



iceida

ICELANDIC INTERNATIONAL DEVELOPMENT AGENCY
PRÓUNARSAMVINNUSTOFNUN ÍSLANDS

FINAL EVALUATION REPORT



ICEIDA Malawi **WATSAN** Project in
Traditional Authority Nankumba

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ACRONYMS

ADC	Area Development Committee
CLTS	Community-Led Total Sanitation
DCT	District Coordination Team
DEHO	District Environmental Health Officer
DSIP	District Strategy and Investment Plan
DWO	District Water Officer
FW	Field Worker
GoM	Government of Malawi
HC	Health Centres
HH	Household
HP	Hygiene Promotion
HSA	Health Surveillance Assistant
HWF	Hand Washing Facility
ICEIDA	Icelandic International Development Agency
KAP	Knowledge, Attitude and Practice
MDGs	Millennium Development Goals
MGDS	Malawi Growth and Development Strategy
MK	Malawi Kwacha
MoEST	Ministry of Education Science and Technology
MoH	Ministry of Health
MoiWD	Ministry of Irrigation and Water Development
ODF	Open Defecation-Free
PHAST	Participatory Hygiene and Sanitation Transformation
PRA	Participatory Rural Appraisal
PWP	Protected Water Point
TA	Traditional Authority
UNICEF	United Nations Children’s Fund
VDC	Village Development Committee
WASH	Water, Sanitation, and Hygiene
WASNAN	Water and Sanitation Project in TA Nankumba
WMA	Water Monitoring Assistant
WPC	Water Point Committee

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The logistics of this evaluation required exceptional planning and facilitating skills on the part of country's management teams. We wish to acknowledge their outstanding work. With the interviewers, these were large teams to house, move, and facilitate. This was a difficult exercise that required the collaboration of many, including drivers and government staff.

There are many more individuals, Staff from PBM Consultants, Government and other organizations officials and, of course, the many communities that were visited and interviewed by the teams that need to be acknowledged and thanked.

The evaluation process was found to be exciting and very encouraging, particularly for the evaluation team which has learned a lot from this experience.

We hope that this evaluation report will help to provide a useful insight on the projects' results and will help improve ICEIDA's future interventions in Malawi and abroad, in order to further increase access to water and sanitation services and for the well-being of communities.

Sincerely yours,

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EXECUTIVE SUMMARY

A.1. ICEIDA WatSan Project in Mangochi, Malawi

ICEIDA has been working in the water, sanitation and hygiene (WASH) sector in Malawi with the overall objective being to assist the Government in its efforts to achieve the Millennium Development Goals, and its national development goal of economic growth as laid down in the Malawi Growth and Development Strategy. The project endeavored to achieve this by increasing number of functioning water points in TA Nankumba; building capacity at both district and community level; increasing the hygiene and sanitation knowledge base of targeted beneficiaries; training target groups around community based management and promoting coordination, monitoring, reporting and networking between stakeholders.

The WATSAN project initially planned to drill and construct 100 new boreholes, repair or rehabilitate 50 non functional boreholes and construct 300 protected shallow wells. The project got approval to change the planned targets to drill 83 boreholes, rehabilitate 87 non functional boreholes and dig and protect 280 shallow wells. The WatSan project also planned to facilitate construction of 20,000 new and/or improved pit latrines. ICEIDA managed to deliver all deliverables with a budget of approximately USD 3.4 million, despite government of Malawi failure to provide matching funds to the project as per grant agreement.

A.2. Evaluation methodology

The goal of the consultant's assignment was to evaluate water and sanitation activities implemented in by ICEIDA in TA Nankumba in Mangochi District from 2008 to 2011. The purpose of the evaluation was to appraise whether the project's results were achieved, to assess impact of activities with reference to the project's objectives, and suggest recommendations for future interventions. The evaluation was conducted by a team of Water and Sanitation experts from PBM Consultants with Peter Matipwiri as « evaluation team leader ».

The ICEIDA WatSan project was evaluated on the basis of key criteria which have been developed by the Development Assistance Committee (DAC) of the Organization for Economic Co-Operation and Development (OECD) as international standard criteria for evaluating development assistance. These are: Relevance, Effectiveness, Efficiency, Impact and Sustainability.

The evaluation methodology included three components:

- 1) Review of project's documents and reports: the project's annual reports, work-plans and tracking-tables, budgetary documents, previous KAPs surveys and evaluations.

2) A questionnaire-based field survey addressed at beneficiary communities, to gain quantitative data to assess the project's impact, by comparison with the results of the baseline survey conducted in 2007.

3) Interviews with key project staff, public authorities, sector partners and stakeholders, to gain qualitative information on strategies and implementation processes.

Notwithstanding any challenges, the evaluations' activities were carried out successfully and the results of the field survey were of good quality. The consultant therefore believes that the evaluations' findings offer a faithful insight on the project's performance and impact, and hopes the recommendations provided will help improve future interventions.

A.3. Summary of findings and main recommendations

Overall, the evaluation found that ICEIDA's WatSan project in TA Nankumba has produced very positive results and has achieved its objectives and its overall goal of improving health standards and an increase in the quality of life of the most vulnerable part of the population in TA Nankumba

Analysis of project documents, interviews with key project staff and partners and data from the field survey all confirm this finding and enable to make a positive assessment of the project in terms of its impacts. There are however several significant elements which could be improved in order to increase relevance, effectiveness, efficiency, impact and sustainability.

Relevance

The choice of TA Nankumba intervention area is relevant with respect to the low level of water and sanitation services. Procedures for needs assessment and choice of the beneficiary communities within the intervention area are relevant and effective. The project has a strong focus on women. All public authorities interviewed say that ICEIDA's interventions correspond to their expectations and acknowledge the strong role of ICEIDA to raise the level of access to water and sanitation services in TA Nankumba. MoIWD and MoH authorities value ICEIDA's contribution in the achievement of the MDGs in rural areas. Community members acknowledge an improvement of the general well-being, health and quality of their lives. ICEIDA's interventions are completely aligned with national policies and respect national standards.

⇒ Major recommendations of the evaluation on relevance include:

1. With respect to public authorities: Increase support to public authorities to carry out the ex-post monitoring of water facilities, At district level, advocate for increased budget for chlorine and household water treatment methodologies in areas where many shallow wells have been dug. Consider engaging all relevant government line ministries in project implementation to avoid losing some of the lasting benefits that could have been enjoyed had it been that all relevant ministries were adequately and fully involved and engaged like Ministry of Health

2. With respect to communities: Increase efforts and develop innovative mechanisms to change behavior than just promote sanitation with subsidies as baits for receiving a water point at community level
3. With respect to the internal structure: Consider a phase out period to provide support to TA Nankumba especially on the already defunct or seasonal shallow wells.

Effectiveness

The analyses of effectiveness were particularly difficult because of inconsistencies between the different project documents available. In particular, some soft ware indicators don't have targets and with absence of Indicator Tracking Tables (ITT) it was difficult to track through them.

Overall, the analyses shows that 100% of ICEIDA's targets related to increase of new or rehabilitated boreholes as per **Objective 1** have been achieved. The analyses shows that the majority of ICEIDA's targets related to **Objective 2** have been achieved except for establishment of spare parts centres. Even if some target were slightly under-achieved, the rate of activities' implementation was generally high. ICEIDA's outcomes and outputs for the WatSan project with respect to increasing knowledge in hygiene and sanitation among the target group as per **objective 3** shows that the major item related to this objective was not met as only 70% of the planned 20000 latrines were constructed nevertheless all WPCs were trained on hygiene and sanitation. Overall, the analyses shows that the project successfully delivered, all deliverables on water supply including shallow wells which was the main item on **objective 4**. The project could not do **objective 5** due to change of plans. **Objective 6** on improving community based management was 100% successfully done. Despite change of strategy on how to engage government ICEIDA new engagement structure seemed to have successfully worked as the district now has a stronger water department team which they attribute its success to ICEIDA support which was the overall goal for **objective 7**.

⇒ **Recommendations of the evaluation on effectiveness include:**

It is strongly recommended that all defunct water points should be revisited, ICEIDA should emphasize on the element of quality. ICEIDA should engage government to advocate for development of a strategy for the management of spare part centers. Establish effective networks for pump maintenance and repair, Follow-up on the process of opening bank accounts for WASH committees and find solutions to easily access credit institutions for isolated communities. In next phases ICEIDA should consider including schools in all water and sanitation projects since it is easier to effect behavior change in children than adults and children can easily become change agents in their homes. Re-think the strategy of sanitation promotion in order to encourage a higher rate of improved latrine replication by households. ICEIDA should consider increasing cooperation with other WASH stakeholders like UNICEF and be involved in sector-wide dialogue and advocacy, capitalizing on lessons learnt, sharing of documentation and external visibility.

Efficiency

Data illustrate a very positive evolution of the situation between 2008 and 2011 in terms of access to water and sanitation services, therefore demonstrating a strong positive impact of ICEIDA's activities. However, there has been no significant change in people's behaviours.

Data show a significant improvement in access to drinking water: The year-round access to protected water (during the dry and rainy season) is now much higher in the project areas, passing from 42% during baseline and 85.5% during the period of evaluation in 2013. The project has encouraged increased access to environmental sanitation, with data showing a very significant increase in households owning a latrine from 60.4% before the project to 88.4% during time of evaluation in 2013.

Considering the good results achieved, it is very evident that access to safe water and improved sanitation has made remarkable impact on people's health. It is therefore recommended that efforts should be continued on promoting not only access but also utilization of water from protected sources; follow up on defunct boreholes and shallow wells. Consider adopting a comprehensive behavior change programme for the next phases of WatSan project supported by ICEIDA.

Impact

Not mentioning Cholera which has completely been eradicated, data on diseases show an amazing decrease of diarrheal diseases in the project area from 2309 and 2598 cases in 2008 and 2009 respectively to barely 538 cases in 2013. Incidence of dysentery has also been managed from 1530 cases in 2008 to 533 cases only in 2013. Overall, the indicators on community management are positive, with 100% communities having a structure in place for the management of water points. On financial contribution, Data from the field survey show that almost 86.7% of households are contributing financially. 75.6% of WPCs also indicated that they penalize those who fail to contribute towards operation and maintenance meaning penalties are being enforced on defaulters.

It is recommended that even though prevalence of diarrhoea is low, efforts to sensitize communities on oral-faecal transmission and hygiene best practices, particularly concerning diarrheal diseases should continue. Personal hygiene like face cleaning can prevent trachoma and other diseases like bilharzia can be prevented with proper hygienic behaviours as such include them in further health components of WatSan projects supported by ICEIDA.

Sustainability

ICEIDA has a strong focus on the sustainability aspect of its interventions and makes a lot of efforts to ensure financial, technical and institutional sustainability. Overall, mechanisms to ensure sustainability are in place and functioning, and all partners and stakeholders interviewed esteem that ICEIDA's interventions will be sustainable in the long term.

Data from the field survey show a good current functioning status of the programs outputs. According to survey data, all water points have a WPC even though only 86.7% are active. Data show that 86.7% of households contribute financially towards operation and maintenance. The rate of replication of the improved type of latrines introduced by ICEIDA is low; almost a third of respondents said the reason was "lack of financial means" despite that they like the technology. To ensure technical sustainability, ICEIDA has trained water committees in maintenance and repairing, and artisans in latrine construction and has set up 3 centers for spare parts and provided committees with maintenance tool kits. However, evaluation results show spare parts distribution networks and the management of centers constitutes a problem in terms of sustainability.

There are good mechanisms to ensure ownership and institutional sustainability at the community level, with the WASH committees being legally recognized, trained in management. However, at the municipality, district and regional level, public institutions have limited technical, human and financial resources to effectively carry out their responsibilities and ensure ownership and sustainability. With respect to environmental sustainability, ICEIDA's water projects do not have any negative environmental impacts, but the project could increase its activities concerning research on climate change, local capacity building and collaboration with stakeholders on environmental issues especially afforestation.

⇒ **Key recommendations of the evaluation on sustainability include:**

Financial sustainability: keep up the efforts to continuously sensitize communities on the need to contribute financially. Technical sustainability: Improve performance of spare parts supply chains and management of spare parts centers. To improve on sanitation and hygiene practices consider designing a comprehensive behaviour change programme. Institutional sustainability: Put extra efforts in updating and increasing the knowledge level of water committees. Consider whether to provide support to public authorities, especially at the district level, but also at the TA level to enable officers and communities conduct better monitoring of activities. Environmental sustainability: Increase the project's focus on environmental sustainability in the long-term. Improve interaction with other NGOs, stakeholders and public authorities working on sustainability and climate change issues.

A.4 Lessons Learnt

A number of lessons were learnt amongst many key lessons are as follows: planning for a phase-out period and strategy could have allowed for consolidation of gains achieved and ensured that continuity is maintained. Spare parts supply operators should be consistently monitored through water monitoring assistants to regulate on price and assure availability of spare parts stocks. Behaviour change is a critical component of water and sanitation projects otherwise lasting benefits will never be realized. Implementation of WatSan projects based on geographical or administrative zone ensures effective and efficient delivery of outputs.

A.5 Summary

This project has adequately contributed to the high level goals of MGDS and MDGs. It has adequately changed lives and improved well being of many children, their families and communities in TA Nankumba. In summary, ICEIDA WatSan project has achieved its goals and objectives and has consequently resulted in a positive evolution of the situation in TA Nankumba, Mangochi district for the better.

1.0 INTRODUCTION

1.1 Introduction

In response to worsening water and sanitation problems that people in Monkey bay health zone were facing. ICEIDA in collaboration with Malawi government launched a Water and Sanitation project that sought to improve health standards and an increase in the quality of life of the most vulnerable part of the population in TA Nankumba. In an aim to evaluate the success of this WatSan project in Malawi, ICEIDA invited a team of Water, Sanitation and Hygiene (WASH) experts and consultants led by Consultant Peter Matipwiri to undertake the evaluation task.

1.2 The purpose of the report

The major purpose of this evaluation report is to appraise and present findings on whether the project's results were achieved; the impact was made with reference to the project's objectives, and suggests recommendations for future ICEIDA supported WatSan projects. It aims at presenting the projects experience, identifying possible shortfalls and lessons learnt, and to account to the donors for funds utilization.

1.3 The scope of evaluation.

The evaluation process intended to achieve the following:

1. To review the extent at which the ICEIDA WatSan Project objectives and results have been achieved.
2. To carry out a comparative analysis of baseline and end of project performance indicators.
3. To identify programme strategies and interventions that contributed to or impeded the achievement of intended impact of programme interventions and establish plausible links between inputs and impacts at the end of the project.
4. To assess the effectiveness and efficiency of technical, managerial and resource management strategies, structures and systems established to support programme implementation at the project level in terms of their impact on programme results.
5. Make specific recommendations on how ICEIDA WatSan project can improve its strategies and programme interventions to enhance its performance with respect to the above mentioned objectives.
6. To assess the synergy between various ICEIDA WatSan Project components including linkages with Government of Malawi and other development programmes, and its effectiveness in enhancing the programme performance.

1.4 The scope of the project

The overall objective of the project was to assist the Government in its efforts to achieve the Millennium Development Goals, and its national development goal of economic growth as laid down in the Malawi Growth and Development Strategy. The project endeavored to achieve this by increasing number of functioning water points in TA Nankumba; building capacity at both district and community level; increasing the hygiene and sanitation knowledge base of targeted beneficiaries; training target groups around community based management and promoting coordination, monitoring, reporting and networking between stakeholders.

2.0 COUNTRY AND PROGRAMME PROFILE

2.1 Context for development

Malawi is a sub-Saharan African country located south of the equator. It is bordered to the north and northeast by the United Republic of Tanzania; to the east, south, and southwest by the People's Republic of Mozambique; and to the west and northwest by the Republic of Zambia.

Malawi's most striking topographic feature is the Rift Valley, which runs the entire length of the country, passing through Lake Malawi in the Northern and Central Regions to the Shire Valley in the south. The Shire River drains the water from Lake Malawi into the Zambezi River in Mozambique. To the west and south of Lake Malawi lay fertile plains and mountain ranges whose peaks range from 1,700 to 3,000 meters above sea level.

2.2 The economic, cultural and political dimensions of Malawi

The economy of Malawi is based primarily on agriculture, which accounts for 30 percent of the gross domestic product (GDP). The country's major exports are tobacco, tea, and sugar. They account for approximately 85 percent of Malawi's domestic exports. Generally, rural households spend about 58.7% of their income on food and there is inadequate income spent on other basic needs and productive means.

The country is divided into four regions: Northern, Central, Eastern and Southern Regions. There are 28 districts in the country: 6 districts in the Northern Region, 9 in the Central Region, 3 in the Eastern Region and 10 in the Southern Region. Administratively, the districts are subdivided into traditional authorities (TAs), presided over by chiefs. Each TA is composed of villages, which are the smallest administrative units. The villages are presided over by village headmen.

According to the 2008 Population and Housing Census, the projected population in Malawi is 13.1 million, with an intercensal population growth rate of 2.8 percent per year. Population density increased from 105 persons per square kilometer in 1998 to 139 persons per square kilometre in 2008 (NSO, 2008). Mangochi District forms part of the southern region and has a population of approximately 79,667. The ethnic composition of Mangochi District is dominated by the Yao and other smaller ethnic groups of Chewa, Tumbuka, Tonga, Ngoni and Lomwe. Mangochi is 6,273 square kilometers with a population density of 127 persons per square kilometer.

The ICEIDA WatSan project area is located within the Nankumba Peninsula on the western part of the South East Arm (SEA) which falls under the jurisdiction of Traditional Authority (TA) Nankumba in Mangochi District on the northern side with Group Village Heads (GVHs) Mwanyama, Chiwalolo, Chamba, Nankumba, Kasankha, Mputa, Zimbayuta, Kapichi, Chembe, Mwalembe and Matekwe. The area is dominated by the Chewa ethnic group.

The area experiences warm climate with mean annual temperatures ranging from 18°C to

32°C. In exceptional instances, temperatures go as far as 40°C. The lowest temperatures are experienced in June and July while the highest temperatures are registered between the months of October and November.

The area is under the climatic zone of the rift valley/coastal plains extending from the foot of Namizimu Highlands Forest Reserve on the eastern part, down to Chilipa area up to Bwanje Valley. The average annual rainfall ranges from 800mm along the lakeshore valley plains to around 1000mm over the highlands on the eastern side of the lake. The vegetation cover is open canopy woodland of hills, escarpments and plateau.

The project area has a total of 98 villages with a population of 115,060 people and approximately 22,001 households covering 5 health centres namely Nankumba, Malembo, Nkope, Nankwali and Monkey Bay. The majority of the households in the peninsula are smallholders, but fish businesses form an important part of the economy in the villages closest to the lake.

2.3 State of Infrastructure that Characterize the Context for Development

The Integrated Household Survey 2004-2005 showed that only 66.4% of households have access to improved water source in Malawi, with a lower access in rural (63.9%) than in urban (85.1%) areas. In many villages in Malawi the drinking water source is very poor, and many are prone to surface water pollution, especially during the rainy season. The situation is aggravated by low hygiene standards and poor sanitation facilities. This leads to regular outbreaks of waterborne diseases for instance Diarrhea and cholera.

It is generally recognized that access to improved drinking water sources and improved sanitation is essential to preventing people from getting sick. In Mangochi District, it is the IHS (2004-2005) estimated that 73.3% of households had access to an improved water source. In Mangochi District, piped water supply is restricted to urban areas like Monkey bay town. For the people in T/A Nankumba the common sources of water are the lake, rivers, shallow wells and boreholes.

2.4 Link to poverty reduction

Life expectancy at birth in Malawi is estimated at 52.3 years for women and 49.6 years for men (NSO, 2008). Data from the 2004 MDHS and 2010 MDHS show that under-5 mortality rate has decreased from 133 deaths per 1,000 live births in 2000-2004 to 112 deaths per 1,000 live births in 2005-2010 (NSO and ORC Macro, 2005 and NSO and ICF Macro, 2011). The maternal mortality ratio has also declined from 984 deaths per 100,000 live births in 1998-2004 (NSO and ORC Macro, 2005) to 675 deaths per 100,000 live births in 2004-2010 (NSO and ICF Macro, 2011). The adult HIV/AIDS prevalence rate is estimated at 10.6 percent (12.9 percent for women, 8.1 percent for men) (NSO and ICF Macro, 2011).

There is a general consensus that recognizes sustained water access as major player in poverty reduction. Water is viewed as a catalyst to enhanced economic growth, reduced poverty,

There is overwhelming evidence that the situation in my area needed urgent attention; our behaviours around drinking water management, improved sanitation and hygiene were on the edge of wiping out my people, TA Namkumba (2013).

improved food security and a protected ecosystem. Most of all, water is a critical component of public health and failing to supply water is life threatening (Boe-Hansen, 2001).

ICEIDA had done a number of projects in TA Namkumba like fisheries, health and education and there is a clear link of water and sanitation to these poverty alleviating projects that need not be emphasized.

2.5 Link to Sustainable Development and Local Needs

According to 2008 population census report, household information regarding sources of drinking water in dry season is used as a proxy of general population welfare of the country. In view of this and Malawi having understood what its poor socio-economic indicators meant developed its Malawi Growth and Development Strategy (MGDS). The MDGS underscores improved access to water supply and sanitation as one of its key strategies to achieve economic growth.

The ICEIDA WatSan project was aimed at contributing to this partly by establishing water supply and sanitation systems using demand driven approaches and participatory hygiene and sanitation transformation. The MGDS is linked to the Malawi Millennium Development Goals, specifically for the purpose of this evaluation it is the MDG number 7 on sustainable development and more particular target number 10 on halving people without access to safe water and sanitation that is of paramount importance. The MGDS assesses economic growth as central to achieving the MDGs and the MGDS seeks to achieve through provision of safe water and improved sanitation to its people.

According to the Integrated Household Survey (2004-2005), 73.3% of households in the whole of Mangochi District had access to an improved water source. However many people whose borehole pumps were non functional simply resorted to unsafe drinking water sources like lakeshore and river waters. There were a number of cholera outbreaks along the lakeshore due to unsafe water. This trend culminated in the 2001/02 cholera outbreak that reported over 33,000 cases and 100 deaths. Cholera cases were normally associated with the rainy period but in Monkey Bay, cholera cases have been reported even during the dry season signaling the seriousness of the situation.

2.6 Gender equality, Environment, and other programming priorities

Malawi has a tropical continental climate with maritime influences. Rainfall and temperature vary depending on altitude and proximity to the lake. From May to August, the weather is cool and dry. In September and October, the weather becomes hot. The rainy season begins in October or November and continues until April.

Traditionally in rural areas of Malawi women and girls are the most affected because they carry the burden of carrying water in sub Saharan Africa. This project was designed on the understanding that gender equality values will be upheld as such 60% of the representation of all water committees was emphasized to be occupied by women and disabled people with the able of giving women an opportunity to make decision on things that matter to them most and that is

water.

During the evaluation process it was evident that women were encouraged not only to participate but also to take leading roles in all the groups that were established as regards this project. A 50% or more representation of women in the WPCs indicated an 88% giving a mean of 4.47 than men whose mean representation was found to be 3.42.

2.7 Financial Resourcing

The total estimated budget of WASNAN was USD 3,275,500 with ICEIDA tentatively contributing USD 2,729,500 and the GOM tentatively contributing the rest. The actual amount spent on the Project by ICEIDA by the end of 2010 was USD 3,270,000. It was estimated that ICEIDA would then need to spend approximately another USD 130,000 thousand via Mangochi District to finalise the Project in 2011. This meant a total expenditure of around USD 3,400,000, or roughly hundred thousand more than originally estimated in 2006. Here it should be noted that WASNAN received extra finance from headquarters in 2008 of approximately USD 100,000 to install solar panels at Chabwera village and Malembo Health Centre in addition to procuring a water quality testing kit. WatSan also installed solar panel at Nankumba Health Centre which was not budgeted for. Hence, the original budget estimate proved to be quite accurate.

The tentative contribution from the GOM was to be the equivalent of USD 546,000. This was to account for salaries, allowances and operation costs related to staff provided by the GOM to the Project, such as extension workers. As it eventually played out HSAs were not available to WatSan which eventually hired directly its own extension staff, the FWs. The GOM seconded two part-time professionals to WatSan: a Water Officer from the MIWD and Health Officer from the MOH. The wages paid by the GOM to these two professionals accounted for only a fraction of the tentative USD 546,000 stipulated in the PD.

The cost incurred by ICEIDA not originally anticipated, in addition to the USD 100,000 mentioned above, was to cover the wages and operational costs (allowances, trainings and fuel costs etc.) of the FWs on top of fuel allowances for the two seconded professionals. Roughly estimated this amounted to USD 250,000. The conclusion is that ICEIDA bore all the cost of WatSan, including the cost which was tentatively expected to be contributed by the GOM.

2.8 Project Milestones and Achievements to date

The WatSan project planned a number of water and sanitation hardware deliverables thus in terms of water supply; drilling and constructing 100 new boreholes, repairing or rehabilitating 50 non functional boreholes and constructing 300 protected shallow wells. The project upon extensive analysis and deliberation and getting approvals from the steering team managed to change the planned targets and by 31st December 2010 the project managed to drill 83 boreholes, rehabilitate 87 non functional boreholes and dig and protect 280 shallow wells. The project increased the number of rehabilitated deep wells and essentially increased the number of water supply beneficiaries by 4%.



According to the ICEIDA Staff report (2011), data of defunct boreholes in TA Nankumba was so overwhelming that it made much sense rehabilitating than drilling new boreholes and also that drilling of new boreholes would have been three times expensive.

Construction of shallow wells which seemed to be easier to implement in areas close to the lake failed to meet the objective. 18.8% shallow wells had dried up during the period of evaluation survey as water table went down. It was reported that drying of shallow wells in the dry months of the year resulted in people going back to unprotected water sources like the lake and open wells. A few wells too were found to be salty and hence not being used at all for drinking. Almost 22.6% of the respondents reported not being satisfied with their water facility as a result of performance of most of the shallow wells that were constructed by the project. This has affected the overall goal of the project despite having managed to construct all the water points in the project plans.

Just as it were found during the midterm evaluation, the project needed to have technical standard operating procedures that were supposed to be guiding the process of construction of water points. By the end of the project it was found that 38.9% and 43.6% of the shallow wells and new boreholes respectively were suffering diminishing yields, diminishing yields were not only attributed to construction problem but also to un protected water catchment areas that are supposed to assist in recharging the aquifers.

The project abandoned also the plans of protecting two natural springs for supply of safe drinking water on a community participatory basis to Mvunguti Village. This objective was abandoned in early 2008 on the advice from a WatSan technical consultant due to technical complications. Instead two new shallow wells were constructed and the water point served by one of the two springs was rehabilitated.

“Water on its own is not everything but without it there is nothing” so it is said as such ICEIDA WatSan project adopted the holistic approach and indeed best practice in water and sanitation sector of combining water provision with sanitation in order to maximize the health benefits of programming the two together. ICEIDA WatSan project planned to facilitate construction of 20,000 new and/or improved pit latrines with adequate accessory sanitation facilities such as for hand-washing and bathing etc. ICEIDA WatSan project implementation strategy required that a water pump be not installed until it was verified by the project that between 75 - 80% of households for each water point had reached the minimum sanitation and hygiene requirements, i.e. proper pit latrines and other sanitation facilities at each household. By having managed to provide 450 water points it was assumed that 75-80% of the 76100 direct beneficiaries of the water project were to have improved sanitation and proper hygiene practices, indeed at the time of this evaluation almost 88.4% were having latrines. On the contrary since sanitation and hygiene were used as baits for water, two years after the project was completed only 59% have sanitary facilities (non defecation) at their home and worse only 8.4% have a usable hand washing facility at their toilets.

This evaluation found that the Ecosan type of latrines was most preferred in sandy soil areas and that many beneficiaries had adopted this technology for scale up. Other type of latrines faced many challenges in sandy soils as they had collapsed and communities had to construct new latrines.

The software component of the project involved empowering the beneficiary in operation and maintenance of the facilities by training them on community based management of rural water supplies. 86.7% of water point committees were found to have the adequate technical knowhow on O&M however the knowledge base failed short of the end users who only 16% of the end users have some knowledge of O&M. Some complicated borehole pump repair works are beyond the capacity of the beneficiary technical knowhow and require a trained mechanic, it was established that during the project implementing period 18 area mechanics were trained even though it was found that their availability or willingness to assist communities who have pump problems is a challenge.

Despite that spare parts suppliers were established and trained in every zone it was clear that just 2 spare parts suppliers were functioning, most of the spare parts suppliers were failing to keep up the momentum of stocking spare parts for pumps. If stocked, spare parts were double expensive comparing to costs in Mangochi town and suppliers complained of tying capital in spare parts thus being not viable and profitable. Spare parts supply chain and management is becoming a threat to the project despite efforts of establishing a robust network of spare parts supply centres only 66.3% WPCs stock fast wearing spare parts and 43.3% of communities have access to spare parts.

In a bid to create a mass of trained local people on hygiene and sanitation, water point committees and selected Health Surveillance Assistance (HSAs, GOM extension workers) were sensitized and trained to train other community members in methods to improve hygiene practices and construct improved sanitation facilities. By the end of the project it was very evident that cholera had not occurred since the project was launched and prevalence of diarrhea diseases was going down.

Great strides were achieved in sanitation comparing to the situation before the project was launched. For instance the 2007 baseline survey indicated that 54% of the households had no pit latrine but by the time of final evaluation 88.4% households owned their own latrines. Even though attainment of an open defecation free status was not a specific objective of the project, nevertheless the project has contributed highly to the current government ODF strategy.

Unlike many WASH projects, this evaluation found that the ICEIDA WatSan project engaged in on-going training in Community Based Management (CBM) not only for community members but also for local leaders. Community members and local leaders (chiefs and village headmen) were trained in the maintenance and repair of water pumps (Village Level Operation and Maintenance, VLOM), the management of water points (e.g. maintaining funds for spare parts) the construction of sanitation facilities and the good practice of hygiene.

2.9 Stakeholder Participation

Delivering a project efficiently through a complex system that combines a heavy government involvement as well as the lean and supposedly efficient delivery system of development agencies is one of the most challenging thing project managers would face. This evaluation has learnt that the ICEIDA WatSan project was not orchestrated via the DEC or District assembly as was planned in the PD but rather creatively and innovatively through the administrative hierarchy of the project, i.e. the PSB, PSC and PIU. De facto all planning was made by the PIU and vetted by the PSC and PSB. The PSC and PSB meetings served to share information with GOM and the District as well coordinate and report on progress or lack thereof. All planning initiative was in the hands of the PIU. Reporting and coordination with the grass root (traditional authority and communities) was done via FWs and WASNAN's Field Operation Supervisor (FOS) who reported to PIU and back. This evaluation has captured this as one of important lessons.

Despite the good things and outcomes this project brought, it is clear that during project implementation period rolling out a comprehensive behavior change programme was a challenge as sanitation and hygiene were used as a bait for water supply. The behavior change components of the project were whence rolled out before behavior bridges, motivators and barriers essential for behavior transformation, reinforcement or change were identified.

This evaluation has also learnt that even though ICEIDA enjoyed a good relationship and cooperation with the GOM via the Ministry of Irrigation and Water Development (MIWD) however cooperation with the MOH was minimal. Failing to work effectively with MOH in the early days of the programme affected the soft components of the project.

It also came to the knowledge of the evaluation team that the technical knowhow of the water team was very critical for rolling out of the shallow wells drilling programme, as such functionality of shallow wells, which are much affected with seasonality and depth were much dependent on the technical knowhow and serious and consistent supervision of the water field officers and this in a big way may have affected the number of shallow wells functionality that were constructed during this time.

3.0 EVALUATION PROFILE

3.1 Methodology

The evaluation process was guided by the Terms of Reference (ToRs) and presented in the logical framework. This provided for a linear relationship in each key result area namely water, sanitation and hygiene. From the perspective of effective responses from the stakeholders the critical elements of evaluation framework presupposed linkages of these three as necessary but also dependent to a number of requirements, some of which are obvious and others which are not.

The evaluation adopted participatory approaches which combined both qualitative and quantitative study methods. These were triangulated through household and water mapping (quantitative); Focus Group Discussions, and Key Informants (qualitative). Supportive literature reviews and site visits (observations) were also carried out. These methods were used to determine evaluation data to ensure effective measurement of planned outcomes and impact of the program over the implementation period and at various stages of implementation. Summary of indicators table outlines all the indicators collected.

3.2 Sources of data

3.2.1 Primary data

The primary data for the evaluation was collected from different sources using structured questionnaires to assess situation 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.

3.2.2 Secondary data

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

3.3 Sampling methods

Household sampling and sampling of the project outputs to be visited

With the assistance of the data provided on the targeted villages and population/household, mapping of the project activities across the project area was done and selection was made based on the statistical sampling formula.

$$\text{Sample Size (SS)} = Z^2 * (p) * (1-p) / c^2$$

Where:

$$Z \text{ (95\% confidence level)} = 1.96$$

$$P \text{ (percentage picking choice)} = 0.5$$

$$c \text{ (confidence interval)} = 0.04$$

And:

Correction for Finite Population

$$\text{New SS} = \text{SS} / (1 + ((\text{SS}-1) / \text{pop}))$$

The interviewed households and water facilities to be mapped were selected base on the above formulae.

The sample for evaluation was designed to provide estimates of the “before and after programme” measurements of water, sanitation and health indicators. The evaluation method was discussed extensively during the inception and the methodology was fine-tuned for the purpose of this evaluation at the stakeholder’s meeting, which focused primarily on household level and water mapping questionnaires.

3.3.1 Sample size for interview and water point mapping

Primary data collection was gathered by interviewing 582 households project beneficiaries using enumerators for interviewing and 257 water points were visited collecting GIS information and interviewing water point committees using Water Monitoring Assistants from the Ministry of Water Department and ICEIDA staff.

3.4 Enumeration

Seventeen enumerators (with two supervisors) were given training on the methods of data collection. They were introduced to the household questionnaires so that they fully familiarize the questions and get acquainted with new words to minimize threats to reliability of data.

Six Water Monitoring Assistants were also trained in the use of hand held GPS to familiarize them with capturing the water point X, Y coordinates and at the same time introducing to them water point mapping questionnaire.

3.5 Techniques of data collection

3.5.1 Household interview

Logistical planning of the visited villages for each day was prepared prior to the exercise to minimise time wastage in locating target villages and the enumerators 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 submitted the questionnaires to their respective supervisor for data checking.

3.5.2 Water point mapping

Water Monitoring Assistants (WMAs) visited selected water points from all target villages, collecting GPS coordinates and recording all the responses of the respondents in the questionnaires.

3.5.3 Focus Group Discussion

Focus Group Discussions (FGD) were conducted in the five health zones (centres) to get the wide picture following the project implementation in each area. The outcome of the FGD helped to understand different perspectives, attitudes, pressing challenges of the communities, water and sanitation situations and to establish complementary views that substantiate the information about the project, extent of participation and roles played by men and women.

3.5.4 Discussion with Key Informants

The representative of staff from ICEIDA, Government line ministries from Mangochi District Assembly were among those with whom the in depth interviews were conducted to gain an

in depth knowledge of WASH issues. Key Informant provided necessary backup knowledge of the situation.

3.5.5 Observations

The evaluation team travelled across the project area and observed physical achievements of the project, quality of work, physical condition, distribution and performance of water facilities 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.

3.6 Data analysis

Data was recorded on SPS program, excel spread sheets and ArcView GIS program; frequency ratio and GIS map were used to present and compare results of the evaluation and project achievements. Secondary data were also compared and analyzed to substantiate primary data. The information gathered through evaluation, FGD, in depth interview with key informants and physical observation were compared, triangulated and analysed during the preparation of the report. Data analysis process was guided by the ICEIDA WASH logical framework indicators.

Qualitative data was analyzed by progressive outcome thematization and quantitative results gap rapping provided answers to status quos and trends found.

4.0 EVALUATION FINDINGS

4.A.0 Relevance

This section concerns the extent to which the ICEIDA WATSAN program's activities were suited to the priorities of the target group and the Government of the recipient country. Information provided has been gathered through review of project records and existing documentation as well as interviews with project staff, key sector stakeholders and beneficiaries. Overall, the evaluation found ICEIDA interventions in TA Nankumba in Mangochi District very relevant.

4.A.1 Needs assessment and choice of the beneficiaries

With respect to the project's intervention area: The WatSan project intervened in rural communities of Mangochi more specifically TA Nankumba. This is an area where water and sanitation service levels were low and needs were huge.

Access to water services in this region was as follows:

- TA Nankumba was at a calculated access of 42%; Mangochi District was 73.3% in the HIS (2004-2005)

Access to sanitation services was even lower and very worrying:

- TA Nankumba was 60.4% in a baseline of 2008

As a consequence, there were many cases of water-related diseases such as cholera, diarrhea and child mortality was high. The choice of ICEIDA to intervene in such area is therefore relevant with respect to the lack of water and sanitation services in absolute terms. Several of the national and district authorities interviewed consider that ICEIDA scope of intervention correspond to the water and sanitation sector's needs from a relative – national – perspective.

With respect to the choice of the beneficiary communities: In 2007, ICEIDA conducted a baseline survey in the project's intervention area to assess needs of the beneficiary communities and to assess the starting point to facilitate future impact evaluations. According to this survey, levels of water and sanitation services in the communities were extremely low and justified a prompt intervention. Specific needs were assessed by ICEIDA in collaboration with public authorities at the district and local level, and following national standards and criteria. These criteria are generally based on population, current access to water and sanitation facilities, and commitment of the community to contribute financially towards the investment and maintenance cost of the facility¹. Globally, the evaluation found that the procedures for needs assessment and choice of the communities within the intervention area are relevant and effective.

Availability of water in many times tends to encourage migration towards the beneficiary community, during the study it was not clear that demographic changes at the micro-level are due to the ICEIDA project. However, needs assessment should not be specific to the

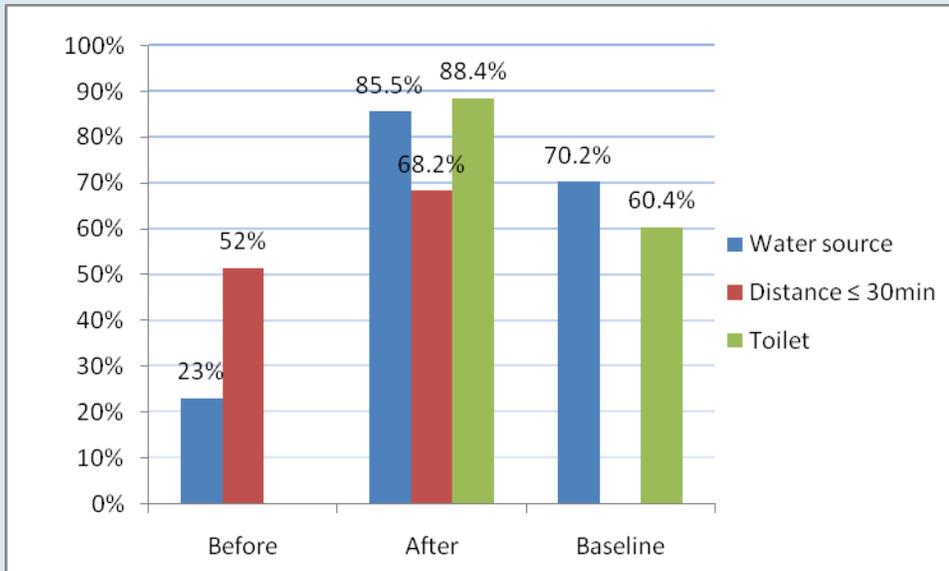
¹ Minimum financial requirement for a new borehole : the community has to contribute MK15000 and keep in a bank account

provision of potable water for drinking only but also consider needs in terms of water for agricultural and animal farming activities. It seems that some communities give priority to such activities at the expense of domestic use of water, therefore in some cases the provision of potable water may not be the most appropriate response to the demand and such potable water risks to be used for other uses than those intended. Nevertheless in TA Nankumba it was generally felt that water is used for domestic use.

With respect to focus on women and vulnerable population: ICEIDA as an organization has chosen to address its interventions to the most vulnerable segments of society, namely women, children, elderly, people with handicap and the poor. Results of the field survey, review of documentation and interviews conducted during the evaluation confirm that there is a real effort by the WatSan project to translate these values in practice. WASH facilitators encourage women to actively participate in activities and promote empowerment of women associations.

During the project implementation period there has been no intervention oriented towards the specific needs of people with disabilities. Considering that every society has some disabled people it would have been important that the project included approaches on how to adapt water and sanitation technologies to the specific needs of the disabled. These elements are recommended to be included in the design of water and sanitation facilities for the next phases of the project.

Graph 01: Evidence for need for water and sanitation project



The graph clearly articulate the situation before on water from 23% to 85.5% and a jump in those who were accessing water within a 30 minute walking distance from 52% to 68.2%. Latrine access has gone up from a 60.4% to now a 88.4%.

4.A.2 Consistency of program's objectives with beneficiaries needs and expectations

At the national level and district level, all public water and sanitation authorities interviewed in Malawi acknowledge the strong role of ICEIDA to raise the level of access to water and sanitation services. ICEIDA is mentioned by all as a key partner which responds to the Government's needs and expectations. All recognize the high relevance of ICEIDA activities and particularly appreciate ICEIDA contribution to the achievement of the MDG and to the funding of water and sanitation services in rural areas. Water authorities at the district level and TA Nankumba value ICEIDA efforts to involve them in project implementation activities (especially for the training of the water committees), the collaborative relationship installed and the support provided for the running of Mangochi District water office. Most people interviewed said that ICEIDA responded timely and positively to their demands. In addition, ICEIDA is recognized to address the needs of the poor and to bring services to inaccessible and remote areas where government and other development actors tend not to intervene, more interestingly was the recognition that ICEIDA came close to the ideal and theoretical standard of providing water to a 250 number of people for deep wells and 100 number of people for shallower wells and within a walking distance of 500m as per government standard. ICEIDA is known to have played a very useful complementary role. However, while water authorities at the district level are closely involved in all activities, both ICEIDA and Ministry of health acknowledged the strained relationship between them during the early years of the project which eventually normalized by the end of the project. Authorities from MoH have a feeling that they were sidelined during the project implementation; ICEIDA thinks the "work for allowance syndrome" deterred the MoH local staff from active participation.

Finally, TA Nankumba and other public authorities expressed the need of having continued support from ICEIDA especially to ensure that all water points that were provided are in working condition since the community capacity both financial and technical is well below what may be required to make seasonal and defunct shallow wells working. He expressed need for ex-post monitoring of water facilities provided by ICEIDA so that a true picture for more specifically water access is portrayed in his area.

At the community level: Beneficiary communities interviewed during the field survey are satisfied with ICEIDA interventions and say to have greatly benefitted from them. Community members believe ICEIDA effectively responds to their needs in the areas of provision of potable water, sanitation and hygiene and disease prevention. Most recognized is a strong impact in terms of eradication of Cholera and decrease of diarrheal diseases in the community. Many interviewees especially appreciate the multi-sectoral integrated approach adopted by ICEIDA. Globally, all acknowledged ICEIDAs efforts in the following sectors; Water, Sanitation, Health, Education and Fisheries.

However, many expressed the wish that ICEIDA interventions could provide them with more sanitation facilities especially the ECOSAN as they felt the sandy collapsing characteristics of soils in their area is hampering their progress in sanitation. Despite some traces of replication of ECOSAN and doom slabs the replication rate of ECOSAN and Doom Slabs is very low in the entire area. Many households still find it difficult to pay for the latrines and wished they could receive some kind of subvention as was the case in the past.

However, a subvention would be inconsistent with the CLTS approach and ODF Strategy which has being endorsed by the Government in Malawi.

4.A.3 Consistency of program's strategy and activities with program's objectives

ICEIDA WatSan implementation strategy in communities typically includes a combination of “hard” and “soft” activities which are both necessary and complementary to the provision of adequate and sustainable water services. A first stage of community mobilization and sensitization prior to the drilling is followed by a series of training activities addressed to water committees and artisans, which are to take place simultaneously with the borehole drilling and water point development. Activities include the construction of latrines, health and hygiene education, behavior change education and community capacity building. The drilling campaign itself includes different stages namely the ensuring that the community have satisfied 70-80% of sanitation and hygiene needs of their community, then siting, drilling, pump installation and water point development and construction of superstructures.

In a bid to ensure that water provided to the communities is safe ICEIDA procured a potable water quality testing equipment. ICEIDA facilitated training of HSAs and district water personnel on operation of the equipment.

At a district level, activities are undertaken to develop collaborative network with public authorities and key sector stakeholders. In order to successfully carry out all these activities and achieve its goals, the projects had at their disposal an adequate amount of technical, human and financial resources. Following interviews with project's staff and review of project documentation, it seems that the 19 Field workers were instrumental for timely delivery of the project.

While the project puts a strong focus on financial sustainability and ownership at the local level, effort to assure environmental sustainability may be improved. The project did not take impact of climate change into perspective; mass roll out of shallow wells in an area experiencing massive deforestation degradation and regular bush fires seem to have been a risk. In fact, for the ICEIDA WatSan project, ecological sustainability should be seen more as a long term objective, as there are today still many unknowns related to climate change that could completely wipe out all efforts from ICEIDA.

4.A.4 Alignment with National Policies, Strategies and Priorities

The water and sanitation sector in Malawi have all undergone important institutional reforms in recent years. Official responsibilities are clearly identified and decentralization reforms have given increasing role to districts even though not fully decentralized. Sector policies have been recently consolidated and guidelines and standards are available to orient partners' interventions in the WASH sector. Review of documents and interviews with stakeholders and public authorities confirm that ICEIDA interventions are aligned with national policies and respect national standards and criteria. ICEIDA has signed official agreements with public authorities at the National and district level specifying each other's roles and responsibilities. Members of the district water and sanitation department are regularly associated to the activities of training and Water and Sanitation education in

communities, with the precise objective of assuring conformity to national guidelines and legislation. Officers from the health and water services are also associated as much as possible to the activities. Public officers play a role of control on the project activities, issue authorizations and certificates, share information and data and are also supposed to assure the ex-post regular monitoring of the facilities. ICEIDA is accountable to the Government, regularly sends information on activities conducted and planned, collaborated with national programs and initiatives and follows national strategies and approaches such as Water for all as per National Water policy and indirectly the National ODF strategy and National Hand Washing Campaign.

Currently ICEIDA has decided not to set up an ICEIDA water department as a parallel structure to government water structure rather it has decided to work through government in delivery of their projects. Despite anticipated challenges of delivery when working through a heavily bureaucratic system of management of government at least there is an assurance of even more alignment with national policy and this avoids the risk of case-by-case alignment to national policies and guidelines.

4.B.0 Effectiveness

This section presents the status of achievement of the program's objectives and major factors influencing the achievement or non-achievement of the objectives. The analyses of effectiveness were particularly difficult because of inconsistencies between the different project documents available. In particular, some soft ware indicators don't have targets and with absence of Indicator Tracking Tables (ITT) it was difficult to track through them.

4.B.1 Objective 1: Increase the number of boreholes in the Monkey bay Health Zone

Overall, the analyses shows that ICEIDA's water projects' targets related to Objective 1 have been achieved.

Tracking Table	Total 2008-2011			
	Monitoring Indicators	●	●	√
No of New Boreholes	100	83	83	100%
No of Rehabilitated Boreholes	50	87	87	100%

Red dot=Planned, Yellow dot=Revised, Green check=Achieved, Blue Star=% Accomplished

Water supply remained the main component of the ICEIDA's WatSan project and it represents the most fundamental contribution to the well being of people in TA Nankumba. In general ICEIDA's water projects' field staff was instrumental in delivery of the hard outputs of water nevertheless at the expense of software as it seems their pace was quick. Targets related to borehole drilling were 100% achieved in 4 years of the planned 5 years. Having delivered the outputs is one thing but having successfully all of them working is another of the new water points that were constructed only 73% were found to be perfectly working, 12.5% were working but not in good condition and 14.4% were not working either because there was no water, had broken down or was vandalized.



The project facilitated procuring of potable water quality testing equipment and ensured that district water officers, laboratory technicians and HSAs are well trained on equipment operation. According to ICEIDA, consistent use of equipment is a challenge and it is recommended that district staff be sensitized on need to ensure that water quality tests are done on sampled water points periodically. Considering that most water points are shallow wells and are susceptible to contamination, **it is recommended to ensure that households are equipped with knowledge and adequate supplies for household water treatment.**

Water samples of every new wet deep of shallow well drilled or dug need to be collected and analyzed to check compliance with WHO guidelines and National standards. In addition to these initial test, water quality of functioning wells is also sampled on a regular basis to check possible variations in water quality. Water quality analyses include two main components: analyses of physical and microbiological elements, whose indicator tests can be done in the field but it is a best practice to have all tests results validated at the National water chemistry laboratory at regional or National level.

4.B.2 Objective 2: Build up capacity among communities in maintenance of boreholes and pumps

To increase capacities of communities for O&M, the water projects organize the training of Water point committees and area mechanics, the distribution of repairing kits to the water committees and the establishment of spare parts centers. Targets related to the training of water point committees were achieved in the project, with a total of 450 WPCs trained in TA Nankumba.

Tracking Table	Total 2008-2011			
Monitoring Indicators	●	●	√	★
No of water point committees adequately trained	450	450	450	100%
No of area mechanics trained	18	18	18	100%
No of spare parts suppliers centres established	5	5	3	60%

Red dot=Planned, Yellow dot=Revised, Green check=Achieved, Blue Star=% Accomplished

Targets related to toolkits for repair and maintenance provided to communities were achieved in as all water points were provided with a starter pack toolkit of fast wearing spare parts. Targets related to spare parts centers were not wholly achieved as the consultant only managed to verify existence of 3 centres of which only 2 are functioning. **Spare parts centres seem to be challenge that need a comprehensive system set up by government**, some respondent (24.3%) attributed the problem of spare parts to **difficulties in transportation** meaning spare parts need to be brought closer to communities. Even though 85.1% of WPCs were well aware of where the shops are about 20.2% of respondents attributed the **problem of getting spare parts to their availability locally** meaning spare parts centres are not stocking the parts despite extensive training and having received a free starter pack of spare parts business. **Monitoring of spare parts centres is encouraged to be an ongoing activity** through water monitoring assistance.

Concerning training of area mechanics the target was also achieved with 18 area mechanics trained across TA Nankumba. During focus group discussions it was clear that area mechanics are not operation, there are also adamant and choose who to assist. 34.9% of respondents said it is important to contact the area mechanic when something beyond the WPCs capacity happens however, altitudes of most area mechanics is unprofessional. It is worrisome that even having had trained almost 18 area mechanics during project implementation period 61.6% of WPCs said area mechanics are not known. It is recommended that for future projects that effort should be made to **bring area mechanics closer to WPCs in their territory**.

Community financial contribution towards O&M increased

All the communities where boreholes were drilled in TA Nankumba were educated on the need to contribute financially towards repair and maintenance of the hand pumps. They were therefore encouraged to open bank account for funds raised for the operation and maintenance. In fact, it was clear that most communities faced a problem as it is **difficult to access to credit services due to remote locations** as such 91.5% of WPCs keep their money with the treasurer. The risk with this is the money is not insured and has a high risk of being embezzled, lost or getting stolen.

4.B.3 Objective 3: Increase knowledge in hygiene and sanitation among the target groups

Household sanitation facilities increased

Tracking Table	Total 2008-2011			
Monitoring Indicators	●	●	√	★
No of Constructed latrines with sanitary facilities	20000	20000	14000	70%
No of trained WPCs on hygiene and sanitation	450	450	450	100%

Red dot=Planned, Yellow dot=Revised, Green check=Achieved, Blue Star=% Accomplished

ICEIDA's strategy for sanitation promotion includes rolling out of new sanitation technologies like ECOSAN and doom slabs. Sanitation and hygiene was promoted as bait for provision of water points as such communities had to satisfy a 70-80% sanitation benchmark for them to receive a water point. ICEIDA trained communities in construction of doom slabs and ecosan latrines; they provided communities with materials like cement and iron and taught communities on how to take care of their facilities including possibility to use human waste as manure. Households were expected to replicate the latrines, while ICEIDA's WASH facilitators supervise and monitor the construction of replications latrines and superstructures. This objective was under-achieved in TA Nankumba as only 14000 were constructed.

The replication rate too is very low as only a few people are ably molding ecosan bricks and doom slabs for their latrines.

WPCs trained on hygiene and sanitation

The idea of training WPCs as trainer of trainers was from an assumption that there is going to be a trickledown effect of knowledge to the communities which is not correct. Even though all the WPCs were trained on hygiene and sanitation it is these soft ware components of the project that have suffered most. For instance proportion of people who don't bother treating water has gone up from 44.6 to 63.2%, 11.6% still don't own a latrine, 6.4% clearly practicing open defecation, 34.1% still having unclean latrines, only 7.4% washing hands after having attended a baby, 22.7% disposing children feces on open ground, 87% not having a special place for hand washing, only 18.1% owning a rubbish pit.

With the increased availability of water for domestic consumption, storage and handling of water becomes particularly crucial since water which is potable at the source may become contaminated if transported in dirty containers or stores in uncovered vessels vulnerable to the intrusion of external pollutions (flies, insects, dust, unclean objects).

Community members practicing hand washing increased

Hand washing is a cheapest and simplest way to decrease incidence of water related diseases. Activities include education sessions on appropriate hand-washing practices at critical times and at least twice a day face-washing for children. Also, a very strong means

of communication used to sensitize communities of WASH best practices, is drama or radio broadcasting. Hand washing with soap at critical times is the best practice that any person should have knowledge of. Even though 37.7% of people wash hands after visiting the toilet, still 67.5% eat without washing hands and 92.6% think they don't need to wash hands after attending to a baby or having been in contact with baby's feces. It is in view of these still prevalent dangerous behavior challenges happening in TA Nankumba that the hygiene component of the project is being questioned.

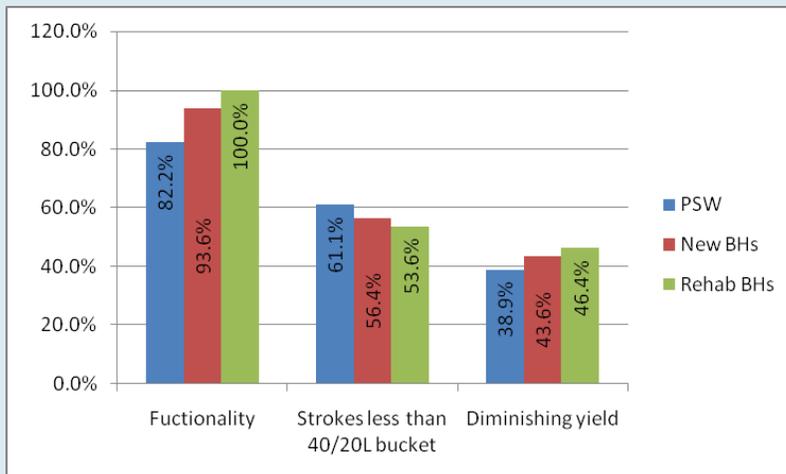
4.B.4 Objective 4: Increase the number of protected and improved shallow wells

Tracking Table	Total 2008-2011			
Monitoring Indicators	●	●	√	★
No of Shallow wells constructed	300	280	280	100%

Red dot=Planned, Yellow dot=Revised, Green check=Achieved, Blue Star=% Accomplished

The project successfully delivered all deliverables on water supply including shallow wells. Shallow wells came as a surprise to the community as they thought only deep wells could provide water however over time communities were convinced it was possible to have water from them. The only drawback of shallow wells is seasonality, our interviews with the ministry head quarters indicated that shallow wells are not encouraged because of challenges of water quality and its seasonality, the ministry has however not put up their clear stand on shallow wells. Out of the 100% shallow wells that were constructed 82.2% are working. Indeed the larger proportion of non functionality is related to dropping down of water tables. Some shallow wells that are close to the lake are abandoned because they are salty. Refer to graph 02 on functionality of water points.

Graph 02: Showing functionality of water points



Using a 40 by 20L stroke test it was surprising that most of the shallow wells that are working have yields better than deeper wells.

4.B.5 Objective 5: Putting to use 2 natural springs in Mvunguti village

Tracking Table	Total 2008-2011			
Monitoring Indicators	●	●	√	
No of nature springs protected and improved	2	2	0	0%
No of mechanised water systems		3	3	100%

Red dot=Planned, Yellow dot=Revised, Green check=Achieved, Blue Star=% Accomplished

Potable water can be provided through many ways apart from abstraction, water can be provided from surface resources (dams and ponds) and rainwater when groundwater is either not available (yields are too low) or of poor quality (not suitable for treatment), but also alternative abstraction systems, such as mechanized pumps (solar powered), to install where groundwater is largely available and borehole yields are high. The ICEIDA WatSan project failed to continue with protection of the two natural springs in Mvunguti because of technical reasons. The consultant advised that the technicalities were much complicated than what ICEIDA thought as such this idea was abandoned. However ICEIDA mechanized one borehole that was as deep as 80m as well as fixing two wells at Nankumba and Malembo Health centres using solar pumps and panels.

4.B.6 Objective 6: Improve Community Based Management

To ensure that community leaders also have the knowledge of community based management of water and sanitation facilities, community leaders were incorporated in CBM trainings as such community leaders who had received a water points of any of the 450 water points that were constructed had the opportunity of going through a training on CBM.

Tracking Table	Total 2008-2011			
Monitoring Indicators	●	●	√	
No of water points whose community leaders were trained on CBM	450	450	450	100%

Red dot=Planned, Yellow dot=Revised, Green check=Achieved, Blue Star=% Accomplished

4.B.7 Objective 7: Establishing functional co-ordination, monitoring and reporting system between stakeholders

Tracking Table	Total 2008-2011			
Monitoring Indicators	●	●	√	
A functioning system of collaboration and reporting among stakeholders through DEC and District Assembly in place	1	1	0.5	50%

Red dot=Planned, Yellow dot=Revised, Green check=Achieved, Blue Star=% Accomplished

As per the proposal, “building the capacity of local, district and national government officials is essential for long-term water project viability”. The project has achieved to the perception of the consultant 50% of targets related to this objective. ICEIDA’s water projects’ interactions with local and national authorities includes bilateral information sharing ; institutions are being associated to project implementation, namely for the training done in communities and for the certifying of facilities ; institutions are responsible for the management of the facilities once the construction is finished and it has been handed over to communities, and for the ex-post monitoring.

ICEIDA supports Government institutions when they require specific help for example; supporting government with transportation facilities for Water Monitoring assistance, renovating the district water office etc fixing of water problems in public institutions (Health centers, etc). It is understood that all interactions between ICEIDA and public authorities are an occasion for (reciprocal) capacity building. Both project staff and public authorities interviewed at the national and district level considers the relationship useful and constructive. Authorities interviewed consider that ICEIDA could do more to help reinforce their capacities, especially concerning trainings and funding to enable them to correctly carry out their monitoring tasks.

The project document foresaw much more involvement by the GOM and the District but that was not the case. The consultant has learnt that all planning and budget decisions initiative originated from the PIU of WatSan project. However, in this context it must be noted that the Water Officer (WO) of the MIWD who was seconded to the Project played an instrumental role in the PIU. It should also be stressed that he GOM via PSB and District via PSC showed, just like other stakeholders (TA and communities), great enthusiasm and interest in the Project and provided support when called upon.

4.C.0 Efficiency

This section describes the ability of the project to deliver the promises in terms of its goal and outcomes. It describes if the project attained those goals using acceptable means that are widely accepted through local and international standards and guidelines. It present

results of the field surveys and produces a comparison with the 2007 baseline survey. The graphs enable to easily assess the evolution of the situation in water access and sanitation between the project design and baseline period and the period of evaluation.

Overall, data illustrate a very positive evolution of the situation in terms of access to water and sanitation services for the communities in the project area, therefore demonstrating a strong positive impact of the ICEIDA WatSan activities 2008-2011. **The positive change in access to water and sanitation is a major contribution to the overall development objective of reducing water and sanitation related diseases in the Monkey bay Health Zone.**

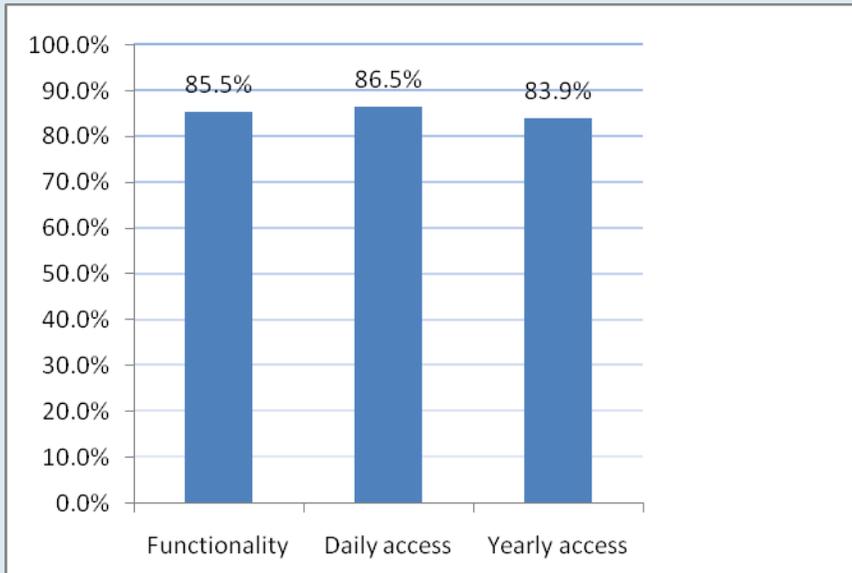
Monkey bay health zone was chosen after it had recorded 33000 cases of cholera that culminated to 100 deaths in 2001/2002. The problems of cholera were very prevalent in TA Nankumba such that cholera could start even during summer when people normally do not suspect cholera to start. The situation in TA Nankumba was very pathetic in terms of sanitation as well.

4.C.1 Significant improvement in access to drinking water



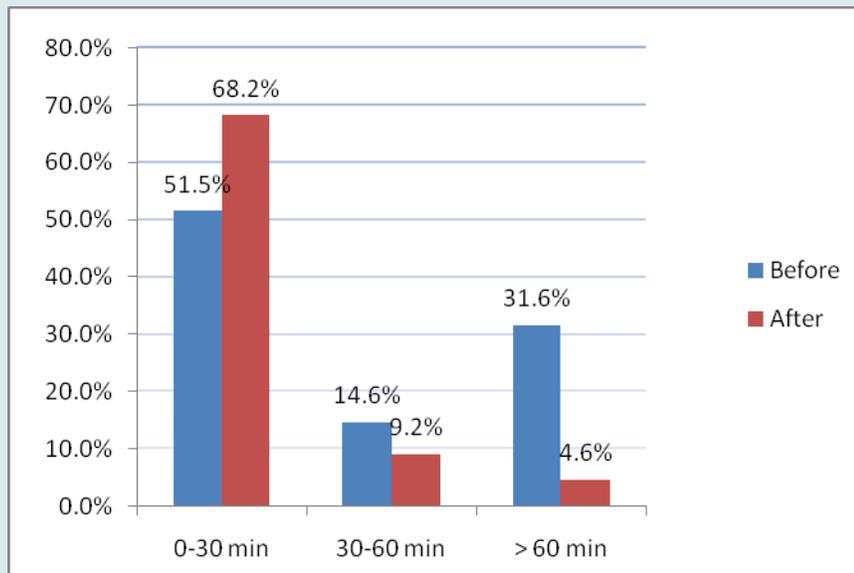
Data show a very remarkable improvement in access to water in the impact zone. The most important one is year round access to water. Data from the field survey concerning access to protected water in the dry and wet season confirm these positive results. Today, there is much less households using unprotected water sources in the project areas. This data confirms the very strong impact of the ICEIDA WatSan project. Of the 450 water points that were constructed 83.9% have year round access and 86.5% provide water 24 hours a day. In the adjacent picture children like these were collecting drinking water from the lake shown in the picture but now they drink from a protected source.

Graph 3: Year-round and 24 hour access to protected water sources



Concerning distance and time, the percentage of households whose main source of drinking water is within a 30 minute round trip walking distance has increased. This indicator translates to amount of time saved, reduced burden of women in collecting water as well as increased time for economic use at a household level. The percentage of households who take 30 minutes or less to fetch their drinking water has increased in TA Nankumba (from 51.5% to 68.2%). It is also encouraging that 85% of the people who are benefiting from reduced distance or time are using the saved time for other household chores (55.6%), family tasks (14.9%) and Income generating activities (14.5%). In terms of adequacy of available safe water; a remarkable increase was noticed from 30.7% before the project started to 63.5% during the evaluation period.

Graph 4: Households walking time to fetch their drinking water



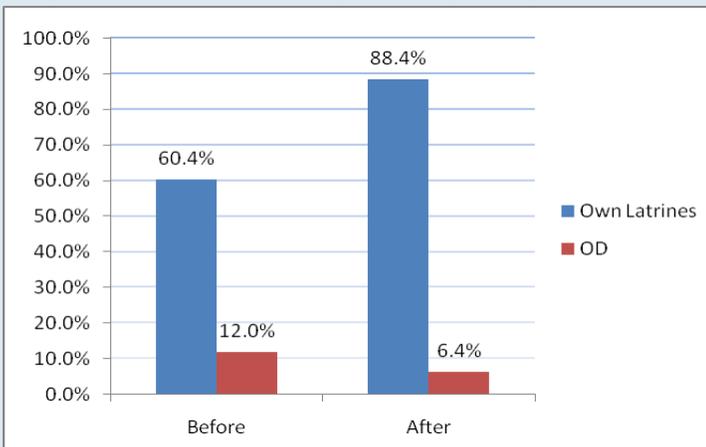
4.C.2 Increased knowledge in sanitation and hygiene

Improved access to sanitation and decrease in open defecation are among of the most important factors which influence reduction of water born-diseases. Graph 5 below shows a **very significant decrease in open defecation between 2008 and 2011** in the project area:

- From 60.4% before project to 88.4% after the project (evaluation) for those owning latrines
- From 12% to 6.4% for those still practicing open defecation

Respondents confirmed the positive data on decreased open defecation. The evaluation team also noticed a general significant decrease in the use of shared latrines at the profit of household latrines from 15% to 11.8%. This encouraging evolution demonstrates an extremely positive impact of the ICEIDA WatSan project. However, the practice of open defecation is still present in TA Nankumba: it is therefore important that ICEIDA and government keep intervening in the area to promote improved sanitation.

Graph 5: Households which practice open defecation



Concerning the **disposal of household waste**, interpretation of the data is not very immediate. In fact, households in rural Africa do not generate much waste apart from organic waste from food since their level of consumption is extremely low and recuperation/recycling very frequent. Most families own animals that reside at the premises (mostly small ruminants) and give most organic waste to them.

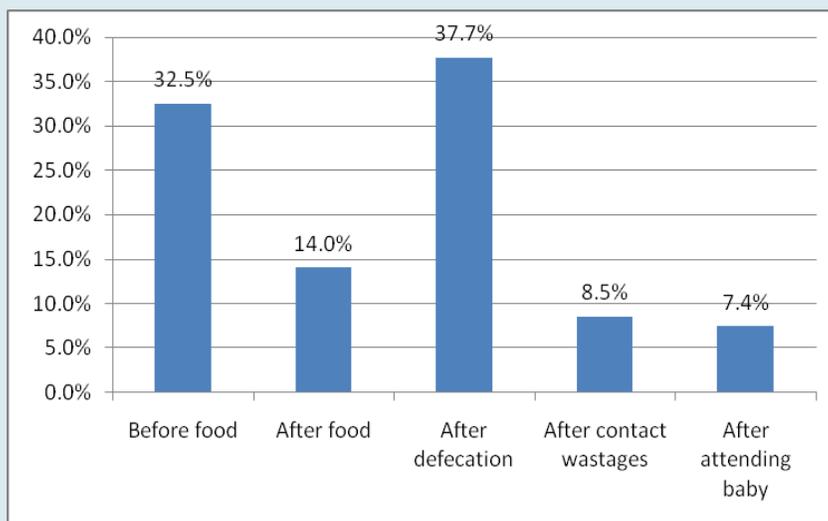
During the evaluation 59% of the households had at least 3 of the sanitary facilities like drying rack, rubbish pit, drying line, bathroom, hand washing facility, the worst owned is the hand washing facility at 8.4% then a rubbish pit at 18.1% and the most owned is a bathroom at 33.6%. This trend signaled a behavior problem as it means there is still a long way to go until community members understand the advantages of safely disposing household waste and change their practices accordingly.

Despite having no trend from baseline concerning **disposal of small children’s stool**, data from the field survey show that almost 22.7% of the respondents just leave children excreta lying plain in the field. This means the **percentage of households safely disposing small childrens’ stools remains very low in TA Nankumba and this is a worrisome situation.**

4.C.3 Practice of hand washing with soap

The practice of hand washing with soap, especially after defecation, is particularly important to avoid oral-faecal contamination of water-borne diseases through food. Researchers and practitioners believe that there is no one valid and reliable measurement of hand washing practices, although the availability of soap can be used as a proxy indicator. Data from the field survey shows that a large majority of people in TA Nankumba wash their hands after defecation as well as before having food which is a positive direction. Comparison with 2007 baseline show a drop in people who owned a hand washing facility from 33.5% to 8.4% and only 45.2% of those who wash hands use soap.

Graph 6: People practicing hand washing



4.D.0 Impact

4.D.1 A remarkable decrease in water-related diseases

One of the main objectives of the ICEIDA WatSan project was to reduce the prevalence of waterborne and water-related diseases through increased access to safe water, improved sanitation and sound environmental and personal practices. Data from the field survey assisted in assessing that **this objective has been achieved, especially with respect to the deadly cholera disease which since 2008 no case has been recorded and verified**, diarrhea and dysentery have remarkably reduced since 2008 even though Bilharzia seem to have not been impacted by the WatSan project.

Major water related diseases like cholera and diarrhea have essentially been eradicated

Tables 1 to 3 below provide actual data since 2008 to the time of evaluation in 2013. Diarrhea has been managed from 2309 and 2598 cases in 2008 and 2009 respectively to barely 538 cases in 2013.

Table 1: Diarrhea prevalence (cases) in Monkeybay Health Zone since 2008

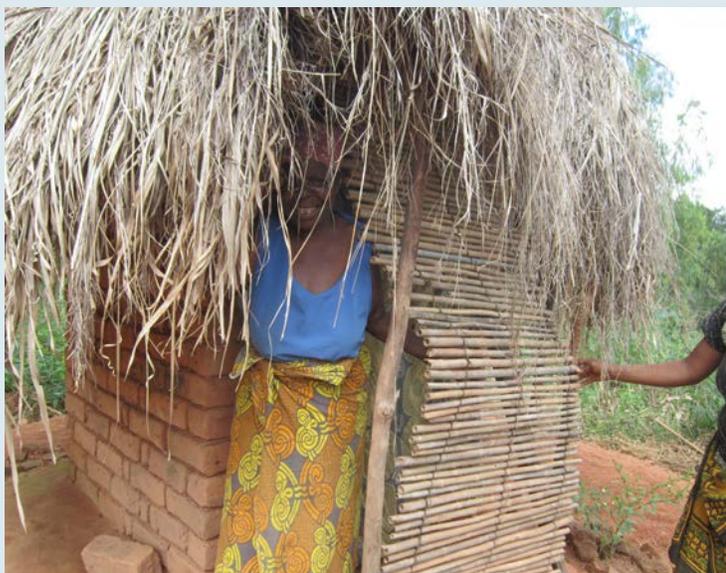
	2008	2009	2010	2011	2012	2013
Nkope	306	372	268	156	171	98
Malembo	456	435	138	123	98	54
Nankhwali	123	125	78	45	43	36
Nankumba	478	432	216	234	127	76
Monkeybay	946	1234	470	345	234	176
Chilonga	0	0	45	67	79	98
Total	2309	2598	1215	970	752	538

Table 2: Bilharzia prevalence (cases) in Monkeybay Health Zone since 2008

	2008	2009	2010	2011	2012	2013
Nkope	54	43	61	67	34	49
Malembo	65	67	50	54	35	54
Nankhwali	5	21	1	6	19	14
Nankumba	198	279	386	137	132	213
Monkeybay	234	285	312	267	124	123
Chilonga	0	0	4	7	6	13
Total	556	695	814	538	350	466

Table 3: Dysentery prevalence (cases) in Monkeybay Health Zone since 2008

	2008	2009	2010	2011	2012	2013
Nkope	234	217	115	98	76	86
Malembo	90	112	65	23	34	29
Nankhwali	78	121	65	38	42	41
Nankumba	453	432	302	211	97	102
Monkeybay	675	543	510	332	285	246
Chilonga	0	0	18	35	27	29
Total	1530	1425	1075	737	561	533

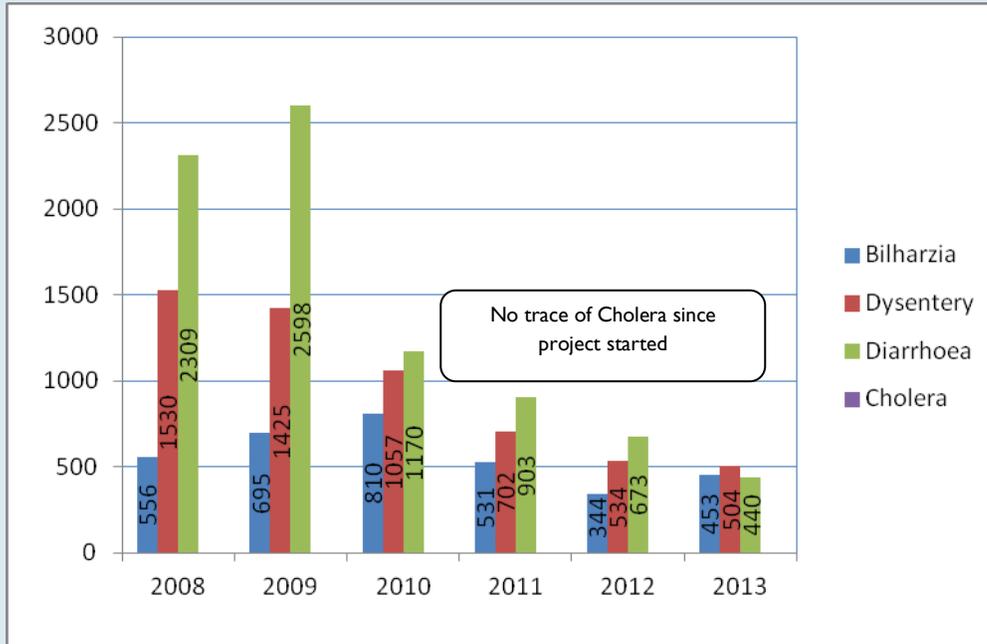


It is very satisfying to notice a **remarkable decrease in prevalence of water and sanitation related diseases that can be attributed to the ICEIDA WatSan project for a basic reason that no other organization or government was running a similar project in the same impact area during the same period.** This drop in water-borne related diseases can also be translated into numerous savings in financial resources for treating water borne diseases.

Similar strides can be assumed to have been achieved in productive time saved for people especially women which rather could have been used for nursing sick people in hospitals. Huge economic gains might have also occurred as many could be assumed to be healthier than before thereby ably working on other activities of economic benefit. Considering that diarrhea and cholera are deadly diseases then many souls have been saved by the project.

As presented in the graph 7 below; health benefits of the project are being sustained as the number of cases suffering from dysentery and diarrhea continue to drop even after the project phased out of TA Nankumba in 2011.

Graph 7 showing decrease in prevalence cases of major water borne diseases in TA Nankumba



4.D.2 Performing community management structures

ICEIDA's water project have a strong focus on putting in place WPCs which are able to efficiently manage the water infrastructures and behave as a focal point for all water and sanitation issues in the community (information, sensitization, sanitation promotion, etc.). In the project areas, 100% of the communities have a structure in place for the management of water points. Of these, 88% of WPCs have at least 50% or more representation of women than men meaning gender was taken into consideration. This data shows a **very strong impact of the project on encouraging women empowerment and their involvement in WASH.**

Concerning capacity building, **the large majority of the WPCs in the project areas have received training for their members.** Data show a significant evolution where almost 95.8% of WPCs were trained. Overall, results confirm a very positive impact of the project. It was also found that 97.7% of community members have trust in their water point committees and this has assisted in removing doubts from community members to freely contribute towards O&M. The 85.5% rate of functionality of boreholes and shallow wells enables to assess the impact of trainings addressed to water committees in addition to the fact that almost 80.9% of WPC engage in regular checking of the water system for preventive maintenance.

Concerning breakdowns, it was evident that very few boreholes were not working almost 14.4% because they had no water, broken or were vandalized this figure is better in comparison to trend in sub Saharan Africa where 30% of water points are not functioning at every point in time (Carter, 2009).

Households' financial contribution is a measure of the sustainability of the project's outputs and a proxy indicator to assess whether the water committees have enough revenue to cover needs for maintenance and operations. Data from the field survey show a huge number of households almost 86.7% are contributing financially. 75.6% of WPCs also indicated that they penalize those who fail to contribute towards operation and maintenance.

With reference to the payment method, each community is free to choose its own but most households preferred contributing monthly. With respect to the project areas, regular monthly financial contribution means communities are beginning to install regular payment mechanisms which are preferable to encourage sustainability.

4.E.0 Sustainability

Sustainability is concerned with measuring whether the benefits of an activity are likely to continue after donor funding is withdrawn and whether the beneficiaries can manage the infrastructures autonomously. ICEIDA has focused a lot on the sustainability aspect of its interventions and has made a lot of efforts to ensure financial, technical and institutional sustainability. **Overall, mechanisms to ensure sustainability are in place and functioning, and all partners and stakeholders interviewed esteem that ICEIDA interventions will be sustainable in the long term.**

However, it should be said that ICEIDA has been working in Mangochi District for more than 10 years and is still very present and active in the communities in Mangochi District. Even though ICEIDA has phased out of TA Nankumba there are high prospects of ICEIDA coming back to the area. This present section will focus on the assessment of mechanisms and conditions put in place by ICEIDA to assure sustainability, rather than on sustainability itself.

4.E.1 Current functioning status of the program's outputs

The water project established a system to ensure monitoring of activities and achievements, through regular reports as well as the mid-term and final evaluations. Although these are not comprehensive especially the baseline report, they enable to draw a general picture on the current functioning status of the programs outputs. According to the results of the current evaluation, in November-December 2013, 100% of communities in the project's area have a water committee even though only 86.7% are active and have a fee collection system. The huge majority of the communities in the project area have a water point even though only 85.5% of the water points are working; going further it is only 73% in good working condition meaning the difference has some defects. The huge majority of households (88.4%) interviewed have a private latrine. These data show a **good functioning status of the programs outputs.**

Results observed are generally slightly better for "hard" outputs, and lower for "soft" outputs. A probable reason for this is that the soft outputs that are more linked to hygienic behaviors were used as bait for water supply thereby failing to address intended changes of behaviors of people. Impact of activities and effectiveness of sustainability mechanisms for hardware are stronger, however, concerning sensitization trainings and WASH practices, it

seems that with time community members tend to forget lessons learned and slide back to traditional behavior. This finding definitely provides a solid argument to advocate for longer life-span of projects which must include “refreshing” visits to “old” communities.

4.E.2 *Financial sustainability*

At the community level, in accordance with Governments guidelines and criteria, there are several mechanisms put in place to assure the financial sustainability of the project’s outputs, namely water points and sanitation facilities.

Concerning the water points, communities that wish to obtain a borehole need to contribute financially with an initial deposit which will be placed in a bank account opened and managed by the water committees. In Malawi it is expected that K15,000 be deposited in a bank account however with the ICEIDA project beneficiaries were expected to raise K3,000 which was later given back to communities in form of fast wearing spare parts. According to survey data, **operation and maintenance costs are being covered by water users in the majority of cases**. Overall, it seems that financial sustainability mechanisms work well as water committee members consider financial difficulties as a minor problem compared with technical difficulties. Almost 86.7% of households interviewed contribute a monthly mean of K225 towards operation and maintenance. The fact that 24.4% of the WPC keep updated records of contribution posed a risk as accountability and transparency might end up being a factor that would deter community members from contributing.

Concerning sanitation facilities, ICEIDA provided some households with ECOSAN type of latrines and some were provided with demonstrational latrines in order to motivate them to demand for latrines. ICEIDA provides free construction tools and expensive materials like iron and cement to the beneficiary households, and the households’ contribution is to find the local materials (sand and gravel), dig the pits and mould the bricks. Communities are then expected to replicate the latrines using their own ways of building latrines. **According to the survey data, the great majority of households in the project areas have a private latrine**, but of these, only about few are improved using models that were introduced by ICEIDA.

Out of the households who do not have improved latrines, about a third said the reason was “lack of financial means”. These are quite high numbers, although the majority of respondents said the problem was not financial (lack of materials, lack of capacity, others).

4.E.3 *Technical sustainability*

Concerning the water points, ICEIDA strategy to ensure technical sustainability consists of training water committee members in maintenance and repairing, providing them with hand pump tool kits, and establishing centers for spare parts. According to the projects’ tracking tables targets related to these activities were achieved. According to the results of the current evaluation, in November-December 2013, 100% of water committees interviewed confirmed to have received trainings and a maintenance tool kit however 95.4% of these WPCs were found to have adequate technical and administrative skills for operation and maintenance.

Concerning spare parts, three spare parts centers were established in Nkope, Malembo and Nankumba areas during the project implementation period. Information on these centers was passed on to WPCs during training sessions such that 84.8% were aware of existence of these centres, however only 2 of the 3 centres are working and only 43.3% of WPCs are able to access the spare parts. One of the reasons being that they are very expensive, double the price in Mangochi town. However, interviews with project staff revealed that the management of such centers constitutes a problem in terms of sustainability. Also, the supply chain for spare parts stocks from towns needs to be organized and reinforced, as well as the distribution chain from the center to communities (as it seems that repair artisans don't have a means of transport and find it hard to travel all the way to the center to fetch the spare parts).

Concerning sanitation facilities, ICEIDA strategy to ensure technical sustainability consists of training artisans in latrine construction and providing them with tools and materials. Training modules for artisans included moulding and laying of triangular shaped bricks for sandy soils substructure and training on construction of doom slabs. According to the projects' tracking tables, targets related to trainings of artisans were achieved. **Technical skills and availability of materials do not seem to be major problems for latrine construction.** It is suggested that ICEIDA staff keeps being regularly informed concerning national strategies concerning technical standards allowed or recommended for latrine construction, as these strategies tend to evolve rapidly. As it seems that quality of latrines vary from one community to another, a higher control over construction is required. Artisans could help to guarantee high technical standard and better monitor results in terms of access to sanitation.

Remaining challenges concern the need to accompany the beneficiaries for a few years after the project's interventions, to follow-up and ensure communities know how to maintain and repair water pumps, latrines and hand-washing facilities. In fact, most of the training were done either before, immediately or shortly after the provision of the infrastructure, at a moment most facilities are still working and most communities had not experienced technical problems, the probable reasons being that most pumps stay without problems for 3-5 years of installation. It would seem much relevant to conduct a second wave of trainings 1-2 years after, at a time when the community would probably have had the chance to encounter some challenges. In an environment where demographics are likely to change in search of better sources of income then it is imperative that community members also have some basic knowledge of operation and maintenance; during the month of November – December 2013 only 16% of community members had this knowledge otherwise it is only WPCs members who have the technical knowhow.

4.E.4 Institutional sustainability

At the community level: ICEIDA water projects have a strong focus on intervention at the community level. They include the empowerment of gender-balanced WPCs in the beneficiary communities in order to increase their management capacities. When a general question on who owns a water facility was posed almost 86% of respondents said they own the facility demonstrating a high sense of ownership of the facility. In trying to build strong WPCs, trainings were also extended to influential community members such as teachers, members of women associations, traditional leaders etc. and also include non-

formal education to increase literacy. Communities are eventually held responsible for their facility, ownership is encouraged and all necessary conditions are put in place to enable institutional sustainability at the community level. **ICEIDA is therefore putting a lot of efforts to ensure institutional sustainability at the community level.** However, the starting point of community capacities being very low, increasing efforts should be put especially concerning **improvements of literacy**. In addition, **cultural sustainability is very challenging especially concerning behavioural changes**: traditional practices such as open-air defecation or non-disposal of household waste are so deeply rooted in the culture that many years of repeated sensitization are needed for changes to become durable. Interviews and surveys conducted during the evaluation showed that initial trainings addressed to community members are not enough because **lessons learnt are easily forgotten** and regular “refreshing” workshops would be required for the initial promising results to endure over time.

At the district level: In theory, there is a favourable institutional context in Malawi to assure institutional sustainability of water and sanitation services in rural areas, as responsibilities are hugely decentralized. Tasks are being shared among water committees at the community level, and de-concentrated government services for technical support at the regional and district levels. **In Mangochi District other than many districts in Malawi capacities of all such institutions are strong, and all have adequate technical, human and financial resources to effectively carry out their responsibilities with assistance from ICEIDA.**

Allocation of funds is centrally driven and decentralized institutions do not have the means to steer their own agenda. Government’s annual allocations to local administrations rarely cover their financial needs and under-staffing and under-equipment are serious problems. Interviews conducted at the district level show that with respect to ICEIDA water projects, authorities find it easier to conduct the monitoring of infrastructures as resources were provided like motorbikes by ICEIDA. ICEIDA could consider continuing providing a support to the ministry at district and TA level to increase their capacities and enable them to better carry out the monitoring and in order to ensure a better institutional ownership and sustainability of the project’s outputs. This should be done in collaboration, coordination and complementarily with existing initiatives of other donors such as UNICEF.

4.E.5 Environmental sustainability

Environmental sustainability is a major issue in TA Nankumba. Deforestation, bush burning, and recurrent drought have led to desertification and soil erosion and are severely affecting agricultural activities.

Concerning the water projects’ environmental impact:

ICEIDA’s water projects do not have any negative environmental impacts. Concerning boreholes, the impact in terms of water resources abstraction is limited because of low yields and low consumption. Falling groundwater levels that have been observed are rather due to decreasing rainfall and not over-abstraction. Domestic water consumption, which is the main component of ICEIDA water projects, is not a major issue in terms of impact on water resources.

Due to limited industrial activities and scarce urbanization, anthropogenic pollution of water bodies and groundwater in rural areas is not a major issue. The only potential risks concern sanitation, as latrines may be a source of contamination if they are built too close to boreholes of other water sources, 92.4% of sanitation facilities were found to be well located at an acceptable distance from the water point. As part of ICEIDA interventions, latrine construction should therefore be promoted at a minimum distance from water sources and boreholes, which is usually the case.

Concerning the water projects' potential contribution to promote environmental sustainability:

As per the ICEIDA proposal, the project did not have any goal in line of environmental sustainability. This is evidenced by missing of water catchment protection activities in their project documents. ICEIDA could therefore consider including in its projects some environmental capacity-building component addressed to communities and public authorities in their further projects. The project is currently suffering diminishing yields at most of its water points for instance 39.8% of protected shallow wells and 43.6% of newly drilled boreholes are facing diminishing yields which is a big threat to such a huge investment.

5.0 CONCLUSION

« In June 2004, during a visit by an ICEIDA delegation to Monkey Bay Community Hospital, the Environmental Health Officer put forward an informal proposal for ICEIDA's consideration regarding possible support by the agency of the Water and Sanitation sector as a measure to reduce water and sanitation related disease »

The goal of the project was to improve health standards and an increase in the quality of life of the most vulnerable part of the population in TA Nankumba. The project's timing and impact has adequately changed lives and improved well being of many children, their families and communities in TA Nankumba where many lives were being lost due to consistent prevalence of cholera, burden of recurrent diarrhea diseases and many other water and sanitation related diseases. This project was "just in time".

This ICEIDA WatSan project was also designed to directly assist the Government of Malawi in its efforts to achieve the Millennium Development Goals more especially goal number 7 and target number 10 of halving people who do not have access to potable water and improved sanitation. This was also found to be relevant as it aligned the project to the Malawi Growth and Development Strategy. This project has adequately contributed to these overarching goals of not only government of Malawi but also the United Nations. As a development agency of the republic of Iceland it is very satisfying to see how the resources have by far enabled a geographical area of TA Nankumba in Mangochi achieve these goals thereby globally making TA Nankumba a case for further evaluation of what attaining MDGs mean to vulnerable and poor people of the developing countries more specifically Malawi.

In Africa and in particular Malawi traditionally women and girls carry the burden of collection of water and nursing sick people in homes and hospitals; the ICEIDA WatSan project has relieved this burden from numerous women and girls thereby allowing them time to rest, time to attend school, work on other household chores and engage in some economic activity in form of income generating activities thereby improving quality of their lives for the better.

By managing to achieve almost all set targets in the project ICEIDA has performed impressively, nevertheless shortfalls in behaviour change need be looked into with a different approach to enable projects like these have a lasting impact on its targeted beneficiaries.

In conclusion, ICEIDA WatSan project has achieved its goals and objectives and has consequently resulted in a positive evolution of the situation in TA Nankumba, Mangochi district for the better.

6.0 RECOMMENDATIONS

Overall, the evaluation found that ICEIDA WatSan project in TA Nankumba has produced very positive results and has achieved its objectives and its overall goal of improving the well-being of communities through increased access to sustainable water, sanitation, and hygiene (WASH) and complementary services. Analysis of project documents, interviews with key project staff and partners and data from the field survey enable to make a positive assessment of the project in terms of its impacts. There are however several significant elements which could be improved in order to increase relevance, effectiveness, efficiency, impact and sustainability. These mainly concern the need to: pursue efforts to accompany communities especially concerning pump maintenance and repairs, sanitation promotion and best hygiene practices, engage in stronger partnership with other sector stakeholders, improve capitalization of lessons learnt and sharing of best practices, clarify strategies and approaches, improve project integration, simplify tools to enhance smoother project implementation.

6.1 **Recommendations of the evaluation with respect to relevance:**

1. Re-assess specific needs at the community level on a regular basis, to better monitor changes in population and in water needs related to economic.
2. Increase efforts and develop innovative mechanisms to change behavior than just promote sanitation with subsidies as baits for receiving a water point at community level.
3. Pursue efforts to construct handicap-friendly latrines and water points for future project phases.
4. Consider to phase out period after the project ended to provide support to TA Nankumba especially on working on the already defunct or seasonal shallow wells.
5. Consider engaging all relevant government line ministries in project implementation to avoid losing some of the lasting benefits that could have been enjoyed had it been that all relevant ministries were fully involved and engaged.
6. Consider to phase out period after the project ended to provide support to TA Nankumba especially on working on the already defunct or seasonal shallow wells.
7. Consider engaging all relevant government line ministries in project implementation to avoid losing some of the lasting benefits that could have been enjoyed had it been that all relevant ministries were fully involved and engaged.
8. Conduct water quality tests to ascertain fitness of water for human consumption.
9. At district level advocate for increased budget for chlorine in areas where many shallow wells have been dug.
10. As a long-term objective, increase efforts to assure ecologically sustainable management of water.
11. Work on external communication to increase visibility especially towards public authorities at the national level.
12. Clearly defined ICEIDA water projects' implementation strategy will serve as a road-map for the implementation of activities in ICEIDA impact countries.

6.2 Recommendations of the evaluation with respect to Effectiveness:

Objective 1:

1. All defunct water points should be revisited.
2. ICEIDA should emphasize on the element of quality.

Objective 2:

3. Follow-up on the process of opening bank accounts for WASH committees and find solutions to easily access credit institutions for isolated communities.
4. Increase the number of communities equipped with tool kit and develop a strategy for the management of spare part centers. Establish effective networks for pump maintenance and repair
5. Follow up all area mechanics, conduct a refresher and introduce them to WPCs in their zones
6. Try to synchronize the “soft” and “hard” activities of the project in order to train WASH committees on pump management and maintenance once the pump has been installed.
7. Conduct water quality tests for all water points so to be well informed of the risks and treatment measures that need to be employed.
8. Continue encouraging communities to not only contribute the mandatory monthly fees but find innovative ways of fundraising for upgrading of system or capital cost recovery

Objective 3:

9. Consider including schools in all water and sanitation projects since it is easier to effect behavior change in children than adults and children can easily become change agents in their homes.
10. Re-think the strategy of sanitation promotion in order to encourage a higher rate of latrine replication by households.
11. Consider provision of gender-segregated latrines and hand-washing facilities to school.
12. Follow-up on hand-washing activities in schools and improve implementation schedule.
13. Re-think the strategy to promote the use of community dumps and safe waste disposal practices.
14. Increase the number of drama and radio messages broadcasted on WASH best practices.

Objective 4:

15. Follow-up on the process of opening bank accounts for WASH committees and find solutions to easily access credit institutions for isolated communities.
16. Increase the numbers of communities equipped with tool kit and develop a strategy for the management of spare part centers. Establish effective networks for pump maintenance and repair.
17. Follow up all area mechanics, conduct a refresher and introduce them to WPCs in their

- zones.
18. Try to synchronize the “soft” and “hard” activities of the project in order to train WASH committees on pump management and maintenance once the pump has been installed.
 19. Conduct water quality tests for all water points so to be well informed of the risks and treatment measures that need to be employed.
 20. Continue encouraging communities to not only contribute the mandatory monthly fees but find innovative ways of fundraising for upgrading of system or capital cost recovery.

Objective 5-None

Objective 6-None

Objective 7:

21. Encourage further occasions of dialogue with WASH actors such as UNICEF and improve ICEIDA’s involvement in sector-wide dialogue and advocacy, through regular stakeholders’ meetings.
22. Increase efforts to capitalize and share on best practices and experiences
23. Consider whether some more flexibility or derogations could be allowed in terms of budget procedures and decisions taken directly at the project level.

6.3 *Recommendations of the evaluation with respect to efficiency:*

1. On the basis of good results achieved, continue to promote increased access to improved water sources in TA Nankumba.
2. Put a stronger focus on maintenance mechanisms and especially follow-up on non functioning shallow wells and boreholes.
3. Keep promoting use of latrines to combat open defecation.
4. Develop a strategy to tackle the issue of household waste disposal and hand washing.
5. Caretakers should be encouraged to teach on how to safely dispose off children faeces.
6. Keep promoting sanitation and encouraging replication of household latrines.
7. Increase the chances of practicing hand-washing after defecation, encourage the provision of hand washing facilities near the latrines.
8. Keep up efforts to sensitize caretakers on the need to wash their hands at 5 critical moments.
9. Next WatSan project should emphasize behavior change and use design for behavior change approaches in order to have comprehensive behavior change programme.

6.4 *Recommendations of the evaluation with respect to impact:*

1. Keep up efforts to sensitize communities on oral-faecal transmission and hygiene best practices, particularly concerning diarrheal diseases whose incidence though small in numbers but are still prevalent in TA Nankumba.
2. Do not slow down efforts to sensitize communities on trachoma and Bilharzia disease.
3. Continue efforts to encourage gender-balance in water committees.
4. Increase trainings in reparations addressed to water committees.

5. Further investigate why non functionality of boreholes in the project area is still prevalent and take corrective measures to decrease their duration.
6. Continue efforts to sensitize communities on the need to contribute financially for O&M and repairs.

6.5 Recommendations of the evaluation with respect to sustainability:

1. Continue to monitor closely the status of past achievements to get feedback on the functioning of sustainability mechanisms.
2. Focus particularly on the activism of water committees and health clubs.
3. HSAs and CDAs should be empowered to continue monitoring water, sanitations and hygiene deliverables together with its health indicators by checking that households good sanitation and hygiene behaviours are reinforced.
4. Go back to old communities for “refreshing” visits and trainings.
5. Increase the life-span of projects to allow for a phase out period.
6. Keep sensitizing communities on the need to contribute financially.
7. Introduce innovative ways of raising funds for operation and maintenance even cost recovery
8. Increase efforts to promote sanitation (namely latrine replication).
9. Establish local responsibilities for the long-term management of spare parts centers.
10. Conduct further training of water committees in management.
11. Conduct a higher control over construction artisan’s to guarantee high technical standards.
12. Accompany the communities for a few years after the project’s interventions, to follow-up and ensure communities know how to maintain and repair WASH facilities on the long run.
13. If necessary, conduct a second wave of trainings 1-2 years after the first one.
14. Put extra efforts in increasing the literacy level of water committees.
15. Concerning behavioral change, focus particularly on sanitation and hygiene.
16. Conduct regular “refreshing” workshops to communities that already received initial trainings.
17. Consider to continue providing support to municipalities and WASH authorities especially for the monitoring component.
18. Increase the project’s focus on environmental sustainability in the long-term.
19. Improve interaction with other NGOs, stakeholders and public authorities working on sustainability and climate change issues.
20. The project need to include in its projects some environmental capacity-building component addressed to communities and public authorities in their further projects.

7.0 LESSONS LEARNED

The major lessons learned in the ICEIDA implemented WatSan project are:

1. Proper planning on phase-out period and strategy of the project between ICEIDA and government line ministries should be drawn out to ensure that gains are consolidated and continuity is maintained.
2. Integrated programming system especially with government line ministry ensures maximum benefit from all stakeholders.
3. Setting up a parallel water department for a development agency like ICEIDA undermines its role of facilitating projects than implementing projects
4. When area mechanic is not fully integrated and connected with WPCs in his territory he becomes isolated and obsolete.
5. Spare parts supply operators should be consistently monitored through water monitoring assistants to regulate on price and assure availability of spare parts stocks.
6. Behaviour change is a critical component of water and sanitation projects otherwise lasting benefits will never be realized.
7. Technical expertise in the construction of protected shallow wells ensures good performance of the water facility can avoid possible seasonal operation of the shallow wells.
8. Closer supervision and monitoring is required during implementation of project for quality control.
9. Implementation of WatSan projects based on geographical or administrative zone ensures effective and efficient delivery of outputs.
10. Water quality test should be considered as a requirement before the water facility is commissioned.
11. Empowerment of women in WatSan facility management ensures sustainability.
12. A detailed baseline survey based on relevant indicators with relevant counterfactuals (comparisons) is crucial for results monitoring and evaluation and, hence, efforts are required to collect such data prior to the commencement of the projects.
13. Proper planning prior to start of implementation pays off in terms of avoiding declining support from the government and the community.
14. Indigenous knowledge on utilities management should be properly developed for use on the WatSan facilities.

APPENDICES

APPENDIX 1: TERMS OF REFERENCE (ToRs)

Final Evaluation of the Water and Sanitation of ICEIDA and the District of Mangochi 2007-2010

ICE13090001



TOR for the invitation to consultants

September 2013

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Background

1.1 Overview of the project

Information from project summary

Country: **Malawi**
Project Title: **Water and Sanitation Project, Monkey Bay Health Zone**

Sector: **Water and Sanitation**
Project Period: **2007 to 31.12.2010, partly extended to 31.12.2011**
Sector - DAC:
Type of Aid:
The Partners: **ICEIDA and Government of Malawi**
Implementing Institutions: **Mangochi District Water Office and ICEIDA**
Total cost: **US\$ 3.453.060**
Donor: **ICEIDA**
ICEIDA contribution: **US\$ 3.453.060**
Government/partner contribution:
Target population: **120 000**

1.2 Links with ICEIDA's and Government strategy and plans.

This project was aligned with the Malawian Growth and Development Strategy (2007-2011) and in line with the development needs and plans of the District of Mangochi in Malawi. The project was approved by the Board of ICEIDA in line with the agency's willingness to engage in projects for improvements in social infrastructure in Malawi. At the time of initiation ICEIDA did not have a Country Strategy for Malawi, but the agency had a long standing experience in the country dating back to 1989, in, amongst other areas of development, social infrastructure.

The linkages with national development plans of Malawi were clearly established and with those of ICEIDA in general as well.

1.3 The project, history and current status

The background

The Project Document for WaSNan is the outcome of a number of events and the collaboration of different institutions and persons.

In June 2004, during a visit by an ICEIDA delegation to Monkey Bay Community Hospital, the Environmental Health Officer of Mangochi presented an informal proposal for ICEIDA's consideration regarding possible support by the agency of the Water and Sanitation sector as a measure to reduce waterborne diseases. This matter was discussed among members of the delegation and the ICEIDA staff members in Malawi. It was then decided that the suggestion be forwarded to the board of ICEIDA for consideration. ICEIDA Malawi submitted a memo to the General Director of ICEIDA where it was suggested that a survey should be conducted before ICEIDA made a decision to embark on such a project.

Between October and December 2004 an appraisal team was organized comprising a Consultant from ICEIDA and a Senior Assistant District Environmental Health Officer based in Monkey Bay. The results of the appraisal were presented to ICEIDA Board of Directors. After careful consideration of

the appraisal report and the recommendations therein the Board agreed to embark on a project on Water and Sanitation activities in the Monkey Bay Health Zone.

On October 12th 2005, Dr W.O.D Sangala, the then Principal Secretary of the Ministry of Health and Population confirmed the Ministry's support to the planned project. In December 2005, Africa-South Project Partners were hired as consultants to formulate this particular Project Document, based on the appraisal study document of December 2004, field analysis and a two day participatory workshop with the local partners. The consultancy was commissioned by the ICEIDA Country Director.

The consultant worked closely with numerous people, and the first skeleton draft was presented to the partners at national level who made significant contributions to his document.

The draft document was revised and elaborated further by ICEIDA Malawi together with representative from Ministry of Irrigation and Water Development.

Development Objective:

The overall objective of the Project was to assist the Government in its efforts to achieve the Millennium Development Goals, (herein referred to as "MDGs"), and its national development goal of economic growth as laid down in the Malawi Growth and Development Strategy, (herein referred to as "MGDS"), in order to ensure that water resources are well protected and managed as well as reducing water and sanitation related diseases in the Monkey Bay Health Zone. This project is expected to contribute to improved health standards and an increase in the quality of life of the most vulnerable part of the population.

Specific Objectives:

1. Increasing the number of functioning waterpoints in the Monkey Bay Health Zone;
2. Building capacity among staff at district level on Water and Sanitation and the communities on Community Maintenance of waterpoints and pumps by offering training;
3. Increasing knowledge and information about hygiene and sanitation among the target group of beneficiaries in communities;
4. Increasing numbers of shallow wells in the target area and improving shallow well protection;
5. Putting to good use two natural springs in Mvunguti Village before the end of 2007, and to build up well functioning Community Based Management system there;
6. Improving the Community Based Management of the various water resources by offering training courses for the target group;
7. Promoting networking and a functional coordination, monitoring and reporting system between stakeholders.

Expected Outputs:

In order to achieve the specific objectives the project was to deliver the following results:

1. Up to 100 new boreholes drilled and functional, 50 boreholes repaired and civil works on or around those areas done according to national standards by end of 2010.
2. Adequate and properly trained water point committees established and, qualified to maintain boreholes and pumps (committees capable of Community Based Maintenance and repair work).
3. Adequate and properly trained committees on hygiene and sanitation that can train and sensitize the target group.
4. Up to 300 shallow wells protected at household level on a self-help basis.

5. Two natural springs protected and improved for supply of safe drinking water on a community participatory basis.

6. Trained committees and leaders in Community Based Management.

7. A functioning system put in place regarding, “Planning, coordination, monitoring information sharing and reporting system” between stakeholders through DEC and District Assembly.

In 2009 a mid-term review was conducted by Charles Hocutt, consultant. He made observations about the project and made a handful of recommendations about its future, but overall he rated the project satisfactory.

In 2010 the staff of the project published a study on the sanitation part of the project which showed somewhat disappointing results regarding changed behaviour of beneficiaries in respect to hygiene.

In 2011 consultant Damien Delaplace did a report on the sanitation and hygiene part of the project while at the same time giving training in the said area to key staff. His remarks were positive in certain areas while also recommending monitoring of further developments in the communities. By the end of the project period, in the first half of 2011 the project staff delivered a final report.

1.4 Changes made to the program since the implementation start.

During implementation the focus shifted from the planned number of boreholes to an increased effort to rehabilitate waterpoints and the digging of a greater number of shallow wells – without compromising on the target number of effective waterpoints made.

The rationale was the following: Groundwater seemed to be more abundant and easily accessible than previously thought in a number of places, making the drilling of boreholes excessively costly in comparison to shallow wells that would fulfill the function of delivering safe water just as well. It materialized that the number of already prepared, but defunct waterpoints in the area due to lack of maintenance justified more effort in rehabilitation. This was more cost effective to provide water to communities. ICEIDA faced budget cutbacks during the project period and this put pressure on the management of the project to try to provide the planned number of waterpoints with less costly methods.

The steering committee of the project agreed to this change of plans in 2009.

By the end of 2010 the project was officially over but a few final tasks remained. The Project Manager of ICEIDA left his post and remaining staff was left to complete remaining work and facilitate the transfer of ICEIDA’s Monkey Bay water office and trained staff to the District Water Office (according to plans for future support to the District). Due to a host of complications (like the absence of a District Water Director) this transfer took longer than expected and was completed by mid 2012. During this transition period the following activities took place, based on already approved plans to expand: Completion of WasNan work, rehabilitation of the Water District Office, KAP survey of TA Chimwala for the scaling up of ICEIDA water and sanitation efforts and a complete mapping of water facilities in Mangochi, further training of field workers in sanitation sensitization by consultant Damien Delaplace, and the survey and report of Delaplace on sanitation results of WasNan in TA Nankumba (Monkey Bay Health Zone). By mid 2012 all water and sanitation support of ICEIDA had been directed to be managed by the District of Mangochi. This transition period reflected the desire of stakeholders to further develop cooperation in this sector in the future and has resulted in renewed interventions on a much grander scale in the District of Mangochi.

2 Evaluation Purpose

2.1 Rationale

The project document stipulates that a final evaluation will be done by the completion of the project, explaining that on the basis of the evaluation, the Contracting Parties will make a decision on whether to extend the Project period further or prepare the Project phase-out.

The project has been completed and a decision already taken to scale up water and sanitation support of ICEIDA to include the district of Mangochi as a whole. This decision is based on the mutual satisfaction of both partners about the WatSan project and on the Country Strategy of ICEIDA in Malawi, confirmed by the Ministry for Foreign Affairs in Iceland in 2012.

However, it is deemed prudent to satisfy evaluation needs according to the Project Document since the findings will in all probability provide lessons learned to the ongoing water and sanitation effort in Mangochi. In addition the evaluation report will assist ICEIDA in future endeavors in this area in other parts of Malawi and/or in other partners in Africa. The District of Mangochi and the relevant Ministry will also benefit from the lessons learned.

It is the intention of ICEIDA to conduct an impact assessment in a few years time in order to assess the sustainability of this project.

2.2 Use and value of the evaluation

The evaluation will provide input and lessons learned for the Government of Malawi to continue its work in the water and sanitation sector and if relevant, contribute to the growing pool of resources about improving water and sanitation programs. The evaluation will also provide input and lessons learned for ICEIDA in the ongoing Mangochi District Program. It is especially pertinent for both partners to see the result of sanitation efforts in combination to improvements in waterpoint construction and potential health benefits to the public at large. The District Health Office and the District Water Office will benefit directly since the evaluation is especially relevant to development plans in Mangochi.

2.3 Linkages with other processes

ICEIDA's support to the water and sanitation sector in Mangochi has been scaled up since 2012 and ICEIDA is now assisting the District Water Office in a number of ways. It is therefore highly relevant to conduct this study when this new program has just been launched.

1 Scope and focus of the evaluation

The scope of the external final evaluation is the entire project implementation period, from 2007 up to 2011. The evaluation shall cover, but not be limited to, the expected outputs of the project and the verifiable indicators as defined in the Project Document and the Project frameworks (log frame and results frame). The evaluators need to take into account amendments to the plan during implementation as reported in this TOR.

The main focus of the external final evaluation is to ascertain the outcome of the Project.

This implies evaluating the success of establishing the number of functioning waterpoints that was planned, and secondly, evaluating improvements in sanitation and hygiene associated with the project. Of importance is also to establish the likelihood of the project to be sustainable.

The overarching question of the evaluation is the following:

To what extent has the project assisted the Government to ensure that water resources are well protected and managed as well as reducing water and sanitation related diseases in the Monkey Bay Health Zone?

Answering this overarching question requires a response to the following questions, but not limited to this list only:

A. Achievement of development and specific objectives.

- 1) Did the project successfully complete the number of planned water points and are they functioning as such now when just over two years have passed since the closing of the project? (linked to objective 1, 4)
- 2) Are trained water point committees all operational and capable of delivering maintenance, keeping spare-parts and collect fees from beneficiaries to keep maintenance funds? (objective 2 and 6)
- 3) Have sanitary practices improved since the inception of the project in respective communities? (objective 3)
- 4) Is there quantifiable evidence of reduction of waterborne diseases in the project area in comparison to other comparable areas or in the same area prior to the project? (objective 3)
- 5) Is there evidence that the established water points will be sustained? (objective 2 and 5)
- 6) Is there evidence that improved hygiene practices will be sustained? (objective 3)

Objective 7 is addressed generally.

B. Sustainability, cross-cutting issues, and local ownership

- 7) What further action is needed, if any, in the project area in order to consolidate gains made by the project (assuming that improvements are measurable)?
- 8) How, and in what ways, has the project been gender sensitive and involved both genders as participants and beneficiaries?
- 9) What is level of local ownership over the project deliverables and expectations about the future of the water points, sanitation awareness and maintenance issues?

The report format provided by ICEIDA is precise and prescribes that the evaluators list lessons learned, how cross-cutting issues were addressed and what recommendations are made by the evaluators.

The external final evaluation report shall distinguish between findings at the different levels: inputs, activities, outputs, outcomes (and impacts to the extent this is possible).

2.4 Issues to be covered

- The evaluation should use standard OECD/DAC criteria (relevance, efficiency, effectiveness, sustainability and impact).
(<http://www.oecd.org/development/evaluation/dcdndep/44798177.pdf>)

The evaluation shall document, assess and analyze a project with reference to the following factors:

- **Relevance.** Examining relevance in to the context of:
 - Government of Malawi policy goals concerning the sector.
 - Cross-cutting issues related to environmental sustainability and gender equality as stated in Government of Malawi policies.
- **Efficiency.** Assessing the use of financial and human resources available to the Project. Of importance in this context is also to examine the coherence and complementarities between different government projects and programs, as well as coherence with other Icelandic and/or international development assistance programs in Mangochi.
- **Impact.** Analysis of positive and negative effects in communities, relating to all parties affected by the project as far as impact can be determined given the relatively short time since project completion.
- **Effectiveness.** Examining the extent to which the Project's objectives were achieved, taking into account their relative importance.
- **Sustainability.** Assessing if net benefits are likely to continue after the completion of the assistance. Sustainability of the institutions may be examined in terms of their absorption and retention capacity of the expertise developed under the Project.

2.5 Methodology

The evaluators shall describe in an Inception Report (template provided by ICEIDA) the initial outline of the overall evaluation approach and data collection methods proposed to answer the evaluation questions. This is to be developed further with the evaluation management of ICEIDA if needed.

2.6 Information sources for new data collection

The external final evaluation consultant(s) are expected to conduct interviews with all key personnel involved with the planning, implementing and monitoring & evaluation of the Project, including field work in Malwi focusing on beneficiaries of the project and deliverables (contacts made through ICEIDA and the District Office in Mangochi).

2.7 Methods: data collection, analysis, involvement of stakeholders

The final evaluation shall be conducted in accordance with the prevailing OECD DAC Quality Standards for Development Evaluation:

(<http://www.oecd.org/development/evaluation/dcdndep/36596604.pdf>)

The final evaluation shall use information documented in earlier reports and from key documents together with data collected in the final evaluation.

The final evaluation team shall make use of appropriate empirical methods such as interviews, focus groups, and data/literature surveys to collect data, which will be analyzed using well specified judgment criteria and suitably defined qualitative and quantitative indicators (including from the logframe).

2.7 Process results expected

The process shall allow for strengthening of common understanding and analysis among the different partners and stakeholders of the project

2.8 Involvement of key stakeholders

The evaluation team is to involve all major stakeholders of the project. This means staff of the District Water Office and The District Health Office (DEAHO), TA Nankuma as a chief of the communities, a reasonable sample of community leaders and Water committee members, Health Surveillance Assistants in the affected area, representatives of the Ministry of Water and Sanitation and key ICEIDA staff, including the- Project Manager, the Project Coordinator and chosen project staff. The two Country Directors of ICEIDA that were most involved in the planning and execution of the project are to be included.

2.9 Process and Deliverables

The overall flow and timeframe of the evaluation will eventually be a matter of agreement between the successful applicant and ICEIDA.

The final evaluation is expected to take place in 2013 and be completed by end of December at the latest. Within this timeframe ICEIDA is flexible.

Up to five qualified consultants registered in ICEIDA database are invited to submit separate bids for conducting the evaluation.

The consultancy can be conducted by one qualified consultant or a team of consultants who meet qualification standards.

The proposal for consultancy should list the following:

- 1) Number of consultants and CVs (if more than one) is undertaking the evaluation.
- 2) Total number of consultancy days expected for the evaluation.
- 3) A brief outline of methodology that is to be used and brief evaluation plan (based on this TOR draft). (Not more than 2-3 pages)
- 4) Total expected budget for the consultancy itemized for the proposed consultancy days and other cost within Malawi. (International travel if needed is separate)
- 5) Expected timeframe for the consultancy, including start and end dates.

Interested parties are invited to submit an evaluation proposal to ICEIDA.

The selection process of interested consultants who submit proposals will be based on the following criteria:

- Practical experience in water and sanitation programs in developing countries, with added value for experience in Malawi
- Academic background in the sector
- Experience in evaluations of development programs, with added value for evaluations in the water and sanitation sector in Africa
- Overall cost estimate including rates for consultancy days and travel cost within Malawi to Mangochi.

2.9 Deliverables of the evaluation consultancy and time schedule

When the consultancy has been contracted the following activities and deliverables are expected:

- ✓ Review of key documents for Inception report to be delivered to contractor.
- ✓ Delivery of Inception report
- ✓ Interviews and field work focusing on recipients and deliverables (in Malawi), as per planned method.
- ✓ Interviews with former project staff in Iceland, through teleconfering or otherwise.
- ✓ Preparation of first draft report, delivered to evaluation management
- ✓ Additional data collection
- ✓ Preparation of second draft report based on feedback and data collected, delivered to evaluation management
- ✓ Preparation of final report based on feedback.
- ✓ Final adjustments of the report if needed.

Outputs

- ✓ An Inception Report detailing the method and process of the evaluation for distribution to main partners.
- ✓ First draft report for distribution to main partners. Focus on establishing facts, preliminary results of fieldwork. This is brief in nature.
- ✓ Second draft report, including conclusion, lessons learned, structure based on template for Final Report.
- ✓ Final report, including an outline of how feedback was addressed (structure, facts, content, conclusion, lessons learned, recommendations, executive summary – a complete report according to template).
- ✓ Formal consultation with stakeholders.

All presentations and reports are to be submitted in electronic format in English and in accordance with the deadlines set in the agreed work plan.

The Partners, ICEIDA and Government of Malawi, retain the rights with respect to all distribution, dissemination and publication of the deliverables. ICEIDA is committed to publish all evaluation reports on its official website.

Time schedule: This will be a part of proposal made by consultants and a part of the final version of the TOR.

3.0 Management and Logistics

- The Evaluation management is by ICEIDA in close cooperation with the respective Ministry in Malawi.
- The cost of the Evaluation is covered by ICEIDA

Logistical issues related to staffing and working conditions are the following:

- ICEIDA ensures the availability and provision of services (local translators if needed, transportation **within TA Nankumba**, driver, but accommodation and meals is covered by consultants. ICEIDA pays per diem according to harmonized international donor agreement. All this does not have to be taken into account in the budget proposal for the consultancy with the exception of travel cost to Mangochi.
- ICEIDA will assist in ensuring support staff for arranging meetings.
- International transport (if applicable), visas and insurance is organized by consultants, ICEIDA reimburses cost for flight tickets on economy class, visa cost and vaccinations if needed. This does not have to be taken into account in the budget proposal.

The consultant reports directly to the evaluation manager, who receives and approves drafts
The consultants supply own personal laptops and stationary as needed for the work.

3.1 List of key documents included with this invitation for bids:

- Project Document
- Mid-Term Review Report
- Final report of project staff.
- Report on the sanitation part of the project by Damien Delaplace.

3.2 List of key contacts for the final evaluation:

ICEIDA:

Former Country Directors: Ms. Margret Einarsdottir and Mr. Stefan Jon Hafstein (by email or by phone if necessary).

Former Project Managers, Mr. Glumur Baldvinsson (by email or by phone if necessary).

Former Project Coordinator, Mr. Levi Soko on location in Mangochi, Malawi.

Former Staff members of WaSNan: Key Field workers and supervisors of WaSNan are currently members of the District Water Office staff and reachable in Mangochi, assistance provided by ICEIDA office in Mangochi.

Partner:

Ministry of Water and Sanitation and Irrigation

District Commissioner: District Water Office:

Beneficiaries:

TA Namkumba, community chief in Nankumba.

District Environment Health Officer, Mangochi

HSAs in Nankumba

Village chiefs in communities

Water Committee Members of benefitting communities, (with emphasis on equal gender distribution).

Household members in benefitting communities (with emphasis on equal gender distribution).

3.3 Evaluation team

The external final evaluation team will be comprised of agreed number of consultants who must have extensive experience of water and sanitation issues in Africa and over three years of experience working in the field, either managing water and sanitation programs/projects or evaluating development projects in Southern Africa. Experience of working and living in Malawi is an asset. The external final evaluation team shall be be fluent in English and able to work with translators on location if needed.

Member(s) of the external final evaluation team are expected to have between them the relevant academic qualifications and evaluation experience, and competencies:

1. Advanced university degree in a relevant discipline;
2. At least three years experience in development programming including evaluation experience in the sector ;
3. Relevant knowledge of the sector and exposure to interventions in the sector in sub-Sahara Africa;
4. Competencies: Facilitation skills, proven experience of writing reports and evaluations and be culturally literate.

3.4 Application process

ICEIDA has chosen a number of qualified candidates who are registered in its database and sent them invitation to do a bid for the evaluation by email. ICEIDA will manage the application process in consultation with the respective Ministry in Malawi and fund the evaluation.

The selection of the successful candidate will be based on the followin criteria (see also clause #6 in the TOR):

- 1) Working experience in water and sanitation projects,preferably in Malawi.
- 2) Academic qualifications.
- 3) Strength of the brief evaluation plan.
- 4) Cost of the consultancy.

Based on this ICEIDA will invite the successful candidate to contract the consultancy based on a final version of a TOR which will include the approved timeframe, budget and other practicalities.

APPENDIX 2: EVALUATION RESULTS MATRIX

Evaluation Question	Indicators	Indicator Definition or key indicator words definition	Evaluation Value	Baseline Value
Relevance				
1) How, and in what ways, has the project been gender and disability sensitive and involved both genders as participants and beneficiaries?	% of women in VHWCs or WPC	Proportion of women actively taking a leading role in managing water and sanitation facilities (50% or more representation)	88% Female = mean 4.47 Male = mean 3.42	Not Available
	% of women and disabled people in water point management committees	Proportional of marginalised and excluded groups taking an active role in management of water facilities	N/A- Narratively explained	Not Available
2) How did the then situation adequately substantiate the need for a water and sanitation project according to the government of Malawi policy goals concerning prioritization in the sector?	Evidence of situation that justified need for a water and sanitation project in TA Namkumba.	In relation to standards and the MDGs what was the situation like in comparison to the current period of evaluation	Water Source Before Project = 23% After Project = 85.5% Walking distance ≤ 30 min Before Project = 52% After Project = 68.2% Toilets Before Project = 85.7% After Project = 93.7% Cholera After Project = 0 cases Diarrhoea After Project = 186 cases	Water Source = 70.2% Toilets = 60.4% Cholera = 33,000 cases Diarrhoea = 268 cases
3) Is there evidence of consistency of program's strategy and activities with program's objectives	% of program's approaches, models and activities that were value adding	Which approaches were found to have contributed effectively to the project goals and	N/A- Narratively explained	Not Available

Evaluation Question	Indicators	Indicator Definition or key indicator words definition	Evaluation Value	Baseline Value
	and contributing to the project goals and objectives.	which ones did not?		
	% of grant reports readily available for inspection as per grant agreement	The extent at which the project adhered to the project contractual agreements	N/A- Narratively explained	Not Available
	% of available WEST quarterly field Monitoring visits ready for inspection	The extent at which stakeholders like government adhered to the project contractual agreements	N/A- Narratively explained	Not Available
4) Is there evidence of alignment with national policies, strategies and priorities?	Digression from National policies, strategies and priorities	Alignment or contribution to the MDGS or Country sector strategies.	N/A- Narratively explained	Not Available
5) Is there evidence that communities contributed towards construction of the facilities to demonstrate demand.	% of people who contributed towards construction of a water facility	Cash contribution towards construction of a water facility (<i>New BH or Rehab BH</i>)	Mean = MK225	Not Available
Effectiveness				
Did the project successfully complete the number of planned water points	% of completed actual water points deliverables against the planned water points	Variation between the actual and targeted water points	100%	Not Available
2) How many water points are functioning now when over two years have passed since the closing of the project? (linked to objective 1, 4)	# Of functioning but new boreholes used by the target group in the Monkey bay health Zone.	Functional means adequately providing water at all times. (In case of breakdowns then they are repaired within 24 hours)	93.6%	Not Available
	# Of functioning but maintained Boreholes.	Ditto but on boreholes that were not functional and now repaired/rehabilitated	100%	Not Available

Evaluation Question	Indicators	Indicator Definition or key indicator words definition	Evaluation Value	Baseline Value
	# of functioning shallow wells using variety of appropriate pumps in selected villages in Monkey Bay Health Zone by 2010 with well functioning WPC	Shallow wells were hand dug well, protected with concrete rings and fitted with and Afridev pump	82.2%	Not Available
	# of natural springs protection completed but functioning with well functioning management system	Springs are capped and protected, reticulated into a system to supply water to communities	1	Not Available
3) How many water point committees (WPC) were trained on operation and maintenance of their water system?	% of active WPCs with a clear responsibility in the villages for boreholes operation and maintenance	A water point committee is freely selected by the community itself and mandated by the community to be responsible for OM	CBM Training = 95.4% O&M plans = 79.5% Manuals & guidelines = 56.7% Keep repair records = 25.9%	Not Available
4) How many WPC stock spare-parts for emergency and routine preventive repairs.	% of active WPCs with a clear responsibility in the maintenance of water facility	A well trained WPC is ready for any emergency or problem by stocking fast wearing parts of the borehole	66.3%	Not Available
5) How many WPC are practicing water facility preventive maintenance measures?	% of active WPCs with a clear responsibility in the preventive maintenance of water point facility	A well trained WPC conducts preventive maintenance every six months of operation (a standard practice)	80.6%	Not Available
6) How many WPC are collecting fees from	% of water facilities with a fee	A well trained WPC has a fee collection system	Fee collection = 86.7%	Not Available

Evaluation Question	Indicators	Indicator Definition or key indicator words definition	Evaluation Value	Baseline Value
beneficiaries for maintenance funds? (objective 2 and 6)	collecting system.	i.e. standard fee/month, records of financial matters and a bank account	Bank account = 24%	
7) How many WPC have a system for management of water point user funds?	% of water facilities with active water point management committee with a fee collecting system.	Use fees for O&M only	88.3%	Not Available
8) How many communities have been declared Open Defecation Free (ODF) as per the government ODF strategy since the inception of the project (objective 3)	% of households with sanitary facilities (defecation)	Having a latrine at household level is an indicator of progress towards open defecation free environment	88.4%	60.4%
9) How many communities are adequately practicing good sanitary and hygiene practices?	% of households with sanitary facilities (non defecation)	Having all the hygiene sanitary facilities at a household level is an indicator of positive hygiene practice (At least three sanitary facilities)	59%	Drying line = 65.6% Refuse pit = 17.3% Dish rack = 54.9%
10) How many households are properly utilizing sanitary facilities for both defecation and non defecation?	% utilization of sanitary, bathroom, hand washing facilities		Bathroom = 91.3% HWF = 8.4%	Bathroom = 87.9% HWF = 33.5%
Efficiency				
1) Is there quantifiable evidence of reduction of waterborne diseases in the project area in comparison to other comparable areas or in the same area prior to the project? (objective 3)	% Reduction of people reported to hospital with dysentery, cholera (WASH related diseases)	Cholera, dysentery or diarrhoea are strong indicators of low utilisation of safe water for drinking and poor sanitation or hygiene behaviours	N/A- Narratively explained using DEHO HMIS data	Not Available
2) Are there evidence of coherence and complementarities between different government	Evidence of integration of the ICEIDA WatSan project with other	Apparent connection and economies of scale between different projects that ICEIDA did	N/A- Narratively explained	Not Available

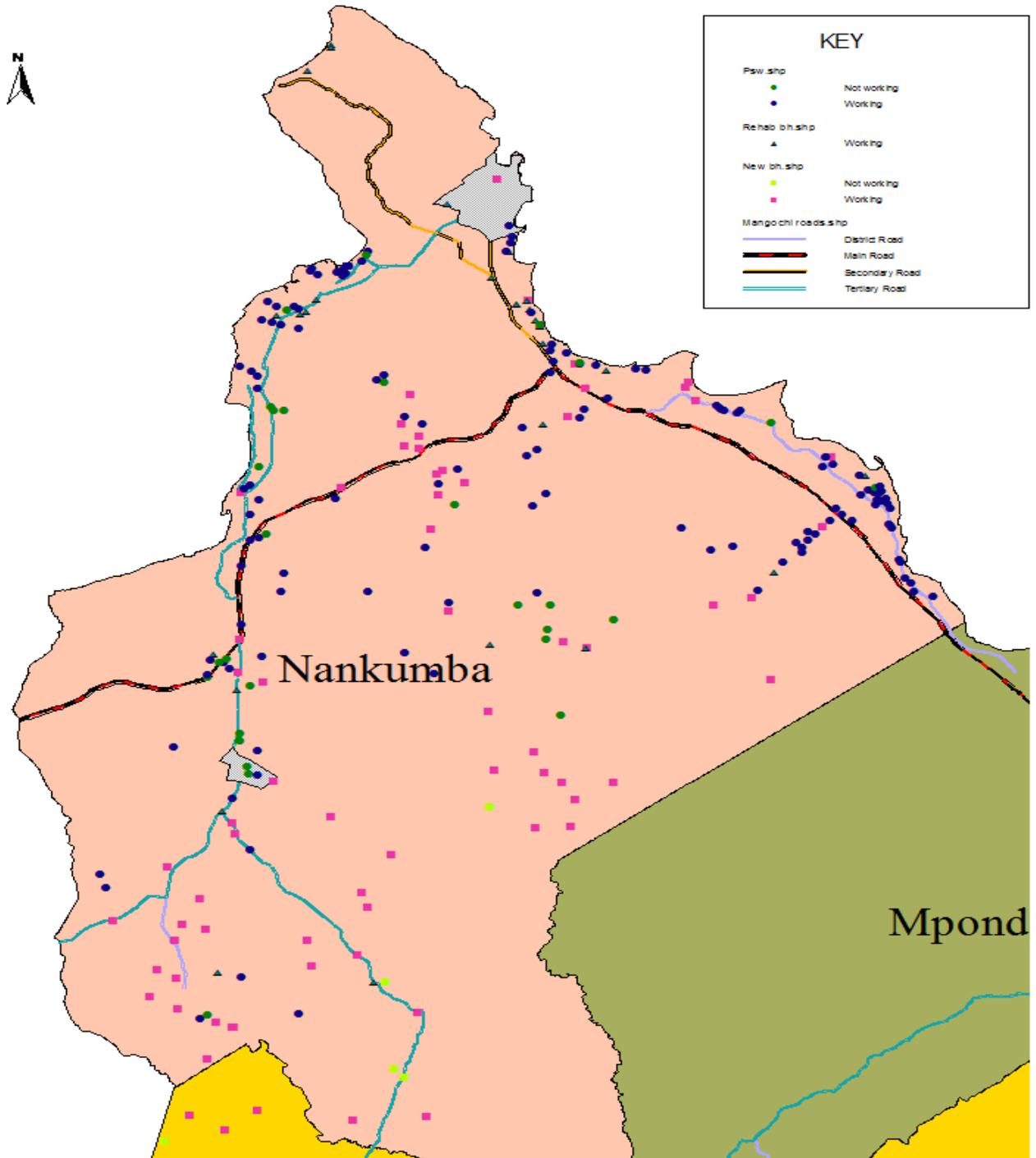
Evaluation Question	Indicators	Indicator Definition or key indicator words definition	Evaluation Value	Baseline Value
projects and programs, as well as coherence with other Icelandic and/or international development assistance programs in Mangochi.	projects in the area	in TA Namkumba e.g. Fisheries, Health and Education projects		
3) Is there evidence that aid was used in the least costly possible manner in order to achieve results?	Evidence of high levels of stewardship and accountability in handling project resources.	Demonstrable evidence of adequate controls in management of resources, accountability, checks and balances	N/A- Narratively explained	Not Available
Sustainability				
1) Is there evidence that the established water points will be sustained? (objective 2 and 5)	% of water facilities with active fee collecting system.	A well trained WPC has a fee collection system i.e. standard fee/month, records of financial matters and a bank account	86.7%	Not Available
	% of water points in a working status	Defined as functional water points	Working in good condition = 73% Working not in good condition = 12.5%	Not Available
	Evidence of updated Records for contribution of funds	Record keeping is evidence that the committee is active	24.4%	Not Available
	Records of sales at spare parts supply chain centres	Spare parts supply centres should have evidence of sales of parts	Aware = 84.8% Able to Access = 43.3%	Not Available
	% of spare parts supply chain centres in a working condition	Spare parts Supply centres should have a adequate spare parts	67%	Not Available
	% of water point management committees who still have adequate technical and	Adequate technical and administrative skills encompass financial management skills, operation and	95.4%	Not Available

Evaluation Question	Indicators	Indicator Definition or key indicator words definition	Evaluation Value	Baseline Value
	administrative skills of managing a water facility	maintenance, fundraising skills etc		
2) Is there evidence that improved hygiene practices will be sustained? (objective 3)	% of households practicing open defecation	Open defecation status is when members of the community are still relieving themselves in the bush	11.6%	39.6%
	% of communities declared open defecation free	Open defecation free status is when members of the community no longer shit in the bush.	88.4%	60.4%
3) What is level of local ownership over the project deliverables and expectations about the future of the water points, sanitation awareness and maintenance issues?	% of households who contribute towards operation and maintenance of water facilities	Regular monthly contribution towards operation and maintenance is an indicator of ownership of the facility	86.7%	Not Available
4) Are the programs outputs currently in a functioning status	% of water points in a working status	As defined under functionality-facilities that are seasonal are defined are partially functional facilities	85.5%	Not Available
5) Is there evidence of communities efforts in raising funds for operation and maintenance or capital cost recovery	% of households who contribute towards operation and maintenance of water facilities	As defined above	86.7%	Not Available
6) On sanitation is there in existence an enabling environment for scaling up of a san plat project after ICEIDA closure of project	Evidence of community members replicating construction of improved sanitation facilities on their own.	Ability to mould bricks and construct ECOSAN latrines or ability to mould doom slabs for installation on latrines	N/A- Narratively explained	Not Available
7) Do the end users have enough technical and administrative skills to	% of water point management committees who	Adequate technical and administrative skills encompass financial	16%	Not Available

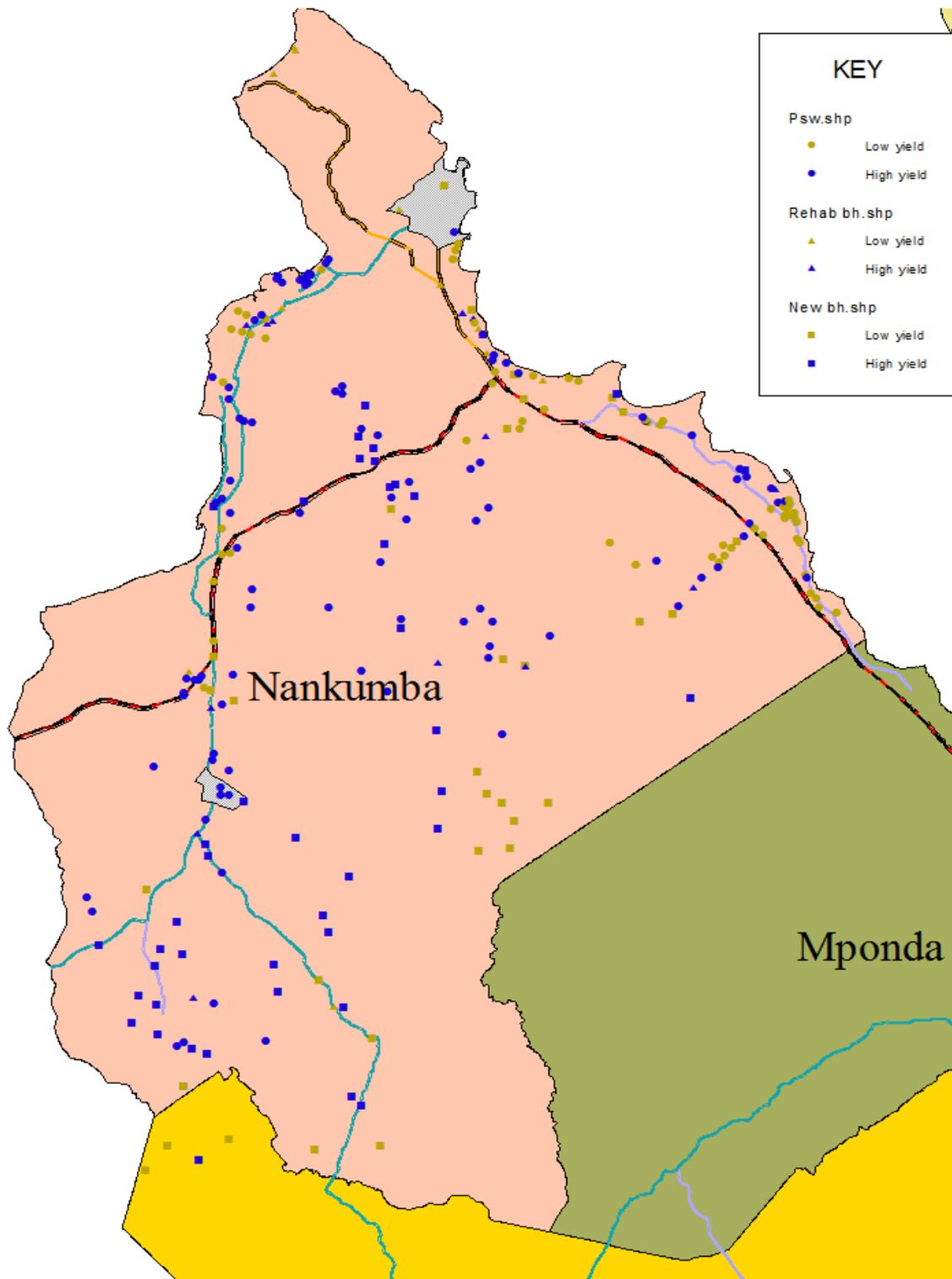
Evaluation Question	Indicators	Indicator Definition or key indicator words definition	Evaluation Value	Baseline Value
operate and maintain a water facility	still have adequate technical and administrative skills of managing a water facility	management skills, operation and maintenance, fundraising skills etc		
Impact				
1) What further action is needed, if any, in the project area in order to consolidate gains made by the project (assuming that improvements are measurable)?	% of water points with diminishing yields	All water points that are seasonal or are no longer providing adequate water to users are an indicator of diminishing yields	PSW = 38.9% BH (New) = 43.6% BH (Rehab) = 46.4%	Not Available
2) Is there evidence of positive or negative impact of the project on the environment for instance are low yield due to decreasing rainfall or over-abstraction?	% of water catchments that have been protected	Protected catchments have a regularised system of management that encourage activities that would recharge aquifers thereby sustaining water levels in the catchment.	N/A- Narratively explained	Not Available
3) Were sanitation facilities properly constructed at a recommended distance from the water source?	% of sanitation facilities constructed within acceptable distance from a water point.	Latrines are recommended to be constructed not less than 50m upstream and not less than 30m downstream from a water point	92.4%	Not Available

APPENDIX 3: GIS WATER POINT RESULTS MAP

TA NANKUMBA (SHOWING WATER FACILITY FUNCTIONALITY)



WATER POINTS PERFORMANCE (CURRENT YIELDS)



APPENDIX 4: EVALUATION ACTIVITIES AND TIME FRAME

ICEIDA FINAL EVALUATION Total 53days Thu 11/14/13 Mon 1/6/14 (Including Christmas and New Year Vacation)	Contract award and signing 1day Start Thu 11/14/13 Finish Thu 11/14/13	Work plan agreement-dates and timing 1day Start Wed 11/20/13 Finish Wed 11/20/13	"Inception Report: Workplan finalisation, Evaluation matrix, Sampling framework, Tools plus stakeholders workshop materials preparations etc" 5days Start Fri 11/15/13 Finish Tue 11/19/13
Inception report submitted Mile stone Tue 11/19/13 Tue 11/19/13	Approval of Inception Report 1day Start Thu 11/21/13 Finish Thu 11/21/13	ICEIDA send invitation letters to all stakeholders and give copy to Consultant 1day Start Wed 11/20/13 Finish Wed 11/20/13	Travel to Mangochi 1day Start Sun 11/24/13 Finish Sun 11/24/13
Stakeholders workshop 1day Start Mon 11/25/13 Finish Mon 11/25/13	Review of tools in consideration of stakeholders feedback 1day Start Tue 11/26/13 Finish Tue 11/26/13	Enumerators training 3days Start Wed 11/27/13 Finish Fri 11/29/13	Pretesting of tools and review of tools 1day Start Sat 11/30/13 Finish Sat 11/30/13
"Data Collection quantitative- Households, water point checks" 5days Start Sun 12/1/13 Finish Thu 12/5/13	"Data Collection qualitative- FDGs, Key Informants Interviews" 3days Start Mon 12/2/13 Finish Wed 12/4/13	Data Entry 4days Start Fri 12/6/13 Finish Mon 12/9/13	Data Cleaning and preliminary analysis 2days Start Tue 12/10/13 Finish Wed 12/11/13
ICEIDA prepares stakeholders for a validation and feedback meeting 1day Start Thu 12/12/13 Finish Thu 12/12/13	Travel to Mangochi 1day Start Thu 12/12/13 Finish Thu 12/12/13	Validation meeting-feedback prior to report writing 1day Start Thu 12/12/13 Finish Thu 12/12/13	Report writing-finalising 1 st Draft 1day Start Fri 12/13/13 Finish Fri 12/13/13
First Draft Submission Milestone Start Sa 12/14/13 Finish Sa 12/14/13	Compiling second draft 2days Start Tue 12/17/13 Finish Wed 12/18/13	Second Draft Submission Milestone Start Wed 12/18/13 Finish Wed 12/18/13	Edits to second draft 5days Start Fri 12/20/13 Finish Tue 12/24/13
Festive Shutdown 8days Start Wed 12/25/13 Finish Wed 1/1/14	Cleaning and finalisation of final report 4days Start Thu 1/2/14 Finish Mon 1/6/14	Final Report Submission Milestone Mon 1/6/14 Mon 1/6/14	

Colour Legend:

Total Project Period		Process Activities		Milestones		Off work season
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APPENDIX 5: LIST OF PEOPEL INTERVIEWED

Date	Organization		Name & SURNAME	Function	Place
25 Nov 2013	District Council	1	Bester Mandere	District Commissioner	Mangochi
25 Nov 2013	MoH	2	Ingelesi Maunde	SHSA	Mangochi
25 Nov 2013	MoIWD	3	Harold Pondeponde	Former Water Officer	Mangochi
25 Nov 2013	District Council	4	Geoffrey Chilenga	District Monitoring and Evaluation Officer	Mangochi
25 Nov 2013	MoIWD	5	Geoffrey Perekamoyo	Water Officer	Mangochi
25 Nov 2013	District Council	6	TA Nankumba	Chief	Mangochi
25 Nov 2013	MoIWD	7	Jonas Salim	Water Officer	Mangochi
25 Nov 2013	MoCD	8	Micheal Mwenifumbo	ACDO	Mangochi
25 Nov 2013	MoH	9	Lawrence Majeza	SHSA	Mangochi
25 Nov 2013	ICEIDA	10	Levi Soko	P/Coordinator	Mangochi
25 Nov 2013	ICEIDA	11	Mphatso Sokosa	P/Accountant	Mangochi
25 Nov 2013	MoH	12	Zacheus Solomoni	AEHO	Mangochi
25 Nov 2013	MoH	13	Kondwani Mamba	DEHO	Mangochi
25 Nov 2013	PBM Consultants	14	George Makumngwa	Water Engineer	Mangochi
25 Nov 2013	PBM Consultants	15	Chris Banda	Social Scientist	Mangochi
5 Dec 2013	MoIWD	16	Prince Mleta	Deputy Director of Water-Ministry Headquarters	Lilongwe
13 Dec 2013	ICEIDA ²	17	Stefan Hafstein	Former Country Director	Mangochi

FOUCS GROUP DISCUSSION AT NANKUMBA HEALTH CENTRE					
2 Dec 2013	GVH Chimphepo	18	Fillimoni	Chief	Mangochi
2 Dec 2013	GVH Dzonzo	19	Anastazio Chamba	Chief	Mangochi
2 Dec 2013	Church	20	Elliot Chafuka	Pastor	Mangochi
2 Dec 2013	MoEST	21	Joyce L. Bai	Deputy Teacher	Mangochi
2 Dec 2013	MoEST	22	Susan Sawira	Teacher	Mangochi
2 Dec 2013	MoH	23	Francis Smart	HSA	Mangochi
2 Dec 2013	MoH	24	Ingeles Maunde	SHSA	Mangochi
2 Dec 2013	MoH	25	Clement Masoambeta	Medical Assistant	Mangochi

FOCUS GROUP DISCUSSION AT NKOPE HEALTH CENTRE					
1 Dec 2013	GVH Chiwalo	26	Samson Nawoza	Chief	Mangochi

² The Consulting failed to have responses from former Project Manager, Mr. Glumur Baldvinsson despite several email attempts, nevertheless the consultant managed to interview Mr Levi Soko and Mr Polepole who were equally instrumental in delivery of the project.

1 Dec 2013	Anglican Church	27	Rev Fr. Tito H. Lezile	Reverend Father	Mangochi
1 Dec 2013	Community	28	Paul Katema	Chief	Mangochi
1 Dec 2013	MoEST	29	Babra Mtepuka	Head Teacher	Mangochi
1 Dec 2013	Community	30	Nelson Majawo	Volunteer	Mangochi
1 Dec 2013	MoH	31	Leonard Kaliza	HSA	Mangochi
1 Dec 2013	MoH	32	Stoward Kapandawako	SHSA	Mangochi

FOCUS GROUP DISCUSSION AT MALEMBO HEALTH CENTRE					
30 Nov 2013	GVH Matekwe	33	Matekwe	Chief	Mangochi
30 Nov 2013	GVH Katole	34	Katole	Chief	Mangochi
30 Nov 2013	MoH	35	Ishmail Tembetani	SHSA	Mangochi
30 Nov 2013	MoEST	36	Peter Chikwamba	HSA	Mangochi
30 Nov 2013	MoEST	37	B Kabuthu	Teacher	Mangochi
30 Nov 2013	MoH	38	K Faustini	Health Centre In charge	Mangochi
30 Nov 2013	MoEST	38	R Muhanya	Teacher	Mangochi
30 Nov 2013	Church	39	JE Chimoyo	Church Elder	Mangochi
30 Nov 2013	Moslem	40	Salesi Banda	Elder	Mangochi

FOCUS GROUP DISCUSSION AT NANKWALI HEALTH CENTRE					
30 Nov 2013	Community	41	L Gwaza	Volunteer	Mangochi
30 Nov 2013	GVH Kasankha	42	Harry Zumali	Chief	Mangochi
30 Nov 2013	GVH Kabeti	43	Kabeti	Chief	Mangochi
30 Nov 2013	GVH Kamphande	44	Kamphande	Chief	Mangochi
30 Nov 2013	MoH	45	Lwarence Majeza	SHSA	Mangochi
30 Nov 2013	MoH	46	Mary Kasuka	Nurse	Mangochi
30 Nov 2013	MoH	47	Humphrey Jumusi	Accountant	Mangochi
30 Nov 2013	Church	48	Matthews Mchaku	Catechist	Mangochi

FOCUS GROUP DISCUSSION AT MONKEYBAY HEALTH CENTRE					
29 Nov 2013	MoEST	49	Christopher Wengawenga	Teacher	Mangochi
29 Nov 2013	MoEST	50	S. John	Teacher	Mangochi
29 Nov 2013	Moslem Community	51	Yusufu Sitola	Elder	Mangochi
29 Nov 2013	Church	52	Micheal Dingi	St Louis-elder	Mangochi
29 Nov 2013	GVH Jongo	53	Jongo	Chief	Mangochi
29 Nov 2013	MoH	54	Rodgers Wengawenga	HSA	Mangochi
29 Nov 2013	GVH Msumbi	55	Msumbi	Chief	Mangochi
29 Nov 2013	MoH	56	Zacheus Solomoni	AEHO	Mangochi

APPENDIX 6: QUESTIONNAIRES

EVALUATION FOR ICEIDA WATER AND SANITAION PROJECT HOUSEHOLD QUESTIONNAIRE

HOUSEHOLD IDENTIFICATION AND INTERVIEW SUMMARY	
District name: MANGOCHI	
Traditional Authority name: _____	
Group Village Headman name: _____	
Village name: _____	
Water Point Number _____	
Name of respondent: _____	Sex: _____ (Male / Female)
Date of interview: _____	__ __ __ __ _1_ _3_
Enumerator (Name) _____	CODE: __ __ (See code list)
Is questionnaire complete? Yes __ No __	
Name of supervisor: _____ __ __	Date checked __ __ __ __ _1_ _3_ D D M M Y Y
Supervisor's Signature: _____	
Data entry clerk: _____	CODE __ Date of data entry __ __ __ __ _1_ _3_

COMPLETE THE QUESTIONNAIRE WITH A MEMBER RESPONSIBLE FOR HH DECISIONS

INTRODUCTION

Hello, Good morning/afternoon. My name is.....I am working for **ICEIDA**. I have come to your house today because your household has been randomly chosen to participate in a survey. We are trying to learn more about how **ICEIDA** are doing with the Water and Sanitation program. I would like to talk to you about the people living in this household, your involvement with **ICEADA Programs**, how you are doing the water and sanitation issues. The information collected from you will be combined with information collected from others like you, and we will not disclose your name and what you have told us. If you can answer our questions as honestly as possible it will help in the future development of this community. You should not hesitate to say you do not understand a question, or do not know the answer. It takes about 30 minutes. Would you be willing to talk to me? Thank you.

DID THE RESPONDENT CONSENT TO PARTICIPATE? Yes |__| No |__|

ACCESS TO WATER

#	QUESTION	RESPONSE CODES	SKIP
100a	<p>What are the different sources of drinking water that your Household uses before the project?</p> <p>Kodi ntchito yamadzi ndi ukhondo zisanabwere madzi okumwa pa khomo lino mumakatunga kuti?</p> <p>PROBE: Any other? Any other?</p> <p>MULTIPLE RESPONSE POSSIBLE</p>	Private Tap 1 Neighbors Tap 2 Community dug well 3 Community stand post..... 4 Spring water 5 River/Steam 6 From the lake.....7 Protected Well.....8 Other (SPECIFY) _____ ... 9	
100b	<p>What are the different sources of drinking water that your Household uses after the project?</p> <p>PROBE: Any other? Any other?</p> <p>MULTIPLE RESPONSE POSSIBLE</p>	Private Tap 1 Neighbors Tap 2 Community dug well 3 Community stand post..... 4 Spring water 5 River/Steam 6 From the lake.....7 Protected Well.....8 Other (SPECIFY) _____ 9	
101a	<p>Before the project, is the water your Household uses enough for your household?</p>	Mostly enough 1 Sometimes enough 2 Sometimes not enough..... 3 Mostly not enough..... 4 Dk 88	
101b	<p>After the project, is the water your Household uses enough for your household?</p>	Mostly enough 1 Sometimes enough 2 Sometimes not enough..... 3 Mostly not enough..... 4 Dk 88	
102a	<p>Before the project, what is your opinion about the water quality from the main source of drinking water?</p>	Very Good 1 Good..... 2 Not good, not bad 3 Bad 4 Very bad 5 Dk.....88	2⇒ 120

#	QUESTION	RESPONSE CODES	SKIP
102b	After the project , what is your opinion about the water quality from the main source of drinking water?	Very Good 1 Good..... 2 Not good, not bad 3 Bad 4 Very bad 5 Dk.....88	
103a	Does your household treat your drinking water in any way to make it safer to drink Before the Project ?	Always 1 Often 2 Sometimes 3 Never.....4 Dk.....88	
103b	Does your household treat your drinking water in any way to make it safer to drink After the Project ?	Always 1 Often 2 Sometimes 3 Never.....4 Dk.....88	
104a	What do you usually do to the water to make it safer to drink? BEFORE PROJECT Kodi Ntchito ya madzi ndi ukhondo isanabwele mukakatunga madzi okumwa musanayambe kuwagwiritsa ntchito mumawatani?	Boiling..... 1 Chlorination..... 2 Filter 3 Cover it.....4 Nothing.....5	
104b	What do you usually do to the water to make it safer to drink? AFTER PROJECT Kodi Ntchito ya madzi ndi ukhondo itatha mukakatunga madzi okumwa mumawatani?	Boiling..... 1 Chlorination..... 2 Filter 3 Cover it.....4 Nothing.....5	
105a	Before project , how much time did your family spend to collect water for drinking and other purposes?	Less than 15 min 1 15-30 min 2 30 – 60 min..... 3 More than 60 min.....4 No change in time.....5	
105b	After project , how much time did your family spend to collect water for drinking and other purposes?	Less than 15 min 1 15-30 min 2 30 – 60 min..... 3 More than 60 min.....4 No change in time.....5	
106	If your Household spends less time collecting water since the project, how does your Household spend the time that is saved in collecting water? <i>Ngati mumaononga nthawi yochepa kokatunga madzi nthawi inayo mukhala mukutani?</i>	Other HH chores 1 Family tasks 2 IGA (Weaving, poultry etc)..... 3 School/study.....4 Nothing.....5	

#	QUESTION	RESPONSE CODES	SKIP
107	How much water does your Household use compared to before the project? <i>Kodi ndi madzi ochuluka bwanji amene nyumba ino imagwilitsa nchito poyerekeza ndi nthawi yomwe pulojekiti isanabwere?</i>	Much more.....1 Little more.....2 The same..... 3 Little less 4 Much more..... 5 Dk 88	
108	Is the water available everyday of the year? <i>Kodi kumene mumakatungako madzi amapezeka tsiku lililonse?</i>	Yes1 No.....0	
109	How many hours a day is water available at the water point for your household? <i>Kodi madzi amenewa amakhala alipo kwa maola angati patsiku?</i>	1 – 3 hrs.....1 3 – 6 hrs.....2 24 hrs.....3 Every alternate days.....4 Cant remember.....5	
110	Do you think other households get more water than your household? <i>Kodi mukunganiza kuti anthu ena amatunga madzi ochuluka kuposa mmene inu mumatungira?</i>	Yes, they get more1 No, it is equal2 Our Household gets more.....3 Dk.....4	
111	Are there any problems by sharing the same water source? (Borehole, Tap etc) <i>Kodi palibvuto lina lililonse mukamatunga limodzi madzi ndi anzanu?</i>	No0 Yes, I have to wait on the line1 Yes, I don't get enough water.....2 Conflicts.....3	
112	Does your Household pay/contribute any fee for operation and maintenance of the water supply system? <i>Kodi khomo lino limapereka ndalama ina iliyonse yokhonzetsera njingo?</i>	Yes1 No.....0	
113	What is your opinion about the fee for operation and maintenance of the water supply system? <i>Kodi ndalama zimene mumapeleka mukuziona bwanji?</i>	1 – Very high 4 - Low 2 – High 5 – Very low 3 – Fair 6 - Dk	
114	I would like to know how satisfied you are with the water services that were brought by the project	1 – Very satisfied 2 – Satisfied 3 – Not satisfied 4 - Very unsatisfied	

1. ENVIRONMENTAL SANITATION (Access and technology choice)

115	Do you have a toilet at your home? <i>Kodi pabanja pano muli ndi chimbudzi?</i>	Yes1 No.....0	0⇒ 117
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#	QUESTION	RESPONSE CODES	SKIP
116	<p>What kind of toilet facility do most members of your household usually use?</p> <p>[OBSERVE AND RECORD]</p> <p>Mumagwiritsa ntchito chimbudzi cha mtundu wanji pa banja lino?</p>	ECOSAN 1 Pit latrine 2 Flush toilet..... 3 Field/bush 4 Attached to biogas.....5 Other (SPECIFY _____)6	
117	<p>What is the main reason for not building your own toilet?</p>	A forest/river is nearby 1 Lack of space 2 Too lazy 3 Too expensive 4 Attached to biogas.....5	
118a	<p>Where did your Household go for toilet before the project?</p> <p><i>Kodi pachiyambi banja lino mumakazithandizira kuti?</i></p>	Private toilet..... 1 Shared toilet with neigh..... 2 Community toilet 3 Field/bush 4	
118b	<p>Where did your Household go for toilet after the project?</p> <p><i>Kodi pa banja lino mumakazithandizira kuti?</i></p>	Private toilet..... 1 Shared toilet with neigh..... 2 Community toilet 3 Field/bush 4	
119	<p>Who suggested to you to build the toilet?</p> <p><i>Kodi amene anakupangitsani kuti mumange chimbudzi ndi ndani?</i></p>	It is my own vision.....1 I saw one at my neighbour.....2 EW suggested it.....3 Local leaders.....4	
120a	<p>Are you facing any problem with your toilet?</p> <p><i>Kodi mukukumana ndi bvuto lina lililonse yokhudzana ndi chimbudzi chimenechi?</i></p>	Yes1 No0	0⇒ 122
121b	<p>Mentioned the problems you are facing</p> <p><i>Ndimabvuto anji amene mukukumana nawo pa chimbudzi chimenechi?</i></p>	Drainage problem1 It gets filed too soon2 It smells.....3 Toilet needs repair.....4 It falls down easily.....5	
122	<p>What options for toilet were presented by ICEIDA before constructing one?</p>	No, only 1 option was discussed .1 ECOSAN2 Pit latrine.....3 Pit latrine attached to biogas.....4 Flush toilet.....5 Community septic tank.....6 Dk.....88	

#	QUESTION	RESPONSE CODES	SKIP
123a	Did you receive any subsidy from the project? <i>Munalandilapo chithandizo china chilinse kuchokera ku pulojeketi?</i>	Yes1 No0	0⇒ Skip Q123b
123b	If you received any subsidy what was it? <i>Nanga ndi thandizo lanji limene munalandira?</i>	In cash1 Construction materials.....2	
2. SOLID WASTE AND GREY WATER MANAGEMENT, SANITATION			
124	Where do you dispose the organic waste <i>Kodi zinyalala zaku khitchini mumataya kuti?</i>	Dispose it in the garden1 Dispose it in the road2 Give it to the animals.....3 Dispose it in the pit.....4	
125	Where do you throw the inorganic waste such as plastics, glass? <i>Kodi zinyalala zanu monga mapulasitiki mumakataya kuti?</i>	Burn it.....1 Dispose it in the river2 Dispose it in the communal.....3	
126	I would like to now how satisfied you are with the sanitation services that were brought by the project?	Very satisfied.....1 Satisfied.....2 Not satisfied.....3 Dk.....88	
127	During the project did you or any member of your family participated in any healthy and hygiene activities?	Yes1 No0	0⇒ 129
128	How satisfied are you with the information provided on health and hygiene by ICEIDA?	Very satisfied.....1 Satisfied2 Not satisfied.....3	
129	Do you know any sanitation activities currently going on in your community?	Yes1 No0	
130	What should be done to improve the sanitation situation in your communities?	Increase awareness programs1 Increase number of toilets2 Introduce proper waste mgt S.....3 Make proper rules and regulations...4 No idea.....5	
3. HEALTHY AND HYGIENE			
131	Has there been any change in the general health of your family since the project?	Much better health1 Little better health2 Not better, not worse3 Little worse health4 Much worse health.....5 Dk.....88	
132	Is the toilet clean? (Make observations)	Yes1 No0	

#	QUESTION	RESPONSE CODES	SKIP
133	Do you have a hand-washing facility outside the toilet? Kodi muli ndi chipangizo chosambira mmanja kunja kwa chimbudzi? ASK PERMISSION & OBSERVE THE FACILITY	Seen the facility filled with water.....1 Seen the facility but no water.....2 Not seen3 No facility4	
134	What material was used to construct the entire toilet? (Make observations)	1 Pan, 2 Pipe, 3 Cement, 4 Brick, 5 Wood, 6 Bamboo, 7 Plastic, 8 Clay, 9 Mud, 10 Sand, 11 Gravel, 12 Stones, 13 Iron rod	
135a	Do you think putting on slippers/shoes before you enter in the toilet is necessary?	1 Yes 0 No 88 Dk	
135b	If yes, then why? Ngati mumabvala silipasi nchifukwa chiyani?	1 To protect from dirt and germs 2 To prevent diseases 88 Dk	
136	At what times do you wash your hands? (If the answer is 3 ASK Q137)	Before having food.....1 After having food2 After defecation.....3 After contact wastages.....4 After attending baby.....5	
137	If the answer is after defecation, what do you wash your hands with?	Water only.....1 Soap and water2 Ash and water.....3 With clay.....4	
139	Where do you take your baby/child for defecation?	In plain land.....1 In the toilet.....2 Drop excreta into toilet.....3	
140	Does your household have a special place for hand washing? Kodi banja lino lili ndi malo omwe anakhazikitsidwa kuti ndi osambirapo mmanja?	Yes1 No0	
141a	Where do you keep your domestic animals?	Indoors1 Outdoors2 No animals.....3	
142b	How do you manage the excreta of the domestic animals?	Make compost manure1 Dispose it outside the house.....2 Nothing.....3	
143	Does your household have the following sanitary facilities of your own? Kodi pakhomo panu muli ndi zipangizo za ukhondo monga izi?	Yes No	

#	QUESTION	RESPONSE CODES	SKIP
	a. Drying rack for plates & other household utensils Thandala loyanikira mbale ndi zwiya zina za panyumba	1 2	
	b. Pit for dumping wastes/rubbish Dzenje/nkhuti lotayila dzinyalala	1 2	
	c. Line for drying clothes? Chingwe choyanikira zovala	1 2	
	d. Bathroom Bafa	1 2	
144a	In the past year did you or any family member suffer from the Diarrhea disease?	Yes 1 No 0	
144b	If yes, who suffered from diarrhea?	<5 years child1 >5 Years..... 2	
144c	In the past year did you or any family member suffer from the Cholera disease?	Yes 1 No 0	
144d	If yes, who suffered from Cholera?	<5 years child1 >5 Years.....2	
4.WATER AND SANITATION USERS COMMITTEE			
145	Have you ever heard about WASH?	Yes 1 No 0	
146	Were you asked to participate in the WASH?	Yes 1 No 0	
147	Are you informed about what happens at committee meetings?	Yes 1 No 0	
148	Before construction, were you asked to choose who would be responsible for operation and management of the water system?	Yes, I was asked..... 1 No, I wasn't asked 2 No Idea.....3	
149	In your opinion how much does the WASH/project take care of the problems in water and sanitation?	Very much 1 Much 2 Not much.....3 Little.....4 DK.....88	
150	Do you think the WASH/ICEIDA is able to maintain and operate the water system?	Very much 1 Much 2 Not much.....3 Little.....4 DK.....88	
151	Why do you think WASH is not able of maintaining and operating the system?	Lack of technical knowledge... 1 Lack of materials/equipment.. 2 WASH lack responsibility.....3 WASH is corrupt.....4 WASH has too little money.....5 WASH don't address the demand directly.....6 DK.....88	

#	QUESTION	RESPONSE CODES	SKIP
152	Who would you contact if there is a problem with the water system?	WASH/Vge maintainance... 1 ICEIDA..... 2 VDC.....3 My neighbours/friends.....4 No one.....5 Area Mechanic.....6 DK.....88	

5. PARTICIPATION AND DECISION MAKING

153	Did you or any members of your household attend any meeting about the water and sanitation project	Yes.....1 No.....0 Dk.....88	
154	Was it mostly male or mostly female members of your household that went to the meetings?	Only male1 Mostly male2 Male and female evenly.....3 Mostly female.....4 Only female.....5 Dk.....88	
155	Why did you or your family member(s) attend these meetings?	I/We were interested.....1 Were asked to attend2 Were obliged to attend.....3 Dk.....88	
156	Did you take part in decisions that were made about the water and sanitation project in your village?	Very much1 Much2 Not much.....3 Little.....4 No.....5 Dk.....88	
157	Before construction, on which aspect did you have the most influence?	Project management(WASH).....1 Type of toilets2 Private taps.....3 Household contributions.....4 Prices for water.....5 Prices for water.....6 No influence on any.....7 Dk.....88	
158	In your opinion, do you feel your voice has been respected?	Very much1 Much2 Not much.....3 Little.....4 Dk.....88	

159	Could you please tell me the aspects of the project did your family get benefited from?	Private toilet1 Pavement repair with bricks2 Private taps.....3 Well repair.....4 Surface drainage.....5 Sanitation.....6 Emplloyment.....7 Dk.....88	
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6.PROJECT CONTRIBUTION

160	Have you or any household member been in any of the water user committees or community groups?	Yes.....1 No.....0 Dk.....88	
161	What is the name of committee?		
162	How much money does your household pay for the installation of water systems (upfront)	Mk	
163	How much money does your household pay for water every month?	Mk	
164	Was it difficult for your household to obtain the money for installing the water system?	Very difficult.....1 Difficult.....2 Not difficult/Not easy.....3 Easy.....4 Very easy.....5 Dk.....88	
165	How much did your household invest for the toilet?	Mk	
166	Was it difficult for the household to obtain the money to install the toilet?	Yes.....1 No.....0 Dk.....88	
167	To what extent do you feel that your family has been benefited from the project compared to other families?	My family benefited more1 My family benefited equally2 My family benefited less.....3 My family did not benefit.....4 Other(specify).....5 Dk.....88	

END OF INTERVIEW THANK THE RESPONDENT

**ICEIDA WatSan Project
WATER POINT MAPPING QUESTIONNAIRE**

Enumerator Name		Date of survey	
Water Point Number		Water Point Type	
District	<i>Mangochi</i>	TA Name	<i>Nankumba</i>
Village		No. of HH	
Furthest walking distance to WP:		Funding Agency	
Construction Year		GPS ID No.	

2.0 Exiting Water Points situation/functionality

Number of Stokes to fill 20L bucket	____(Strokes) <input type="checkbox"/> no measure
Water Quality (hearing form users)	<input type="checkbox"/> 1. Clear/good, <input type="checkbox"/> 2. Salty, <input type="checkbox"/> 3. Silty/sandy, <input type="checkbox"/> 4. Reddish/ rusty, <input type="checkbox"/> 5. Strong smell, <input type="checkbox"/> 6. other (describe)_____
Water point functionality	<input type="checkbox"/> 1. Working <input type="checkbox"/> 2. Not working (broken/ no water/ vandalized) <input type="checkbox"/> 3. Abandoned <input type="checkbox"/> 4. Working but not in good condition

3.0 Civil works/surrounding condition

a) Check Applicable Items Structure	Not Present	OK	Needs Repairs		Comments include a description of any existing civil works concerns
			Minor	Major	
1. Apron	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Drainage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Bucket Stand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Washing Slab	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Soak Pit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Fence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b) Is the surrounding of the water facility kept clean?			<input type="checkbox"/> Yes <input type="checkbox"/> No		
c) Is there refuse pit within 30 meters from the water supply facility?			<input type="checkbox"/> Yes <input type="checkbox"/> No		
d) Is there latrine within 30 meters from the water supply facility?			<input type="checkbox"/> Yes <input type="checkbox"/> No		

4.0 Operation and Maintenance (O&M)

4.1 Organization for Management of Water Supply Facility	
4.1.1 What is the name of committee for O&M of water point in this area?	1 Village health water committee (VHWC) 2 Water point committee (WPC) 3 Tap committee (TC) 4 Water user association (WUA) 5 Private groups/person employed by the village 6 No organization 9 Others ()
4.1.2 No. of committee members	Male : _____ Female : _____
4.1.3 Way of establishment	1 Elected 2 Designated 3 Others ()
4.1.4 Do you have rules & regulations for use of water supply facility?	1 Yes 0 No
4.1.5 Is there O&M plan such as procurement plan of spare parts, preventative maintenance and renewal hand-pump, etc. in your committee?	1 Yes 0 No
4.1.6 Is the meeting of committee held?	1. Yes regularly 2. Yes un-regularly 3. No
4.1.7 If No, why?	
4.1.8 If yes in 4.1.6, do you keep record of the meeting?	1 Yes 0 No
4.1.9 Is there any publicity from committee to users?	1 Yes 0 No
4.1.10 Has the current VHWC/WPC/TC had CBM training?	1 Yes 0 No
4.1.11 If VHWC/WPC/TC had CBM Training what were the topics?	1 Community mobilization 2 O&M training / Caretaker training 3 Hygiene and sanitation
4.1.12 Who organized the training?	1 DCT members 2 WMA 3 AM 4 Donors 5 NGOs

4.1.13 Do you have any manuals and guidelines for O&M of water supply facility?	1 Yes 0 No
4.1.14 Has the current VHWC/WPC /TC had CBM refresh training?	1 Yes 0 No
4.1.15 Do you think that VHWC/WPC/TC now needs to receive training for better maintenance of the water supply facility?	1 Yes 2 No
4.1.16 If yes in 4.1.15, what categories are necessary to receive training? (check multiple)	1 Mechanical techniques 2 Money collection and management 3 Promotion of local people's awareness on water usage 4 Hygiene and sanitation 5 Other ()

4.2 Financial Management for Water Supply Facility	
4.2.1 Do you collect water fee?	1 Yes 0 No
4.2.2 How much does each beneficiary pay?	<input type="checkbox"/> Fixed fee: (MK/HH/month)
4.2.3 Where do you keep the money collected?	1 Treasure (village) 2 Bank (name) 3 Post office 4 Other ()
4.2.4 Do you have account book?	1 Yes 0 No
4.2.5 Do you have any penalty if beneficiaries not pay the fee?	1 Yes 0 No 88 Do not know
4.2.6 Have the deposit of water fee been used other than O&M purpose?	1. Yes 0. No 88 Do not know

4.3 Structure of Maintenance and Repair	
4.3.1 Has the water supply facility got repaired before?	1. Yes 0 No
4.3.2 If yes who repaired the facility?	1. By ourselves 2. WMAs 3. Other EWs 4. AM 5. Other private 6. NGOs 7. Donors

4.3 Structure of Maintenance and Repair	
4.3.3 Do you keep record of repairing and checking of water supply facility?	1. Yes 0. No
4.3.4 Where do you get the cost of repairing water facility?	1. Deposit from collected water fee 2. From all beneficiaries, when it is broken 3. From village leader 4. From wealthy villager 5. Others ()
4.3.5 Has the caretaker carried out the regular checking of water supply facility?	1. Yes 0 No
4.3.6 Has the caretaker carried out the repair of minor problems and/or replacement of parts?	1. Yes 0. No
4.3.7 If the caretaker cannot repair the facility and/or replace any parts, what kind of action do you take?	1 Contact WMAs 2 Contact TA or ADC 3 Contact District officials 4 Contact AMs 5 Contact neighboring technicians 6 No contact
4.3.8 Do you think that the caretaker now has enough capacity to maintain the water supply facility in sustainable manner?	1 Yes 0 No
4.3.9 Do you know the place of spare parts shops?	1 Yes 0 No
4.3.10 Is it difficult to get spare parts for you communities?	1 Yes 0 No
4.3.11 If it is difficult to get spares parts why is so?	1 Don't know the place 2 Difficult to transportation 3. Spares not locally found 4 Other ()
4.3.12 Does your VHWC/WPC/TC have the contract with area mechanics (AMs) for services of maintenance and repair of water supply facilities?	1 Yes 0 No

4.3 Structure of Maintenance and Repair	
4.3.13 If no in 4.3.12, why not?	<input type="checkbox"/> AMs are not known. <input type="checkbox"/> The cost for their services is too expensive. <input type="checkbox"/> Their technical skill is doubtful. <input type="checkbox"/> Not necessary because caretakers can do everything. <input type="checkbox"/> Others. Specify ()
4.3.14 If yes in 4.3.12, what are the services	1 Repair contract in case of break down 2 Preventive maintenance contract for one year 3 Community Based Maintenance training 4 Other ()

4.4 Technical and Administrative Support from District and Extension Workers	
4.4.1. Did extension workers (EWs) visit your village for the monitoring of the water supply facilities in the past?	1 Yes 0 No
4.4.2. If yes in 4.4.1 what kind of supports did VHWC/WPC/TC normally have from EWs when they came?	1 Repair of facility (hand pump, etc.) 2 Provision of spare parts (hand pump, etc.) 3 Arrange to get spare parts (hand pump, etc.) 4 Financial support (eg. cash subsidy, donation) for repair 5 Technical advice 6 Technical training 7 Hygiene education 8 Other ()
4.4.3. If yes in 4.4.1, do you think the support from EWs is satisfactory and effective to improve the situation in the village?	1 Yes 0 No
4.4.4. What services in O&M field does the local government have to offer to the communities?	1 Regular checking 2 Repair of facility 3 Provision of spare parts 4 Arrange to get spare parts 5 Financial support (cash subsidy) for repair 6 Technical advice 7 Technical training 8 Hygiene education 9 Other ()

4.5 Sense of Ownership in Communities on Water Supply Facility	
4.5.1. Who should be responsible for O&M for water supply facility in the village?	1 VHWP or WPC or TC 2 Village Development Committee 3 Area Development Committee or Traditional Authority 4 Government 5 ICEIDA

4.5 Sense of Ownership in Communities on Water Supply Facility

4.5.2. Who owns the water supply facility in the village?	<ol style="list-style-type: none">1 Beneficiaries2 VHWP or WPC or TC3 Village Development Committee4 Area Development Committee or Traditional Authority5 Government6 ICEIDA
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EVALUATION SURVEY HEALTH FACILITY QUESTIONNAIRE

A. GENERAL INFORMATION

District: Traditional Authority:
 Name of Healthy Facility: Catchment Pop:
 Name Recorder: Position:

B. HEALTH FACILITY STAFF

Description	Male	Female	Total
MA/CO			
Nurses			
HSA's			

C. SOURCE OF WATER AT THE FACILITY

- a. Source of safe water at the school: A. Borehole B. Tap C. Play Pump D. None b.
 Is the water point functioning? Yes No
 c. What is the location of safe water source? A. Within Health Facility grounds B. Outside
 Health Facility grounds

D. SANITATION FACILITIES

Sanitation facilities	Sex		
	Male	Female	Total
Basic Latrines			
Improved/Durable Latrines with concrete floor			
VIP Latrines			
Water Closet Latrines			
Total Latrines			
Hand washing facilities/buckets			
Urinals			
Placenta Pits			

E. MANAGEMENT STRUCTURES

Is there HCMC? Yes No
 Composition in terms of gender Males..... Females
 Is it trained? Yes No
 When was it trained?
 Does the committee organize meetings? Yes No

F. COMMUNITY LED TOTAL SANITATION TRAINING

Number of HAS trained in CLTS: _____
 - When? _____

G. DISEASE PREVALENCE

Diseases	Under 5 years	Over 5 years
	2013 (Jan to June)	2013 (Jan to June)
Common Diarrhoea		
Blood Diarrhoea		
Cholera		
Malaria		
Bilharzia		
Scabies		
Eye Infection		

H. GENERAL COMMENTS

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APPENDIX 7: LIST OF COMMUNITIES/VILLAGES SURVEYED

Vg. No	Health Centre Zone	Village
1	Monkey Bay Health Zone	Mvunguti
2	Monkey Bay Health Zone	Balamanja
3	Monkey Bay Health Zone	Nsumbi 1
4	Monkey Bay Health Zone	Nsaka/Chimphamba 1
5	Monkey Bay Health Zone	Chembe
6	Monkey Bay Health Zone	Madzedze
7	Monkey Bay Health Zone	Chizuula
8	Monkey Bay Health Zone	Chimphamba II
9	Monkey Bay Health Zone	Zambo
10	Monkey Bay Health Zone	Namaso- Bay
11	Monkey Bay Health Zone	Namakoma
12	Monkey Bay Health Zone	Chilombo
13	Monkey Bay Health Zone	Mbwadzulu
14	Monkey Bay Health Zone	Msumbi II
15	Malembo Health Zone	Chigonere
16	Malembo Health Zone	Chilawi
17	Malembo Health Zone	Chilimba
18	Malembo Health Zone	Domwe
19	Malembo Health Zone	Katole 1
20	Malembo Health Zone	Katole 2
21	Malembo Health Zone	Kholowere

Vg. No	Health Centre Zone	Village
22	Malembo Health Zone	Khombe
23	Malembo Health Zone	Manzi
24	Malembo Health Zone	Matapang`ombe
25	Malembo Health Zone	Matekwe
26	Malembo Health Zone	Mbinda 1
27	Malembo Health Zone	Mbinda 2
28	Malembo Health Zone	Mputa
29	Malembo Health Zone	Mwalala
30	Malembo Health Zone	Nkupa
31	Malembo Health Zone	Simoni
32	Malembo Health Zone	Zimbayuda
33	Malembo Health Zone	Ntola
34	Malembo Health Zone	Nselema
35	Malembo Health Zone	Zimbawadi
36	Malembo Health Zone	Kalowa
37	Nankumba Health Zone	Chinganji
38	Nankumba Health Zone	Sokole
39	Nankumba Health Zone	Mologeni
40	Nankumba Health Zone	Kamanga zula
41	Nankumba Health Zone	Kundete
42	Nankumba Health Zone	Saidi Matola
43	Nankumba Health Zone	Chabwera
44	Nankumba Health Zone	Sosola

Vg. No	Health Centre Zone	Village
45	Nankumba Health Zone	Lumwira
46	Nankumba Health Zone	Maganga
47	Nankumba Health Zone	Saiti Tiputipu
48	Nankumba Health Zone	Chamba
49	Nankumba Health Zone	Kachipande
50	Nankumba Health Zone	Binali
51	Nankumba Health Zone	Kella
52	Nankumba Health Zone	Chilonga
53	Nankumba Health Zone	Jumam'mbanga
54	Nankumba Health Zone	Mbapi
55	Nankumba Health Zone	Kaiche 1
56	Nankumba Health Zone	Kaiche 2
57	Nankumba Health Zone	Kansiya
58	Nankumba Health Zone	Chimphepo
59	Nankumba Health Zone	Chantulo
60	Nankumba Health Zone	Mthelereka
61	Nankumba Health Zone	Makokola
62	Nankumba Health Zone	Nankumba
63	Nankumba Health Zone	Makunula
64	Nkope Health Zone	Chilembwe
65	Nkope Health Zone	Chindongo
66	Nkope Health Zone	Kalumba
67	Nkope Health Zone	Kanyenga

Vg. No	Health Centre Zone	Village
68	Nkope Health Zone	Chiwalo
69	Nkope Health Zone	Sombe
70	Nkope Health Zone	Mang'umbi
71	Nkope Health Zone	Lizimba
72	Nkope Health Zone	Nkugwi
73	Nkope Health Zone	Mthunya
74	Nkope Health Zone	Mwanyama
75	Nkope Health Zone	Mpeta
76	Nkope Health Zone	Namgoma
77	Nkope Health Zone	Guma
78	Nkope Health Zone	Mdalachikowa
79	Nkope Health Zone	Masanje
80	Nkope Health Zone	Kamwetsa
81	Nkope Health Zone	Nona
82	Nkope Health Zone	Mpale
83	Nkope Health Zone	Maudzu
84	Nankhwali Zone	Kazembe
85	Nankhwali Zone	M'bwana
86	Nankhwali Zone	Mwenda
87	Nankhwali Zone	Kaphande
88	Nankhwali Zone	Mtewa
89	Nankhwali Zone	Mbeya
90	Nankhwali Zone	Kapichi

Vg. No	Health Centre Zone	Village
91	Nankhwali Zone	Kasankha
92	Nankhwali Zone	Kaphande II
93	Nankhwali Zone	Mbapi
94	Nankhwali Zone	Mpango
95	Nankhwali Zone	Yesaya
96	Nankhwali Zone	Machilika
97	Nankhwali Zone	Kasankha 2

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