

# **WaterFinns/TAEES**

**Evaluation Report**

**For**

**Mtwara Community Water Supply & Sanitation Project  
(CWSSP)**

**Phase one and two**

*.....Too small too sweet....*

**Final report**

**Dar Es Salaam; May 2012**

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## ABBREVIATIONS

<b>Abbreviations</b>	<b>Meaning</b>
AMREF	African Medical Research Foundation
CWSSP	Community Water supply and Sanitation Project
EFQM	European Foundation for Quality Management
JICA	Japan International Cooperation Agency
M&E	Monitoring and Evaluation
MKUKUTA	Mkakati wa Kukuza Uchumi na Kupunguza Umasikini Tanzania
NA	Not Applicable
NR	Not Reporting
SPSS	Statistical Package for Social Sciences
TAEES	Tanzania Association of Environmental Engineers
TWESA	Tanzania Water and Environmental Sanitation
TZs	Tanzanian Shillings
USAID	United State Agency for International Development
VEO	Village Executive Officer
WHO	World Health Organization

## **EXECUTIVE SUMMARY**

### **... Reflection on the underlying assumptions and relevance**

The project design sought to improve access to safe and clean water to Mtwara District Council residents through rehabilitation of shallow wells. It expected to develop a user-managed water model for sustainability through capacity building to water committees and health promotion sessions. This project philosophy contradicted the 1980s Tanzania Government policy where the sole provider and communities did not have any responsibilities. This paradigm shift needed to be systematically managed to achieve project vision. In terms of conformity with community needs and national policies, the project is in sync with both community needs and national development policies. Albeit the project vision remains relevant, the project has not yet adequately dealt with complexities around community-ownership to achieve its vision.

### **Attempts to quantify the programme demonstrate...**

As set out in section 3.3 and 3.4 this report has reached an estimated total of 20,468 people who have access to clean and safe water in 22 villages. This population has contributed to increase in the percentage of people using water in the district by 10% in the last five years. Through community mobilization and health promotion sessions, communities constructed significant number of pit-latrines leading to estimated 75% coverage; just above the project target of 72%.

### **... Inherent uncertainties on effective project management and sustainability**

The project philosophy and focus remains relevant and valid; but the complexities in villages to create ownership have not yet been adequately addressed. Hands-on support through mentoring and coaching to water committees beyond one off training will merit consideration in phase three. The financial-burn rate was about 78%; and the resources made available could support shallow wells. However, the shallow wells can no longer meet the current community needs and changes in levels of underground water.

### **.....but also interventions are inadequate to achieve the project vision**

The scale of interventions were also less than required to achieve the vision; both hardware and software. The project covered wide geographic area needing more resources than it had; for example covering 22 villages was spreading too thin. Some neighbouring villages (such as Chagalawe) still don't have access to clean and safe water and these contaminate the likely impact at sectoral level.

### **Leveraging WaterFinns efforts prove a common denominator....**

The three water supporters in Mtwara District (AMREF, WaterFinns and JICA) have the same goals, but there is no forum to speak to each other. As such little reinforcement is seen and this can compromise the same goals at times leading to competition on quality of product and services as seen that user-fee is paid for using piped water by AMREF at Nitekela and not shallow wells by WaterFinns. In the event

the Government is not creating forum for all partners, TAEs may be champion to initiate and support government to establish these kinds of discussions.

### **Strategic focus and target then is a concern ...**

With small resources available, if no sizable increase can be secured for third phase, then WaterFinns will have to select few villages to work in and do it really well for the model to be documented and shared. Reasonable investment will have to be made in hardware and software in line with strengthening the M&E system to define project results, track them and document model process and results.

### **All observations of this evaluation point ...**

This project is relevant to the community needs and national policies for provision of clean and safe water to rural population and also development policies. The project has contributed to increased population accessing safe water. Harvest by communities in the project areas has increased and health burden of water-based disease has been reduced. School attendances has also increased, but did not impact on school performance. The resource base made available for this project is less than required and its financial-burn rate is low; meriting reconsideration.

### **Towards implementation of phase three...**

Re-prioritizing the interventions and scaling down in phase three to more strategic and needy neighbouring villages is recommended. The project targets will need to be phased for each year and a result framework developed all the years. A plan for each village will have to be developed through Participatory Review and Reflection Process and such plans will have to guide the implementation and support. Developing framework for user-managed water system will have to be done, strategies on how to achieve that clearly defined. Of equal importance will be installing functional M&E system for the project. Government support on structural and systemic issues will have to be planned for and provided, probably with higher levels of authorities than just department of water and sanitation.

## **ACKNOWLEDGEMENT**

The evaluation team wishes to express its gratitude to the staff of the Tanzania Association of Environmental Engineers, the staff of department of water and sanitation at Mtwara District Council and leaders of the villages that were sampled in the evaluation. Preparations to visit water sources and homes of water users are particularly appreciated.

Deus Masige, Christine Atieno, Masumbuko Mutesigwa and Omari Kayanda offered valuable insights in the programme, based on their involvement. The last two are government employees; Mr. Masumbuko gave history of the project and challenges in mobilizing community for commitment. Mr. Kayanda escorted the evaluation team during field work alongside Ms. Christine- the TAEES Project Officer.

During the field visits the team met with a large number of stakeholders – both engaged through the programme, notably water committees, village leaders - but also water users themselves. Later the visits deepened into exploring the impact of the program and visited health clinics, schools and cooperative union. These visits gave the team a much-needed perspective on what it takes to design, implement and sustain successful user-managed water supply system. It is not feasible to thank each and every respondent for their insights. Annex 6.2 and 6.3 gives an extensive itinerary which lists all persons interviewed in this assignment.

Last but not least, the evaluation team would like to thank Elliot Stuart who coordinates all contractual issues from Finland and responded to questions whenever raised. We also thank the Mtwara steering committee members Anna Arosilta-Gurvis and Susanna Rinta who also provided comments and responded to some questions during the evaluation process.

We on behalf of Ubora Company Limited commit to support this noble initiative as deem necessary.

Dar Es Salaam May 2012

**Ubora Company Limited**

**Peter Bujari MD & Rose Nshoma**

## 1 INTRODUCTION

### 1.1 *Background to the project and evaluation for phase I and II*

The main goal of the Community Water Supply System Project is to provide safe, affordable, and sustainable water supply to Mtwara District villages and improve their basic hygiene and access to sanitation facilities, thereby reducing health costs and the associated loss of income and labour productivity. This was envisaged to be achieved through empowering and building the capacity of local people and institutions to achieve self-reliant and ongoing water supply and sanitation services. This initiative is to support the Government of Tanzania's policy for rural water supply and sanitation which puts the responsibility for these operations on the consumers. The design of this project in 2005 sought to develop a "*model approach*" that can be rolled out to a wider scale, under the authority of the Government of Tanzania and its regional and district offices.

The first phase of the CWSSP was implemented in 2005-2007 in Mtwara District through partnership between WaterFinns, and the local partner Tanzania Water and Environmental Sanitation (TWESA). This involved 10 villages where 19 wells were rehabilitated/constructed, hygienic and sanitation awareness sessions provided as well as capacity building to the water committees. The second phase 2008-2010, where seven villages benefited from the support whereby five wells were drilled and pumps installed and again hygiene and sanitation awareness sessions conducted.

In 2009 and 2010, the project lacked continuous implementation with WaterFinns ending its relationship with TWESA and forming a new relationship with Tanzanian Association of Environmental Engineers (TAEES) in 2010. This affected continuity and led to extension of funds that were withheld to be used in year 2011. Since the project implementation has to continue, this evaluation was done to establish lessons learnt so far and point out key considerations for phase three. In conformity with Ministry of Foreign Affairs (MFA) recommendations on monitoring and evaluation, the evaluation envisaged to cover the following aspects; (1) Relevance, (2) Effectiveness, (3) Sustainability, (4) Impact (both intended and unintended) and (5) Efficiency. Evaluators were also required to make an opinion on the project contribution to poverty reduction, protection of environment and human right, equality and democracy.

### 1.2 *Underlying reasons for initiation of CWSSP*

Between 1973 and 1993 Finland supported Rural Water and Sanitation program in Lindi and Mtwara. Despite the fact that wells were established, maintenance cost for the wells remained unbearable, hence the objectives of provision of clean and safe water to communities was not achieved. By year 2000, only an estimated 30-40% of hand pumps were still functioning. The distance from water sources to residence remained beyond 400 meters as recommended by national water policy. This project was redesigned with key approach being to strengthen the capacity of village

water committees to operate and maintain their own water supply system. The design also emphasized on the development of a model and village leadership commitment was considered to be a factor informing which village to benefit from the support. Communities were also encouraged to contribute their own funds and locally available materials. The project key beneficiaries were women and children who are primarily water collectors. As a result, the project envisaged to measure community participation through (1) Village financial plans, (2) Amount of money collected according to financial plans, (3) Reliability of water services, (4) Water supply system rehabilitated or built and number of people using water wells.

### 1.3 Project target for phase I and II

The project targets were set for each phase. Whereas the description of the target is clearly shown, the actual target was often missing. The table below shows the target by phases.

Table 1: Project targets for phase I and II

Description of the target		
Target Phase I	Target	Achieved
# of Wells rehabilitated	19	19
# of village selected	10	10
# of training session in village on Hygiene and sanitation	NR	NR
# of people trained in training session	NR	NR
# of Financial plans prepared	NR	NR
# of people using wells before and after project	NR	20,468 <sup>1</sup>
Target in Phase II	Target	Achieved
# of wells constructed & DP repaired	14	5 wells & 3 DPs
# of squatting slabs constructed	200	(16) by TAEES
% of population latrines constructed	70%	75%
# of training in village on Hygiene and sanitation	NR	8 by TAEES
User managed water supply concept introduced	22	22
Improved management of CWS	22	NR <sup>2</sup>
% Improved access to safe drinking water	61.20%	62%

<sup>1</sup> Estimated number of uses both during rain and dry season from TAEES assessment in 2012 (62% of all people)

<sup>2</sup> Trainings were done to CWS, but protocols for what improved management mean was not stated. TAEES report that 21 out of 22 committees meet. In reality, when the evaluation team requested minutes of the meeting this same finding was not established.

## 2 THE EVALUATION

### 2.1 Evaluation objectives

The purpose of the evaluation was to provide recommendations or lessons learned from the execution of the project phases 1 and 2 for improvement of phase 3 and future interventions. This is of special importance, to inform and possibly modify the activity plans and villages to be targeted for 2012-14. The evaluation will also provide MFA with an analysis of the extent to which the set objectives of the project were achieved, of the sustainability of the results and the management of the project.

### 2.2 Evaluation questions

The evaluation team analysed the research questions and regrouped them to facilitate the evaluation and subsequent reporting. In line with ToR the team made the following headings:

**Program relevance:** This section provides evidence if the project is addressing the felt needs of communities and in line with national policies.

**Program Efficiency:** This section examines the cost effectiveness of the project; that is if the input correlates with the project results.

**Program Effectiveness:** This section attempts to assess the extent at which the project targets were achieved and the quality of the product and services.

**Program impact:** This section attempts to examine changes in lives of people or sectoral change that may be attributed to the project interventions.

**Program sustainability:** This section examines the extent at which the project product and services are likely to continue beyond the life of the project.

**Conclusions and recommendations:** This section summarizes the lessons thus far and in the opinion of evaluation team, recommendations for phase three and beyond are made. Recommendations for WaterFinns and TAEs as well as for Government are also made.

### 2.3 Methodology

The evaluation method employed the three-tiered analysis framework where review of project documentation was done as the first tier; the implementers and stakeholders were interviewed constituting the second tier and lastly the beneficiaries of the project were interviewed being the third tier. A total of 59 individuals participated in the evaluation including water committee members, Government officers and TAEs officers, water users and village leaders.

Selection of villages was done by simple randomly sampling from the sampling frame of 22 villages where the project has worked. The villages were given numbers then from random number table six villages were selected and communicated to the

field upon arrival. Six villages selected were Nitekela, Ndumbwe, Mwatehi, Changalawe, Nakada and Mnaida. Due to the proximity of Nakada to Chemichemi and since Chemichemi is the water source, Chemichemi was also visited. Also due to proximity of Mnaida to Tangazo was also visited. Table two below summarizes the status of villages with regard to management of water sources.

**Table 2: Villages visited by evaluation team**

S/N	Village	Comments
1	Nitekela	Village leadership is committed, water committee is functional. They have received extra support from AMREF for deep well, tanks and piped water. AMREF supported water is paid for but not one supported by WaterFinns.
2	Ndumbwe	Village leadership is not committed, water committee not functional and less pro-activeness was seen. Contribution is too small (10 Tsh per bucket) and only one well is working. One pump was stolen from a guarded house and no action.
3	Mwatehi	Village leadership committed, water committee somewhat functional, but only piped water is given priority and paid for. The generator uses fuel and thus expensive to run. No user-fee charged for using water from wells supported by WaterFinns.
4	Changalawe	Both village government and water committee are active and demonstrated enthusiasm and ready to manage water. They have no water source, yet they are contributing money. A water source currently used was visited and it was appreciated that they need urgent support.
5	Nakada	Village and water committee not active enough. Village leadership did not express ownership and intension to manage their water system. There is a potential conflict between Nakada and Chemichemi that may need District Commissioner and or District Executive Director to intervene.
6	Chemichemi	Village leadership and water committee are not active. No security to taps and nobody cares when water is being lost. Village chair says it is the water committee and water committee says the problem is with community members.
7	Mnaida	A newly established village from Tangazo. It owns wells supported by WaterFinns that supported the whole village before JICA supported deep wells, tank and pipe system. Now they are cut off to use water from pipes. Water committee don't meet, but collects money. Both village leadership and water committee had lost hope, but they appeared to be committed if supported
8	Tangazo	Village leadership selfish and want Mnaida not to use piped water. They even cut water to the dispensary that serve both Mnaida and Tangazo. Village leadership was managing water themselves and have not handled the authority to water committee including managing the account. The difference between these two villages was said to emanate from political ideology.

Figure 1 summarizes the proportion of participants by their position. Most of participants (39%) were water committee members followed by water users. Out of 59 participants interviewed 42 (68%) being females and 20 (32%) were males. The information collected during actual evaluation was processed and identify the patterns and then the patterns were matched.

TAEES made a round visit to the 22 villages to collect information that would inform the evaluation. The tools used to collect data were annex 1, 2 and 3.

Annex one and two made general assessment of village

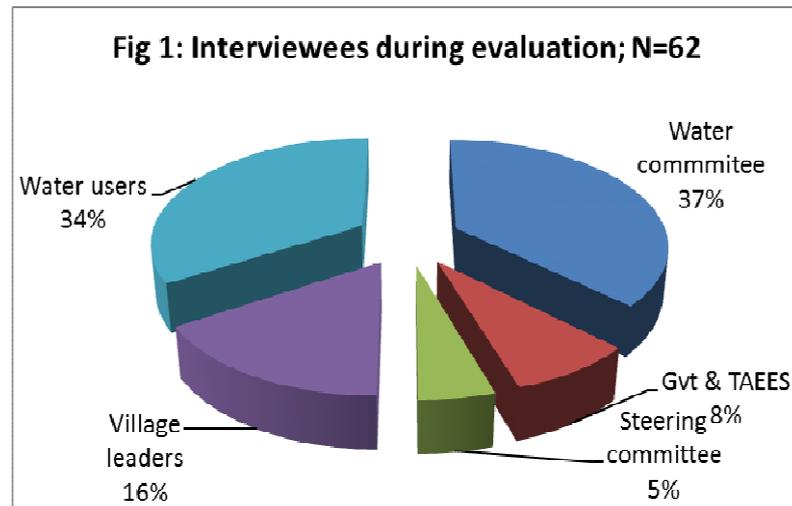
performance while annex three was individual responses. The Quantifiable information was coded, entered in SPSS and analysis done for frequencies and tables. Since the annex one and two were observational and represented the village performance, they were analysed and is included in main report.

The information from annex three involved interview of four people per village; interviewing a total of 49 people. This sample was considered by evaluation team not representative and therefore was not included in the main report; instead it was analysed and is presented as annex 6.4.

## 2.4. Limitations

Hindsight the support received in the field during evaluation and large amount of documentation shared, three limitations are noted and are worth reporting:

1. The project design documents and annual reports did not allow friendly extraction of project targets and achievements. Similarly, monitoring plans and reports for the project were not available hence posing challenges on an attempt to quantify the project.
2. The villages where evaluation was to be done were not informed in advance; hence in some villages (4 of 6) not all required interviewees were available. More importantly, the key sectors likely to have been impacted by the project such as education and health centres were not informed to avail data for evaluation team to measure and quantify the likely impact.
3. The project design documents make attempt to define targets and results, but what was not apparent is the ability to define levels of results from output, outcome and impact. This weakness lead to monitoring system not being able to collect information that can be used (with confidence) to measure effectiveness.



**Figure 1 Proportion of people participated in evaluation**

### 3 KEY FINDINGS

#### 3.1. Program Relevance

##### Too sweet too small.....

Evaluation findings show that the project's aim of improving water access to rural communities is relevant to the national and district plans. National Strategy for Poverty Reduction and Economic Growth (MKUKUTA<sup>3</sup>) II Cluster II Goal IV envisage achieving improvement on access to clean and safe water to rural population to reach 65% by 2015. One of the strategies to be employed is to rehabilitate water facilities; and construction of low-cost appropriate water sources (boreholes, dams and surface water supply networks). This is the strategy employed by the CWSSP, hence relevant both on the addressing the needs of communities and also in line with national strategy to increase access to clean and safe water among rural communities.

Mtwara District Council is among districts whose water department is keen to ensure that its population accesses clean and safe water. In his welcome remarks District Environmental Technician Mr. Masumbuko Mtesigwa demonstrated this when he said (Quote 1):

*Quote #1: .....Hata kama kuna msiba, watu wanazungumzia maji; na unapokuja kuongea kusaidia maji, wanakuona kama mungu wa pili..... Meaning water is discussed even during funeral and when you indicate interest to support water you are perceived as another God....*

In year 2005 when the implementation of this project started, only 52% of the population in the area was accessing safe and clean water. Within five years of implementation, the population accessing clean and safe water increased by 10% reaching 62% by June 2011<sup>4</sup>. Of 136,910 people using clean and safe water, an estimated 20,468 (15%) is accessing water throughout the year with support from WaterFinns. The increase in proportion of people using clean and safe water in the district is not wholly attributed to WaterFinns but also to other stakeholders such as AMREF, JICA and government through TASAF.

Despite the achievement so far, the district is still slightly below the target of 65% by 2015. The evaluation team is confident that given the current trend and if maintained, the district will



Figure 2: Source of water for Changalawe village

<sup>3</sup> MKUKUTA is a kiswahili acronym for National Strategy for Poverty Reduction and Economic Growth

<sup>4</sup> District report on access to clean and safe water as of July 2011 (Unpublished report).

definitely go beyond the target.

WaterFinns work in 22 villages and 21 have at least one type of source of water, except Changalawe, which is on the agenda for phase three. The picture (Figure 1) shows the source of water for Changalawe village while the neighbouring village has both piped and shallow wells. Given that neighbouring villages shares the health centre and schools; such inadequate coverage compromises achievement gained by the project; more evident when we measure the impact on disease burden or livelihood and education. It is important to note that water washed disease are transmissible and can be transmitted among school children hence affecting the overall impact. It therefore stands to reason that for the project to record significant impact, and for the purpose of development of the model; coverage for neighbouring village would have to be achieved.

The report from district shows that also of June 2011 at least four in ten people (110,077) in the district still use water from traditional sources which is unsafe. The water access point is still at a distance between 4-10 Km<sup>5</sup>.

As noted above, both the project focus and strategies are relevant to the community needs and current government policy. It has to be noted that the concept of user-managed water system is a new; changing from 1980s Government managed water system as a sole provider into user-managed. This paradigm shift has to be managed and reasonable investment done; if the project philosophy has to be achieved. This will further be exemplified under section 3.5 Project Sustainability.

In conclusion, the evaluation team concludes that both the project focus and strategies are relevant and needs to be consolidated. Strategy to ensure adequate coverage of neighbouring villages to allow measurement of impact cannot be overemphasized. For the project vision to be achieved, investment on “software<sup>6</sup>”- the key engagement of community members and leaders for ownership will need to be prioritized. Benchmarks will need to be drawn and tailored mentoring done to both committee and village leadership to achieve project vision.

### **3.2. Program Efficiency**

For phase one and two a total of €203,755 was approved and € 158,195 was spent representing 78% financial burn-rate. With this financial burn-rate, finances held by the donor not spent is about € 45,559. The burn rate was grossly affected in year 2009 and 2010 (where financial burn-rate was dropped to 35%) mainly due to management issues and changing from first partner (TWESA) to current partner (TAEs). For seven years of project implementation, this represents an average spending of € 22,599 annually. With money spend in these years and the number of people using water (20,468), the per capital investment would be € 7.7 per person<sup>7</sup>.

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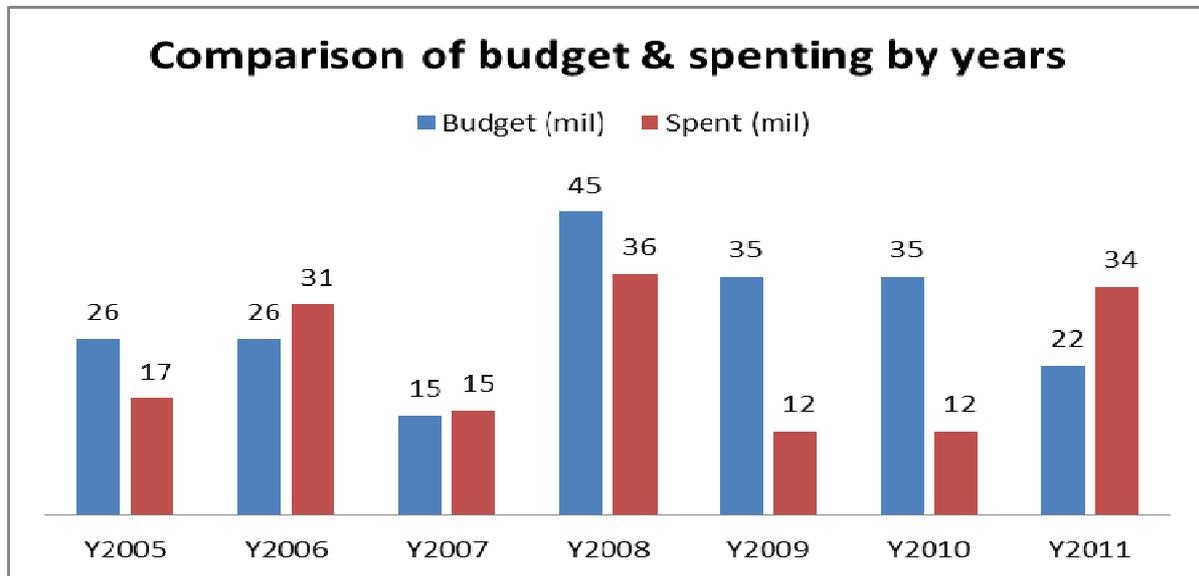
<sup>5</sup> Mtwara District water use report as of June 2011-Unpublished report ( Accessed April 2012)

<sup>6</sup> Unlike hard ware which is construction or rehabilitation for wells, software refers to installation of new thinking and paradigm shift to own project and services towards User-managed water system. One off training has not proved to work in may development areas, mentoring and coaching with clear targets will be more beneficial.

<sup>7</sup> Note that this figure includes those who use water supported by AMREF & JICA where also WaterFinns also supported such as Nitekela and Tangazo where the evaluation team visited.

WHO estimates per capital investment of €19<sup>8</sup> to provide borehole water in Africa, but this project spent an estimated per capital of €7.7 which the evaluation team concludes was efficient spending.

Figure 3 below for comparison of approved budget and actual spending in thousands.



**Figure 3: Comparison of Approved Vs Spent in € "000"**

Project spending was analyzed by functions (see figure 4) and these are shown in figure three below. With regard to figure three; the following comments can be made:

1. While materials and maintenance constitute an important function in this project, they shared only 14% of the total spending in the entire period. Yet even the amount approved for these function (€ 44,000) only 50% of this was actually spent during this period.
2. Monitoring and evaluation function shared significant budget (€36,000<sup>9</sup>) and only spent €31,000 representing 85% of financial burn-rate. M&E shared 19% of the total project spending. Despite this significant spending on M & E, the evaluation team noted with concern that the M&E function in the project has considerable weakness and affects the project effectiveness considerably. For instance, no M & E plan was produced, indicator descriptions are non-specific and targets are not set for most of the domains. Reports are also weak in reporting extent at which the targets have been achieved. A weak linkage/continuity was noted from first partner to the second; this needs to be carefully looked at if the vision has to be achieved. For instance, TAEs team

<sup>8</sup> Data from 2000 adjusted to 2005 prices using an average annual gross domestic product (GDP) deflator of 10%.

<sup>9</sup> This was about 45% far above the USAID and WB estimates that M & E functions spends between 5-10% of the project budget. Operational costs are estimated by WHO regional office to cost up to 10% while education component is estimated to spend 5% of the project investment.

is not fully aware and don't have all documents from the previous partner and this affect continuity.

3. Expenditure for activities which includes hired skills and trainings spent more than estimated; which makes sense considering the project vision to build capacity of water committees towards user-managed water supply system. This trend in spending needs to inform phase three and more important if the project still envisage to build the model that can be replicated.

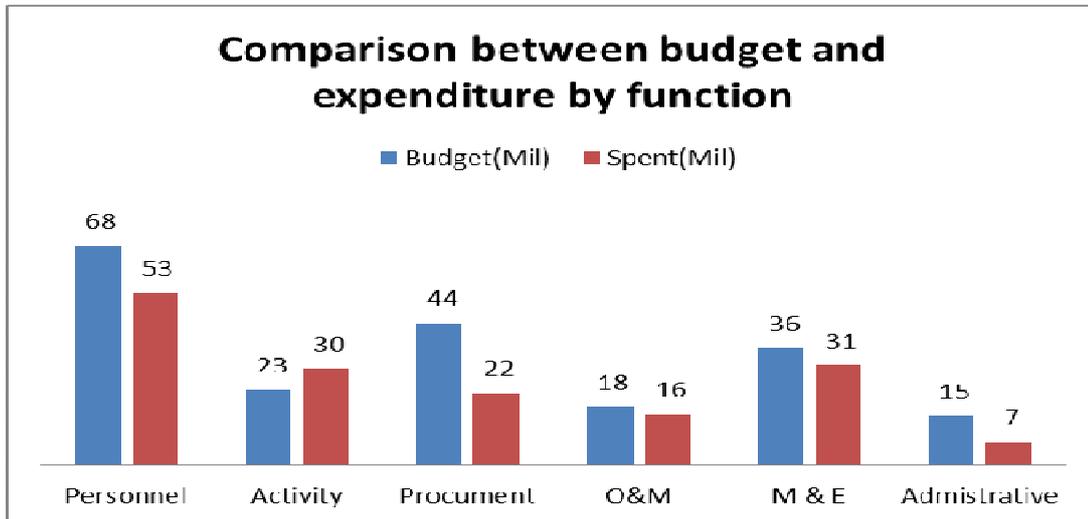


Figure 4: Budget Vs spending by function

The project per-capital spending is estimated to be at €7.8 for the services provided. The services included rehabilitation of shallow wells, gravity scheme, installation of hand pumps, training to water committees and health promotion to communities. Water Aid ([www.tawasa.objective.net](http://www.tawasa.objective.net)) estimates per-capital spending of about €21 for shallow wells and simple gravity system. This means that the project has spent less than is needed to provide water to the population in villages currently using water supply. This may mean that there are less shallow wells and people have to follow where water. Based on these assumptions, with investment done, it would have reached adequately an estimated total of 7,382 which is about one third of the current estimation.

In conclusion, the project spends is less than approved (78% financial burn-rate), which is fair and this is low due to management problems that lead to change from one partner to another. Overall there is less spending as compared to other corresponding project (**too small**) which may compromise with the quality of services provided. There is less spending procurement of materials and investment, probably because this was not a construction but mainly renovation. As explained above (3.1.and 3.2), some villages' water situation is pathetic hence the phrase "**too sweet**".

### 3.3. Program Effectiveness

At the onset of the Mtwara Community Water and Sanitation Project (MCWSP) the results could be categorized into three result areas namely (1) Wells constructed or rehabilitated, (2) Capacity of water committee and (3) Toileting. The table below attempts to quantify the project targets and actual delivery hence estimation of effectiveness.

The project reached 22 villages in two phases and reports shows that a total of 33 shallow wells were expected to be rehabilitated. There was also construction of water sources at Rudipe, Ding'wida and Tangazo, in addition to three Domestic Points constructed in 2011. Assessment done in 2012 indicated that a total of 18 wells out of 29<sup>10</sup> were still functioning which is (62%) of all wells supported. Some reasons for not functioning included well being damaged or not giving water, pump being damaged or removed etc. This is considerable achievement, but raises key question on sustainability in light of the project philosophy; see *annex 1* and this will be further described in section 3.5. The technology of shallow wells seems not to cope with weather changes and also the outlook of other similar project in the area. For example there is water scarcity at Makome A, Ding'wida, Mkunguni chini, Mkonye and Nakada. According to the TAEs assessment of 2012, a total of 1,170 people don't access water nearby during dry season, because water levels decreases considerably and wells gets dry. In light of this, WaterFinns will have to upgrade the technology to support piped water scheme with either surface or deep wells and thereafter increase domestic points. The evaluation appreciate that the planning for phase three is already considering medium wells.

It is appreciated that rehabilitation of the wells and trainings have been done, but the evaluation team noted that the project design documents and corresponding reports was not always consistent in targets against achievement. As such, some of the indicators (three of eight) could not be quantified are reported as NR meaning Not Reported. Rehabilitation/ construction were achieved by 73% and the reduction was during the second phase Table 3 below summarize the targets and achievement of the project. This weakness notwithstanding, and despite the management challenges in 2009 and 2010, the project reached 100% score in 4 of 8 key indicators for the project.

**Table 3: Summary of targets and achievement**

Description of the target	Target	Achieved	% Achievement
# of Wells rehabilitated	33	24	73%
# of village selected	22	22	100%
# of training session in village	NR	16 reported by TAEs	
# of people trained	NR	NR	N/A
# of Financial plans prepared	NR	NR	N/A

<sup>10</sup> There are two gravity water system at Chemichemi and three gravity systems at Lolido. This explains the difference between reported 24 and 29; see also annex 1.

# of people using wells after project	19000	22458 <sup>11</sup>	118%
% of population latrines constructed	70%	75%	107%
% of population accessing safe water	61%	62 <sup>12</sup> %	101%

Training sessions and number of people trained including development of village plans to manage water could not be quantified, though interviews shows that trainings were done to previous committee and some of the new ones. The evaluation team note that trainings are done to water committees, but future success of the project may have to go beyond the one off trainings. To be effective, curriculum for water committee and villages will have to be extracted from the Government manuals, demystified, printed and shared with village water committee for further reference.

The estimated number of people to be using water was exceeded possibly due to other partners such as AMREF and JICA supporting the same villages where WaterFinns was supporting. Example, at Nitekela a village with an estimated population of 1552 is mostly supported by AMREF supported water. Tangazo with estimated 2192 is mainly supported by JICA supported water. The population of households using latrines reached above the target though they were constructed by communities themselves after health promotion trainings and not by the project. However, due to the input this project invested in, it is still accounted to the project.

The village leadership was lukewarm in four of the eight villages visited; and ownership of water system remained questionable. There was lip-service that water belonged to them, but no action attached. This was evident in Mwatehi, Ndumbwe, Nakada, Chemichemi, Mnaida and Tangazo. During the discussion at Mwatehi, the evaluation team noted that the pump was stolen from a closed house and no action was taken to the guard. Communities were paying TZS 300 per month equivalent to 10/day regardless of how much water you fetch; yet they had a stolen pump that needed to be replaced and they had no money.

<sup>11</sup> Based on the assessment of households which had pit-latrines were 842 and according to 2012 assessment 5123 households have pit-latrines.

<sup>12</sup> Total population in 22 villages is about 32,783 and about 20,468 access water which is 62%.

At Ndumbwe the village chairperson after the meeting said that the evaluation team should give them money for calling them to the meeting: This same experience was reported at Changalawe village in a previous meeting that intended to build the capacity of water committees (See quote # 2). This practice is common but it is not sustainable and does not show their commitment. The evaluation team is of opinion that incentives should be given when people have been called from a distance where transport fare and lunch is needed. If the meeting or training is done in their village and no lunch is paid for, we recommend at most bites and a drink. Again, this will depend on the duration of the training. If it takes the whole day, then some payment may have to be considered. The project will have to careful think about the implication of allowances in light of the sustainability and volunteerism by water committee. In a sense that will be paying them when they perform duties related to their function? And indeed they do perform them with no payment. In some other experiences, incentive is given not in monetary but in kind such as T-shirts, Caps etc.

*Quote #2: Baada ya mazungumzo tulidhani kuna maji ya kunywa sasa tunaondoka hivihivi tu....*  
Meaning after the meeting we thought we will be given some money to buy water, but we are leaving just like that.....

While those who don't have water shows great commitment, those with water shows high level of negligence, which may call for Government action beyond the scope of the project. Example, the political ideology (at Tangazo, Mnaida and Chemchemi) seems to influence on who should have access to water and who should not. The Village Executive Officer for Nakada felt that it was the responsibility of district Government to sort out their problems including theft that happens at their village. There is water mismanagement at Chemchemi with water being lost at the taps and source (see figure 5). This situation appeared not to be of any body concern.



Figure 5: Water being lost at Chemchemi village

The evaluation team made attempt to speak to the village Executive officer and community to understand why repair of water system was not done. The Village Executive Officer for Chemchemi said that the water committee was not working and also community members did not value the project. Some water user when asked said that it was the problem of leaders who did not supervise. With regard community contribution to cover maintenance cost, the evaluation team noted with concern that in some villages such as Mwatehi contributed very small that

could not cover the operational cost (TZS 300 per household per month). In Nitekela and Ndumbwe, they were contributing for using piped and not wells constructed by WaterFinns. At Mnaida they were contributing by using WaterFinns supported wells after they were cut-off from using JICA supported water project. This means that once more technology is available to supply water the shallow wells are no longer considered important and the likelihood of being maintained is negligible. Classification of estimated Maintenance and operational cost shows that most villages (10) used between TZS 0.5million to 2 million, seven village less than 0.5 million, four villages (Minyembe, Rudipe, Chemichemi and Mbawala) the cost of repaid not available and one village ( Makome A) used less than 100,000.

We make further assessment of the villages whose cost was for O&M was not available and Makome A which used less than Tzh. 100,000. Table 4 below summarizes the situation:

**Table 4: Well/pump functioning status for villages whose O&M cost was not available**

<b>Village</b>	<b>Pump status</b>
Minyembe	Pump is available but damaged; not functioning
Rudipe	No wells, only rain water harvesting tank recently constructed
Chemichemi	GS available, water being lost and taps damaged but not repaired
Mbawala	Pump available but not functioning
Makome A	Well available but damaged

The key question remains if village water committee can be effective or not. In eight villages visited (See table 3) by the evaluation team, found varying degree of functionality of the water committee six. For example, At Nitekela the committee was working had with support from village government. At Tangazo, Mnaida, Chemichemi, Nakada, Ndumbwe there were evidence of weakness in committee meetings, documentation, collection and expenditure and shared plans for future. Despite of the fact that the 2012 assessment indicated that committee was meeting at a given frequency, none of them was able to produce evidence that they were meeting, record of income and expenditure, minutes of meetings, village plans etc. There was a problem of smooth transition from one committee to another, with some committee members getting tired and those replaced did not know what and how to perform their duties. Of concern is that currently there are new committees which have not been trained and most of them don't know their roles. In many villages except Nitekela and Changgalawe, the support from village government was lukewarm.

In light of development of a “*model*” that can be documented and shared for scale up, the evaluation team found this philosophy to have been lost in transition and it appears not to be thought of any more. There were no developed framework on which the model would be based and no documentation of the same that was made

available to the evaluation team. Yet, this idea remains golden and needs to be restored and supported by the project.

In conclusion this project has achieved considerable success in meeting its targets, but maintenance and technology seems to be challenging. Maintenance cost expected to be contributed by villages was not adequate hence in some villages pumps are not functioning. The shallow wells initially installed may no longer meet the expectation due to decreasing under-ground level. Communities seems to abandon shallow wells once they have piped water, which means this project may have to adapt advanced technology depending on where they operate. For the purpose of the model, scaling down to villages (1) that share public services such as schools and health centres (2) have village that are committed merit consideration. The monitoring system to clearly define the indicators and tracking them requires improvement. Robust support of Government on village leaders who are irresponsible cannot be overemphasized. The philosophy of development of a model remains golden and is still owned by WaterFinns, hence the model will have to be defined and monitored.



Figure 6: Solar pump at Nitekela whose water is paid for



Figure 7: Water source at Ndumbwe not paid for

### 3.4. Program impact

Measurement of the impact of this project is affected by three factors namely (1) that WaterFinns is not the sole institution providing water and sanitation services in the area (2) Inability to adequately cover the neighbouring villages that share the same facility such as health centre or school and (3) the weak monitoring system that track outcomes and impact indicators that are related to the project. The above notwithstanding, the evaluation team attempted to quantify the project under section 3.2 and 3.3 and in this section attempt is made to assess the impact so far. However, due to the factor # one above, the impact will not be sole attributed to the project; but as impact to which the project has contributed to.

The assessment of the impact of this project is made with the following assumptions:

1. That availability of water closer to households and that is reliable will have the following effect: (a) communities spending more time in livelihood production hence improved harvest, (b) children spending more time at school instead of fetching water and this is likely to improve school attendance and performances
2. That availability of clean and safe water that is reliable will lead to the following effects (a) Reduction of waterborne diseases that would have been acquired due to use of unsafe water and (b) reduction of water washed disease that would have been acquired as a result of inability to access water.

In describing the impact, both subjective and verifiable information was collected. Subjectively all groups of people met including, the government, implementers, village leaders, water committee and water users all hailed the project indicating that it has improved the lives of communities. The implementer had no evidence to this fact and it remained subjective. The Acting District engineer and environmental technician all reported usefulness of the project as they said; see quote 3:

*Quote #3: Health of people in general has improved; the distance from water source to households had been reduced, decreased attack by wild animals during search of water and finally increase domestic crop production...*

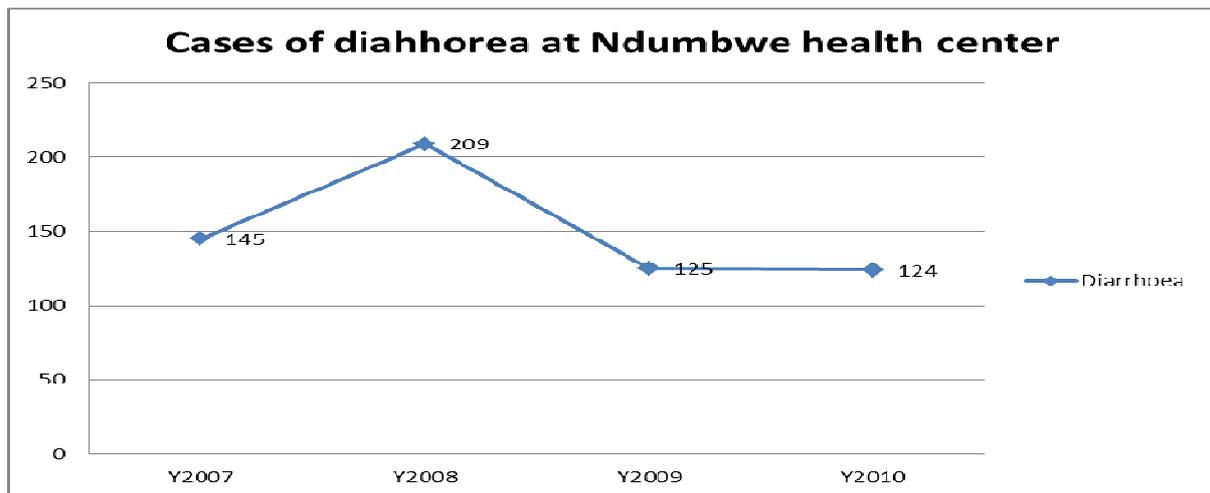
The quotation above was further supported by water user (women focus group discussion) at Nitekela who said *“Zamani tulikuwa hatuogi na wakati mwingine hatuoshi vyombo lakini sasa tunaoga...We used not to take shower or wash utensils, but these days we do...”*

The subjective impact above was also reported in other villages where it was reported that school children used to go with empty buckets to school so that they can go straight to fetch water as they return home. Water users also affirmed that they have more time to prepare farms ahead of schedule which increased their harvest.

The evaluation team established that the system introduced by WaterFinns to form water committees and contribute to the operational cost lead to new water- supports

such as JICA at Tangazo and AMREF at Nitekela. This was because the new partners wanted to know which villages were able to contribute and had demonstrated so. The two villages above were among those which had done well on that area thus chosen. This benefit to target communities that were targeted by WaterFinns is positive spin-off effect since it was not expected yet it has contributed to achievement of the project goals. This can be attributed to the initiatives for this project and its unintended positive impact also referred to as positive spin-off effect.

Information collected from health facilities shows that there were considerable reduction in the cases of diarrhoea between 2007 and 2010 at Ndumbwe village; a decrease by 14% see figure 7. Evidence also shows that cases of scabies were reduced from 6 in 2007 to one in 2010 which is a reduction of 83%. There was no change in trachoma since the cases were very few. It has to be noted that Changalawe village that don't have safe source of water and also use the same health facilities thus there is likely contamination of these results in terms of reflecting the actual impact of the project. Much so that there is no monitoring data to filter patients by residence and the evaluation team was constrained by time to make this detailed analysis while in the field. Suffice to say that the project impacted on health outcome for both waterborne and water washed disease.



**Figure 6: Cases of diarrhoea at Ndumbwe village**

Examination of cases of water related disease at Nitekela village presented a mixed trend; the most impact seems to have been on diarrhoea where the cases were reduced by 12% (from 238 to 209). These facts seem to support the reported impact by implementers reported earlier in this section. Analysis of health centre data at Nitekela shows that there was no impact on the trend of scabies and bilharzia which actually increased during this period. Examination of school performance at Nitekela also shows significant improvement of school attendance from 80 in 2008 to 86% in 2011. However, the increased school attendance did not lead to improved examination performance in the same period. It has to be noted that examination performance is beyond the scope of this project and that there are other factors contributing to this such as quantity and quality of teachers, student-books ration etc.

With regard to the harvest, the evaluation team established that there is improvement in harvest where the records show that this improved at individual level

and at village level in total. The cooperative group at Nitekela for year 2010 reported harvest of 600 tons and this increased to 850 tons of cashew-nuts in 2011. This is an increase of 42% and it needs to be commended. However, in terms of attribution, this positive impact may not be wholly attributed to WaterFinns since there were other efforts specifically targeted to improve cashew-nut harvest such as access to agriculture inputs and Technical support in addition to favourable weather.

WHO in its publication “*Global targets for attaining water and supply*” estimates an efficiency gain of between 3 to \$34 invested in safe and clean water in advancing health outcomes. Making this an average it comes to \$18.5 equivalent to €14 for each Euro invested. WaterFinns invested a total of € 158,195 since year 2005 to 2011. In this sense, WaterFinns has made health benefit associated with provision of clean and safe water services to a tune of € 2.2 million to the community of Mtwara in the last seven years. Interpretation of this impact should be taken with care since it depends other factors such as constant availability of clean and safe water and assumes that families will use clean and safe water consistently.

Inclusion, the project has made positive impact on amount of harvest and cases of diarrhea in the operating areas. It has also made significant benefit to health outcomes to an average of € 2.2 million to communities of Mtwara in the last seven years. However, the project capacity and plans to track results beyond output (to outcomes and impact) needs to be improved. Lastly significant impact is likely to be improved with project down-sizing to focus on few villages that the project can provide hands on services.

### 3.5. Program sustainability

*The User-managed water supply system; a revolutionary but hard to reach vision:*

Hindsight the design of the project to ensure that water user managed water system is achieved, this vision remained far-off to be reached. The project design philosophy is to develop the model, documentation it, and share for scale-up among Government and other water stakeholders. The evaluation team could not establish the model description and framework in which the model was to be built. Neither was there evidence of documentation of the model that was accessed by the evaluation team; however the philosophy remains valid in the context of national water policy.

As seen in table 6 below; Of 22 villages where data collection was done by TAEs, ten villages (45%) reported to be meeting monthly. Four villages reported bi-monthly and two villages quarterly. In the table below, we summarize village visited and self-reported committee meeting frequencies and our verifiable findings during the meeting.

**Table 5: Evaluation comment on water committee meetings**

<b>Village name</b>	<b>Reported frequency</b>	<b>Verifiable Comment</b>
Tangazo/ Mnaida	Monthly	Reported meeting at Tangazo, minutes could not be produced; no handover had been done by village leaders to committee. No meeting at Mnaida since end of 2011, no minutes and no file related to the water committee in the office.
Nitekela	Bi-monthly	Committee was meeting and making decisions. Documentation of decisions not verified e.g why WaterFinns is free
Changalawe	Monthly	Committee meets and contributes money
Mwatehi	Quarterly	Committee reported to meet; minutes/file could not be produced.
Chemichemi	Bi-monthly	No evidence of meeting
Ndumbwe	Monthly	NO evidence of meeting, even though they reported to meet.
Nakada	Monthly	No evidence of meeting, no minutes or file for the water committee.

From the above table, there is inconsistency between what TAEs data shows (which was self-reported) but when the evaluation team wanted to verify if the meeting was taking place, no evidence was produced. This difference in data collected by TAEs and physical verification can be attributed to the inadequacy of the skills in M&E among the implementers. The monitoring system will in future have to take into consideration mechanism and protocols for data quality verification and not relying on self-reported data only. Of the eight villages that were visited, Nitekela village demonstrated to be reasonable functioning; supported by village leadership.

This notwithstanding, attention was more to piped water (supported by AMREF) than wells constructed by WaterFinns even though the wells has been supporting the villages for years. For-instance, no water fees was collected by using wells supported by WaterFinns, but it was collected from AMREF supported piped water system. AMREF constructed deep wells, installed solar pumps, then pipes and constructed storage tanks. From the tank there are Domestic Points where communities collect water. Considering that AMREF water is close to them than WaterFinns, utility is attached more to DP sources.

**Table 6: Reported frequency of water committee meeting**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Three times in a Monthly	1	4.5	4.5	4.5
Monthly	10	45.5	45.5	50.0
Bimonthly	4	18.2	18.2	68.2
Quarterly	2	9.1	9.1	77.3
Biannual	1	4.5	4.5	81.8
Never meet, above 2 years	1	4.5	4.5	86.4
Don't have specific time for meetings	2	9.1	9.1	95.5
No longer meet	1	4.5	4.5	100.0
Total	22	100.0	100.0	

Of the villages visited during evaluation, Nitekela village leadership proved to be committed and demonstrated ability to protect environment (forest conservation) as a strategy to protect water sources. The Village Chairman Mr. Ismail NaMmanje said:

*“Tumeamua kuzuia wananchi kulima eneo hili lote ili tupate usalama wa maji, na Uongozi wa kijiji ulichukiwa lakini tulisimama kidete”..... Meaning We village government decided to barn all agricultural activities in that areas to protect our water sources and it created a tension between village leaders on one hand and community on another hand but we remained firm.....*

Due to the change of weather and decreasing of underground water level, reliability of shallow wells and their sustainability is questionable. This will mean that the future of the project not only will have to step up its financial investment, but also possibly moving into deep wells with water pumps that are high investment but low maintenance cost such as solar pumps. Not only that this will be environmental friendly, but also will be relevant and reduce maintenance and running cost. The evaluation team is of opinion that if this decision is made, and hands on support to communities are done to ensure collection of water fees is done, operational cost will be manageable.

While the above technical recommendation is made for the donor and implementers, the sustainability of any water project will depend largely on the extent at which community owns the project and village leadership effectively supports water committee. The evaluation team notes with concerns that sustainability is threatened

by lack of ownership by community members, non-functional water committees and lukewarm village government.

In conclusion, the project have recorded considerable achievement to date, but sustainability that depends on government and community systems are yet to be effective and they threaten long-term sustainability for the water system. The future of the project among others will have to focus on few villages and install and closely support water committee and village government with more mentoring by skilled team. Monitoring plan to be developed and made in use to ensure data quality and also consumption of synthesis of data by community members. For example, data collected could be analysed and shared back with villages every six months. Then build capacity of few community water champions who can do that beyond the project life. When the project comes to an end, it is recommended that the village leadership and water committee be informed and this transitioning should be planned on the start of the project.

## **4. LESSONS LEARNED**

### ***4.1 Operational lessons***

CWSSP implementation in five years records strong collaboration with Government, and recognition by community as their problem solver. The government has been supportive in provision of technician and community trainings. These good successes would be bolstered by extending collaboration with other water stakeholders in the district such as AMREF and JICA. Example where AMREF or JICA has installed deep wells, solar pumps and pipes, it will not be worth to put a medium well, but to extend pipes and increase the number of DPs.

Capacity building to water committees is noted to be vital to the function of the committee, but a well-thought and scheduled and tailored mentoring support to the committee will make them functional than one off support. However, the capacity building to village government and or ward leadership is equally important for reinforcing actions.

Project spending is far-less than the approved budget and both the investment and operational cost are less than they are expected to be considering the nature of the project. Budgeting and spending will have to be realistic and apportioned systematically to achieve both the hardware and the software. WaterFinns team works voluntarily with no secretariat, which given their core business may affect institutional memory and probably effectiveness. Whereas this evaluation focus in no way to WaterFinns and not much is known on how they operate, the evaluation team is of opinion that having a secretariat may with a hands on person would benefit the projects. Such initiative may also assist expand its resource mobilization strategy and make applications that may attract more funding to be able to meet the financial needs of the project in future.

The technology that WaterFinns used was appropriate that time, but with emerging of other supporters who install recent technology, the utility value attached to WaterFinns support is less than it was. This together with changes in underground

water level, the technology used for future may have to change with possible stepping up project investment.

Project planning records weak monitoring function in planning and anticipating the three levels of results that is output results, outcome and impact results. As such, monitoring plans are not made and project results beyond the outputs are not monitored. The third phase will have to carefully redesign its M& E plan and capacity of implementers built in the area.

The TAEs Mtwara office is not equipped to optimally function as an office; being one manned office with no filling system and or minimum capital items to allow functioning. Retrieval of finance and project data is constrained and is likely to compromise with efficient project management.

At impact level, there is obvious reduction in the diarrhea disease across the villages where the impact data could be obtained. Although this cannot be exclusively attributed to WaterFinns, the project has made considerable investment towards this impact. The impact however has been affected by limited coverage of some neighboring villages and mismanagement of water system by communities and less functioning of water committees. The fact that some families still use water that are not safe ("*maji ya kuokota*") just because they don't want to contribute for water further explicate that health promotion are keenly needed.

#### ***4.2. Development lessons (related to the societal consequences of the project)***

With regard to relevancy, community attaches value to water project and find the support useful not only for domestic use but also for agriculture such as in Chemichemi village. However, many communities are not aware of the global and environmental changes and the need for them to take precautions and conserve water. This area may require more focus in future to ensure ownership and sustainability.

#### ***4.3. Comments on phase three***

The plan is somewhat explicit with targets to be achieved within three years. They are not phased and sequencing is not clearly established; it is therefore advised that the phased result framework be developed to show what outputs in quantity will be achieved and what outcome and finally impact. The evaluation team is of opinion that ten villages coverage will mean spreading too thin; hence further scaling down to cover villages sharing same social facilities and according to the budget available it would benefit about 9,500 people. It is appreciated that the baseline in these villages will be done; this should inform the objectives stated in section 5.2 to make them SMART. The approach to ensure use-managed water system is appreciated, but strategies towards that are not defined. This may call for operational plan on how the targets will actually be achieved.

## 5.0. CONCLUSIONS AND RECOMMENDATIONS

### 5.1. Conclusions

The Mtwara Community Water Supply and Sanitation Project is relevant to the needs of the community and also in line with national policies which guide planning and budgeting; the National Strategy for Poverty Reduction and Economic Growth (NSPREG). However, the technology employed by the project will need to be improved to conform to current standards and community expectations.

The project has project plan that is used to budget and annual reporting system that reports both programmatic and financial reports. The Monitoring plan for the project has some weakness and needs to be strengthened to efficiently track project results; as currently performance data are less generated. Data quality remains questionable especially for those that are self-reported. Project financial-burn rate is less than optimal; additionally investment is less than what is needed to provide same interventions.

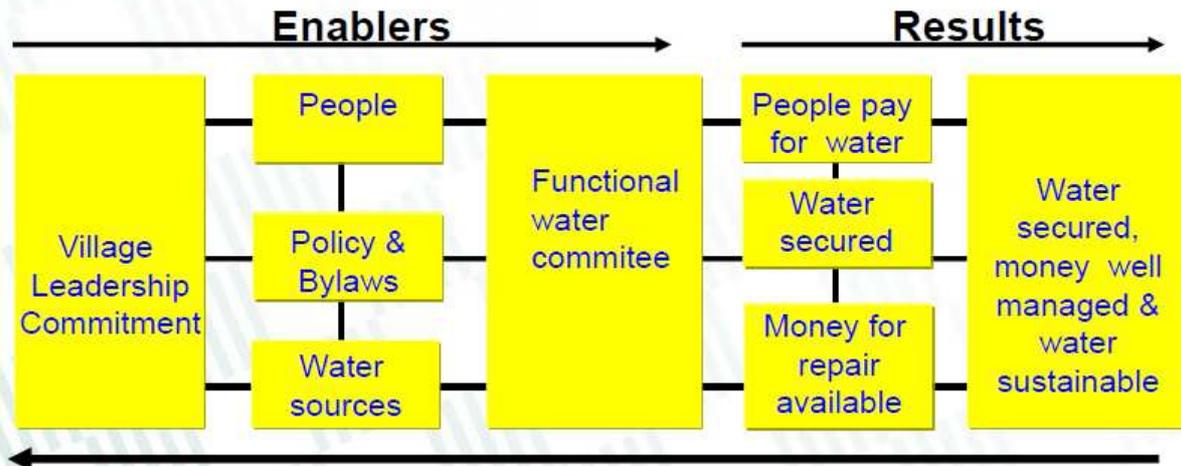
The project has to greatest extent achieved the desired targets in most areas; three of the five indicators that could be quantified and measured. It has also contributed to the reduction in diarrhoea diseases and also increases school attendance at primary school level.

The project strategy for sustainability is built in project plan but not always referred to and implemented. The skills to verify subjective reports are also weak among the implementers hence village and water committees often reports wrong data/information and it taken by the implementers to be accurate. In general sustainability of the project is affected by technology used by the project and non-functioning of the water committee coupled by non-committed village leadership.

### 5.2 Recommendations

The recommendations for phase three are to be made below after the description that entails development of the model in accordance to the philosophy of the project. The third phase will have to first describe the framework that will be used to develop, implement and document the model for user-managed water system. In the following description, a systematic approach to strengthen an institution to deliver the results is presented. This model is adapted from the EFQM model that is no prescriptive, see <http://www.efqm.org/en/tabid/132/Default.aspx>.

This framework assumes that for an institution such as village or water committee to improve the results the institution achieves, and then it must improve what it does. For this to happen two things are considered (1) enablers which referred to as what the organisation does and (2) Results what the institution achieves. Figure 8 below summarizes the proposed framework for the model to be created by the project to attain its philosophy.



**Figure 7: Proposed framework for development of a user managed water model**

If the above proposal is accepted then the project plan will have to be revised and monitoring plan developed to track each of the domains in enablers and results.

Below specific recommendations for the third phase are presented:

The finances made available for the project needs to be increased for both investment and also the capacity development including tailored support to the water committees and village leadership; more so because the technology used needs to be updated.

Financial burn rate is low, it needs to be above 90% of the effectiveness of the project has to improve. Allocation of funds needs to be done appropriate including addressing human resource and capital investment to actually meet the project targets

The project scope needs to be scaled down to focus on few villages where both water and sanitation can be adequately done, followed up and results tracked from outputs, outcomes and impact. Strategic choices need to be made on where WaterFinns can make greatest impact in few-neighbouring villages that share the same schools and health facilities.

Construction of simple gravity scheme and medium wells is appreciated, but construction of medium wells will have to be done during dry seasons to be sure they will not get dry during dry seasons. Should the project afford, it is recommended that solar pumps be installed and water transported into the tanks for Domestic points to be installed.

Once the villages have been selected TAEs will have to facilitate a Participatory Review and Reflection Process to help villages to review their performance and build consensus around the model above. A trajectory path then will have to be drawn toward creating a model. These plans will have to be owned by communities and also kept with TAEs and will have to guide tailored interventions for each village separately. One shoe-fit all will not work; either is one off interventions.

WaterFinns Mtwara office will have to be designed as fully functioning office beyond one staff and also capital items and filing system installed for effective project management ( retrieval and back up) for both financial and program data.

Involve the village leadership in planning and from the start (through trajectory planning) transitioning should be done. The TAEs will have to invest in documenting the process and content of the model and prepare resources and forums for sharing the experience in implementing the model.

The Government needs to facilitate water-stakeholders (JICA, AMREF &TAEs) meeting probably twice a year to facilitate joint planning, learning and consensus on shared roles.

The district government will need to develop and customise the system to support project implementers in addressing key challenges of ownership and conflicts that compromise with the project vision. Such challenges include uncommitted village leadership and political ideologies that affect maintenance of water system and access to some people with different ideologies.

## 6.0. Appendices

### 6.1. Functioning and non-functioning wells

Village	Total wells	functioning	# non functioning
Minyembe	1	1	0 ( fetching using bucket –pump not there)
Mwatehi	2	1	1 (pump stolen)
Nitekela	2	2	0
Moma	1	1	0
Ding'wida	1	1	0 (pump not functioning)
Tangazo	2	2	0
Mkwajuni chini	1	1	0
Mnyundo	2	2	0
Nachenjele	1	1	0 (well ok- pump stolen)
Mkwajuni	1	1	0
Muongano	2	2	0
Chemchem	2 (gravity & pipe system)	-	-
Mbawala	2	0	2 ( No pumps)
Lilido	3 (gravity system)	0	0
Changarawe	0	0	0
Mihembe	Unimproved wells	0	0
Makome B	1	1	0
Makome A	1	0	1
Mwembetogwa	2	2	0
Mkonye	1	0	1
Ndumbwe	1	1	0
Total	29	18	5

## 6.2. Names of interviewee

S/N	NAME	SEX	ADDRESS	POSITION
1	Chirstine Atiano	Female	Mtwara office	Program Officer
2	Masumbuko Mtesigwa	Male	District-Water	Technician
3	Charles Malisa	Male	District-Water	Engineer
4	Musa Namkwanga	Male	Mnaida	Chairperson
5	Isa Mtang'anya	Male	Mnaida	VEO
6	Musa chituta	Male	Mnaida	Chairperson- water
7	Lukia Namwao	Female	Mnaida	Secretary - Water
8	Dadi Kaisi ali	Male	Tangazo	Secretary -Water
9	Hamisi Musa	Male	Mnaida	Water user
10	Amiri Shomari	Male	Mnaida	Water user
11	Ibrahimu Sesa	Male	Mnaida	Water user
12	Nabwina Nabwina	Male	Mnaida	Water user
13	Ismail Nammanje	Male	Nitekela	Chairperson
14	Hamisi ally Liyuu	Male	Nitekela	VEO
15	Yusuph Namito	Male	Nitekela	Health officer - Ward
16	Abdala Majaliwa	Male	Nitekela	Water Committee
17	Fadhili Muwanya	Male	Nitekela	Water Committee
18	Muhibu Ndomondo	Male	Nitekela	Water Committee
19	Jaffary Makame	Male	Nitekela	Water Committee
20	Hamisi Kupela	Male	Nitekela	Water user
21	Abdul Mtama	Male	Mwatehi	VEO
22	Abdala Bwatamu	Male	Mwatehi	Village Committee
23	Zainabu Nachuli	Male	Mwatehi	Village Committee
24	Mohamedi Abdala	Male	Mwatehi	Chairperson - Water
25	Athumani Namdimba	Male	Mwatehi	Water Committee
26	Mwanahamisi Mdoda	Female	Mwatehi	Water Committee
27	Said Nasoro	Male	Mwatehi	Water user
28	Hassani Mayah	Male	Mwatehi	Water user
29	Said Selemani	Male	Mwatehi	Water user
30	Binti Ismali	Female	Mwatehi	Water user
31	Binti Ahamadi	Female	Mwatehi	Water user
32	Nasi Saidi	Female	Mwatehi	Water user
33	Fatu Rashidi	Female	Mwatehi	Water user
34	Somoe Abemani	Female	Mwatehi	Water user
35	Ismail . A. Mnonje	Male	Ndumbwe	Chairperson
36	Hamisi Malindi	Male	Ndumbwe	VEO
37	Bakari Mtangahulu	Male	Ndumbwe	Chairperson - Water
38	Sharifa yusufu	Female	Ndumbwe	Tresure - water

39	Hamisi Yasini	Male	Ndumbwe	Secretary - Water
40	Juma Ngohe	Male	Ndumbwe	Water Committee
41	Ahamadi Chingoda	Male	Ndumbwe	Water Committee
42	Sofia Hamisi	Female	Ndumbwe	Water user
43	Mwanaidi Ahmadi	Female	Ndumbwe	Water user
44	Somoe salum	Female	Ndumbwe	Water user
45	Mwanawiye Shate	Female	Ndumbwe	Water user
46	Latifa Aly	Female	Ndumbwe	Water user
47	Moni Mikdadi	Female	Ndumbwe	Water user
48	Sharifa Mkerambaji	Female	Ndumbwe	Water user
49	Somoe mohamedi	Female	Ndumbwe	Water user
50	Mwajuma Hamisi	Female	Ndumbwe	Water user
51	Selemani	Male	Changalawe	Chairperson
52	Salum Ally	Male	Changalawe	Water Committee
53	Ahamadi	Male	Changalawe	Water Committee
54	Fatuma Bakari	Female	Changalawe	Water Committee
55	Ismail Hamisi	Male	Changalawe	Water Committee
56	Hashimu Hassani	Male	Changalawe	Water Committee
57	Asia	Female	Changalawe	Water Committee
58	Omary Kayanda	Male	District-Water	Technician
59	MacDeus Masige	Male	TAEES Director	Executive Director
60	Elliot	Male	Finland	Project coordinator
61	Anna Arosilta-Gurvis	Female	Finland	Steering committee
62	Susanna Rinta	Female	Finland	Steering committee

### 6.3. Evaluation itineraries

Date	Activity	Remarks
17-19 <sup>th</sup> April	Review of PDD and development of evaluation protocols	None
20 <sup>th</sup> April	Interview with TAEES Executive Director	None
23 <sup>th</sup> April	Interviews with TAEES project officer and Government officials	None
24 <sup>th</sup> April	Field work at Nitekela village	Well prepared
25 <sup>th</sup> April	Field work at Ndumbwe and Mwatehi village	Ndumwe prepared
26 <sup>th</sup> April	Field work at Changalawe, Nakada and Chemichemi village	Changalawe prepared

27 <sup>th</sup> April	Field work at Mnaida and Tangazo villages	No preparations
30 <sup>th</sup> April to May 6 <sup>th</sup>	Data analysis and report writing	None

#### 6.4. Analysis of individual responses from Annex 3

A total of 22 villages participated in the survey where 89 people participated in the interviews that were conducted. In each village 4 people were interviewed, except for Chagalawe where 5 people participated. Forty people interviewed were males and females were 45 making the proportion almost equal. Most of household 51(57%) had 4-6 people, followed by 24 (27%) which had 7-10 family members. 12(13%) has 1-3 and two households have more than ten members. Interviews show that over half 68(76.4%) access water from project improved wells.

**Table 1: Main source of water during dry season**

	Frequency	Per cent	Valid Per cent	Cumulative Per cent
Valid Shallow wells improved by the project	68	76.4	76.4	76.4
unimproved shallow wells or spring	21	23.6	23.6	100.0
Total	89	100.0	100.0	

The proportional of those who use water from the improved wells during dry season falls to 24% during rainy season. Twenty per cent use both improved wells and rainwater harvesting. The proportion of those uses unimproved shallow wells during dry season drops from 21% to 14% during rainy season, meaning that some shifts to using rain water harvesting. With regard to community contribution for water use, most of the interviewees (36) 40% recommended payment of Tsh. 50 per bucket; see table 2 for more details on community contribution

**Table 2: what do you think would be affordable level of water fee**

	Frequency	Per cent	Valid Per cent	Cumulative Per cent
Valid TZS 300 per month	11	12.4	12.4	12.4
TZS 500 per month	10	11.2	11.2	23.6
TZS 50 Per bucket	36	40.4	40.4	64.0
TZS 20 per bucket	21	23.6	23.6	87.6
Above TZS 1000	1	1.1	1.1	88.8
TZS 40 per bucket	3	3.4	3.4	92.1
not applicable	6	6.7	6.7	98.9
No one sell water	1	1.1	1.1	100.0
Total	89	100.0	100.0	

Twenty-four people (27%) reported to have attended health promotion and education and the rest reported not to have attended any type of education. Self-reported impact of health education received included hygienic practices including water storage, environmental cleaning and improved toilets. Forty- eight participants (54%) said they used bush or field as they did not have toilets and only 39(46%) had pit latrines-toilets. With regard to the health impact at family level, 35 (39%) of

people said they had seen improvement in the household health in general, but 42(47%) had not seen any change. Those who reported change in health status reported significant reduction in waterborne disease such as diarrhoea.

Table three below reports difficulties that were reported by interviewees in 22 villages. Other difficulties included water fee not enough to operate pumps, one shallow well for the whole village, conflict with neighbouring villages, and income from water not known to villagers.

**Table 3: Difficulties associated with water use**

	Frequency	Per cent	Valid Per cent	Cumulative Per cent
Valid				
Walking a long distance to fetch water	31	34.8	34.8	34.8
Shortage of water during dry season	10	11.2	11.2	49.4
WATSAN committee does not work properly	8	9.0	9.0	58.4
No any difficulties	15	16.9	16.9	76.4
Demand is high compare to the service available	9	10.1	10.1	86.5
Others	16	2.2	2.2	100.0
Total	89	100.0	100.0	

With regard to improvement required, 56 (63%) of interviewees said that bringing water closer to the residence and education on the use of toilets would improve health of communities. Rehabilitation of wells and more wells were also reported by interviewees.

As further described in table 4, Pumps were available in 14 villages but functioning only in nine (41%) of villages reported that the pumps were still functioning and other 13 (59%) were not functioning. In 13 villages (59%) of the villages, wells were operating, meaning that there were three villages where wells were operating but not pumps. Most of the village (10) wells/pumps were rehabilitated or constructed in phase one (2005-2007). Four were done in phase two and two in 2011.

*Table 4: Village profiles and well situation*

Village	Population	Well Operating	Pump available	Pump functioning	Construction	Rehabilitated
Mkwajuni Chini	604	Yes	Yes	Yes	1970	2008
Makoma A	2065	No	No	No	1982	
Mihembe (rudipe)	796	No	No	No	2011	
Ding'wida	1200	Yes	Yes	No	1980	2006
Nitekela	1552	Yes	Yes	Yes	1983	2006

Village	Population	Well Operating	Pump available	Pump functioning	Construction	Rehabilitated
Ndumbwe	2990	No	No	No	1980	2008
Muongano	1022	Yes	Yes	Yes	1985	2005
Chemchem	1500	No	No	No	1952	
Makoma B	2065	Yes	Yes	Yes	1982	2005
Moma	1519	Yes	Yes	Yes	1980	2006
Tanzazo	2192	Yes	Yes	Yes	2005	2005
Changarawe	1010	-	-	-		
Mwatehi	610	Yes	Yes	Yes	1985	2006
Lilido	3050	No	No	No	1952	
Mkonye	1200	No	No	No		2005
Nachenjele	1550	Yes	Yes	No	1970	2005
Mnyundo	1240	Yes	Yes	Yes	1985	2006
Nakada	820	No	No	No	1952	2011
Mbawala	2041	No	Yes	No	1982	2006
Mabatini	876	Yes	Yes	Yes	1970	2008
Minyembe	1987	Yes	Yes	No	1980	2009
Mwembe Togwa	894	Yes	Yes	Yes	1986	2005

In accordance to this assessment 21 villages out of 22 water committee meets this is 95%, but only three villages out of 22 have security guard for the well this is 14%.

### **6.5. Scope from the terms of Reference**

The purpose of the evaluation particularly is to provide recommendations or lessons learned from the execution of the project phases 1 and 2 for improvement of phase 3 and future interventions. This is of special importance, to inform and possibly modify the activity plans and villages to be targeted for 2012-14. The evaluation will also provide MFAA with an analysis of the extent to which the set objectives of the project were achieved, of the sustainability of the results and the management of the project.

The evaluation will be carried out by extracting the relevant information from the documentation produced by the project, listed below. In order to obtain both quantitative and qualitative information [data] about the achievements of the project, an assessment that includes a technical inspection and a survey of project beneficiaries [villages and their water committees] will be carried out prior to this evaluation in all of the 22 villages that have benefited from the project during 2005-2011. The implementing partner TAEs will perform the assessment, and the report will be submitted to the evaluator in a timely fashion before the mission.

The evaluation will also include some interviews of beneficiaries and selected key informants, to verify TAEs' findings from the assessment.

The **evaluator must formulate the questions to the beneficiaries** based on the results of the prior assessment by TAEs, and the questions listed in the annexes of the assessment. The selected evaluator will formulate extra questions as they see fit. When passing the assessment report to the evaluator, WaterFinns may clarify the issues that need to be elaborated and evaluated. However, the scope and amount of interviews will not be increased.

The **evaluator must also formulate the questions to selected key informants,** and discuss the following issues in interviews:

- 1) Views on institutional capacity
- 2) Cost recovery aspects
- 3) Overall sustainability factors
- 4) Sanitation situation
- 5) Related programs

Interviews of key informants should seek to obtain information on more specific local issues of rural water supply & sanitation in Mtwara and on specific policy and strategy issues at the national level in Dar es Salaam.

An evaluation mission of approximately 10-11 days (inc. travel if evaluator coming from outside Tanzania) is to be carried out between April 1<sup>st</sup> and May 1<sup>st</sup> 2012. The mission will include a visit of approximately 6-7 days in Mtwara town and District, where **at least five project villages** will be visited for the purpose of carrying out the beneficiary surveys and interviewing local key informants in Mtwara. These project villages will be determined by the assessment carried out by TAEs prior to the evaluation, but will include at least three from the TWESA era and two from TAEs' 2011 activities. The assessment will point out which of the villages require attention and which give the broadest selection to represent the project communities overall. Approximately one day will be devoted to interviewing key informants in Dar es

Salaam. A tentative list of individuals and organisations to be interviewed is presented in Annex 1. Another week approximately will be needed by the evaluator in their own office reviewing and analysing documents, and preparing the findings, and reports.

**The interviews will consist of the following persons:**

1. Minimum of four people or households (gender balanced and randomly sampled),
2. Two water committee members (chairperson, treasurer)
3. One WATSAN or other applicable hygiene & sanitation committee member
4. Village chairperson

One of the villages to be surveyed from each of the TWESA and TAEES' eras will be a successful one and one with less satisfying results (in WUE management, fund raising, technical implementation, and motivation etc. – to be named following TAEES assessment). The other villages selected for interviews should be randomly sampled from the list of all 22 which have benefitted from the project during 2005-11.

**The evaluator must have read and analysed the village specific results of the assessment prior to performing the interviews, and reflect the answers based on this data.**

The results of the interviews must be presented by village, and verbal answers translated from Swahili and written in English only.

The following is intended to guide the evaluation consultant in comprehending the content and specific features of various evaluation criteria:

Relevance

- Rationale of the objectives and their relevance in relation to the goals and aims of the Finnish development cooperation and the Tanzanian national and regional policies, especially the Tanzanian National Rural Water Supply and Sanitation Program (NRWSSP). Important questions here are: is there something the project can adopt/modify? How do the objectives, implementation, results and effectiveness differ between the NRWSSP and this project?
- Relevance in relation to the development goals set by this project and the MFAA at village level;
- Relevance of the institutional set up, and
- Overall relevance of the funding and implementation process.

Effectiveness [of results]

- Effectiveness; the extent to which the key results of the project have been achieved,
- Applicability and effectiveness of the project strategy,
- Cost-effectiveness of the institutional arrangements, organisation and management of the project,
- Effectiveness of communications,

- Effectiveness of the training and capacity building provided,
- Effectiveness of the hygiene promotion provided, and
- Effectiveness of monitoring [and self-evaluation in annual reports].

### Sustainability

- Soundness of the chosen approach to ensure sustainability including medium/long-term cost recovery prospects,
- Ownership of the local water committees,
- Changes in sanitary behaviour within the communities,
- Coordination with other NGOs, donors,
- Replicability of the project and model,
- Quality and feasibility [i.e. how realistic] of the plan of action for future operation and maintenance of rehabilitated facilities (inc. financial plans of villages) and
- Appropriateness of the planning process, with feedback from experience during implementation.

### Impact assessment

- Health impacts,
- Economic impacts [e.g. time saving, etc.], and
- Overall description and assessment of intended and unintended [if any] impacts.

### Efficiency

- Cost vs. benefit of the training,
- Efficiency of project delivery [cost of project administration and technical assistance], and
- Efficiency of beneficiary contribution.

### **Reporting**

The evaluator is required to produce the above specified evaluation outcome according to the following timetable:

- The draft evaluation report will be submitted for review no later than 30.04.2012,
- Comments sent to the evaluation consultant in 7 days after the submission of the draft evaluation report will be taken into account in the final report
- Final report and submitted to WaterFinns by 7.05.2012.

All reports, questionnaires, surveys and results of the evaluation will be presented in English. The interviews can be completed in Swahili.