practically-oriented trainings and the exchange visits ("*eye opener*") but these are too short in term. Trainings for target groups should ideally be reiterated and exposure visits/exchange programs should be provided much more frequently.

The community capacity is strengthened in watershed management issues (NRM, EE). The Hukumat intends to consider integrating the community watershed management plans into the District Development Plan in 2014.

The project approach is good but the project period and the duration of the project intervention are far too short to ensure sustainability.

The bottom-up approach has received wide acceptance by the beneficiaries but it is not the best method for success of a watershed management program, especially when downstream needs and other interests are to be considered.

The poorer households were not methodically and strategically integrated into the project approach because it is difficult for vulnerable poor people to use natural resources sustainably.

An effective watershed collaboration forum or an effective information exchange system to ensure long-term collaborative watershed management between all relevant intersectoral stakeholders (grassroots organizations, the private sector, government line agencies, local authorities, NGOs and other development institutions) are not currently discernible.

The overall effectiveness of the project is good; in some aspects very good. The performance of the project is good in aspects of the accomplishment of programme activities and achievements, particularly thanks to the smooth cooperation among all stakeholders of this project

4 Efficiency

According to the documents, the project is aiming to directly assist 819 households (HHs), which will mean more than 6,569 direct beneficiaries.

The initially planned entire project budget was EUR 942,016 for the 36 month project. More than 29% of funds were to be directly available for the target group and about 40% for personnel costs. The personnel costs are relatively high, but this is justified because the project approach entails employing an International Advisor, who supports the project and the national project management very effectively in capacity building and watershed project implementation.

5 Outcomes and impacts

Especially in the field of the **Sustainable Land Management** and Agriculture for the community, newly introduced techniques (conservation measures, cultivation methods), awareness raising of stakeholders the impact as hardly assessable because a large number of project inputs are very new and activities started in recent times (periodic year effects) and it is too early to assess their success.

Local organised organisation **Village Development Council (VDC)** are crucial institution for watershed management in terms of the self-help approach and realize their creative potential. It has generated common interests and has fosters a common purpose.

At the end of the project period the community institutions implemented by this project will be handed over to the beneficiaries and a formal certificate will be signed by Welthungerhilfe

and by the designated beneficiary representative and the responsibility will be assumed by the beneficiaries. Indeed, some of the institutions are ready and in line with the projects watershed approach but they need much more support over a longer period.

In a participatory approach all watersheds have successfully elaborated their own **Watershed Management Plan (WSMP)** which includes a Pastoral-Management-Plan (PMP). This WSMP was handed over to the District officials. According to the Hukumat in Baljuvon the WSPM will be integrated in the District Development Plan of the Baljuvon District in year 2014.

However, very obvious is a lack of training in **fruit growing/agriculture/horticulture** skills of very dedicated project beneficiaries.

The project conducted very successful promotion campaigns to improve the **Energy Efficiency (EE) techniques** at household level firstly through public advertisements (Boards and Market-Info-Points) and especially by its village level farmer & women groups and its VDCs.

Numerous energy efficient households received, upon an own contribution and after receiving practical trainings modified cook stoves; stove heat exchanger, pressure cookers, and solar cookers. For the house insulation local masters have been trained and support the project in insulating of several buildings. A considerable increasing number of households in both the project target and non-target areas are interested in using energy efficient technologies as well as sustainable land management methods.

Several **Joint Bread Bakeries (JBB)** have been implemented in the project area. Several households women jointly gather together bake their bread in the new bakery. They stated that they can save more than 50% of fire wood since they have the opportunity to bake together.

The implementation of a chimney (which is not common in this area) is a great advantage due to the decreased smoke formation in the room which has an impact on eye and respiration diseases of the users.

The building is used also as a social forum point for the community and is used for community solemnities as well. Women come together and talk about the news of the day. According the women the topics of discussions are often social, economic and environmental issues that affect the community. These discussions can address specific planning activities which aim to overcome women's social drawbacks and can consequently enhance women's empowerment in the community society.

For some of the villagers the building is too far away, having small children or handicapped family members. Consequently in some villages another such facility may be worthwhile. So far, however, on communities own initiatives and resources as yet no other bakery has been planned by them. But it may be a matter of time until it becomes clear in the frame of the self-help-approach, that such an investment can be useful and economical profitable for the community.

The project implemented several **photovoltaic units** and in March 2013 started the implementation of twelve of these solar units in village households. The accumulator back-up system is charged daily by one solar panel. HH are using this solely for light and for watching TV. On the one hand it enhances the quality of life of the household considerably, but on the other hand it is questionable whether those investments contribute to the furtherance of the project objectives.

Water structures (rain water roof catchments, water conservation ponds, counter-channels, trenches, and terraces, drinking water -tanks and outlets) were carried out in good condition, some are still under construction (e.g. ponds for water catchments). Some of

the structures were insufficiently covered or easily accessible, which puts humans and animals at risk of drowning.

One **drinking water system** was provided by the project and the installation (labour, construction material) was contributed by the community. Unfortunately no tapes are installed on the outlets to seal the pipes, to avoid or minimise water losses easily especially during the drought periods. Community based Water User Groups (WUG), perhaps as part of the VDCs, should be established to run these facilities more efficiently and ensure sustainability. Beneficiaries stated that the cases of water-related diseases have decreased and beneficiaries now have more time because they are relieved from the need to fetch water from far distances.

Several **rainwater harvesting systems** have been installed in the project region and household and farmers appreciated this simple and easy collection system, as it requires only little input. The water is mainly used for the irrigation of kitchen gardens, washing and cleaning.

At present, several **gully plugging's** in the sub-watersheds have been established and stabilized with palisades, stone gabions, retaining walls and plantings of trees & shrubs. Numerous gullies are stopped from further erosion but other gullies have to be restored. It has to be seen in future whether the VDCs or the communities are capable to take over the project approach for further action in this respect.

Project activities concerning the **pasture management** planning were conducted by the local project partner organisation AZAL. Target persons received training on the topics of the efficient use of the natural resources of pasture (pasture rotation, cultivation fodder crops, controlling over grazing, development & use of the pasture management plan). Several **water points** have been created for the animals in the upper project region to push herds into going further up for grazing and to reduce transhumance in the region. Pasture management is a key issue in the WS management project. A Pasture Management Plan (PMP) was finalized in the all WS in February 2013, so it is too early to assess any impact of that activity in this evaluation. According to this plan, pastoralists organized themselves for future pasture management. Outcomes and impacts of appropriate pasture management that result from this planning remain to be seen, if TG (herders) can and will adopt the pasture management into practice.

A **Project Info Point** has been established at Baljuvon Sunday *Bazar*, where models of energy efficiency techniques and land conservation and rehabilitation technologies are presented. All models (conservation technologies and house isolation model) are very convincing and, -after the project concludes in Nov. 13-, it would be a good idea to place these models somewhere to support the environmental lessons and the adoption of behaviours and practices which protect the environment, and to promote a better understanding of the principles of ecologically sustainable development. However, the local authorities feel unable to organize another exhibition space as an information point.

The project trained **local master** craftsmen to become energy efficiency (EE) specialists, provide individual consulting services and to support and assist the beneficiaries in the implementation of energy efficient techniques. In fact, the demand is growing for such services as the benefit of energy efficient facilities has become widely known in the district.

Local traders can organize the necessary inputs for the promoted resource conservation techniques and sell them at the Baljuvon market. Households and farmers, who want to replicate systems on their own, can find the necessary inputs more or less (depending on the particular quality requirements) on the market. Master craftsmen will be available for the community as long there is a demand for this kind of service.

In accordance with the activities of the producers, an exemplary demonstration for the **manufacturing** of HE and for fencing materials revealed that in this context and in terms of sustainability both businesses may be worthwhile over the long term and can contribute to the long-term supply of the project beneficiaries with project required material.

6 Sustainability

Fruit growing, agriculture and horticultural cultivation activities are highly appreciated by the target communities. But this requires in general long-term project support, especially for the new agro-pastoralists to keep the new farmers encouraged in their new activities and make it more efficient for their communities.

Increasing numbers of households in these communities understand the impact of soil conservation very well and had already gained knowledge, as well as their own observations and experiences, concerning its effects. Other neighbouring farmers and farmers other regions have started activities and micro-projects on their own initiative (orchards, collection and incorporation of organic material into the agriculture cycle, joint bread bakery) to advance these soil protecting cultivation methods, and started digging trenches and terracing on their land; moreover, they appreciate the effects of these efforts.

Experience exchange visits and meeting are very successful, *-clear and convincing-*, should be conducted regularly, to learn from each other and improve the quality of WS-implemented facilities and for replication and diffusion.

The know-how and resources of the district government is still insufficient for engaging in watershed management. No attempt to participate or contribute any important, valuable input to the project implementation was seen by most of the project stakeholders. During the whole project period the local authorities have not so far played any major role, such as taking the initiative towards finding solutions to the watershed problem, or for taking any types of measure to advance the project objectives. Capacity building and practical training are essential to ensure that the watershed approach finds its way up to the administrative level. Unfortunately, this opportunity was not seized by the responsible government agencies.

The Watershed Management Plan is now ready for integration into the District Development Plan. The responsible authorities have to act now. The involvement of all stakeholders, especially of all relevant government institutions in planning and execution of the project, is crucial. The inter-state movement of stock from outside areas crossing the watershed region to summer pasture in the highlands has to be monitored and controlled. The process of implementation, however, may be decelerated by other important interested groups who have influence on the inter-state movement of stock.

Since the watersheds are inhabited by large human and cattle populations within a narrowly confined region, it has become more of a social problem than a technical one. Therefore the watershed management approach has to be both technically feasible and socially acceptable, accommodating the minimum needs of the people.

Awareness-raising of persons responsible toward the fact that better quality of livestock, rather than larger herds, can have numerous benefits for both humans and nature.

The local authorities suffer from the fact that, so far, the state has provided only limited resources to the concerned sector. One other major obstacle to the implementation of an efficient and collaborative Watershed Development Program in the district was seen in the lack or low level of willingness or commitments on the part of the local authorities, which can significantly threaten the sustainability of this project

7 Most important recommendations

- ⇒ Plan and design surveys in cooperation with relevant stakeholders to define suitable and verifiable indicators for socio-economical and livelihood issues which mobilise stakeholder activities and increase ownership in the project implementation.
- ⇒ Community organised structures (VDCs) are ready and in line with the project's watershed approach but they need much more support in capacity building over a longer period.
- ⇒ Fruit growing, agriculture, and horticulture cultivation is highly appreciated by the target communities. But this requires in general long-term project support, especially for those new to agro-pastoralism's, to make this activity more efficient for their communities.
- ⇒ All issues concerning the constructed water facilities should be mentioned in the formally presented certificate, to point out responsibilities and hazards in order to avoid accidents and health hazards.
- ⇒ Consciousness raising is very much recommended to increase the capacity of local stakeholders to
 - understand and manage the intersectoral processes and approaches necessary for effective watershed management
 - understand ecological and environmental interrelationships
- ⇒ Existing models for conservation technologies and house insulation built by the project are very convincing. Place these models somewhere (in publicly accessible places or institutions) to support environmental lessons and adoption of behaviours & practices and promote a better understanding of the principles of ecologically sustainable development.
- ⇒ The practical implementation of the PMP within the watersheds should be observed. Further on-site supports are required.

8 General conclusions and "Lessons Learnt"

- ⇒ To assess the rate of innovative adaptations outside the project region is a challenge for monitoring teams and requires a well-thought-out monitoring concept which includes quantitative & qualitative assessments to allow for statistically robust conclusions.
- ⇒ Experience-exchange visits and meetings (*eye opener / clear & convincing*) are very effective and should be conducted regularly, to let beneficiaries learn from each other.
