

# Evaluation report

---

## Water supply and sanitation project – Shangla district / Pakistan

Project Number: PAK - 1015

**9/29/2008**

**Richard Ellert**, Civil Engineer – water supply and sanitation

**Duration:** August 26<sup>th</sup> to September 12<sup>th</sup> 2008

## I. Summary

### 1 Brief description of the project and framework conditions

The overall goal of the project was to provide livelihood assistance to communities affected by the earthquake, assisting 12 villages with better access to water aiming at improving their health situation. This was envisaged by the following outputs: 12 Gravity Fed Water Supply Systems; 180 latrines, 4 grey water disposal systems, and 26 rounds of hygiene and health training (for both males and females) in each village.

Aside of this goal, Welthungerhilfe attempted to build up a reliable partner for future cooperation in the water and sanitation sector. This is done by extensive capacity building.

#### **Basic data of the project**

<b>Country:</b>	Pakistan
<b>Project title:</b>	Rehabilitation of Drinking Water Supply and Sanitation Facilities in the Earthquake affected areas of Shangla District, North-West Frontier Province
<b>Project No.:</b>	AS 1328 / PAK 1015-07
<b>Project holder:</b>	Welthungerhilfe
<b>Approved budget:</b>	Total 550,000 €
<b>Committed funds:</b>	Total 550,000 € / 340.000 allocated to 2 local NGOs (see below)
<b>Co-financer (line):</b>	None
<b>Implementing partners</b>	EPS and SABAWON
<b>Project period:</b>	07/2007 – 10/2008/15 month
<b>Beneficiaries:</b>	planned: 1,550 families / 11.625 people actual: 1,050 families/5,800 people (50 %)
<b>Location:</b>	12 villages in Shangla district and 5 Union Councils (Shang, Khormang, Sarkool, Dandai, Butiyal) around Besham along the Karakorum Highway

The project is implemented by two local partners, the Environmental Protection Society (EPS<sup>1</sup>) with its headquarter in Kalam/Swat and the Social Action Bureau for Assistance in Welfare and Social Networking (SABAWON<sup>2</sup>) with its headquarter in Peshawar.

Shangla, the target district, has one of the worst human development indicators in Pakistan with respect to livelihood, health and education. The existing water supply schemes in the

---

<sup>1</sup> <http://www.eps-swat.org>

<sup>2</sup> <http://www.sabawon.org>

target villages were already defunct before the earthquake and latrines were used by 50 % of the population.

## **2 Outcomes and impacts**

It is reasonable to assume that, as a result of the intervention, the health status has improved in the villages, of course with respect to water-borne and water-washed diseases only. The health and hygiene sessions covered diseases transmitted through other routes however; impact on reducing those diseases will be little. Additional impacts mentioned during the discussions were:

- new information on health and hygiene issues (1 village) received;
- people have changed their hygiene behaviour (an example given was a child, which now washes its hands before sitting down at the table).

The investigation into the health and hygiene training brought various findings. Although people said that they prefer having the health and hygiene training instead of receiving additional pipes<sup>3</sup>, they could not really name the actual benefits of the training. Most of the males interviewed said they had already known most of the messages before but were too lethargic / lazy to apply them. The trainings are well done but one could see in the session that people showed only medium interest. During the interviews, people were frequently spitting on the floor and children's appearance lacked cleanliness, a sign of limited impact of the training. On the other hand, behavioural change cannot be expected after an intervention of 3 to 4 months. It might be assumed that people have started to think about the consequences of their ignorance. The new water supply systems will reduce medical expenses; whether this is economically significant cannot be analysed.

The immediate impact of the latrines on health is difficult to verify; however, it is realistic to believe that the spacious and new latrines will prevent contamination during defecation. In addition, it provides invaluable assistance to women, who normally access the toilets in the morning and in the evening. This advantage, however, only benefits families who have received a latrine (between 2 and 26 families in each village). Tensions about the distribution of latrines were mentioned in one village (the M & E department is sure that tensions can be assumed in almost all cases).

A number of villages reported that the project had a significant impact on their social fabric and made statements like:

---

<sup>3</sup> This is quite astonishing and the consultant is somewhat doubtful on the validity of this statement. However, it was confirmed in all villages.



## **4 Relevance**

The relevance of a project depends largely on the vulnerability of the population and, in case of Shangla district, it is consequently a function of the distance to the Karakorum Highway. The walk over 2 to 3 hours to their village, the difficult access to health care, income and, for example, transport of construction materials represents a heavy burden for the population. The construction of water supply systems is almost certainly more beneficial to target villages that are situated farther away from the Karakorum Highway. The improvement of their water supply systems was given first priority in the seven project villages visited as collecting water represents heavy work for the communities living along the steep slopes of the mountains. Hence, the rehabilitation of water supply schemes was a vital support in order to make the life of the target population easier. Latrines have been regarded by the people as very useful and they are well designed and constructed. The health and hygiene awareness campaign was well received and villagers stated that they had not traded it for physical input (pipes and material). In summary, it can be concluded that the project and its activities were very relevant for the target group.

## **5 Effectiveness**

The project has limitations with respect to effectiveness. Only between 50 and 60 % of the originally planned target group was reached. In addition, the pipes laid are partly<sup>5</sup> underdimensioned which will reduce the water quantity (provided sufficient yield at the spring) available for the population. The exact figure is difficult to estimate, as it would require a detailed hydraulic recalculation. The latrines of course had only an impact on the families who had received them. Nevertheless, as far as people were covered by the project and its outputs, the GWSS, latrines, as well as the health and hygiene training were effective within the limitations mentioned.

## **6 Efficiency**

Efficiency is the critical part of the project. It is understood that the costs were a result of extensive capacity building at partner level, and reduced implementation speed was part of the concept. However, the services came with elevated costs, proven by the following facts:

- The amount for personnel and running costs have consumed more than 50 % of the funds in the overall budget, whereas on material 33 % was spend (see table 6.1-2); it has to be noted that the budgets of the partners were economic;

---

<sup>5</sup> In order to get precise figures, the hydraulics would have to be redone for all schemes.

- Welthungerhilfe has used a substantial amount of the running costs and personnel costs in their budget even though the project was implemented by partners;
- Required resources were extensive as in essence three entities (Welthungerhilfe plus 2 partners<sup>6</sup>) worked which required office space, equipment and transport;
- Overall expenditure per beneficiary is 84 Euro which is high, and this assumes that only 480.000 Euro will be spent and not 550.000.

There should be quite a potential for cost savings in the next project, by building more systems with reduced costs.

## **7 Annual cross-cutting theme**

There are indications that the project actually “helped people to help themselves” based on the statements made in some villages; however, findings again are contradictory. People repeatedly said that it had to be someone from the outside to “unify” them and show them the potential of joint work. On the other hand, most of the principles of the relevant working paper of Welthungerhilfe (principles of ensuring that self-help structures are considered) are fulfilled.

## **8 Most important recommendations**

### Welthungerhilfe – head office

- The budgets of Welthungerhilfe should be amended including a realistic calculation of the overall and total costs of the different outputs (wells, gravity schemes, latrines, etc.) in order to allow a fast comparison with other proposals and assess cost-efficiency at an early stage this should be done in all countries Welthungerhilfe is working (according to the desk in Germany this can be easily done through “cost control”) (chapter 6.2);
- Pakistan deserves the continued involvement of Welthungerhilfe for various reasons e.g. likeliness of instability caused by Islamic extremism, internal political turmoil, the bad economy and the disastrous foreign policy of the US; Pakistan is an important country in the region and essential for the stabilisation of Afghanistan; the poverty in Pakistan and especially in Shangla is extremely high and it would be counterproductive to close down activities after extensive capacity building of local

---

<sup>6</sup> The consultant is of the opinion that, given the time and effort used to select the partner, one partner should have been selected.

partners. In addition, Pakistan may still allow a type of humanitarian engagement that makes a difference, in contrast to the present development in Afghanistan where NGOs are drawn into politics and mainly used to deliver “peace dividends”.

#### General Welthungerhilfe/Pakistan – Germany

- The project could potentially be used to attract donor funding (chapter 5 / 6);
- An additional project cycle is recommended in which Welthungerhilfe should continue with one partner only; the input of the international expert should be reduced for this phase (chapter 5 / 6);

#### For the present projects

- The funds earmarked for sewage projects should be used for latrines (chapter 5.3.1.3);
- The M&E department should make a survey concerning the points mentioned in this evaluation and should verify whether the sanitation concept achieves the desired impacts (multiplier effect, general increase in number of latrines, etc.) (chapter 0);

#### For future projects

- Selection of villages should consider the distance to Karakorum Highway and also establish a maximum investment per beneficiary; selection should be done faster and design should start as soon as a village is selected (chapter 6);
- H & H training, if to be sustainable, should make a multiplier binding and should use the bigger part of the project period to monitor effectiveness of multiplier (chapter 3.5);
- The funds should primarily used for water supply schemes and low-cost sanitation not for surface water drainage of sewage disposal; this is not effective under the present frame conditions (chapter 5.3.1.3).

#### **Recommendation on design / technical issues:**

- Additional training on hydraulics is required for the design engineers using population growth correctly, peak factors, including losses, etc.; it should be clear whether an open or a closed system is designed; if the spring provides sufficient water, a closed type should be introduced;

- Hydraulic design should consider “open taps” and not necessarily the amount of people connected; distribution of pipes should not be smaller than DN 1”;
- Different types of latrines should be developed in order to match different requirements in the villages.

## **9 General conclusions**

The project had “quality” as one of its core values irrespective of the mentioned design errors and debatable concepts for individual components. The motivation and readiness to reassess and adjust procedures and project elements was clearly noticeable. In this respect, it was a commendable practice of the project that it has refused to compromise on quality and rather had a structure demolished and rebuilt than its insufficient quality accepted. Village selection, health and hygiene training, community mobilisation, engineering design, construction, formation of water user committees, etc. – all this activities were guided by the intention to do something which will make sense and have an impact. This could be named as “best practice” analysed from the project however this is difficult to duplicate, as it depends very much on the respective team and most of all the know-how and the commitment of the person in charge. The Consultant had experienced the importance of the project manager in other evaluations for Welthungerhilfe. This might indicate that knowledge management and quality control of Welthungerhilfe as an organisation needs improvement and makes human resource management essential.

Another recommendable practice was a “lessons learnt – Work shop” which was carried out directly after the evaluation report was submitted. This could be an effective tool for knowledge management, increase acceptance of findings and incorporate them in future project work.

On a more critical note, it must be clear that extensive capacity building of partners requires monitoring in order to work goal-orientated. In order to ensure this, indicators have to be developed to gauge any development.

Following the findings of this evaluation it must be acknowledged that quality of construction work requires extensive checking, control and supervision comparable to the private construction industry – there is no alternative. It also requires capable staff and will be costlier than fast implemented project. Non-governmental organisations tend to believe that goodwill is sufficient to produce good quality. The project was a positive example in this respect as it used routines for quality control extensively and was managed by a professional expert.

Under certain frame conditions, selection of villages cannot be based on vulnerability alone. Especially in areas prone to security problems, selection criteria have to include ease of access and ensuring that host communities are not neglected.

Finally, the consultant thinks that discontinuous assignments of project manager should not be the future in WHH, in particular in areas, which have security problems. The known difficulties in finding adequate personnel should not be the decisive factor in this respect. If the decision for intermittent assignments is taken, it should be based on a clear strategy (impact of absence on the project, monitoring capacity building of the local partner, which steps are taken for phasing out, gradual hand-over to local staff, exit strategy, etc.).