



For a world without hunger



REPORT

**External evaluation
on behalf of Welthungerhilfe, Bonn**

**Project:
Improved Food Security of Small Farmers in
North Tajikistan
BMZ: 2012.5557.9 / Tadschikistan
Welthungerhilfe: TJK 1082-12**

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Finally, the independent translator, who facilitated the interviews with the beneficiaries in the field and with the project staff.

The results of the evaluation and the report are the sole responsibility of the author and can in no way be taken to reflect the views of Welthungerhilfe. Of any factual errors or of ill-judged conclusions, which undoubtedly exist in assessing such complex and innovative projects, the evaluator apologises in advance and welcomes corrections.

Dr Rudolf Schwarz
October 2015

I SUMMARY

1 Brief description of the project and framework conditions

The project for Improved Food Security of Small Farmers in North Tajikistan (the project) was presented by Welthungerhilfe to BMZ for co-financing. The project holder in Tajikistan is the International Charity Public Organization (ICPO) JOVID.

The project time frame was from 1 November 2012 to 31 October 2015 with a total budget of € 511,784. From this amount € 300,000 were funded by BMZ, € 119,984 by Welthungerhilfe and € 91,800 by JOVID and the target groups.

The project objective (purpose) is:

A year-round supply of food for 1,600 farmer families can be secured by improving agricultural production and post-harvest protection.

The most important step to achieve the project objective was to establish producer groups as a means for adopting knowledge and for promotion of technical innovations. The groups received theoretical and practical training from promoters trained by the project staff.

Group members received vegetable seeds and jars in which to preserve fruits and vegetables; some members also received seed potatoes, wheat and alfalfa seed, as well as materials for constructing greenhouses, storage facilities and compost bunkers. In addition, upon request, they received technical advice for the issuance of land use titles.

The project area districts of Gonchi, Shahrstan and Istaravshan are home to approximately 320,000 people, with more than 50% living under the poverty line. On average, farmers have access to 0.04 to 0.12 hectares of irrigated land for agricultural production. In recent years, agricultural production has dropped off as a result of decreasing soil fertility.

The low productivity of agriculture and lack of land appropriate for agricultural purposes result in Tajikistan currently importing 56% of its required foodstuff – on average families are spending up to 73% of their income on food.

Project beneficiaries live on small agricultural plots and earn their living mainly from growing wheat, potatoes and alfalfa as well as are managing kitchen gardens with fruit trees. They received their land only since the land reform and do not come from a traditional farming background. They are also facing uncertainty in respect of land tenure because they lack land use titles.

As they don't have access to high-quality seed, other inputs and adapted storage options, the food supply for their families is consistently unbalanced. Agricultural yields are only sufficient to cover approximately nine months of the year. Because of this difficult situation, many men are working as labour migrants in Russia. Frequently, contact with these migrant labourers break off and women are left to fend for their families. Now approximately 40% of households are headed by women, who have very few rights as a result of their unclear status. These women, therefore, view growing and preserving vegetables as an opportunity to secure food for their families.

2 Relevance

During the field visits it was possible to verify that the project has managed to identify the bottlenecks. The implemented measures (see section 5, Outcomes) substantially improved the target group's food security. Conversely, and especially in the very dry parts of the project area, on various occasions beneficiaries mentioned that these innovations would not have the desired effect if the irrigation water supply had not been significantly upgraded.

The project is of high relevance for the Welthungerhilfe and JOVID objectives as it considerably improves the situation of food security of smallholders' families and also follows their shared approach of "help towards self-help".

3 Effectiveness

In order to exactly measure the effectiveness of the project implementation it would be necessary to have the results available from the end-line survey. Unfortunately that had still not been done at the time of the evaluation. Therefore determining the project's effectiveness is mainly based on information gathered during the field visits, which allows for a more qualitative than quantitative appraisal.

In general terms the project's overall technical and financial execution is fine, its inputs, activities and outputs are adequately managed and the target groups are involved in project implementation. The evaluator could prove that agricultural production and post-harvest protection substantially improved and thus the project has had a very positive effect on improving the target group's food security. The work of the promoters who are rendering advisory services on a voluntary basis is especially worth mentioning.

Project preparation

The analysis of the target group and its situation is rather assertive as important social and technical challenges were identified which are impairing food security. These challenges were mostly addressed adequately by the formulation of the project.

Nevertheless, the evaluator considers that some deficiencies should be mentioned:

- Smallholders had to contribute 50% of the value of the seeds that they received in cash; while that was practicable in the case of vegetable seeds, it was a problem in the case of staple foods (potatoes, wheat) and fodder plants (alfalfa).
- The scarcity of irrigation water in the project area was not taken in consideration.
- Smallholders in the project area are still used to a conventional agricultural system which depends on chemical fertilizer and pesticides. Apart from the production of compost, sustainable agricultural practices were not really considered.

Project planning matrix

The preparation of the project objective (and the secondary objectives) is logical and realistic. The project structure is quite comprehensible and manageable because the project is limited to only a few secondary objectives and activities.

Most of the indicators are formulated in an adequate and precise manner. Nevertheless, there are some visible inaccuracies, such as the lack of quantitative specifications and use of wrong terms.

And regarding the assumptions and risks, in addition to those presented, should have been mentioned the deficient supply of irrigation water.

Results chain analysis

Generally, the results chain is logically established, the elements of the sequence are justified and each of them constitutes the base for the next one.

The proposed inputs are absolutely meeting the target group's needs in case of seeds, and preservation of fruits and vegetables; however, for the greenhouses, storehouses and compost bunkers the original planning had to be modified.

Trainings and study tours for JOVID staff members were foreseen; they should pass on the acquired knowledge to the promoters, following the training of trainers (ToT) approach.

The measures proposed by the project meet the target group's needs and ensure that the aforementioned inputs were used properly. Unfortunately activities relating to sustainable agriculture, such as mixed cultivation, crop rotations or integrated pest management (IPM) were not taken into account.

The predicted outputs, consisting of capacity building (Output 1) and support with materials and equipment (Output 2) for improving agricultural production and post-harvest protection in combination with improving security of land tenure (Output 3) are logically linked and constitute adequate pillars for achieving the project purpose.

Appropriateness of staff, material and financial planning

The personnel required for implementing the project mainly was adequately devised. The required materials were also mostly appropriate; except for greenhouses because the type originally scheduled was changed in favour of a bigger, and therefore more expensive, model. The budget was mainly adequately designed. Nevertheless two budget reallocations were required, as it turned out that some budget lines were left or underfinanced. Salaries for personnel were calculated too low resulting in two moderate increases to avoid the risk of staff members leaving the project. No budget line was planned for visibility, and it was necessary to use funds for them from existing budget lines.

Quality of analysis of project holder (partner(s) or external structure of Welthungerhilfe

The project holder IPCO JOVID was established in August 2002 with Welthungerhilfe support. This non-commercial and non-governmental organization aims to increase the rural population's livelihood through integrated development measures.

At present there are five departments within the organization with 13 staff members working on a permanent basis. The main office is located in Chkalovsk, near Khujand and is adequately equipped. Since its foundation, ICPO JOVID carried out more than 30 different projects corresponding to a volume of more than € 4 million.

The organizational structure of the project is almost fine. Tasks are adequately assigned; each position has its own defined job description. Regarding the agronomists, one male is covering the Gonchi district and the other male the Istaravshan and Shahrستان districts. The female agronomist is working throughout the districts with women belonging to the producer groups in all the areas.

Some changes were made in the composition of staff, introducing a logistician; therefore the number of agronomists was reduced from four to three.

Agronomists participated in trainings and study tours on issues of rural development and sustainable agriculture in other parts of Tajikistan and Kyrgyzstan. From what they learnt they are applying the construction of compost bunkers, the use of seed bags and the construction of greenhouses. However other techniques were only moderately applied, such as IPM or improved soil fertility.

Steering by the head office, regional office and cooperation with the project holder

The relationship between JOVID and Welthungerhilfe is sound and fluid. Collaboration during project implementation was regular and close, including exchange visits with other projects. Nevertheless JOVID's involvement in the process of detailed project proposal planning and submission of the final version to BMZ was limited. This caused certain issues to be misunderstood.

Welthungerhilfe Country Office (CO) support was strong in administrative issues. Welthungerhilfe CO staff conducted monitoring visits with JOVID and the project, and

cooperation with CO's Partner Support Office was close. Nevertheless, the project manager expressed that in the future he would like to receive more technical input from Welthungerhilfe CO.

Project execution quality

The project was mainly implemented as planned. The inputs handed over to beneficiaries were those needed to achieve the project purpose, such as seed potatoes (variety Red Fantasy), seeds of wheat (variety Starshina), alfalfa, (variety Tashkent 122) and vegetables (cucumber, beetroot, pumpkin, beans, carrot, and turnip) and seedlings of tomato, bell pepper and cabbage.

The original design for the greenhouses was modified and to construct larger ones. That was an appropriate decision as it was thereby possible to produce seedlings also for the other members of the producer group.

A few new storehouses were constructed (36), but mostly existing ones were rehabilitated or improved (164). This change is reasonable as it turned out that most beneficiaries already made use of storehouses.

The implementation of the project's technical innovations was based on how the producer groups were set up; to do this, local self-help approaches and structures were taken into account. Some 64 producer groups were set up with 25 members in each, following the criteria established by the project and agreed upon with local authorities.

The group members selected promoters who coordinated the group and passed on the technical knowledge that they received from the project agricultural specialists. The groups gathered together to learn and exchange experiences about agricultural production and post-harvest techniques. From the 1,600 group members 1,016 were women, which correspond to 63.5% – much more than the 40% originally anticipated.

Regarding assistance to farmers for receiving land use titles, the legal advisory fund was established and a contract was concluded with the local consultancy organization Mushovir to give legal advice to dekhan farms to become individual ones where members dispose of land use titles.

It was observed during field visits and interviews that the foreseen outputs were mainly achieved in the case of beneficiaries. (See section 5 – Outcomes.).

Regarding the project agricultural specialists, the evaluator got the impression that they are only partially applying what they learnt at their trainings and study tours about sustainable agricultural practices and participatory advisory methods.

For the evaluator it seems that most of the indicators were achieved. A detailed analysis can be found in Table 3 in the main text.

The target group is adequately involved. There is continuous contact, mainly between the project agronomists and the promoters. The promoters received trainings from project agronomists, and are adequately coordinating the groups. The project extension work is mainly carried out by the promoters.

The criteria for selecting beneficiaries were sound, nevertheless some criteria as “poor, less land than 1 ha”, “woman-headed households” and “families who don't have experience in agriculture” contradict to some extent the specification that beneficiaries should make a contribution of 50% in cash for the seeds they receive. This was solved by the project giving expensive seeds, such as potatoes, wheat and alfalfa, to farmers who were better off and/or were already known from former projects. This can be justified to some extent because these farmers are more experienced in agricultural issues and can assume the role of “motivators” or even promoters in the producer groups they belong to.

Women's participation in the groups is high. Sometimes at the beginning of the project women didn't want to meet with men in the same group and so built up sub-groups. But little by little these were integrated into the main groups.

Cooperation with local authorities in the project area is close and trustful.

4 Efficiency

The inputs provided by the project contributed to the achievement of the project purpose and resulted necessities.

The modifications made by project staff (e.g. increase the size of greenhouses, prioritize rehabilitation and/or improvement of storehouses instead of constructing new ones) were assertive and helped to improve the cost/benefit ratio.

Beneficiaries' own contribution in cash and in kind was delivered as planned, reaching an amount of € 84,356.

The efficiency of the project is high, chiefly because the work in the field is mainly done by promoters. The strategy to work through promoters allows for a big impact at a low cost. Also the size of the producer groups of 25 persons allows for working on an efficient scale.

Furthermore including women within the producers groups and therefore in the production process, the project managed to activate an enormous workforce, which beforehand was largely unused.

A more detailed analysis of the cost/benefit ratio for the individual measures can be found in the main text (section 4.2).

The project's internal monitoring and evaluation (M&E) system is adequately designed and updated. The monitoring of producer groups, the trainings they received, materials and seeds handed over to beneficiaries is regularly done. Quarterly progress reports are sent to Welthungerhilfe CO.

Regarding monitoring of outcomes and impacts, the project's monitoring expert informed the project manager about the obtained data and if they met a problem, this was discussed together with project staff. As a result some changes and improvements were initiated during the implementation of the project.

5 Outcomes and impacts

Outcomes

The expected economic outcome was achieved in the case of beneficiaries who are now:

- using the greenhouses for producing vegetable seedlings (from February to April), vegetables (from May to September, without plastic foil) and greens (from October to December);
- growing and consuming vegetables they didn't know before (bell pepper, beet root, turnip);
- reproducing seeds from vegetables and storing them in seed banks for the following growing seasons;
- increasing production of staple food (potatoes, wheat) and fodder plants (alfalfa);
- managing adequately the newly constructed or rehabilitated storehouses;
- producing compost and applying it to their kitchen garden;
- producing better quality preserves of vegetables for the winter season;
- are part of a producer's group where women and men are participating, learning together about agricultural production and sharing experiences and responsibilities;
- coordinating a producer's group (in case of the promoters).

There were also some unforeseen, nevertheless still positive economic outcomes:

- Group members now have access to more seedlings than before, as greenhouse owners were committed to provide group members who didn't receive a greenhouse in spring with seedlings, mainly of tomato and bell pepper.
- Some greenhouse owners also earn money selling seedlings to farmers who don't belong to their producer group.
- Some beneficiaries are producing bell peppers, tomatoes, cucumbers, etc. for sale at local or regional markets.
- Some producer groups are doing business together, purchasing agricultural inputs or selling their products together.

The strong involvement of women in the project activities is a very important socio-cultural outcome.

The system of producer groups guided by promoters seems to work out rather well. All the interviewed members were satisfied with the work of the promoter. The promoters said that they want to continue at least for some more years. They never mentioned that they expect a payment for their labour.

One organizational outcome is that producer groups are turning themselves into organizations that will continue working after the project finishes. All producer groups' members who were interviewed expressed that they want to continue as a group for sharing experiences about agricultural production, producing seedlings and managing banks of vegetable seeds. Some members additionally explained that the group should work together towards buying agricultural inputs and selling their production, thus establishing themselves as an entrepreneurial producer's association.

The environmental outcome is medium; it mainly consists of the beneficiaries successfully producing and applying compost on to their kitchen gardens, thus allowing a reduction in the use of chemical fertilizer.

Impacts

The economic impact of the project is high, mostly due to the distribution and reproduction of improved seeds.

There was a significant increase in the production of potatoes, wheat and alfalfa. Vegetable production saw an increase in varieties already known in the project area (carrot, cabbage, cucumber, pumpkin, beans and tomato); while other vegetable species were newly introduced (beet root, bell pepper, turnip) and produced well. Also the production of seedlings of tomatoes, bell pepper and cabbage and their distribution between the members of the producer groups had a significant economic effect. Beneficiaries now produce more food for their own consumption and depend less from products brought from outside. The preservation of fruits and vegetables also has had an important economic impact, as families now have more available and of better quality.

The construction or rehabilitation of storehouses allows smallholder families to store harvested products in better conditions, maintaining the quality and reducing post-harvest losses.

Finally, beneficiaries manifested that since they are applying their own compost, the quantity and quality of vegetables from their kitchen garden improved substantially.

The socio-cultural impact could be considered high; beneficiaries of both sexes in various opportunities showed that they are now more confident to manage their plots. For women, the impact appears to be even greater as they now participate in producer groups; they learnt also about preservation of fruits and vegetables and are less restrained to express their opinion.

In case of the promoters, the socio-cultural impact is also high as they have learnt how to coordinate a group and are respected for their contribution to the group's development and the community in general.

The organizational impact is very high in case of the producer groups as these can form themselves into entrepreneurial centres for organized farmers associations.

The institutional impact for JOVID and Welthungerhilfe is high as they showed that they are able to jointly implement a project that has a high impact on smallholder families' food security. Nevertheless project staff's impact on agronomists seems not as high as they only in part are applying the innovations they learnt during trainings and study tours.

The political impact is also high as representatives from Jamaot and Khukumat manifested that they are closely following the implementation of the project because they consider it very important for the area and will do their best to continue with the innovations it has initiated.

The environmental impact is medium; the use of compost in kitchen gardens allows for reduction in the application of chemical fertilizers; nevertheless there is still much to be done in the project area for making agriculture more sustainable.

Regarding to its contribution to the MDGs: MDG 1 – the project has achieved to substantially improve the quantity and quality of food production, its storage and preservation by project beneficiaries; MGD 3 – most of the beneficiaries are women who, with support from the project, substantially improved their capacities to produce, preserve and store agricultural products for feeding their families. They now can better fend for themselves and their families and have become more self-confident.

6 Sustainability

The economic-financial sustainability can be considered very high for growing vegetables. Beneficiaries maintained that they will continue producing their own vegetables as well as vegetable seeds, and they will collaborate with the seed bank managed by the group.

For alfalfa, the sustainability of the newly introduced variety Tashkent 122 also seems high, as it is well accepted by beneficiaries for its good production and tolerance to drought and it is possible for farmers to reproduce seeds.

Regarding wheat, the variety Starshina is of high productivity and also well accepted. Unfortunately seeds only can be reproduced for a few years as they become contaminated with diseases and weed seeds. Therefore the sustainability of introducing this variety can be considered as limited.

In the case of potatoes things are similar. The variety Red Fantasy imported by the project until now is very well accepted by the farmers. Nevertheless, potatoes are degenerating quickly and the reproductions should not be used for more than seven or eight years. Import from seed potatoes therefore cannot be considered a sustainable measure.

Sustainability of preservation of fruit and vegetables can be considered as very high, as the required primary materials are now available and of good quality; also jars and lids can be purchased at an acceptable cost.

Women who are participating in the producer groups have acquired skills on how to grow and preserve vegetables. They are also now participating in group activities and have become more self-confident. Many of them are very interested to continue with the groups as these allow them a place for sharing experiences and exchanging views. It can be supposed that they will not voluntarily give up the ground they have acquired.

The groups' sustainability can be considered medium to high. It is assumed that not all of the groups will continue, and some of those that do will not be with all their members. Furthermore it can be assumed that some groups will continue as before, as providing an informal space for exchanging experiences of crop cultivation and sharing or bartering seed materials; other

groups will probably be able to shift towards being formally established, in an entrepreneurial manner of organized producers' associations.

So long as the environmental impact of the project refers to the implementation of compost bunkers, its environmental sustainability is high as beneficiaries will continue producing compost for their kitchen gardens.

The lack of water for irrigation purposes in the project area will, to some extent, limit the sustainability of some of the implemented measures.

7 Most important recommendations

Project design and implementation

- a. The project holder in the developing country should be involved closely in the project elaboration by contributing its specific knowledge of the area and to avoid different understanding regarding the project contents.
- b. Visibility should be included in the project budget from the beginning.
- c. All necessary staff should be considered from the beginning. The position of an agronomist was replaced by a logistician, which originally not was foreseen. That should be avoided in a project which is predominately directed towards agricultural issues.
- d. Salaries should be competitive to avoid having to increase them later.
- e. The project proposal should be revised in time (kick-off workshop) as to whether it is applicable, and the required modifications should be done where necessary.
- f. The capacity building concept of the project is based on the idea that project agronomists participate in trainings and study tours and subsequently pass the received knowledge to the promoters (ToT approach). The bottleneck of this approach is that the quality of the promoters' work depends mainly on the training they are receiving. At least some promoters should also participate in trainings or study tours together with project agronomists as the former understand these from their practical understanding of agriculture and therefore probably consider aspects which agronomists don't observe.
- g. JOVID should design and implement an exit strategy for the remaining months of the project duration.
- h. The end-line study of the project should be carried out.
- i. JOVID representatives suggest that in future projects cash contributions should be converted into contribution in kind. As it seems rotation funds are working in the TJK 1082-12 project area better than in other parts of the country and JOVID has positive experiences with these rotation funds, this recommendation should be considered in future projects.

Staff

- a. As they have requested, agronomists should receive trainings in production of seed potatoes, advanced gardening and management of irrigation.
- b. They should also become familiarized with the concept of conservation agriculture.
- c. In addition to receiving trainings and study tours staff should pursue their own continuous professional development.
- d. Staff should be monitored to see if they are applying what they have learnt.

Technical-productive aspects

- a. For seed potato production to become more sustainable JOVID and/or promoters could re-establish contacts with the Institute for Plant Physiology (Dushanbe) and farmers in Zerafshan Valley who are working on production of in vitro plants and reproduction of first field generation seed potatoes.

- b. Considering the challenges agriculture in Tajikistan is facing, future projects should become more integrated, including irrigation management, IPM, livestock management, fruit growing, soil conservation and fertility, crop rotation and other elements of sustainable agriculture.

Organizational aspects

- a. A final meeting should be held with each producer group where the achievements of working as a group should be analysed, the difficulties which the group had to overcome and the overall impact of the group for its members. Participants should make plans on how they could continue with the group in the future.

8 General conclusions and “lessons learnt”

- a. Implement the project in cooperation with promoters is viable under the project area's conditions and this approach should also be applied to forthcoming projects. The quality of work of promoters depends on the training they are receiving from project staff.
- b. Beneficiaries are interested in learning about sustainable agriculture; future projects should satisfy this demand, taking into account technical and methodical aspects.
- c. In the project area it is possible to involve women in the project activities, the obvious example is their enthusiastic participation in the producers groups. In this regard it seems supportive that the groups were coordinated by promoters from the same village and not from external persons.
- d. It is better to set up producers group in the beginning in an informal way and without an ambitious programme; the most important issue is that members trust each other. If the members feel a need, little by little they will come closer together and will formalize the group and do business together.
- e. In the long term all involved actors should work on improving the irrigation water supply in the project area to ensure the impact generated by the project.