Impact Evaluation of SNV WASH Program 2007-2012 in Ethiopia

Executive Summary

Background
In the period of 2007 to 2012, SNV implemented a WASH project in 6 woredas (districts) of the SNNPRS (Southern Nations, Nationalities and People Regional State) in Ethiopia. The project aimed at increasing access to water supply, sanitation services, and improved sanitary practice in the communities and at schools. The project introduced the CLTSH (Community led Total Sanitation and Hygiene) approach in the 6 woredas. The project selected a model of close collaboration with, and capacity building of, the local government offices. It focused on strategic planning, improved service delivery, community involvement, monitoring and evaluation. Aidenvironment carried out an impact evaluation of this project in 2015, with the purpose of assessing the structural impacts of the SNV WASH project, especially where it concerns the improved access to improved water and sanitation for the target groups as well as the effects on the capacities of the government functionaries in the WASH sector.

Methodology
The impact evaluation focused at household level, school level, water schemes, and at capacities of institutions at both e targeted woredas and the regional level. Mixed methods were used including structured and semi-structured surveys, in-depth interviews and focus group discussions. The household and school surveys focused on access to safe water, access to improved sanitation and information and training on WASH. The surveys were translated in the local language and use was made of digital data collection. In total 1450 household interviews were conducted, selected from 58 *kebeles* (rural municipalities) in the 6 woredas. In total 50 schools were selected and 100 school interviews (50 pupils and 50 teachers) were conducted, equally distributed over the 6 woredas. Survey data were analysed using SPSS, descriptive statistics and inferential analysis. In total 50 water schemes were visited, with surveys to determine functionality. To evaluate capacity building effects of relevant staff (within the WASH, education and health sectors) at woreda level, the 5C (5 capabilities) approach of evaluating capacity building was used as a basis for interviews, using a balance score card system specifically developed for this study. The study did not include control groups for households, schools or water schemes. The study did include two non-targeted woredas, as control groups, to make a comparison in capacities between staff within targeted and non-targeted woredas. To establish the main changes in time, the study compared the current values with the baseline values (from 2007). This posed some challenges because the baseline data and the approach used had at the onset not been well defined. Also, a reliable midterm measurement survey was missing. To draw conclusions on the contribution by the SNV project, the quantitative and qualitative results were used to assess whether defined impact pathways (based on the project's theory of change) could explain the changes in time, including the relative contribution by the SNV project and other (external) factors.

Findings

In the analysis of access to water, in line with the SNV baseline survey three criteria have been used: a) the type of main water source and its safety, b) the travel distance or travel time to the safe main water source and c) the access to clean water storage. When taking into account these three criteria, access to water for households in the project area has declined from 53% in 2008 to 46.4% in 2015. Currently travel time is more than 30 minutes for 40.7% of the respondents, which is still better than the average of 62% for rural areas in Ethiopia, according to the Ethiopia Demographic and Health survey of 2011.

In the analysis of access to improved sanitation, we adopted four criteria, in line with the baseline survey: a) the presence of an improved latrine facility; b) cleanliness of the latrine, c) regular use of the latrine, and d) cleanliness (no feces remains) in the compound.
When taking into account these criteria, we found that an increase of access to improved sanitation within households from 27% to 41.4%. Looking at the various factors that influence access to sanitation (according to the impact pathway), we conclude there is a significant relation and plausible contribution by the SNV project to the improvement in access to improved sanitation. There is also a significant correlation between access to safe water and access to improved sanitation for households, suggesting that access to safe water influences improved sanitation. The decline in the incidence of diarrhoea is highly significant (from 52% to 17%), and can be partly explained by the improved access to improved sanitation.

Concerning the schools, access to water has significantly improved (from 7% to 22%, or 52% when water sources beyond the school premises are also considered). In the schools 94% have a latrine facility, but access to improved sanitation declines to 28% if we also take into account aspects of cleanliness and safety. This can be explained by limited access to water within the school compounds or limited management by teachers of WASH within schools. Most student-based WASH clubs (72%) are functional. We cannot conclude there is a significant relation by the SNV project to access to improved sanitation in schools but a contribution by the SNV project is plausible based on evidence from interviews and focus group discussions.

To determine functionality of water schemes, three criteria were used: water discharge, water quality and waiting time. It was found that for the majority (72%) of water schemes in the project area functionality has improved. The SNV project has contributed to the improved functionality of water schemes in the project area, by training on operations & maintenance and supporting local WASH committees. For instance, the time it takes before a reported failure is repaired has considerably reduced. However, for 70.6% of the water scheme users, waiting time at the water scheme was more than 30 minutes (with a maximum of 5 hours), reducing their functionality. We conclude there is a significant contribution by the SNV project to the improved functionality of water schemes, based on evidence from interviews and focus group discussions This also means that access to water would probably have been lower (than 46.4%, see above) if SNV had not contributed to improved functionality of water schemes. The remaining low functionality of water schemes is mainly due to low volumes of water from existing water schemes in relation to high and increasing water demand, with underlying causes of relatively few new water schemes being constructed or low water volume per water scheme.

Opinions of woreda staff are positive with respect to the services being provided by the SNV project. At woreda level, strategic planning, service delivery, community

involvement and monitoring have much improved. The targeted woreda's have better capacities for WASH strategic planning and WASH service delivery than control woreda's. The model of training-on-the–job (GLOWS) has been very effective in terms of improving service delivery. The response rate to repairs has increased. Use of the Management Information System (MIS) has failed due to lack of support and continuity at regional level. We conclude there are positive changes in capacities of woreda level staff to manage WASH related aspects and plausible evidence for a significant contribution by the SNV project.

With respect to sustainability of the results, most capacity building results will sustain, such as the integrated strategic planning approach (education, health and WASH) and the improved service delivery. Also, most local water schemes are well maintained with WASH committees (88%), including fees being charged. Among the targeted woreda's, there is some evidence that the targeted woreda's are better able to access funds from donors for investment objectives, presumably because of their improved planning and funding requests. Nevertheless, funds for investments in new water schemes and large-scale maintenance of existing water schemes remain insufficient. The GLOWS approach is reported to be costly and still not formally recognised, and therefore uncertain to be continued. Altogether, there are insufficient recurrent financial inputs to the WASH sector in the region, e.g. through fees or taxes. From an environmental angle, it is worrisome that water boreholes have to go deeper and yet cannot supply sufficient water for the whole population in the region. This may lead to depletion of underground water resources. More attention could be given to rainwater capture and/or underground storage. There may also be need for collaboration and integration with natural resources and watershed management for improving vegetation coverage around water sources so as to improve water recharge.

Thus, there are remaining challenges, which are mainly related to external factors, including the need for institutional support to use the MIS and continue the use of GLOWS, additional hardware especially on new water schemes, operations and maintenance of large water schemes to increase water discharge, and improved motivation of staff and improved skills on specific tasks.

Conclusions and recommendations
The approach taken by SNV in the WASH sector is innovative by focusing on capacity building of local public institutions, on awareness raising and change of practices, involving training institutes and networking. This focus by SNV on the 'software' was part of a programme partnership with UNICEF that focused on the 'hardware'. Overall, this evaluation shows that the SNV approach has generated significant results, but the 'hardware' component now seems to constitute the main constraint. The contribution by SNV is positive in relation to change of behaviour on sanitation and hygiene at household level, improved maintenance of water schemes, build up of capacities at woreda level, among the communities, WASH committees and WASH clubs at schools. Also, there is increasing private sector involvement in the WASH sector. Although the funding from national sources to the WASH sector has improved for the 6 targeted woreda's, funds for investments in new water schemes and large-scale maintenance of existing water schemes remain insufficient.

Considering the remaining challenges, there is a potential role for SNV to play as follows:

- Scaling the successes achieved in the sanitation sector, by capitalizing on the significant correlation between access to improved sanitation for households and the support and training provided;
- Strengthen the WASH monitoring and evaluation system within SNV and with local partners, including proper establishment of a baseline measurement, and including a technology to monitor water discharge of water systems and waiting time;
- Strengthen a joint learning and evaluation system and assure continuity in follow-up or refresher training, to assure further improvement and/or to avoid fall-back;
- Take the lead in proactively engaging in advocacy and lobby to narrow the existing gap on demand for safe water, by lobbying for budget increases to develop additional water facilities and developing more sustainable solutions ;
- Further strengthen private sector engagement in the WASH sector;
- Pay more attention to rainwater capture, underground water recharge and storage and watershed management, to avoid water depletion and to increase access to water from sustainable sources.