The Ethiopian Evangelical Church Mekane Yesus

Development and Social Service Commission

and

Norwegian Lutheran Mission-Ethiopia


Filtu Water and Sanitation Project

(2009-2011)

Final Evaluation Report

Evaluation team

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ACRONYMS

BSF	Bio-Sand Filters
CHP	Community Health Promoter
DRMFSS	Disaster Risk Management and Food Security Sector
DPPB	Disaster prevention and Preparedness Bureau
E.C.	Ethiopian Calendar
EECMY/DASSC	Ethiopian Evangelical Church Mekane Yesus Development and Social Services Commission
FGD	Focus Group Discussion
FWSP	Filtu Water and Sanitation Project
HP	Health Post
RF	Humanitarian Response Fund
KAP	Knowledge, Attitude and Practice
m.a.s.l	Metres Above Sea Level
MDs	Millennium Development Goals
NGO	Non-Governmental Organisation
NLM	Norwegian Lutheran Mission
PHAST	Participatory Hygiene and Sanitation Training
STI	Sexually Transmitted Infections
THP	Traditional Harmful Practices
UNOCHA	United Nations Coordination Office for the Humanitarian Affairs
WASH	Water, Sanitation and Hygiene
WatSan	Water and Sanitation
WMC	Water Management Committee
WSDP	Water Sector Development Programme

Acknowledgement

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Matewos Tera

January 2012

Executive Summary

The Ethiopian Evangelical Church Mekane Yesus Development and Social Services Commission and Norwegian Lutheran Mission in partnership have been implementing Filtu Water and Sanitation Project (FWSP) in Filtu woreda of Somali Regional State since 2002 in three phases (2002-2005, 2006-2008 and 2009-2011). Water insecurity, poor hygienic and sanitation situation due to unavailability of facilities such as health posts were among the problems identified to be addressed by the project. The shortage of water is aggravated by recurrent droughts that has dwindled the already scare water sources and negatively impacting on the livelihood of the people. As the continuation of the previous phases, the overall objective of this third phase (2009-2011) was to improve water security and health condition for human and also piloting farming practices in selected target kebeles. The specific objectives of the project were: (1) ensuring water security, (2) improving health, hygiene and sanitation (3) improve production by piloting crop production and (4) building local capacity both at community and that of collaborating offices and project staff.

The aim of this current phase evaluation is to assess the relevance, efficiency, effectiveness and to what extent the project benefits remain sustainable, and to recommend ways of improving and scaling up the programme based on the current felt needs of the beneficiaries.

The methodology used for the evaluation was geared to understand the progress of the project through process evaluation assessing relationships between inputs, outputs and outcomes. Information colleted from primary sources (surveying households through structured questionnaires, focused group discussion and in depth interviews of community leaders, representatives of the funding agency and programme staff and management) were triangulated with the secondary information and observations at sites.

The evaluation team was composed of an external consultant, 2 staff from Somali Region DPPB, one staff from Filtu woreda Water Office, and EECMY/DASSC representative and project manager. The evaluation was conducted from December 23 2011 to 2nd of January 2012.

Major findings of the evaluation:

The EECMY and NLM have long and successful partnership history in southern Ethiopia for more than half a century. The past success story and experiences in partnership had expanded its dimension to include the third partnership, that is, the government. Though it seemed challenging, the partnership has resulted in positive outcomes in addressing the problems of the communities in Filtu woreda of Somali Region. The following were some of the results delivered by this partnership portfolio project in the areas of domestic water supply, health sanitation and hygiene and piloting agricultural activities in Filtu woreda, Somali Region.

Output 1-drinking water made available by harvesting rain water into partly underground birkas/concrete cisterns, roof catchment at health posts and hand dug wells along the Ganale River beds. 14 birkas constructed (3 were carried over from 2008, 8 newly constructed and 3 were rehabilitated during 2009-2011). Two birkas were incomplete and one needs minor repair. The communities participated in excavating, removing soil and contributed labour during the masonry work of the birkas. Technology such as *bio sand filter* was also introduced. The bio sand filters (BSF) filter silts from water collected in pond. The water can be potable if boiled or chemicals such as Water guard or *'wuha agar'* and Bishangari are added.

Output 2: Improved access to health and sanitation facilities provided. Three health posts were constructed out of which one was carried over work from 2008. The project supported the construction of 70 pit latrines out of which 7 are under construction. Training on basic health, hygiene and sanitation was given for 7 days to 280 (65% or 181 were women) beneficiaries and three days refreshment training was also organised for 291 trainees (out of whom women were 201) coming from 14 kebeles. Before the implementation of activities in basic health, hygiene and sanitation, HIV and AIDS pre-assessment surveys (KAP) were undertaken to identify the needs. Post implementation KAP surveys also conducted to assess the change in behaviour and attitude. It was observed that there were positive trends towards hygiene and sanitation, HIV and AIDS, use of toilets, hand washing and use of soap or ash before eating or cooking food. The responses of surveyed households showed that 100% of respondents washed hands before meal, 92% used soap while 76% have started using toilets.

Output-3: Piloting agricultural activity was started in 2010 by introducing improved seed and provision of water pumps. The project distributed improved seeds, provided two pumps to beneficiaries resided along Genale River. About 4340 fruit and forest tree seedlings were raised and distributed to beneficiaries in different kebeles. The survival of seedlings at Mesajid kebele was encouraging as the Dheer rain was extremely beneficial during the October-November 2011. The scale of the agricultural activities undertaken by the project has yet to make difference in the pastoral livelihood system as 76% of the surveyed population in the project target kebeles responded that they depend primarily on livestock (mainly camels, shoats and cattle) while about 22% practice opportunistic farming activities under rainfed agriculture in line with livestock rearing.

Output-4: The beneficiaries of the project have acquired skill in constructing concrete masonry walls. As the community contributes labour for the construction of birkas, they have good time to learn masonry work, framing the reinforcement iron bars, proportion of sand, cement and gravels. Those who worked with project masons have got good experience which they could use to repair cracks on the walls or floor of birkas. The project also trained WatSan committee and pump operators (16) in management, operation and maintenance of Birka and water pumps respectively.

Output-5: Though it was unplanned, water trucking was undertaken by the project diverting project budget during the March –April 2011. The project reached 6442 HHs or 38652 beneficiaries in 26 sites. The project management witnessed good collaboration with the woreda officials and successfully implemented the project.

Project design and approach adopted

The water, hygiene and sanitation activities were the core programme components of the project while health facility (construction of health posts) had been considered as entry point to undertake preventive health programmes. However, the project should have included the following when it was designed:

- Women economic empowerment activities such as in kind credit for the poor pastoralist women to improve their economic status.
- The project staff qualification (relevant to WASH project) should have been clearly specified and designed in the project document
- Target kebeles should have been identified at the time of planning so that the project focuses both area and activity wise is ensured from the onset.
- The roles and responsibilities of each collaborating offices should have been specified in the project document. The memorandum of understanding should have been signed with Woreda Water Desk, Health and agricultural offices.
- Project steering committee with clear TOR and members should have been designed in the project document
- Though there was a phase out strategy, mechanism for checking the functionality of the handed over project should have been in place while the project is operational in the woreda.

Relevance,

All project outputs were found to be relevant to the challenges facing communities in Filitu woreda where the coverage of water and sanitation is low and where permanent water sources are scarce. Filtu woreda is also one of the drought prone woredas and food insecure; therefore, piloting agricultural activities around rivers is an opportunity for those agro-pastoralists resided in Genale River basin. Basic health, hygiene and sanitation training provided by the project had contributed to the reduction of water borne diseases, change in attitude of communities towards personal hygiene and environmental sanitation.

Efficiency

The project transported construction materials (sand, cement, iron bars etc) from Negele and its surrounding to sites for the construction of birka and health posts. The timeliness of implementation and value for money when compared with other similar projects in similar agro-ecological zone, this project can be said cost effective. The free labour contribution of communities to physical work (excavation, removing soil and assisting project masons) contributed to the cost effectiveness of the project. Unlike other NGOs operating in the woreda, FWSP managed to mobilise free labour of community for birka construction.

Effectiveness

The results achieved by the project contributed to the overall Millennium Development Goals (MDGs) and to the National Water Development Sector Programme in general and enhanced the water and sanitation coverage of Filtu woreda in particular.

Sustainability and Impact trends

The benefits from trainings have been internalised by the communities and this has been proved through observations and during the discussions with the communities in sites. The household survey report also showed clear changes in behaviour and attitude of the respondents towards personal hygiene and environmental sanitation. Sense of ownership which was proved through authentic participation may guarantee that the physical outputs will remain sustainable.

Conclusions

Water is scarce resource in most parts of Filtu woreda. Solving water problem is also solving other social and development problems. Provision of water is the central and core programme around which the other programme components of FWSP have been revolving. Cognizant of the seriousness of water shortage for domestic use, the project constructed over the last three phases about 40 birkas and these have definitely increased access to safe water in project target kebeles. Though the project phase has come to end by December 2011 as per the working calendar, there were in reality uncompleted water construction activities while other have not been fully consolidated. Leakages and cracks on some birkas need to be corrected as well. Agriculture pilot project has not been moved to the pace it should have been expected because of the drought. The evaluation team observed, however, that water projects (mainly birkas) will remain sustainable and the willingness of beneficiaries to pay for operation and maintenance of the birkas was impressive. The quality of the outputs and the management systems in place were to the acceptable level.

Major Recommendations

Programme based recommendations

1. Project staffs have been terminated as of December 31 2011 and no one can be sure whether they will wait for the commencement of the bridging phase of the project. The project management should speed up the process of signing of the project agreement in order to bring back the project on track.

2. Birka construction at Kalagur (80% completed) near Aynle and the other at Hasan Gabeye site (25% achievement) have been languished for long already. The community and the project had invested huge resources on these constructions. The investment should have brought quick returns in terms of benefit for the communities. Therefore, the project should complete them without further delay during the bridging phase.

3. The Birka at Dipro was completed. But all the water that entered the birka has been leaked out during the Dheer season (October-November 2011). Communities were at the verge of losing hope . The project should give priority to rehabilitate this birka before the onset of the Gu rain in March 2012.
4. All Birkas and health posts should have proper design and bill of quantity. Completed projects with necessary documentation should be handed over to the government after completion.
5. All birkas should be roofed phase by phase to reduce intrusion and contamination of water.
6. All brikas constructed by the project (2009-2011) and before need to be repaired, water management committees have to be strengthened. The water quality test should be done frequently.
7. The health post constructed by the project and handed over to the government seems under utilised. The project management can monitor the functionality of the health posts and communicate the concerns while the project is still in the woreda. The project also should have constructed the pit latrine at Qurabul where it constructed the health post.
8. In the future, the project should have demarcated project area and clearly defined target beneficiaries. This will help the project to make impact from the synergy of different activities and corresponding results. Strengthen the integration of project activities (water supply, health, hygiene and sanitation).
9. In developing a new project proposal EECMY/DASSC should concentrate on certain key areas of activities which have already demonstrated results (e.g water supply (construction of birkas), hygiene and sanitation.
10. Promote conservation farming under rainfed agriculture by tapping current experiences to the project from South African or Sahelian countries.
11. The project has experience of providing diesel pumps. The cost of diesel and problem of transportation to Ganale and Dawa Rivers are another challenges. Therefore, the project should explore possibilities of using solar and wind vane pumps which are expensive during the installation, but later on almost free and environmentally friendly (carbon free) sources of energy.

Programme Management and Capacity

12. Specify and put into practice clear roles and responsibilities of collaborating stakeholders (concerned line offices should sign implementation agreement/memorandum of understanding with project.
13. Project staff benefits should be considered to reduce staff turnover taking into account the local context of Filtu and other nearby woredas (where a number of NGOs pay attractive salary with benefit package.
14. Valuing the contribution of the community by calculating labour in terms of money and it must be reported together with financial report of the project and also must be audited.

1. Project Evaluation

1.1 Introduction

Water is a common property resource and is critical for sustainable livelihoods. Water is needed by all households for domestic use, i.e. for drinking, food preparation, washing, cleaning, etc. Access to adequate and clean water will greatly contributes to improved health and better utilisation of food to lead a healthy life style. This means, there is a direct relationship between the availability of water, food security and health. Water is a very scarce resource in most pastoral areas and its supply means sustaining life of people and their livelihood.

Water scarcity is an endemic problem of communities in Filtu woreda, particularly those areas with no permanent water points. Kebeles residing close to the Dawa and Genale Rivers have better access to water, but water borne disease are rampant due to less developed health facilities and malfunctioning of the existing ones.

Cognizant to the water problems in Filtu woreda of Somali Regional State, the Ethiopian Evangelical Church Mekane Yesus Development and Social Service Commission in collaboration with Norwegian Lutheran Mission designed Filtu Water and Sanitation Project (FWSP) and started the implementation in 2002. Since the year 2002, three project phases have been completed. Agricultural pilot programme has been included in addition to the WASH programmes during last phase of the project (2009-2011). Due to severe drought in Filtu woreda in March – April 2011, the project management diverted part of the 2011 project budget to emergency water trucking.

The purpose of this current evaluation is therefore to assess the impacts of the project during the the third phase (2009-2011) and recommend ways of the improving and scale up of the programme. The detail evaluation process and findings has been presented as follow in the report based on the project evaluation criteria.

1.2 Context of the project area

Fiiltu Woreda is situated geographically in southern part of Somali Regional State in Liban Zone having total area of 16,200 km^2. Filtu is located in Liben zone, one of the nine zones that make up Somali Region State. It is bordered by Borena zone of Oromia Region in the west, Genale River in the north, Dolo woreda in the southeast and River Dawa in the south. The population of Filtu woreda is 130912 (national Census, 2007). The altitude ranges from 240m.a.s.l in the Ganale River basin to 1540m.a.s.l at range of hills east of Filtu town.

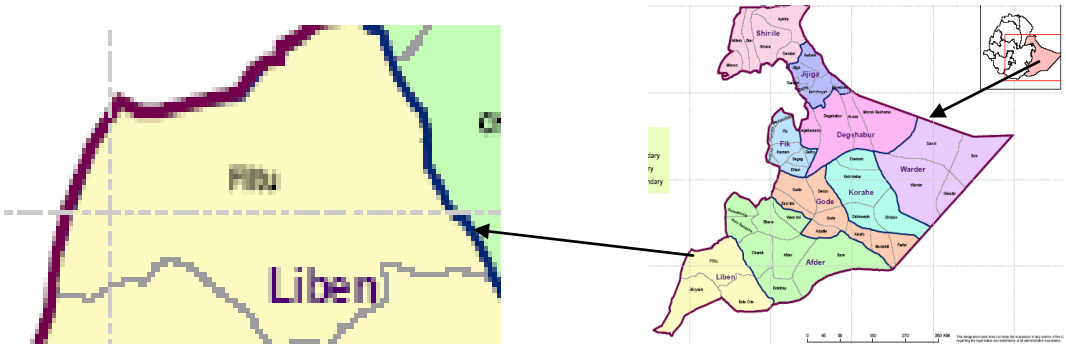

Fig-1: Map of Filtu Woreda

The climate of the project area is semi-arid in the northwest and arid the southern part with temperature ranging 25 ^{o}C– 40^{o}C. Annual average rainfall ranges from 400 to 600mm and it is bimodal (the longest rainy season, Gu running from April – June and the Dheer, the short rainy season from October – November).

Fig-2: Filtu Rainfall 2006-2009

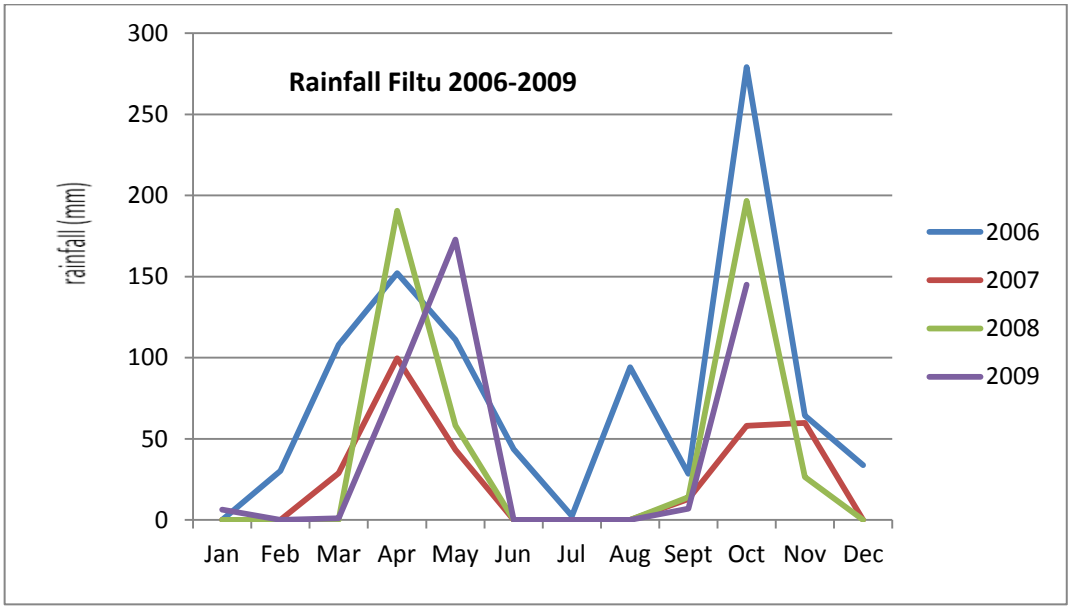

Table-1: Rainfall data for Filtu 2006-2009 at FWSP compound in mm

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
2006	0	30.3	107.9	152.1	111	43.6	2.5	94.2	28.4	279.2	64.3	33.7
2007	0	0	28.8	99.6	43.2	0	0	0	12.8	58.04	59.9	0
2008	0	0	0	190.5	58.2	0	0	0	14	196.6	26.4	0
2009	6.4	0	1	85.4	173	0	0	0	6.9	145		

Source: FWSP

The vegetation coverage consists mainly of grasslands, shrubs, bushes and acacia forests with a variety of trees. No perennial water sources available between Genale and Dawa Rivers. The overall climatic condition in the southern part of Filtu woreda is suitable for camel and goats production while more cattle population is reared in the northern part of the woreda.

The social service coverage in project target kebeles is less developed. There is only one all weather road dissecting the woreda running from Negele to Dolo Odo. The condition of the track passes in villages is rough and the terrains are undulating in some places. The level of social service coverage (human health, education, veterinary service and water) is limited and the functionality of some health posts is questionable due to the shortage of health personnel.

Livestock rearing is the major source of livelihood with significant number of agro-pastoralists who attempt growing rainfed crops (mainly sorghum and maize). The woreda is drought prone and most of the time the crops are lost to the prevailing droughts. Food insecurity is a major problem in the woreda as recurrent erratic and unfavourable climatic conditions and livestock diseases have undermined the capacity of the pastoralists to support their livelihoods. Sedentary farmers comprise group of farmers who grow crops in the valley bottoms under rain-fed and use riverine agricultural practices (in Genale and Dawa river basins).
The government long term strategic aim is to gradually encourage agro-pastoralism and pastoralists to permanently settle along the Genale-Dawa River basins to tackle the food insecurity situation. The sedentarization process has, however, both positive and negative impacts on the pastoral livelihoods. In terms of health, and other infrastructure development, the sedentary life may enable pastoralists to access health services, water and sanitation facilities, but it has also the risks when the promised facilities are not realised and continued as promise only leading to fatal consequences. In terms of ecology too, the sedentarization process naturally leads to higher density of humans and animals, and thus often exerting higher pressure on pastures and livestock watering points. The involvement of the project in extension education and introduction of adaptable technology for dry land and irrigation based farming systems may help the government to implement the settlement programme of pastoralists during the five years of Growth and Transformation Development Strategy (2002-2007 E.C).

1.3 Project Description

The overall objective of FWSP is to improve domestic water security as well as improving health condition among the target communities. To achieve this objective, Filtu Water and Sanitation Project identified four programme components with certain specific objectives for each of them. The activities that were planned under each component have been summarised in the following tables. The targets for the physical work and for the software (training, seminars, workshops) were given under respective tables.

Plan for Physical Realisation

The plan for the current phase shows that the project has planned to construct 12 new water points (eight brikas, three hand dug wells and one spring capping) and repair seven birkas. It was hoped that by year 2011 the number of water points in the district will be 42 from 30 in 2008. The designed number of population having access to water from the 12 new water points was estimated to be 3200 households or some 22400 people.

Table-2: Water development activity plan for the year 2009-2011 (FWSP)

No	Type of Water Point	Number for 3 years	Implementation schedule and number, X=1birka			
			2009	2010	2011	Remarks
1	Complete birkas at *Haraqessa Kabyay*, Esmaha	(3)	XXX			Carried over from 2008
2	Construction of new birkas	8	XXX	XXX	XX	
3	Construction of new hand dug wells	3	X	X	X	
4	Spring Development	1		X		
5	Repair of existing birkas	7	XX	XX	XXX	
Total number of water points		22[1] (19)	9 (6)	7	6	

Source: Compiled by consultant from project document

The project planned to complete health posts at Lantuewer and Halima Islow that were started in 2008 and planned 3 new health posts during the 2009-2011. The construction of 75 pit latrines and 45 bio sand filters (BSFs) and purchase and transportation of 5 roto tankers were among the physical plan for the current phase of the FWSP.

[1] The construction of three birkas was carried over from 2008 with the remaining work of Haraqessa, Kabyay and Esmaha 10%, 5%, 10% respectively. Therefore, the actual plan for 2009-2011 is 19 water points and target of 2009 was 6.

Table-3: Physical realisation plan of health and sanitation facilities (FWSP (2009-2011)

No	Type of Water Point	Number for 3 years	Implementation schedule and number			
			2009	2010	2011	Remarks
1	Completion of 2 health posts		2			
1	Construction of new Health Posts	3	1	1	1	
2	Construction of pit latrines	75	25	25	25	
3	Bio Sand Filters moulding	45	10	15	20	
4	Roto tanks for construction	5	2	2	1	

Source-Compiled by consultant from 2009-2011 project documents

Training, workshop, KAP surveys

In order to integrate the physical realisation, that means, the physical outputs of the project into the local knowledge and practices, training programmes in basic health and sanitation were planned for local communities. The teaching is based on community participatory learning method where drams, using demonstrative pictures and discussions were used for teaching the basic health, hygiene and sanitation.

Knowledge, attitude and practice (KAP) surveys were planned to be undertaken before conducting training and after the training to assess the attitudinal and behavioural changes in relation to personal hygiene, sanitation and basic health. In order to achieve the anticipated changes, project targeted to train 225 individuals in basic health, hygiene and sanitation, the same number to receive refreshment training. Health, hygiene and sanitation trainings have been designed to cover wider scope of preventive health care such as HIV and AIDS, other sexually transmitted diseases and malaria. The trainings were modified and new sessions related to preventive health care were incorporated.

There were other trainings outside of basic health, hygiene and sanitation such as training in bio sand filters moulding and its application, training on vegetable production, water harvesting techniques, nursery management, operation and maintenance of diesel pumps.

Community Participation

The project was designed in such a way that the physical work such as excavation and removal of soil from 400-600m^3 pits at each birka construction sites, digging pit latrines, assisting project masons at time of concrete walls and floors construction without payment. The value of labour and time the communities devoted for each birka construction was estimated by the project to be within the range of 20-25% of its total cost of construction. The project did not pay communities any allowance during the trainings unlike the common practice with other NGOs operating in Filtu woreda.

1.4 Purposes of the evaluation:

- to determine the relevance and fulfillment of objectives, efficiency, effectiveness, impact and sustainability
- To provide information that is credible and useful, enabling the incorporation of lessons learned into the decision-making process of all concerned stakeholders (the concerned local government, funding agency, implementer and target beneficiaries)

Scope of the evaluation

Assessing relevance of the intervention:

- Identify approach and strategies for the evaluation
- Describe the process of implementation and performances of activities
- Examine the quality of project preparation and design – *i.e.* the logic and completeness of the project planning process, and the intervention logic and coherence of the project design,
- Explore appropriateness of intervention in responding to the community felt needs
- To find out the feasibility of the Agriculture component as pilot activity and its relevance for the future intervention in the area,
- Explore whether the established target are reasonable and achievable

Efficiency

- Assess whether the project funds well utilized and used only for the intended purpose
- Examine how well inputs/means have been converted into activities, in terms of quality, quantity and time, and the quality of the results achieved
- To compare physical achievement/accomplishment against project plans and budget

Effectiveness

- Evaluate the quality of the project outputs and corresponding outcomes resulting in positive changes in the livelihoods of the community
- To examine the effectiveness of the implementation methodology and approaches and draw lessons learnt
- To assess the extent of the community and government line department participation in the processes of the project design, implementation, monitoring and evaluation
- Find out how the water rationing activity implemented effectively and the way it was executed,

Sustainability

- To assess the roles of water development committee and find out whether or not this can ensure sustainability of outputs after the phase out of the project,
- To assess the likelihood of benefits produced by the project to continue to flow after external funding has ended,

- Explore the level of community/beneficiaries sense of ownership of the project outputs
- Explore the benefit share among the various group for example women and men,
- Assess reliability/cultural soundness of the benefits to the local context
- Adaptability and replicability of the technology used to deliver various outputs snd sustain benefits,
- Explore to what extent the resilience of the beneficiaries has to disaster and change in climate is built,
- Examine how local representatives and communities could manage the project outputs/institutional arrangements in place to manage the outputs and sustain benefits,

2. Methodology

2.1 Sources of data

Primary data

The primary data for the evaluation was collected from different sources using structured questionnaires to assess changes in water supply, sanitation, participation and sustainability of benefits. Semi structured interviews were conducted with beneficiaries at focused group discussions. In depth interviews were also conducted with community representatives, water management committee members and relevant project staff.

Secondary data

Secondary data were collected from various sources (proposals, monitoring reports, evaluation reports, relevant to water and sanitation and pastoralist livelihood systems) and compared with the results of the primary data.

1.2 Sampling methods

Household sampling and sampling of project outputs to be visited

With the assistance of the project coordinators and staff of the project, mapping of the project activities across the project kebeles was done and the selection was made to ensure representation of activities and geographical heterogeneity of the kebeles. The selection of the kebeles for the fieldwork was randomly selected while all outputs in selected kebeles were visited. The interviewed households were randomly selected from the people in the village.

2.3 Sample size for interview

Primary data collection was gathered by interviewing 37 households (15 or 41% were women) project beneficiaries using enumerators for interviewing.

2.4 Enumeration

Three enumerators (two of them with translators) were given training on the methods of data collection. They were introduced to the household questionnaires so that they fully internalised the questions and acquainted with new words to minimise threat to reliability of data.

2.5 Techniques of data collection

Household interview

Out of the three trained enumerators only two effectively accomplished the task and the third one focused on organising logistics and guiding the evaluation team through the visited sites. Two translators (one for the lead consultant) and two enumerators (one Somali language speaking) worked in harmony to the end of the data collection/interview programme/. The enumerators recorded all the responses of the respondents in the questionnaires and jotted down additional information in their note books which later on communicated to the team leader.

Pic-1: Households being interviewed

Focus Group Discussion

Focus group discussions (FGD) were conducted at Ananis, Birafes, Jigdud, Waradey and Kalagur localities to get the wide picture of the project changes following the project implementation in each kebele. The outcome of the FGD helped to understand different perspectives, attitudes, pressing challenges of the communities and to establish complementary views that substantiate the information about the project, extent of participation and roles played by men and women.

Discussion with Key Informants

The representatives of communities, community elders, staff from EECMY/DASSC, NLM representative, former project manager, project management team, members of project staff were among those with whom the in depth interviews were conducted.

Observations

The evaluation team travelled across project kebeles and observe physical achievements of the project, quality of work, livestock physical condition, availability of pasture, livestock watering points etc. The physical constructions were visited to compare with the financial expenditure and to observe the quality of the outputs, suitability of sites and local management system.

The team observed to what extent the current Dheer rain contributed to the growth of pasture and availability of water collected in ponds. The environmental sanitation around birka and status of pit latrines were observed.

2.6 Data analysis

Data was recorded on excel spread sheet and frequency ratio was used to present and compare results of the survey and project achievements. Secondary data were also compiled and analyzed to substantiate primary data. The information gathered through survey, FGD, in depth interview with key informants and physical observation were compared, triangulated and analysed during the preparation of the report.

2.7 Limitation of the study

Among the proposed members of the evaluation team one person from Somali Regional State Water Resources Bureau did not come, but two persons from regional DRMFSS participated. Out of two persons from woreda water office only one person participated. The two colleagues from Somali Regional DPPB insisted that they are the right persons to conduct the evaluation on behalf of concerned woreda officials. It was unfortunate that the local government staff have not participated to the extent the evaluation team wanted.

On the other hand due to language barriers between the Somali speaking communities and the non-Somali members of evaluation team and enumerators gap might have been created. Care was taken in clarifying questions in simple terms to translators and ensured by reiterating what the community responded to minimise the problems related to language barriers and translation.

The evaluation team did not manage jointly to give the feedbacks of the evaluation to the concerned woreda officials and could not get their perspectives on the overall implementation and management of the project. The woreda officials were very much concerned to collect project property after they unilaterally declared the closure of the project by 30th of December 2011. Otherwise, the evaluation team enjoyed the warm reception by the communities and project management.

3. Findings of the Evaluation

3.1 Demographic characteristics of surveyed households

Out of 37 respondents 15 or 41% were women. The average age of the respondents was 36.7 years. The marital status was also assessed. 97% of the respondents were married. The average family size of the surveyed households was 7.8. The number of wives by married men among the respondents was 1.5.

Table-4: Distribution of sample respondents across project target sites (Dec 2011)

No	Kebeles	Male	Female	Total	Proportion of households (%)
1	**Dipro**	**3**	3	6	16.2
2	Bolabola	3	3	6	12.2
3	Karabul	2	1	3	8.1
4	Kalagur	2	1	3	8.1
5	Ananis	1	1	2	5.4
6	Birafes	4	4	8	21.6
7	Qebyay	5	1	6	16.2
8	Jigdud	2	1	3	8.1
Total		**22**	**15**	**37**	**100**

Source: survey data December 2011

There was great aspiration to have school in the village. Communities at Jigdud kebeles constructed local school shown in picture-2 to educate children recruiting local teacher. The project constructed a pit latrine about 15 metres away from the shelter meant for school.

Picture-2: Shelter used for non formal education (Jigdud kebele)

The level of education of surveyed households was assessed. The result of the survey showed that 81% have no formal education. Comparison between male respondents and female on level of education shows 100% women and 68% men respondents had no formal education. There were no schools and health posts in Jigdud, Birafes and Ananis.

Table-5: Level of education of the respondent (%) (M=22, F=15)

No	Kebele	Total households in the kebele	Respondents with no formal education		Read and write		Grade1-4[2]		Above grade 4	
			M	F	M	F	M	F	M	F
1	Dipro	150	1	**3**	**-**	**-**	**2**	**-**	**-**	**-**
2	Bolabola	200	3	3	-	-	-	-	-	-
3	Karabul	150		1	-		2			
4	Kalagur	200	2	1	-	-	-	-	-	-
5	Ananis	350	1	1	-	-	--	-	-	-
6	Birafes	200	**3**	**4**	**-**	**-**	**-**	**-**	**1**	**-**
7	Qebyay	200	**3**	**1**	**1**	**-**	**1**	**-**	**-**	**-**
8	Jigdud	200	**2**	**1**	**-**	**-**	**-**	**-**	**-**	**-**
Total		**1650**	**15**	**15**	**1**	**-**	**5**	**-**	**1**	**-**
			68%	**100%[3]**	**4.5%**		**22.7%**	**-**	**4.5%**	

Source: survey data

3.2 Livelihood source of the respondents

Responses related to assess the livelihood source of the target groups indicated that 78% and 76% of the respondents generated major income before 2009 and in 2011 from livestock sources respectively. About 51% of agro-pastoralists purchased seed from market, 43% partly

[2] 22.7% of male respondents have first cycle education while one person has above first cycle level of education
[3] All interviewed women have no formal education

purchased and partly used from own production and 6% used own seeds last season for planting. About 24% of the respondents indicated that income from crop production can only last the family members for about 1-3 months while 32% responded from 4-12 months and 40.5 % said they never depended on crop production.

4. Relevance of the project

The Water Resources Management Policy of Ethiopia stipulated that every citizen has the fundamental right to access to sufficient water of acceptable quality to satisfy his/her basic needs. Based on this policy, the Water Sector Development Programme (WSDP) set targets of water coverage in 2002. The targets of 76%, 70.9% and 98.2% for national, rural and urban were set to be met by end of 2011 respectively. From the onset of the policy, the government invited all development actors (multilateral, bilateral and NGO communities) to participate in the realization of the WSDP. The government specifically, mentioned the role of NGOs in rural water supply and sanitation, construction of small scale irrigation, other water related poverty reduction and health improving projects. Involvement in strengthening technical capacities at regions and local, organizing and mobilizing local communities and undertaking rehabilitation of water works was another area the government wanted NGOs to come in.

Successive seasons of poor rains and recurrent drought caused the depletion of water sources exposing the communities to hang around searching for water both for domestic use and for livestock. This negatively impacted on the pastoral system, which once known for its resilience to external shocks. As response to these shocks, the Ethiopian Evangelical Church Mekane Yesus Development and Social Service Commission and Norwegian Lutheran Mission have been supporting the communities in Filtu woreda for about a decade implementing Filtu Water and Sanitation Project. The project was designed to address the most pressing problem of the communities, which is the shortage of water. Where there is no adequate and safe water, the health issue is the problem that naturally follows. Provision of sanitation facilities and training on basic health and hygiene has been the approach used by the project to reduce health problems through preventive measures. The approach and strategies are all in line with the Millennium Development Goals and Development Strategies and Policies of the Ethiopian Government. The relevance of the project to the local context has also been assessed during the evaluation for the major programme components implemented by FWSP during the 2009-2011.

4.1 Relevance of Water Development

Access to water is one of the major needs the communities raised at focused group discussions and individually responded during the household survey. The major source of water both for domestic and livestock watering is the rain water collected into birkas or ponds for the majority of people in Filtu woreda. People who have closer proximity to Ganale and Dawa Rivers have

better access to water. Unfortunately these rivers go bordering the woreda from north and south respectively and the majority of the inhabitants have no close proximity to these rivers.

Pictures- 3: Harbale pond, water source for human and livestock (40kms south of Filtu town)

The communities far from the major rivers used to collect rain water into ponds both for human and livestock consumption. The above picture shows how precarious the situation of safe water shortage is in Harbale kebele about 40kms south of Filtu town. The source of water both for human and livestock is from the same pond.

The women collecting water (picture on left) were asked whether they boil water or have other water purifying chemicals. The response was 'yes we do boil it'. But at the focused group discussion in the same village, some participants declared that they do not have time to boil water while others had mixed opinion. Among the surveyed households 25 out of 37 or 68% said they did not treat water before 2009. As per the continued hygiene and sanitation education which brought change in attitude over the past three years, the percentage of respondents who has started boiling water increased from 32% before 2009 to 49% in 2011.

The project constructed 400m^3 birka for the communities in Birafes kebele some 6kms further to the south who also used to collect water from the above pond at Harbale. The colour of the water collected in brikas (picture-4) is quite clear and no sediment was found in water taken in a bottle (picture-5) from the birka and kept for five days undisturbed.

Picture-4: Birka constructed by FWSP at Birafes site **Picture-5: colour of water from Birka in bottle**

Communities resided between the two rivers in Filtu woreda depend on ponds during the rainy season. Access to birkas is restricted until the water in ponds and shallow wells is exhausted. The birka water is usually reserved for the most drier months for human consumption and users are expected to pay water fee. The capacity of each Birka is about 400m^3, which means it can serve 200HHs at the rate of 40litres/day for about 50 days. But the dry period usually goes more than 90 days. Therefore the need for additional sources of water in the woreda has not been met fully.

The relevance of constructing birkas as source of water for domestic use is justifiable in terms of reducing water borne diseases, saving time of fetching water for other productive work and increasing the enrolment of children in schools.

4.2 Relevance of Health Hygiene and Sanitation programme

The evaluation team visited two health posts constructed by the project during this last phase at Waradey and Qurabul. The health post at Waradey looks as it has not been used for the purposes of its establishment, but mainly as a residence for the health extension workers.

There were two community health extension workers (young girls) trained for 6 months in Filtu who were running the health post. They provide support on preventive aspect of health care and environmental sanitation. They are not mandated for curative treatment though there were rampant incidences of malaria, diarrhoea, coughing, skin infection, urinary tract infection and conjunctivitis. The communities complained that they had to walk for about 6 hours to get treatment for infectious diseases at Haysuftu.

Picture-6: Health post at Woreday kebele, 105kms from Filtu town

The health post has been handed over to the government (woreda health office) who is responsible to assign health professionals to deliver better health service to communities. The health post/HP/ should have been served for health, hygiene and sanitation education. The HP was serving as a residence for the community health workers and sanitation inside of the health post extremely below standard.

Even though the relevance of the construction of the health post in such remote rural area is unquestionable, the commitment of concerned officials was not there. At least the community health workers should have cleaned the rooms to reduce the population of flies that invaded the building.

4.3 Relevance of Agricultural pilot programme

The information collected during the focused group discussion and in depth interview showed that more and more agro-pastoralists have taken up farming as coping mechanism to the recurrent droughts that caused shortage of food during the last 3 decades. Small scale irrigation farming along Genale and Dawa Rivers and planting maize and sorghum on few rainfed agricultural pocket areas has been grown for years in traditionally known as Liben[4] plains.

In order to improve the food security situation and build resilience capacity, FWSP started piloting agricultural activities during the last two years through the provision of improved seed, irrigation pumps and introducing fruit and forest trees to agro- pastoralists. Adaptable strategies and approaches that suit to the local context need to be researched and community dialogues should have been conducted with communities to integrate the local knowledge and practice.

[4] Liben is the agro-pastoral and pastoral area between Genale and Dawa Rivers starting from Negele Borana in the northwest to Dolo in the southeast.

Box-1: **Livelihood trend in Filtu woreda: An in depth interview with Key Informant**

A community elder from Bolabola kebele who was interviewed in Filtu town responded to most of the questions raised by the consultant during the in depth interview. One of the questions was the main livelihood source of the community over the last 3-4 decades. The key informant said it was livestock. He added that there were more cattle than they are today. He explained -goats were less in the past, but they have out numbered cattle now. Camels are also more in number now. The key informant continued telling that rangelands were invaded by bushes and a grass species people call-'***Keligiis Noolaade'*** meaning 'selfish grass'. He said, 'Filtu woreda was hit by severe drought in 2000/2001. This drought wiped out livestock mainly cattle. Sheep and cattle cannot live on poor pasture and cannot tolerate drought compared to goats and camels'. The consultant asked the time farming was started in Filtu. The key informant responded by saying that farming started in Filtu woreda during the Derg regime. Derg agitated farming as superior to pastoralism. Sorghum and maize were major crops then and even now followed by haricot beans. Cultivation started at the valley bottoms. The harvest was good because the rains started in time and continued for longer than it is now. The consultant asked if the key informant could foresee how he would see the future in Filtu woreda (scenario building). He responded: Cattle will continue decreasing as good pasture is no more available. Goats and camels will be the major source of income in more arid area; farming will be expanded in semi arid. Many people also migrate to towns because there are better facilities. He added that Filtu woreda is peaceful place and we want to maintain that. The government should fight with tribalism and ethnic conflicts. NGOs should meet our needs in water and improve pasture. *Nolasha waa biyo,naftana waa caano,this means 'water keeps live while milk keeps body.'*

4.4 relevance of capacity building

The project planned various training in basic health, hygiene and sanitation, operation and maintenance of water pumps and practical demonstration on bio sand filters moulding. The training activities provided by the project mainly focused on awareness raising and sensitisation of community members.

Operational strategies and required skills have to be clearly stated before planning for capacity building objectives. This mean, the objective of capacity building should be justifiable and result oriented. System for following up the impact of trainings and skill development should be in place.

5. Implementation Efficiency

5.1 Water Development

The source of water supply is rain water collected into partially underground concrete cisterns locally called birka. The general agreement between the project and the community shows the excavation work is to be done by community labour (free of payment) after sites selection is done by the project experts and woreda concerned officials. The project completed the construction of three birkas carried over from 2008 at Qebyay, Haraqessa and Isamaha in 2009. The project planned 8 new birka constructions and renovation of 7 birkas. The project managed, however, the construction of eight birkas (only five of them are currently functional) during this ending phase. The birka at Dipro site (17Kms from Filtu) has leakage and no water in it when the evaluation team visited the site at the end of December 2011. The other 2 birkas (at Kalagur and Hasan Gebeye kebeles are under construction with the remaining work of 80% and 20% respectively.

The other water supply component implemented by the project was hand dug wells in Genale River bed for the communities resided in the basin. Out of three planned hand dug wells one is completed at El-Daud site while another in Bandher (Harasame site) is incomplete. The third hand dug well as well as the spring protection has not been implemented.

Picture-7: Dipro the leaking birka

Picture-8: Incomplete Birka at Kalagur

The project also planned to renovate 7 leaking birkas and managed to renovate 3 (Ananis, Qorahe and Gunway). The rehabilitation of the three birkas was completed in 2010.

The project fully completed the construction of 6 birkas even though one at Dipro has leaked all water out. The remaining work of the birka at Kalagur is about 80% that is cement plastering and completing the silt trapping structure. The one at Hasan Gebeye is only at the excavation level as per the report of the project manager.

The construction of these two birkas would have been completed if there was no water trucking programme in 2011. It seems unfortunate for the communities who wished the completion of the birkas construction before the end of 2011. The overall timely accomplishment of planned activities depended on external factors such as drought, release of fund and market price. The drought of 2011 diverted the attention of the project management to water trucking/also a life saving.

The efficiency of the project had been affected by staff turnover and also shortage of technical staff in the area of water construction. Most of the workload was on the project manager and there was also a long gap in replacing key staff such as project manager after he was transferred to the other project. Delays in fund transfer had also impacted on timely implementation of the planned activities as per the opinion of the former project manager. The project had carried over works from one project phase to the next and from one budget year to the other (Table:6a-6c).

Table-6a: Water development activity plan and accomplishment (2009)

No	types of planned Activities by site or kebeles	UoM	Quantity for 2009-2011	Quantity planned 2009	Quantity achieved	% physical achievement of total 3 years	% physical achievement of 2009 plan	Benefiting Households
I	**Water Construction**							
1	Completion of pending projects from 2008 (Qebyay 600m^3, Haraqessa, Esamaha)	No		3 ***(remaining work 5-10%)***	3	100	100	Qebyay = 200 Haraqessa=150 Esamaha=100
2	New Construction (sites-Bolabola, Jigdud, Raydab)	No	8	3	3	37.5	100	Bolabola=200 Jigdud=200 Raydab=250
3	Rehabilitation of birkas (site Ananis)	No	7	2	1	14.28	50	Ananis=300
4	Hand dug well construction at ElDaud	No	3	1	1	33	100	Eldaud=250
5	Spring Development (Haysuftu)	No	1	0	0	0	0	0

Source: Compiled by consultant-Jan2012

Table-6b: Water development activity plan and accomplishment (2010)

No	types of planned Activities by site or kebele	UoM	Quantity for 2009-2011	Quantity planned 2010	Quantity achieved	% physical achievement of total 3 years	% physical achievement of 2010 plan	Benefiting Households
I	**Water Construction**							
1	pending activities of 2009 Rehabilitation of Birka-Site Ananis	No	1	1	1	100	100	300HH
2	New Construction (sites-Dhamole, Birafes, Dipro*)	No	8	3	3	75%	90*	Dhamole=150 Birafes=200 Dipro=150
3	Rehabilitation of birkas (Qorahe, Gunway	No	7	2	2	42.8	90*	Gunway=200 Qorahe=100
4	Hand dug well construction(	No	3	1	1	66.7	85	Arasame=100
5	Spring Development (Haysuftu)	No	1	0	0	0	0	0

Source: compiled by consultant Jan2012

*Birkas at Dipro leaked out water and it was empty (Photo-8) and the achievement % of all birkas (Birafes,Dhamole, Dipro & Gunway) was 90%

Table-6c: Water development activity plan and accomplishment (2011)

No	types of planned Activities by site or kebele	UoM	Quantity for 2009-2011	Quantity planned 2011	Quantity achieved	% physical achievement of total 3 years	% physical achievement of 2011 plan	Benefiting Households
I	**Water Construction**							
1	Completion of 2010 of Birka at Birafes, Dhamole and Dipro	No	1	10%	3	100	100^{R}	Dhamole=150 Birafes=200 Dipro=150**
2	New Construction (sites-Kalagur and Hasan Gebeye)	No	8	2	8*	87.5	80* 20*	Kalagur=200 Hasan Gebeye=200
3	Rehabilitation of birkas	No	7	0	0	42.8	0	
4	Hand dug well construction	No	3			66.7		
5	Spring Development (Haysuftu)***	No	1	0	0	0	0	0

Source: Compiled by the consultant Jan2012

*The progress of construction of birka at Kalagur and Hasan Gebeye were 80% and 20% respectively

** The birka at Dipro site was completed, but water completely leaked out

***The spring was not constructed because it is in inaccessible location (project report) and the budget was diverted to water trucking

100^{R} Birkas at Birafes and Dhamole were completed 100% in 2011

Overall accomplishment of new birka construction went up to 87.5 % while it was only 42.8 for the rehabilitation of birkas for the whole third phase of the project. The reduction of 12.5% under accomplishment has been attributed to the incompleted 2 birkas (at Kalagur and Hasa Gebeye). The leaking birka at Dipro has affected the morale of the communities who were the nucleus of the work, were not lucky to get safa water they have dreamed for so far.

The quality of construction of most birka was found acceptable. There was one at Dipro that leaked out all water entered during the October-November 2011 Dheer season. The former project manager told the evaluation team that there has been transformation on the shape of birkas to reduce the risk of cracks and leakage. The current adopted shape of birka is the shape of one side of equally dissected spherical ball where the diameter on the floor side is less by 30cms than that of diameter at the mouth of the birka.

In Somali Region birkas are usually roofed with iron sheet, but those birkas visited by the evaluation team were all without roofs. Communities had also raised roofing of birkas as a priority need. The evaluation team also recommended the roofing phase by phase on all birkas constructed by this project to safeguard the water from contamination.

Most of the sites have very good catchments to collect water while other have the risk of either small catchment area or potential for silting up. The risks of silt build up and limited catchment were raised by the evaluation team. These problems occurred as sometimes the communities select sites without technical staff and they start excavation without notifying anyone. The woreda officials also forward the request of the communities to the project for implementation. The project shouldn't have gone into the sites they have not selected.

The project did not involve in the site selection at Kalagur and involved after the communities started excavation. This site is not suitable for two reasons: 1. The catchment is close to the main road (about 70 metres) away on the down side. The runoff coming from the hillside has been diverted away from the main road on the upper side of the road. Therefore, there will not be enough runoff to fill the birka from the small catchment between the road and the birka. 2. The catchment above the birka is almost bare-land that may cause quick silt build up. A lot of catchment development and silt trapping structure work needs to be done in order to get water into birkas.

On the other hand, the accomplishment of the hand dug wells was 66.7%. One was fully completed and the second one needs deepening of the well. The third hand dug well and spring protection have been cancelled after the budget was diverted to water trucking in 2011.

2300 households or 70% of the target population have got access to water. This number would have been increased to 86% if the project managed to complete the rehabilitation of birka at Dipro and completed the already started ones at Kalagur and Hasan Gabeye.

The other activity that the project implemented under water development was the establishment of Water Management Committee (WMC). The WMC were well functioning at all water points, but the one at Jigdud had developed modalities /procedures for managing community resource. There were defined penalties for each type of mismanagement and misuse of community resources. The catchment of the birka was well protected to minimise the risk of silt build up. The water fee collection has been already deposited in Negele bank. The project should have facilitated experience sharing visits of WMCs from other sites to Jigdud so that others could adopt the lessons to their situations.

5.2 Implementation Efficiency of Health, Hygiene and Sanitation programmes

Health Posts

The project planned to construct three health posts (one each year). The budget of the health post planned for 2011 was diverted to emergency water rationing project. The health post at Wareday kebele (105km from the project base in Filtu town) was started in 2009 and completed in 2010 while the one in Qurabul (42kms away from Filtu town) was started and completed in 2010. The toilet room which should have been a component of the health post was not built because of the rocky nature of the site at Qurabul.

The health posts were constructed from soil blocks called *adobe blocks* moulded locally. Most of the work of the adobe blocks production was done by local communities without payment. Bigger sized mesh wires were fixed to the walls and then plastered by cement to give strength to the walls. The health post constructions sites were well fenced with barbed wires and sites at Waradey and Qurabul were very good for health service provision.

The responsibility for running the health post was transferred to the government immediately after the completion of construction and furnishing. The evaluation team observed that the health posts have been under utilised. Putting up the structure alone may not mean much unless the system functions. There should be mechanism to make accountable those who are responsible for providing service to the communities. This means that the project should have been closely monitor the functionality of the health posts while it is operational in the woreda. If the completed projects are not functional, there is no logic to build the other.

Training of health, hygiene and sanitation

Basic health training, "*Community Health Promoters"* training, constriction of pit latrines, Knowledge, Attitude and Practice (KAP) surveys and pre training assessments were conducted on behavioural change on HIV and AIDS and Traditional Harmful Practices.

Participatory Hygiene and Sanitation Training (PHAST) approach was used in basic health and sanitation training where community health promoters/CHP/ were selected from the community and training for about a week. Then, the CHP cascaded the knowledge they received at the training to the villagers.

Table-7: Health, Hygiene and Sanitation activity plan and accomplishment (2009-2011)

No	types of activities planned and implemented	UoM	Quantity planned 2009-2011	Quantity achieved 2009-2011	% of achievement	Number of female trainees 2009-2011
1	Health post construction	Number	3	2	66.7	-
2	Basic Health hygiene and sanitation training	participants	350	280	80.0	181
3	Refreshment training	participants	375	411	109.6	241
4	Construction of latrines	Number	75	70*	93.3	-
5	Bio sand Production and instalment	Number	15	28	186.7	-

Source: Compiled by the consultant from project documents,

* Seven (7) pit latrines were under construction in Ananis kebeles

The project managed to train 80% of targets in basic health, hygiene and sanitation. Out of the total trained 280 participants female trainees were 181 or 64.4%. About 58.4% of females were given refreshment training too. Personal hygiene, environmental sanitation, water borne diseases, HIV and AIDS and STI and traditional harmful practices (THP) were topics provided during the training sessions. The project has brought attitudinal and behaviour changes among the communities. Congruent to the changes observed at FGD, the survey report also showed that all 37 respondents said they washed their hands before meals and after cleaning children bottoms while 23 out of 37 respondents wash hands after using toilets. Toilets that built by the support of the community were being used as shower rooms too.

Picture-9 pit latrine at Birafes kebeles, 2011

The evaluation team observed the pit latrines constructed by the project in different kebeles. The standard of all pit latrines was the same. The roof was covered by iron sheet supported by

the project and the pit holes were covered with concrete slabs. The walls of the pit latrines were made of branches of wood. Pit latrines were used by group of people without separate compartment for women and men.

Such latrines were five in one village. The project health coordinator said that these toilets were built for demonstration to be replicated by the communities. The evaluation team did not find any of the replicated toilets built by the communities. The evaluation team commented that the project should not have done five in a village if it is for demonstration. Smaller size of what has been built would have been enough. The walls should have been covered with the iron sheet to provide maximum cover for the people in the toilets and size could have been reduced or portioned into a toilet and shower rooms. In addition to that, if it is for demonstration purpose, it must be something which should not be too local.

Bio Sand Filters Production and Instalment

The project introduced bio Sand Filters (BSF) picture-10, to the communities in rural areas and to Filtu town. The materials for moulding BSFs are cement, fine sand, plastic hose, sand filtering sieve and piece of iron sheet used as a seal. The difference in colour between the water pre-filtration and after is given shown in (picture-11) for comparison.

Picture-10: Bio Sand Filter

Picture-11: Colour of water before filter(left) and after (right)

The moulding machine can be transported and the filters can be produced in villages. The issue of cost affordability for replication is a concern. The project produced over 28 filters already and there was no report of its replication. Marketability of the filters needs to be assessed by the project. Otherwise the technology is adaptable and not sophisticated.

5.3 Implementation Efficiency of Agricultural Pilot Activities

The idea of agricultural piloting activity was raised during the evaluation of the second phase of the project by Filtu woreda officials. This idea was part of the government strategy of settlement of the agro-pastoralists along the catchments between the Genale and Dawa Rivers to address chronic problem of food insecurity. Irrigation infrastructural development was thought long ago to encourage the settlement programme.

The achievement of the project so far in piloting agriculture was provision of improved seed, distribution of 2 pumps for small scale irrigation to address the problem of food insecurity of the agro-pastoral communities resided in Genale River basin in Bandher site (about 130kms from Filtu town) and raising forest tree and fruit seedlings.

Table-8: Achievements of Agricultural Piloting of FWSP (2010-2011)

No	types of planned Activities by site or kebele	UoM	Quantity for 2010-2011	Quantity planned 2010-2011	Quantity achieved 2010-2011	% of achievement	Number of benefiting HHs
1	provision of water pump	No	5	5	2*	100.00%	20
2	Rehabilitation of grain mill	No	1	1	1	100.00%	
3	Rehabilitation of nursery site	No	1	1	1	100.00%	
4	Establishment of nursery site	2	2	2	2	100.00%	
5	provision of improved seed variety	kg	800	400	250	62.50%	14
6	Training on operation and minor maintenance of water pump and nursery and irrigation water management	trainees	NA	NA	29		29
7	Rehabilitation of grain mill	No	1	1	1	100.00%	

Source: compiled by consultant from project reports

- The project purchased 5 pumps but issued only 2 to 2 cooperatives. NA= Not available

Melkassa-2 (improved variety of maize) was distributed to 14 agro-pastoralists in Mesajid and Haydimtu for planting under rain-fed agriculture. Maize crop at Mesajid kebeles (picture-12) was damaged by stalk borer larvae/worms, which may significantly reduce the yield weakening the photosynthetic foliage parts of the plant.

Picture-12: Evaluation team with improved maize seed beneficiary in Masejid kebeles(rainfed farm)

Two diesel pumps were given to two cooperatives (each with 10 farmers). Sixteen farmers who received pumps were also trained in operation and maintenance of pumps for 10 days. Grinding mill was also provided to women group in Bandher as per the report of the project.

The project engagement in supporting pump irrigation is good idea, but the issue of availability of fuel and its cost is challenging. The project should have looked for a cost effective and environmentally friendly option such as introduction of treddle pumps or wind vanes to pump water. The project could organise visit to Omorate, South Omo zone to get experience of triddle and wind wave pupms.

Nursery management by a project is an expensive investment even in many high rainfall areas leave alone in semi-arid and arid climate. The return of nurseries in terms of management cost and the survival rate of the seedlings became the major concerns. FWSP can provide technical support, tools and seeds (forest tree or fruit) and leave the rest to individuals to manage nurseries privately or in group themselves.

5.4 Implementation Efficiency of Capacity Building Activities

The capacity building programme was planned at three levels: at community, collaborating staff of the government and project staff. There has not been significant and well planned capacity building programme in the last three years except the training of communities in health, hygiene and sanitation education. From the observation of the project staff profile and logistics, capacity and competence is to be considered by the EECMY/DASSC management in order to raise the impact of this project in future phases. Capacity and competence building of staff should have been one of the strategic approaches of the project to achieve the intended results.

5.5 Water trucking

There was no such activity in the main project document. The activity was included into the project document based on the request of the local government in connection to the extended drought in 2010/2011. The project management communicated the request to the NLM, funding agency, who gave the go ahead and also signed tri-partite agreement of the emergency water trucking project with the Somali Region DPPB and EECMY/DASSC. The project diverted about birr 1million of FWSP budget to provide water to the needy 6443 households in 26 sites in Filtu woreda. The project report shows that about 1.61 million litres of water was rationed from March 3, 2011 up to April 8, 2011 for about 36 days.

5.6 Synergy between the project components

Water is a very scarce resource both for domestic and for watering livestock. Main source of water in Filtu is rain. The pattern and distribution of rains both for the Gu and Dheer seasons has been erratic for many years. FWSP project has been harvesting the rain water for domestic use into the underground cisterns locally called birkas. The project met much of its objectives in water supply by constructing about 40 birkas during the last three phases of project implementation periods. Unless the available water is well protected it can be the cause of many diseases. The project trained huge number of local people (about two-third being women) in personal hygiene, environmental sanitation, HIV and AIDS and THP. These trainings have brought change in attitudinal and behaviour of the people in general and those who attended the trainings in particular. The project is also expanding its work into the livelihood dimensions as food insecurity is also another problematic area that needs the attention in Filtu woreda. The project has demonstrated new technologies such as introduction of drought tolerant varieties of seeds, rain water harvesting techniques/ making ridges on farm plots to make water available close to the roots of growing crops, provision of pumps for the farmers resided along the Genale river basin etc.

The project has been operating across the woreda and the project components have also been spread across the board. The issue of cohesion and leverage need to be considered so that activities synergise one another to make greater impact. This means for example, health, hygiene and sanitation activities have been integrated into the water supply component to synergise the effect which is greater than the sum effect of each component.

5.7 Gender Dimension

The EECMY/DASSC and NLM have been supporting the communities across Filtu woreda since the years 2002. The major attention and focus was given to water, health, hygiene and sanitation. Providing water to the household is reducing mainly the workload of women and children (girls) who are responsible for fetching water even though that was not the direct result to be expected. The shortage of water affects the health of children and women most. Addressing water problem means addressing also the health problem that affect the

community in general and women and children in particular. Women were two-third of the trainees in health, hygiene and sanitation. The number of women who attended formal trainings in health, hygiene and sanitation during 2009-2011 was 422. But those who participated in village health education and awareness raining sessions were much more than this figure. However, the number of female in senior project management was limited to only an expatriate nurse working as health section coordinator. Otherwise the cashier, one community health promoter and the cleaner are women employees out of 17 staff.

5.8 Community participation

The communities freely explained the whole process of water development, health post construction and training programmes. The excavation of birka to the depth of 6 metres and removing soil from 400-600m^3 volume pits is heavy duty work that the communities have undertaken. Self mobilisation of communities to undertake heavy work such as digging and moulding soil blocks used for constructing health posts helped the project to achieve its objectives. The contribution of free labour by the communities helped the project to make good saving of about 20-25% on the construction work. The community management system was functioning sell at most water points, but watSan committees at n some water points should be strengthened.

The evaluation team observed good harmony between the communities and project staff. The communities appreciated the support given by the project. They also raised some additional support in water development, education and improvement in health services, particularly in curative aspect. The roofing of the birkas was the question raised during the visits at all water points by the communities.

5.10 Budget Allocation and Budget Utilisation

The project received Birr8, 743,460 for the ending phase of FWSP 2009-2011. The budget for three years including that of the water trucking was Birr9, 625,562 (Table-10). The actual transfers were less by birr 882,102.00 and than the budget.

The actual expense until the 3rd quarter of 2011 was Birr9, 628, 445.39. The difference between the actual expense and the budget was Birr730, 470.93 while the difference between the actual expense and transfer was birr151, 631.07. It should be noted that the expense of the fourth quarter of 2011 has not been included and the audit for the 2011 has not been done yet. Further verification on detail budget utilization should be done during the final year (2011) audit.

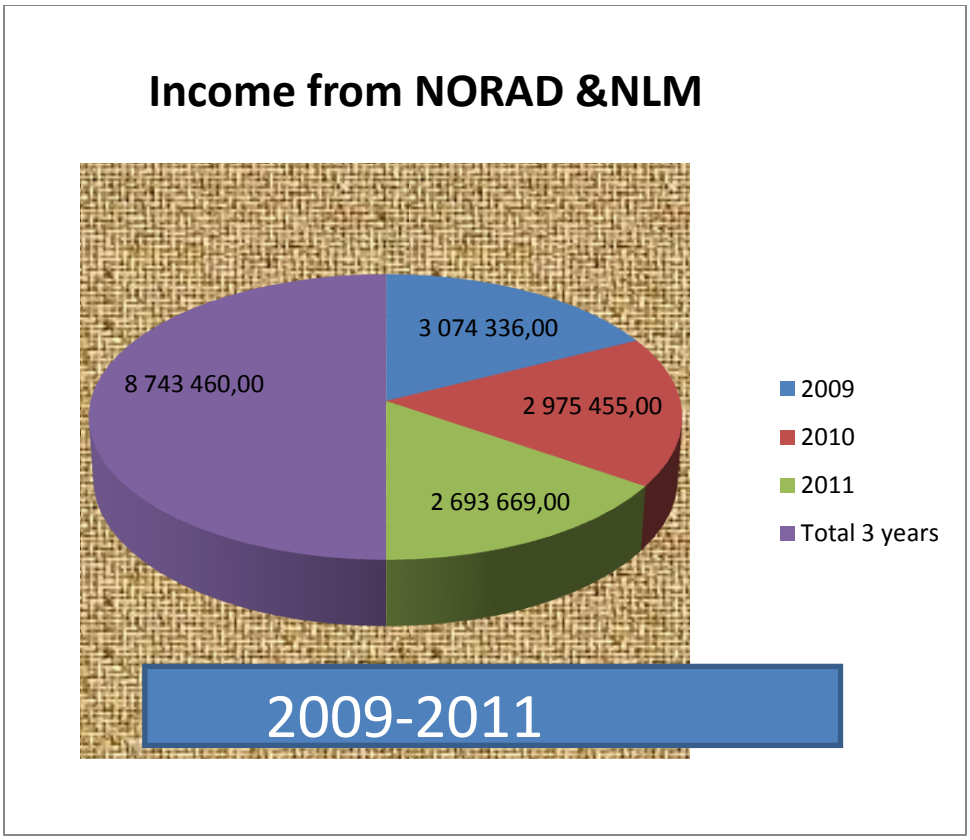

Fig-3 Filtu Water and Sanitation income from NLM by years for the period 2009- 2011.

Table-9: Budget allocation and utilisation FWSP 2009- 2011 (3rd quarter)

	Budget lines	2009		2010		2011		Total 2009-2011		
		Budget	**Actual**	**Budget**	**Actual**	**Budget**	**Actual**	**Budget**	**Actual**	**Variance**
I	Project cost									
	Equipment	99,500.00	93,966.44	29,500.00	26,490.56	42,500.00	79,052.00	171,500.00	199,509.00	(28,009.00)
	Vehicle	450,000.00	442,160.87	1,128,800.00	1,257,835.16	-		1,578,800.00	1,699,996.03	(121,196.03)
	construction/building	993,500.00	1,254,346.80			762,675.00	132,786.00	1,756,175.00	1,387,132.80	369,042.20
	Agric. Pilot			280,217.00	357,134.61		733,353.32	280,217.00	357,134.61	(76,917.61)
	Water Trucking					1,000,000.00	993,354.32	1,000,000.00	993,354.32	6,645.68
	Others	20,000.00	40,142.00			143,500.00	599,940.00	163,500.00	640,082.00	(476,582.00)
	Sub total	**1,563,000.00**	**1,830,616.11**	**1,438,517.00**	**1,641,460.33**	**1,948,675.00**	**2,538,485.64**	**4,950,192.00**	**5,277,208.76**	**(327,016.76)**
II	Operation							-	-	-
	Personnel	801,830.00	525,921.90	876,268.00	595,635.29	988,422.00	901,461.96	2,666,520.00	2,023,019.15	643,500.85
	Consultancy	10,000.00	28,577.50			25,000.00	-	35,000.00	28,577.50	6,422.50
	Administration	242,000.00	211,991.55	230,000.00	232,166.03	242,000.00	46,352.74	714,000.00	490,510.32	223,489.68
	Auditing	10,000.00	5,750.00	10,000.00	8,250.00	10,000.00	-	30,000.00	14,000.00	16,000.00
	Education/Capacity Building	147,500.00	67,080.48	122,500.00	141,639.87	172,500.00	17,668.00	442,500.00	226,388.35	216,111.65
	Transport	162,000.00	254,326.34	238,350.00	294,629.87	232,000.00	179,656.48	632,350.00	728,612.69	(96,262.69)
	Others	15,000.00	17,376.00	10,000.00	41,432.80	30,000.00	-	55,000.00	58,808.80	(3,808.80)
	Evaluation			50,000.00	11,571.00	50,000.00	36,394.50	100,000.00	47,965.50	52,034.50
	Sub total	**1,388,330.00**	**1,111,023.77**	**1,537,118.00**	**1,325,324.86**	**1,749,922.00**	**1,181,533.68**	**4,675,370.00**	**3,617,882.31**	**1,057,487.69**
	Grand total	**2,951,330.00**	**2,941,639.88**	**2,975,635.00**	**2,966,785.19**	**3,698,597.00**	**3,720,019.32**	**9,625,562.00**	**8,895,091.07**	**730,470.93**

Source: Compiled from EECMY/DASSC financial documents

6. Effectiveness of the Project

The effectiveness of the project is measured by the extent to which the project objectives are met. The effectiveness is also measured who benefited from the results of the project and how the target groups are identified. The strategies in place to sustain the benefit of the project were among the criteria to assess the effectiveness of the project.

6.1 Effectiveness of the Water Development

The project completed 3 birkas carried out from 2008, constructed 8 new bikas (five are fully functional, one leaked the water and needs minor repair, two are incomplete), 3 out of 7 birkas were rehabilitated. The project managed to address needs of target groups. About 13800 direct beneficiaries (79%) or 2300 households have got access to water. This number would have been increased to 86% if the two other birkas were completed and birka at Dipro is repaired.

Results of the Water Development

- The availability of water in birkas not only solved the problem of water, but also encouraged the people to lead a sedentary life style around birkas.
- The water in each birka can last the community for at least three critical dry months.
- The communities developed confidence in themselves that they can lead local development and helped them to see to the local potential for the development of their communities
- Water borne disease reduced as the result of provision of water
- Time spent for and work load fetching water is reduced and community used the time saved for other productive work
- Sense of ownership of the community is so strong in sustaining the benefits of the water construction

Surveyed households were asked how long they walk to the water points before 2009 and whether water the collected was sufficient when compared the two period, 2009 and 2011. The responses of the surveyed households were given in Table-6 below. The distance that the surveyed households walked varied from place to place. The results, however, were significantly varied before 2009 and in 2011. The maximum distance travelled to water point before 2009 was 12 hours during the dry season by communities in Bolobola. The average distance computed for eight kebeles was 4.3 hrs.

Almost all surveyed households (36 out of 37) responded that they did not have sufficient water before 2009 while only 15 respondents said water was not sufficient in 2011 either. Water collected in birka was considered comparatively 'quality' in relation to the water

collected in ponds because the birkas have silt trapping structures, have no access to animals and their walls and floors are plastered with concrete masonry.

Table-10: Beneficiaries' opinions on status[5] of water before 2009 and at the end of 2011

No	Site /kebeles	Source of water (for human)		Average time required (hrs) to fetch water		Perception on sufficiency		Quality of water (local standard)	
		Before-9	2011	Before-09	2011	Before09	2011	Before09	2011
1	Dipro	pond	pond	4hrs	4hrs	N=6	N=6	P=6	P=6
2	Bolabola	pond	Birka +pond	12hrs	5-10min	N=6	y=5,N=1	P=6	G=6
3	Qurabul	Well+pond	Well +pond	4hrs	10-40m	N=3	y=2,N=1	P=3	G=3
4	Kalagur	pond	pond	1hr	1hr	N=3	N=3	P=3	G=3
5	Ananis	pond	Birka &pond	5hrs	10-30	N=2	Y=2	P=2	G=2
6	Birafes	pond	Birka & pond	2hrs	5-20min	N=7 0=1	Y=7,N=1	P=8	P=1, G=7
7	Kebyay	pond	Birka& pond	4hrs	5-20min	N=4, y=2	Y=4 N=2	P=6	G=6
8	Jigdud	pond	Birka & pond	4hrs	10-30min	N=3	Y=3	P=3	G=3
				Av=4.3hr					

- Source: Survey data 2011

Keys: N= not sufficient, Y=sufficient, P=poor quality, G[6]=good quality

6.2 Effectiveness of Health, hygiene and sanitation programme

The impact of the training was assessed through the household survey conducted by the consultant. About 51.3% of the respondents reported that they had training on personal hygiene and sanitation and control of water borne diseases. Out of 37 respondents 25 or 67.5% were using the pit latrines. The willingness to of communities to participate in various training and the trust they have in the project is deeply rooted.

Monitoring personal hygiene of household members, environmental sanitation (avoiding open defecation, cleaning houses and compounds) were among the benefits listed during the focused group discussions and also reported back through the survey questionnaires.

[5] Status refers to quality, quantity and distance to water points
[6] G=Good quality is the criteria to determine water collected in birkas.

The introduction of bio sand filters was received positively by the communities, but cost implication is a limitation for wider distribution among the pastoralists. The project should have linked the production and distribution of BSF to business-liking and persons with interest of entrepreneurship.

6.3 Effectiveness of Agriculture Pilot Activities

Improved seed and forest tree seedlings were distribution across the woreda to many kebeles. Agro-pastoralists used to try crop production for many years but the success mainly depends on the availability of rain rather than whether they used local or improved varieties of seeds. In years when the rainfall was adequate there was good harvest and other time it was futile exercise and harvest has been lost to drought as per the feedback received during the FGD.

Dryland farming should have considered emerging techniques such as *conservation farming which* involves reduced tillage, use of mulching materials to conserve moisture and planting the seeds in potholes instead of broadcasting. The project would have chosen the conservation farming as its niche to make a difference instead of continuing business as usual in dryland farming. Conservation farming is replacing conventional farming system in moisture stress areas of Zimbabwe, Zambia and Malawi. Experience from successful projects and advice from experts should have been tapped in identifying the sources of livelihood for the agro-pastoral communities. The project should have focused on less rain dependant livelihood sources such as goat credit (credit in kind) for women instead of promoting crop production on rainfed farming system.

6. 4 Effectiveness of Water Trucking

The impact of the East African Drought (2010/11) severely hit the communities in Filtu woreda. The major problem was shortage of water for human. The most affected were the elderly people, women and children who remained in villages while men migrated to Genale and Dawa with the livestock searching for pasture and water. The shortage of water was first addressed by the funds from UN-OCHA (United Nations Office for the Coordination of Humanitarian Affairs) channelled through Coopi (Italian Based International NGO) operating in Filtu Woreda. After the problem had widely spread to all kebeles, FWSP was approached by the woreda officials to join the 'live saving operation' in water trucking. The project had no other funding source for water trucking operation and it had to divert the project budget of 2011. The project effectively distributed water to 6442HH or 38652 beneficiaries in 26 sites from March 3 to April 8, 2011.

EECMY/DASSC would have applied to UNOCHA to access Humanitarian Response Fund (HRF), the fund that can be made available within short period of time to respond to acute crisis such as water shortage, but it should have had adequate capacity at the project level to compile early warning information regularly.

7. Project management and staffing

The history of the project in terms of line of management had some ups and downs. Initially the project management was under South Ethiopia Synod/DASSC from Hagere Mariam with a close coordination and technical support from EECMY/DASSC and NLM. Later on the management of the project was moved to EECMY/DASSC in Addis Ababa. NLM has continued supporting the project financially and technically. The long term successful partnership history of EECMY and NLM has grown out of the traditional areas and moved to more marginalised pastoralist areas in Somali Region and southeast Bale in Oromia Regional State in recent years. One of the roles of the project management is to manage such historical partnership integrating it to the third dimension partnership, the government and project beneficiaries. The required capacity to manage the partnership project at the project office has been fluctuating as staff turnover was high and also getting professionals with right calibre was one of the difficulties that the project had faced.

However the project should have had a project accountant, water engineer and well trained local health personnel (public nurse or sanitarian). Project accountant could have supported the project manager in financial management. The construction work should have been lead or closely supervised by person with engineering background. The health advisor assigned by NLM has been working at community level. A good rapport between the health adviser and local women was observed during the evaluation in spite of language limitation.

The project manager had shouldered most workload in the area of construction. He was also had to go to Addis to settle petty cashes on quarterly base and for purchase of construction materials. The work that should have been done by project accountant had taken the time of project manager. Outside the project relationships and coordination roles of the project manager was compromised by the daily routines which other staff could have done. The project management should have replaced staff when they leave the project or transferred staff to other project. Compiling and timely submission of the reports[7] to all concerned would have been effective if project manager had not been overloaded both with the programme implementation and coordination.

The project should have formed a steering committee (with clear terms of reference and mandate) at woreda level to evaluate the action plans and monitor the progress by being at the project sites on quarterly basis. The steering committee would have been appropriate organ to approve sites for birkas construction together with technical staff and help in community mobilisation.

[7]The team members who came from Jigjiga for this evaluation complained that they had reports for only 3 quarters out of 12 and they did not receive water trucking report.

The technical backstopping from EECMY/DASSC and NLM was appreciated. But taking into account the unpredictability of drought occurrence, volatility in terms of ethnic conflict on resources such as water and pasture and distance from the centre, EECMY/DASSC should have put a capacitated project team in place that can respond to the situations with minimum consultations from the head office.

The project management strived to smoothly relationship and consulted with the woreda officials, particularly the administration and concerned line offices such as health water, agriculture, livestock and rural development offices.

The project submitted quarterly financial report to EECMY/DASSC until third quarter of 2011. The evaluation team had accessed the 2009 and 2010 project audit reports and financial statements of the 1st, 2nd and 3rd quarters of 2011.

8. Sustainability

There were tangible signs for sustaining the benefits produced by the project. Water and health are major components of the project. Communities championed the construction of all birkas. They were the initiators and major contributors to the construction. The communities understood the benefit of working together. In some kebeles the evaluation team visited, the beneficiaries explained the management procedures that are already in place. They have strong water and sanitation committee. The sense of ownership has already been deeply rooted. People expressed with enthusiasm willingness to pay for the water they use. Willingness to guard and protect the water points from actions that contaminate the birka.

The village health promoters trained by the project disseminated health education across the villages. The communities started exercising the knowledge and skills they acquired at various trainings. There has been positive change in attitude and behaviours towards personal hygiene and sanitation among the target groups. Good number of beneficiary started using toilets, practicing hand washing before meal and after using to toilets. The water and sanitation programme implemented by the project are in line with the National Water Sector Development Programme and MDGs have the longer benefit aim. The technology used in water supply and sanitation is adaptable and can be managed by the local people. The project also trained masons to repair leakage of birkas and water pumps.

9. Assumption and Risks

The project risks and assumptions that were included in the project document during the project design were found appropriate. The price of fuel, construction materials and local

labour payment increased in many folds between the 2009 and 2011. The increase price inflated the cost of construction.

The different modality of community participation (free labour mobilization of FWSP) was confronted even by the woreda officials, even though the project insisted in defending its principle of free labour mobilisation. The risk would have resulted in disastrous effect if the mobilization was not for water, which is the most pressing need of the communities.

The project implementation was affected by the drought in 2011. The project diverted significant amount of project budget to water trucking. Though they were minor and short lived, there were also ethnic conflicts.

10. Challenges and Lessons

Challenges

- The project almost halted all other activities and diverted its attention to water trucking and rationing in the first quarter in 2011. This slowed down ongoing project activities, forced the project to cancel the budget for 3 birka rehabilitation, one spring development, construction of one health post and hand dug well.

- The project target area was not defined when the project was designed. The project used to go to different kebeles with certain activities or with single activity. The synergy between the different activities would have been greater spreading the multiplier effects across the woreda if there was area focus for undertaking activities.

- High staff turnover because of high mobility of staff from one NGO to the other seeking better pay.
- Because of rough and long inter kebeles track passes the vehicles were sent frequently to garage and hence increasing maintenance cost ;
- Shortage of supervision vehicles and delay in staff replacement brought the implementation of some activities behind the schedule.

Lessons

- The communities and the project staff gained practical skill in having exposure to new technologies such as birka, bio sand filters construction and moulding respectively.
- Lesson in local resources mobilization for their own cause and development
- Lesson in developing the right design to avoid leakage

11. Conclusion and Recommendation

Conclusions

The project results have contributed to the overall infrastructure, social service and capacity development of Filtu woreda in general and project target communities in particular. Water is scarce resource in most parts of Filtu woreda. Solving water problem is also solving other social and development problems. Provision of water is the central and core programme around which the other programme components of FWSP have revolved. The number of birkas constructed by this project over the last three phases was about 40. This means, construction of birkas has definitely increased access to safe water in project target kebeles. Though the project phase has come to end by December 2011 as per the working calendar, there were in reality uncompleted water construction activities while other components has not been fully consolidated. Leakages and cracks on some birkas need to be corrected as well. The way the water and health components of the project are synergized is impressive. Agriculture pilot project has not been moved to the pace it should have been expected because of the drought and late start of activities (only in 2010). For a comparatively medium size project like FWSP, most of the activities should have been packed in a number of target kebeles so that the results can be achieved with minimum transportation cost. The evaluation team observed, however, that water projects (mainly birkas) will remain sustainable and the willingness of beneficiaries to pay for operation and maintenance of the birkas was impressive. The quality of the outputs and the management system in place were to the acceptable level. Piloting agricultural activity however needs to integrate conservation farming and options like solar panels and wind vanes pumps where it is possible.

Recommendations

Programme based recommendations

1. Project staffs have been terminated as of December 31 2011 and no one can be sure whether they will wait for the commencement of the bridging phase of the project. The project management should speed up the process of signing of the project agreement in order to bring back the project on track.

2. Birka construction at Kalagur (80% completed) site near Aynle and the other at Hasan Gabeye site (25% achievement) have been languished for long already. The community and the project had invested huge resources on these constructions. The investment should have quick returns in terms of benefit for the communities. Therefore, the project should complete them without further delay during the bridging phase.
3. The Birka at Dipro was completed. But all the water entered has been leaked out during the Dheer season (October-November 2011). Communities were at the verge of losing

hope. The project should give priority in rehabilitating this birka before the onset of the Gu rain in March 2012.

4. All Birkas and health posts should have proper design and bill of quantity. Completed projects with necessary documentation should be handed over to the government after completion.
5. All birkas should be roofed phase by phase to reduce intrusion and contamination of water. Community may share cost in contributing labour as usual for this activity too.
6. All brikas constructed by the project (2009-2011) and before need to be repaired, water management committees have to be strengthened. The water quality test should be done frequently.
7. The health post constructed by the project and handed over to the government seems to be underutilised. The project management can monitor the functionality of the health posts and communicate the concerns while the project is still in the woreda. The project also should have constructed the pit latrine at Qurabul where it constructed the health post.
8. In the future, the project should have demarcated project area and clearly defined target beneficiaries. This will help the project to make impact from the synergy of different activities and corresponding results. Strengthen the integration of project activities (water supply, health, hygiene and sanitation)–synergy between activities needs to be strongly emphasised.
9. In developing a new project proposal EECMY/DASSC should concentrate on certain key areas of activities which have already demonstrated results (e.g water supply (construction of birkas), hygiene and sanitation.
10. EECMY/DASSC and NLM should assess areas where the project could address the economic and strategic needs of the rural women in the target kebeles. Possible areas could be the provision of in kind credit and encouraging the development of savings and credit groups so that women participation in productive activities is increased.
11. Livestock sector also should be supported (water for livestock, rangeland development, veterinary service, market linkage).
12. Promote conservation farming under rainfed agriculture by tapping current experiences to the project from South African or Sahelian countries.
13. The project has experience of providing diesel pumps. The cost of diesel and problem of transportation to Ganale and Dawa Rivers are another challenges. Therefore, the project should explore possibilities of using solar and wind vane pumps which are expensive during the installation, but later on almost free and environmentally friendly (carbon free) sources of energy.

Programme Management and Capacity

14. Specify and put into practice clear roles and responsibilities of collaborating stakeholders as stated in the project document. Concerned local government line offices should sign implementation agreement right from the inception workshop.
15. Organise strong project team with the right mix profession (water construction, public nurse), gender balanced, competent and committed. Consider having good number of ethnic Somali project staff in the team.
16. In built phase in and phase out strategies into the project document so that all stakeholders have equal understanding on the project's lifespan and deliver what is expected from each of them in time.
17. The project management (organisational structure and line of accountability is to be redefined (should it be managed by the Central DASSC or one of the Church Units having closer proximity?)
18. Project staff benefits should be considered to reduce staff turnover taking into account the local context of Filtu and other nearby woredas (where a number of NGOs pay attractive salary with benefit package.
19. Valuing the contribution of the community by calculating labour in terms of money and it must be reported together with financial report of the project and also must be audited

13. Annexes

Annex-1: Summary of physical plan and achievement by FWSP (2009-2011)

Annex-1a: planned targets, budget by category of contributors, % of physical achievement and % of budget utilisation per year

No	types of planned Activities by site or kebele	UoM	Quantity for 2009-2011	budget year-2009									
				Qnty. planned	Qnty achieved	Budget share in Birr (estimated)			% physical achieve-ment of total 3 years	% physical achieve-ment of 2009 plan	% budget utilisation of total 3 years	% budget utilisation of 2009	Remarks
						By FWSP	By comm-unity	Total					
I	**Water Construction**												
1	completion of pending projects from 2008	No		3	3	120000	30000	150000	100	100	**	**	** carried over budget of 2008
2	Construction of birkas	No	8	3	3	502935	147116	650051	37.5	100			
3	Rehabilitation of birkas	No	7	2	1	39180	8700	47880	14.28	50	40	40	
4	Hand dug well construction	No	3	1	1	22000	5220	27220	33	100	100		
II	**Health, Hygiene and Sanitation**												
1	Health post construction	No	3	1	1	32356	5824	38180	33	20			
2	Basic Health hygiene and sanitation training	people	350	150	78	21450		21450	22.2	52			
3	Refreshment training	people	350	150	93	12900		12900	26.57	62.5	33	100	
4	Assessment survey	sites	9	3	1	600		600	11.1	33	33	11.1	
5	Construction of latrines	No	75	25	24	19741	1800	21541	32	96	37.6	113	
6	Training on bio sand filter	round	1	1	1	14470		14470		100		100	
7	Assessment on home development	sites	9	3	2	1200		1200	22	66.7	22	66.7	

Annex-1b: planned targets, budget by category of contributors, % of physical achievement and % of budget utilization per year

No	types of planned Activities by site or kebele	UoM	Quantity for 2009-2011	budget year-2010									Remarks
				Qnty plan	Qnty achieved	Budget share in Birr			% physical achievement of total 3 years	% physical achievement of 2009 plan	% budget utilization of total 3 years	% budget utilization of 2009	
						By FWSP	By community	Total					
I	**Water/Construction**												
1	Completion of Waradey health post/pending from 2009	No		1	1	161718	35400						
2	Completion of repairing Ananis birka/pending from 2009	No		1	1				100	100			
3	Construction of new birkas	No	8	3	3	658350	138750	797100	75	100	89	130	
4	Repair of birkas	No	7	2	2	44100	11024	55124	57	100		100	
5	Construction of hand dug well	No	3	1	1	23100	6000	29100	66	25	71.29	112	
8	Spring development	No	1	1									
II	**Health, hygiene and sanitation**												
1	Construction of health post	No	3	1	2	93500	16500	110000	67	200	67	200	
2	Basic training	Attendant	350	150	146				64	97			
3	Refreshment training	Attendant	375	125	184	15050		15050	79.1	147.2		100	
4	Toilet construction	No	75	25	34	17500	3500	21000	70	136	64.6	100	
5	Assessment survey	sites	15	5	4	5000		5000	60	80		84	
6	Construction and installation of bio sand filter	No		25	15	30000		30000	60	60	60	60	

III	**Agriculture pilot project**												
1	provision of water pump	No	5	5	5	160000	30000	190000	100	100	100	100	
2	Rehabilitation of grain mill	No	1	1	1				100	100			
3	Rehabilitation of nursery site	No	1	1	1				100	100			
4	Establishment of nursery site	2	1	1	1	20000		20000	100	100			
5	provision of improved seed variety	kg	800	400	250	6000		6000	31	62.5			
6	Training on operation and minor maintenance of water pump and nursery and irrigation water management	Attendant			29								

Annex-1c: planned targets, budget by category of contributors, % of physical achievement and % of budget utilisation per year

No	types of planned Activities by site or kebele	UoM	Quantity for 2009-2011	budget year-2011									
				Qnty plan	Qnty achieved	Budget share in Birr			% physical achievement of total 3 years	% physical achievement of 2009 plan	% budget utilisation of total 3 years	% budget utilisation of 2009	Remarks
						By FWSP	By comm.	Total					
I	**Water Construction**												
1	Construction of birkas	*No*	8	2	1	15700	39250	196250	87.5	50		156	
2	repair of birkas	*no*	7	3									shifted to water rationing
3	hand dug well	*No*	3	1									,,
II	**Health, hygiene and sanitation**												
1	Construction of health post	*No*	3	1									,,
2	Basic training	*attendant*	350	150	50	10500		10500	78.2	40	79	40	
3	Bio sand filter production &installation	*No*		25	13	30000		30000	56	52	56	52	
4	Latrine construction	*No*	75	25	12	17500	3500	21000	86.6	48	86.6	48	
5	maintenance of BSF	*No*		7	7				700	100			
6	Refreshment training	*attendant*			60								
III	**Agriculture pilot**												
1	improved seed provision	*kg*	800	550	260	6000		6000	63.75	47.2			
2	Nursery establishment	*No*	2	1	1	20000		20000	100	100			
3	Agro Pastoralist training	*trainees*		70	60								
4	Establishment of demonstration plot	*no*	2										
5	Establishment of household nursery site	*No*	2	2	2								
6	Distribution of seedling	No	5000	5000	43478	5000		5000	100	100			

Annex-2a: EECMY-DASSC- FWSP inventory list of equipment (Filtu station Dec 2011)

S. N	Description	Chairs			Office Desks		Tables			Shelf		Filing cabinet	Save box	Desk PC	Lapt. PC	TV	Paper cutter	Lamina-ting machine
		Wheels	Metal	Wood	150x80	120x60	120x60	80x120	90x50	120x150	200x100							
1	Manager office	1	4	2	2			1		1		1			1		1	
2	Administration office	1		2	1		1			1				1				
3	Health office	1	1		1	1				1								
4	Cashier office	1	1	1	1					1			1		1			
5	Construction office	1	2		1					1				1				
6	Agric office	1		2	1					1					1			
7	Health staff office		3		2		1			1				1	1			1
8	Store		1	1		1						1						
9	Conference room		7	4		1	2											
10	Residence house							1										
11	Residence house		2				1											
12	Residence house			6		1		1	1		1							
13	Project manager house			8			1		1							1		
	Total	6	21	26	9	4	6	3	2	7	1	2	1	3	4	1	1	1

Annex-2b: EECMY-DASSC- FWSP inventory list of furnitures (Filtu station Dec 2011)

No		Copy Machine	Printer	Battery Charger	air com presor	Ward-robe	Single bed	Double bed	Bunk bed	drawer	Bath-room shelf	Gas fridge	Kitch en units	Kitchen stove	Side board	TV Dish Receiver	Binding Machine
1	Manager office	1	Descrip tion														1
2	Administration office		1														
	Health staff office		1														
3	Health coordinatoroffi																
4	Cashier office																
5	Construction office		1														
6	Conference room																
7	Store			1	1												
8	Residence house																
9	Residence house					2	3	1	1	3	1	1	1	1	1		
10	Project manager house					1		1	1	3	1	1	1	1	1	1	
	Total	1	3	1	1	3	3	2	2	6	2	2	2	2	2	1	1

Annex -3 EECMY/DASSC Filtu Water and Santitation Project Project Staff Profile, December 2011

S.N	Name	Sex	Age	Date of Employment (FWSP)	Current Position	Qualification	Service Years			Current Basic Salary	Remark
							Others Org.	FWSP	Total		
1	Estifanos Shiferaw	M	29	Sep-2011	P.Manager	12+4	6 years	3.5m	6y+5m	5531.00	
2	Ahimed Dahir	M	45	Mar-2002	P. Admn.	-	-	9y+9m	9y+9m	4808.00	
3	Shindes Hassen	F	32	Mar-2003	Chashier	Certificate	2 years	8y+9m	10y+9m	2060.00	
4	Yared Getachew	M	24	Oct-2010	S/Keeper	10+3 G/Mechanic	-	1y+3m	1y+3m	1373.00	
5	Mehad Bule	M	40	Sep-2005	Guard	-	-	6y+4m	6y+4m	1373.00	
6	Abdulahi Hasen	M	50	Jan-2011	Guard	-	-	1y	1y	915.00	
7	Abdi Muse	M	37	Jan-2010	Guard	-	-	2y	2y	915.00	
8	Abdulahi Hussen	M	65	Nov-2002	Guard	-	2 years	9y+1m	11y+1m	915.00	
9	Muhammed Abdi	M	40	Jan-2011	Guard	-	-	1y	1y	915.00	
10	Tadelech Bencha	F	32	Sep-2004	Cleaner	5^{th} Grade	3 years	7y+4m	10y+4m	686.92	
11	Endalew Assefa	M	40	Nov 2003	Driver/construction supervisor	-	2 years	8 years	10 years	2604.00	
12	Abdi Hussen	M	30	July 2009	Forman	Read and write		2.5 years	2.5 years	2000.00	
13	Mohammed Sheik	M	29	July 2009	Forman	Read and write		2.5 years	2.5 years	1500.00	
14	Muhammed Abdulahi	M	29	July 2009	Forman	Read and write		2.5 years	2.5 years	1500.00	
15	Dheko Abiker	F	25	July 2009	CHP	Certificate		2.5 years	2.5 years	1500.00	
16	Abraham Kebede	M	28	June 2010	Agric expert	BSc	1.3 years	1.5 years	2.8years	3000.00	
17	Abdureshid Osman	M	24	Oct 2010	Agric. expert	Diploma		1.3 years	1.3 years	1905.00	

Annex-4: Household Survey Questionnaires

1. Household Characteristics and main livelihood source

1.1. Date of the Interview: _____

1.2. Name of the Enumerator: _____

1.3. Kebele of the respondent: _____

1.4. Name of the respondent: _____ _____

1.5. Sex of the respondent (√): 1. [ ] Male 2. [ ] Female

1.6. Age of the respondent: [_____] years
1.7. Education level of the respondent (√): _____Grade [ ] No formal education [ ]
1.8. Marital status (√) 1. [ ] Married 2. [ ] Unmarried 3. [ ] Divorce 4. [ ] Widowed
1.9. No. of wives (for male respondents): _____
1.10. Number of family size: _____
1.11 Complete household members information in the following table.

No	Name of HH members	Age (in years)	Sex (M/F)	Level of Schooling (write codes)	Level of Schooling Codes:
1					1= No formal education 2= Read and write 3=Primary school(1-8) 4=Junior High school (9-10) 5= Senior High school(11-12) 6=Undergraduate degree 7= Others specify
2					
3					
4					
5					
6					
7					

2. Livelihood Sources of the household members
2.1. What is the main occupation of the head of the household? (Tick all possible responses)
1. [ ] Purely pastoralist 2. [ ] Purely crop farmer 3. [ ] Agro pastoralist
4. Causal laborer 5. [ ] Petty trader 6. [ ] Other, specify_____
2.2 Rank according to the economic importance other sources of livelihood of household members

Sr. No	Source of income	Before December 2009	Now (December 2011)
1	Crop production		
2	Livestock production		
3	Food Aid /relief		
4	Causal labour		
5	Petty trade		

6	Cash/food through (PSNP)		
7	Remittance from outside		
8	Sales of firewood/charcoal		
9	Othe specify		

2.3 What are the major crops you grow for food?

1._____2._____3._____4._____

2.4 What is the size of farmland your household owns? _____hectare(s)

2.5 Do you have farmplot under irrigation? 1. [ ] Yes 2. [ ] No

2.6 Where did your household get seed from during the last crop season?

1. [ ] own seed reserve 2. [ ] FWSP 3. Purchased [ ]

4. [ ] Government 5. [ ] Other NGO

2.7 How long did the production from your farm last the family last season?_____months

3. Water supply

3.1 Tick against your main sources of water for domestic use for the given peroids.

Code	Source of drinking water	Three years ago (Nov 2009)	Now (Nov 2011)
1	River		
2	Unprotected spring		
3	Pond		
4	Hand dug well		
5	Protected spring		
6	Deep well/borehole		
7	Birka/underground cister		
8	Others (specify)		

3.2 What were sources of water for livestock before 3 years and where do they get water from now?

Code	Source of drinking water	Three years ago (Nov 2009)	Now (Nov 2011)
1	River		
2	Unprotected spring		
3	Pond		
4	Hand dug well		
5	Protected spring		
6	Deep well/Borehole		
7	Birka/underground cister		
8	Others (specify)		

3.3 If the source of drinking water for your househol is protected spring, hand dug well, Birkas or hand dug wells, who do you think constructed them? Tick all possible responses

1. [ ] EECMY/FWSP 2. [ ] Other NGOs 3. [ ] Government

4. [ ] Community 5. [ ] Others (specify): _____

3.4 Did you participate in the water and sanitation programme implemented by FWSP during the last three years? 1. [ ] Yes 2. [ ] No

3.5 If your response to Q3.4 is 'Yes', what was your contribution?

1. [ ] Free labour during the construction 2. [ ] Cash contribution

3. [ ] contributed local construction material 4. [ ] serving as water committee member

5. [ ] Causal labouere of the project 6. [ ] No contribution so far

3.6 What would be your responses if you are asked about the timely implementation of the water schemes and the quality of work? *Tick possible responses*

1. [ ] Implemented as planned 2. [ ] Too much delay occured

3. [ ] good quality of schemes 4. [ ] Poor quality work and need improvement

5. [ ] Very successful project 6. [ ] They are failure projects

3.7 Are you using the water schemes constructed by the project? 1. [ ] Yes 2. [ ] No

3.8 How long do you walk (single trip) to the water point now and befor 3 years?

Now_____ hrs and _____hrs before three years.

3.9 How long do you queue to fetch water? Now:_____ minutes and before three years_____minutes

3.10 How do you evaluate the water quantity **(**now) 1. [ ] sufficient 2. [ ] insufficient

3.11 Did you have sufficient water quantity before 3 years? 1. [ ] Yes 2. [ ] No

3.12 How do you evaluate the water quality (now)? 1. [ ] Good 2. [ ] Dirty

3.13 Was there better quality water before 3 years too? 1. [ ] Yes 2. [ ] No

3.14 Average amount of water used per day by the HH now: _____ liter

3.15 Average amount of water used per day by the HH before 3 years: _____ liter

3.16 Have used to treat water before use? 1. [ ] Yes 2. [ ] No

3.17 If your response is 'Yes' to Q.3.16, tick the methods of water treatment for peroids given.

Sr.No.	Drinking water treatment methods	Three years ago (Nov 2009)	Now (Nov 2011)
1	Add water purifying chemicals		
2	Boiling		
3	Use bio sand filter		
4	Filtering with cloth		
5	Waite to Sediment by its own		
6	Do not treat water		
7	Others (specify) _____		

3.18 What reasons would you give for not treating drinking water?

1. [ ]Have 'a belief of no bad water' 2. [ ] Lack of know how 3. [ ] Shortage of time 4. [ ] Bioling changes the taste of water to low quality 5. [ ] Others (specify) _____

3.19 How do you keep the water you fetch free from contamination?

1. [ ] Use clean water containers with proper seal

2. [ ] Use clean cups with handle to pour it from conatiners

3. [ ] Others (specify) _____

3.20 Do you think the water supply by the project equitably distributed to beneficiary households?

1. [ ] Yes 2. [ ] No

3.21 Was there any conflict on the water use? 1. [ ] Yes 2. [ ] No

3.22 If your response to Q3.21 is 'Yes', what do you think was the cause of the conflict?

1.[ ] Shortage of water 2. [ ] Few number of functional water taps

3. Insufficient cattle troughs 4. Poor management of water schemes

5. [ ] Tendency of privatising water points by individuals and clans

6. [ ] Others (specify) _____

3.23 Who do you think should maintain the water schemes after the project is phased out?

1. [ ] It is the responsibility of Filtu woreda Water Desk

2. [ ] It is the responsibility of EECMY who constructed them

3. [ ] Trained water technicians from community

4. [ ] It is the responsibility of the community and myself to find the solution

5. [ ] Others (specify) _____

3.24 Did you participate in water related training? If yes, how many times? 1. [ ] Yes 2. [ ] No

1. [ ] Only once 2 [ ] Twice 3 [ ] Three times 4. [ ] More than three times

3.25 If your response to Q3.24 is 'Yes', what practical benefit have you got after the training?

1._____2._____3._____

3.26 If you feel there has not been benefit after the training, what do you think the problem could be?

1. [ ] The topic was difficult 2. [ ] Time allocated for training was too short

3. [ ] Language barrier 4. [ ] The training was not relevant to local situation

5. [ ] Others (specify) _____

3.27 Do you contribute money for operation and maintenance of water schemes? 1. [ ] Yes 2. [ ] No

3.28 If your response to Q3.27 is 'Yes', will you continue to contribute money for water management?
1. [ ] Yes 2. [ ] No

3.29 If your response if 'No', why not?

1. [ ] It is expensive 2. [ ] I go to unsafe water sources as I can afford the payment

3. [ ] I have an opinion that water should be free 4. [ ] Other reasons (specify) _____

3.30 Who fetches water for household use, now?

1.[ ] Women 2. [ ] Men

3. [ ] Boys (between 5-14 years) 4. [ ] Girls (between 5-14 years)

3.31Who fetches water for household use, before 3 years?

1. [ ] Women 2. [ ] Men

3. [ ] Boys (between 5-14 years) 4. [ ] Girls (between 5-14 years)

3.32 Means of transporting water from water points to home, now and before 3 year.

Sr. No.	Means of transporting water	Three years ago (Nov 2009)	Now (Nov 2011)
1	Carried by people		
2	Loaded on donkey's back		
3	Using animal pulled cart		
4	Others (specify) _____		

3.33 Do you think the technology used to construct water schemes is adaptable by the community?

1. [ ] Yes 2. [ ] No

3.34. If your response to Q3.33 is 'No', why it is not?

1. [ ] The construction work demands high engineering skill
2. [ ] The cost to construct the schemes cannot be afforded locally by community
3. [ ] The management of the schemes demands skill of greater knowledge of operation and maintenance

3.35 What are the major problems related to water supply in your area now?

1. [ ] No problem 2. [ ] Shortage of water 3. [ ] long distance to fetch water
4. [ ]) High cost of construction, operation and maintenance of water schemes
5. [ ] Tribal conflict over the water points 6. Poor water quality causing water born diseases
7. [ ] Others (specify)____

4. Hygiene and Sanitation

4.1 What were the interventions implemented by the project related to hygiene and sanitation?

1.[ ] Training on personal hygiene 2. [ ] Training on water borne diseases
3. [ ] Training on waste disposal 4. [ ] Technical support in construction of pit latrines
5. [ ] Others (specify) _____

4.2 Have you been participated in trainings on hygiene and sanitation? 1. [ ] Yes 2. [ ] No

a. how many times? _____ b. For how many days during each round of training?

1st round ___days; 2nd round ___days; 3rd round ____days

4.3 Do you have pit latrine of your own? 1. [ ] Yes 2. [ ] No

4.4. If your response to Q4.3 is 'Yes', when did you construct it? Years or months _____

4.5. Does every household member use the pit latrine? 1. [ ] Yes 2. [ ] No

4.6. If your response to Q4.5 is 'No', what is the reason for not using it?

1. [ ] The construction is poor 2. [ ] Open defecation in the field is preferred to latrine

3. [ ] There is no shelter around the pit latrine 4. [ ] To avoid bad smell from the latrine

5. [ ] Other reasons (specify) _____

4.7 Does everybody in your household wash his/her hand before meal? 1. [ ] Yes 2. [ ] No

4.8 Do caretakers of children wash their hands after cleaning children's bottoms? 1. [ ] Yes 2. [ ] No

4.9 If your answers to Q4.7 and 4.8 are 'yes', do they use soap? 1. [ ] Yes 2. [ ] No

4.10 Do you have hand washing facilities near the toilet? 1. [ ] Yes 2. [ ] No

4.11. Frequency of doing the following activities by family members now and before 3 years

Sanitation	Write number of days in a week		
	Three years ago (Nov 2009)	Now (Nov 2011)	Remark
Frequency of having shower			
Frequency of washing clothes			
Frequency of washing utensils			
Frequency of cleaning house			

4.13 Are there any constructed shower rooms in the area? 1. [ ] Yes 2. [ ] No

4.14 Where does everybody in your household take shower? 1. [ ] Yes 2. [ ] No

5. Health and HIV/AIDS

5.1 Distance to the nearest health facility (health post/clinic/health center)? _____hrs walk

5.2 Was any one of your family member ill during the last 30 days? 1. [ ] Yes 2. [ ] No

5.3 Did he/she go to clinic? 1. [ ] Yes 2. [ ] No

5.4 Has there been diarrhoea problem in the village during the last 15 days? 1. [ ] Yes 2. [ ] No

5.5 What actions did you take when children have diarrhoea?

1. [ ] Take ill child to clinic/health post 2. [ ] Take ill child to traditional healer

3. [ ] Treated him/her with traditional medicine at home 4. [ ] Given ORS

5. [ ] Did nothing and wait for the outcome 6. [ ] Other reasons (specify) _____

5.6 How did you know about HIV and AIDS?

1. [ ] Through the radio 2.[ ] From health personnel 3. [ ] From people in the village
4. [ ] at the health training programme organised by the project
5. [ ] Read from books 6. [ ] at religious places

5.8 If you are aware of HIV and AIDS, what are the modes of HIV/AIDS transmission you think?

(Tick all possible responses)

1. [ ] Mother to child 2. [ ] Injection with contaminated needles 3. [ ] Blood transfusion 4. [ ] Contact with infected persons blood 5. [ ] Sharing razor blades; 6. [ ] Unprotected 8. 7. [ ] Sharing tooth brush sex 8. [ ] Eating together 9. [ ] Sitting together

5.9 How can HIV/AIDS be prevented?

1. [ ] Abstinence 2. [ ] Faithfulness to marriage
3. [ ] Using condoms 4. [ ] Avoiding sex with multiple partners
5. [ ] Pray to God 6. [ ] I don't know

5.10 Do you know someone who is HIV positive? 1. [ ] Yes 2. [ ] No

5.11 Do agree to sit with him/her? 1.[ ] Yes 2. [ ] No

5.12 Do you agree to eat with him/her? 1.[ ] Yes 2. [ ] No

5.13 Where do people go for VCT service in your area? _____

5.14 Did you know someone in your household visited VCT centre during the last six months?

1. [ ] Yes 2. [ ] No

6. Participation of the household in the project activities

6.1 Did you participate in the designing of FWSP? 1. [ ] Yes 2. [ ] No

6.2 If your response to Q2.1 is yes, what were your priority needs at that time?

1. [ ] Water supply 2. [ ] Hygiene and sanitation 3. [ ] Food aid
4. [ ] Capacity building 5. [ ] Health
6. Others (specify), _____, _____, _____.

6.3 Do you think your needs and priorities have been incorporated into the project plan?

1. [ ] Yes 2. [ ] No

6.4 Did you participate in the implementation of this last phase of the project?

1. [ ] Yes 2. [ ] No

6.5 What was your role during the implementation of this last phase of the project ?

1. [ ] Member of the WatSan committee
2. [ ] participated in training on Hygiene and sanitation
3. [ ] Labour contribution whenever the project management requested
4. [ ] Had no contribution so far

6.6. What do you think the community should do to sustain the functionality of outputs of the project?

1. _____2._____
3. _____4._____