



# Community Water Supply and Sanitation Project – Mtwara DC

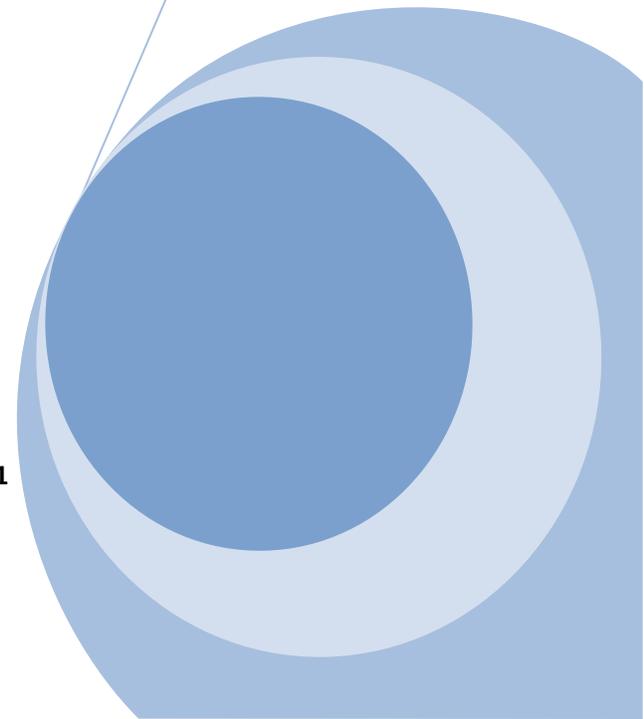
## *BI ANNUAL REPORT*

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## **CHAPTER ONE**

### **1.0 Introduction**

Community water supply and sanitation in Mtwara rural since its beginning, has been taking place specifically in eight villages including Mkonye, Rudipe/Mihembe, Ding'wida, Mabatini, Ndumbwe, Mkwajuni chini, Changarawe and Nakada. TAEES has been implementing the project through capacity building to Water and Sanitation (WATSAN) committees and Water User Groups (WUEs), the main focus to this phase II has been based on facilitation, coordination, supervision and monitoring of water supply undertaking, promotion of hygiene and sanitation practices as a way to enable villagers to stand on their own in the whole concept of project management and undertake operation and maintenance (O&M) of the installed facilities and to construct two rain water harvest tanks (RWHT) in Rudipe and Ding'wida villages.

### **1.1 Site survey on where the rain water harvest tank was to be constructed**

In July 2011, the TAEES team visited the two villages Rudipe and Ding'wida in order to confirm where the tank could suitably be built so that arrangements could be made earlier enough. During the visit, it was found out that there was no specific piece of land to construct the tank, and the village government had space for more development in these villages. The only area that was available in Rudipe was a bit far and was meant for construction of a primary school. Since there was no bare area owned by the village government, there was need to search for a suitable location where the tank could be constructed.

#### **1.1.1 Rudipe (Mihembe) village**

In this village, there was no any commercial place where the rainwater tank could be built, neither was there any house made of iron sheet, a case that forced the construction of at least a structure made of iron sheet that could be used in collecting water into the 10,000litres tank during rainy season to be constructed. This in turn would increase the cost of construction and burst project budget.

The village chairperson in this village suggested his own area to be used to build the (RWHT). But the issue was left to be taken back to the villagers and to be discussed by all members of the village. The villagers were left to decide on where the tank should be constructed. When the team came back after one month, the villagers had already identified a place where the construction could take place but this time it was another different place from the one the village chairperson had offered before.

#### **1.1.2 Ding'wida village**

This village was seen to have a public cereals store(go down) where the rain could be harvested and stored for a couple of days. The area next to the house belonged to someone; therefore they had to as well meet all the villagers together with the owner of that piece of land so that they could urge the owner to offer the space for the

construction of (RWHT) for the benefit of the fellow villagers. When the team came back after a month, the owner had already agreed to offer his land for (RWHT) construction.

The team went back to the District Council to inform them about the land offered by specific persons in both villages. The water engineer advised that it was important to officially enter into an agreement with the owners of the land so as to prevent future conflicts that could arise either from the owner himself claiming back his land or even his sons, grandchildren or great grandchildren.

## **1.2 Agreement**

A drafted contract from the district council for area ownership by villagers was prepared and printed in four copies. The contract basically stated that the area/land owner freely accepts at his/her own will to give out his/her piece of land for the development of water structure for his/her village and he/she nor his/her family would not want the land back at any given time. Arrangements were made and contracts were signed by land owner before a district lawyer. Apart from land owner, the contract was signed by his witness, the village chairperson, District Water Engineer and the District Lawyer.

## **1.3 Report structure**

This report in general discusses two parts that have been involved in the implementation of this project which includes facilitation as well as technical.

### **1.3.1 Facilitation part**

In this second phase of implementation, a recap to all phase I facilitation activities was done to the 8 project villages as a followup to the project and previous trainings and the following areas were covered during facilitation services

- Recap on the previous trainings whereby the trainees were asked on what they remembered from the last training (phase I) to test their understanding and if they still remember what they were taught. They mentioned some of the topics which they needed to be recapped (reviewed). Thereafter, the facilitators did recap on the following:-
  - leadership skills and responsibilities of village leaders,
  - roles and responsibilities of WUA and WATSAN committee leaders and
  - Action plan for the implementation of water and sanitation projects.
- Training WATSAN committee members on financial management of water funds.

### **1.3.2 Technical part**

On the technical side, there were two assignments to be held in this phase II (July – December) which were to train local artisans, villagers and WATSAN committee on latrine technology and the uses of improved hygiene practices through molding and demonstrating casting slabs and to mobilize local artisans (fundis) on the preparation and construct rainwater harvesting tanks.

There was good reception of all activities done and community members have generally been cooperative and supportive though in few villages, there occurred few challenges such as people being late to attend the meetings, late arrival in the training venue and participants demanding for sitting allowances.

## 1.4 Objectives of the recap training session

The objective of the recap phase based to strengthen community capacity to plan, implement, operate and maintain their facilities through community participation, training of WATSAN committees and Water user groups in better hygiene practices being achieved in order to maximize health benefits and ensure sustainability of water supply schemes through community ownership and management. Facilitation team conducted training session to the project villages and focus was based on the following:

- Assist communities to plan, construct, operate and maintain their own water and sanitation facilities.
- Provide focused hygiene education to help them take advantage of water facilities to improve their health.
- Facilitate communities towards contribution of water services at their locality.
- Ensure each and everyone realize the need of having an improved latrine at household level so as to get rid of water borne disease and to reduce the number of people suffering from those diseases especially during the rainy seasons through constructing improved latrines as taught by the technical team.

**Table 1: Training sessions to WATSAN committee members (facilitation part)**

Village Name	visit Date	Topics covered	Methodology	Remarks
Mkonye	23/08/2011	-Recap on the previous topics -Water funds management	-Presentation -Plenary discussion	<ul style="list-style-type: none"> <li>• Good arrangement of the training by village leaders</li> <li>• Good attendance of participants</li> </ul>
Rudipe/Mihembe	24/08/2011	-do-	-do-	<ul style="list-style-type: none"> <li>• Poor preparation of the training, the village has no school so there was no venue to conduct training</li> </ul>
Changarawe	25/08/2011	-do-	-do-	<ul style="list-style-type: none"> <li>• Good attendance of participants</li> <li>• Participants were prepared for the training</li> </ul>
Ding'wida	26/08/2011	-do-	-do-	<ul style="list-style-type: none"> <li>• Good attendance</li> </ul>
Mkwajuni chini	27/08/2011	-do-	-do-	<ul style="list-style-type: none"> <li>• Participants were well prepared</li> </ul>

Village Name	visit Date	Topics covered	Methodology	Remarks
Ndumbwe	28/08/2011	-do-	-do-	<ul style="list-style-type: none"> <li>• Poor preparation</li> <li>• Training was not successful because members demanded sitting allowances</li> </ul>
Mabatini	29/08/2011	-do-	-do-	<ul style="list-style-type: none"> <li>• Training was well prepared</li> </ul>
Nakada	29/08/2011	-do-	-do-	<ul style="list-style-type: none"> <li>• All participants attended including village leaders</li> </ul>

**Table 2: Successes and challenges encountered during the training**

Village name	Successes	Challenges
Mkonye	<ul style="list-style-type: none"> <li>• Training was done successfully</li> <li>• Village leaders were organized and well prepared</li> </ul>	<ul style="list-style-type: none"> <li>• Water account have not yet been opened</li> <li>• Village chairman died,that delayed the implementation of their plan</li> <li>• water funds contributions have been not yet collected</li> <li>• Some villagers have not adopted hygiene practices that promote good health such as hand washing, keeping latrine clean, and keeping home surroundings clean etc.</li> <li>• Demand for water is very high, villagers normally use water from traditional wells which is neither clean nor safe.</li> </ul>
Rudipe/ Mihembe	<ul style="list-style-type: none"> <li>• WATSAN committee managed to collect Tsh. 34,000 since June</li> <li>• Two meetings were held to mobilize villagers on the adoption of improved hygiene practices</li> </ul>	<ul style="list-style-type: none"> <li>• The village is newly established so still has many challenges such as awareness on cost sharing towards different projects</li> <li>• No water funds account which delays the collection of water funds contributions.</li> <li>• Demand for water is very high; villagers still use unsafe water from traditional wells.</li> </ul>
Changarawe	<ul style="list-style-type: none"> <li>• -WATSAN committee is very active</li> <li>• -Mobilization</li> </ul>	<ul style="list-style-type: none"> <li>• No water project exist so demand for water is very high</li> <li>• Villagers still use unsafe water for</li> </ul>

Village name	Successes	Challenges
	<p>campaigns still going on about water funds contributions and improved hygiene behaviors</p>	<p>domestic uses and get clean water from the nearby village,i.e. Mbuo</p>
Ding'wida	<ul style="list-style-type: none"> <li>• Water account has already opened with Tsh. 50,000.Water is sold on Tsh10 per bucket, about 30,000 Tsh is collected per month</li> </ul>	<ul style="list-style-type: none"> <li>• The existing water infrastructure needs some rehabilitation</li> <li>• Demand for water is high</li> </ul>
Mkwajuni chini	<ul style="list-style-type: none"> <li>• Attendance was a bit poor as some members demanded for sitting allowances</li> </ul>	<ul style="list-style-type: none"> <li>• Participants highly demanded sitting allowances which made their attendance to be poor</li> <li>• Demand for water is very high, all villagers depends to only one shallow well to get clean water hence spend much of their time to fetch water</li> </ul>
Mabatini	<ul style="list-style-type: none"> <li>• Training was done successfully</li> <li>• All WATSAN committee members participated in the training</li> </ul>	<ul style="list-style-type: none"> <li>• The previous committee that received training was replaced by the new one and handed over water account with Tsh. 145,000 and cash in hand Tsh. 18,000.</li> <li>• No activities has done so far as per plan of the first training</li> </ul>
Ndumbwe	<p>Not successful</p>	<ul style="list-style-type: none"> <li>• WATSAN committee members refused to attend the training because there were no allowances set aside for them.Village leaders attended to the other meeting so they were not there to clear the situation</li> <li>• The committee was replaced by the old one which received training in the first phase hence made it difficult to cope to the second training.</li> </ul>

<b>Village name</b>	<b>Successes</b>	<b>Challenges</b>
Nakada	<ul style="list-style-type: none"> <li>• Training was done successfully</li> <li>• Community awareness towards modern hygiene practices was done through village meetings</li> <li>• Water is sold on Tsh 100 per bucket and the money is used for operation and maintenance of their water infrastructure.</li> </ul>	<ul style="list-style-type: none"> <li>• There is a delay in the implementation of the project, villagers support on the contribution of water funds is very low</li> <li>• Water funds account is not yet opened which result to the delay in the collection of water funds</li> <li>• The existing water infrastructure is in bad condition, water tank is leaking so a lot of water is lost before reaching to consumers</li> <li>• Nearly the rehabilitation of the network system is highly recommended</li> </ul>

**Table 3: molding and demonstration sessions in the 8 village (technical part)**

<b>Village</b>	<b>Methodology</b>	<b>Remarks</b>	<b>Challenges</b>
Nakada	<ul style="list-style-type: none"> <li>• Apply grease on the depressed side of the sanplate</li> <li>• Use cement sand and aggregate in the ratio of 1;2;3 respectively</li> </ul>	<ul style="list-style-type: none"> <li>• excellent participation from the villagers</li> <li>• H&amp;S committee is present</li> </ul>	<ul style="list-style-type: none"> <li>• Attendance was not good due to the high cashewnut harvest season</li> </ul>
Mkonye	<ul style="list-style-type: none"> <li>• Mix well and fill in the plate, and ensure there is a wire mesh to strengthen the mould</li> <li>• leave the</li> </ul>	<ul style="list-style-type: none"> <li>• Good attendance</li> <li>• Excellent participation</li> <li>• Good attendance</li> </ul>	<ul style="list-style-type: none"> <li>• their water tests salty</li> </ul>
Ndumbwe	<ul style="list-style-type: none"> <li>• Mix well and fill in the plate, and ensure there is a wire mesh to strengthen the mould</li> <li>• leave the</li> </ul>	<ul style="list-style-type: none"> <li>• poor attendance since only 4 people turned up</li> </ul>	<ul style="list-style-type: none"> <li>• Participants highly demanded allowances</li> <li>• villagers have a very poor attitude towards water projects</li> </ul>

<b>Village</b>	<b>Methodology</b>	<b>Remarks</b>	<b>Challenges</b>
Changarawe	<p>concrete for 2 days then remove the slab from the plate and cure for 7days</p> <ul style="list-style-type: none"> <li>• after that, the slab should be ready to be placed in a well dug latrine though continual curing for 21 days could be preferable</li> </ul>	<ul style="list-style-type: none"> <li>• good attendance</li> <li>• villagers were very grieved because of their intense water problem</li> <li>• good participation by the villagers</li> <li>• Inactive H&amp;S committee</li> </ul>	<ul style="list-style-type: none"> <li>• -Demand for water is very high, all villagers depend on water from Mbuo 4km or</li> <li>• Ndumbwe 5km away</li> </ul>
Mabatini		<ul style="list-style-type: none"> <li>• Excellent participation</li> <li>• The demo was as a business opportunity to them</li> <li>• Committed to H&amp;S</li> <li>• Inactive H&amp;S committee</li> </ul>	<ul style="list-style-type: none"> <li>• Attendance was not good due to the peak cashew nut harvest season</li> </ul>
Mkwajuni chini		<ul style="list-style-type: none"> <li>• Well prepared</li> <li>• Good participation</li> <li>• Inactive H&amp;S committee</li> </ul>	<ul style="list-style-type: none"> <li>• Demand for water</li> <li>• Attendance was not good due to the high cashew nut harvest season</li> </ul>
Rudipe(Mihembe)		<ul style="list-style-type: none"> <li>• excellent participation from the villagers</li> <li>• The demo was as a business opportunity to them</li> <li>• Inactive H&amp;S committee</li> </ul>	<ul style="list-style-type: none"> <li>• Attendance was not good due to the peak cashewnut harvest season</li> <li>• Demand for water is very high</li> </ul>
Ding'wida		<ul style="list-style-type: none"> <li>• Inactive H&amp;S committee</li> <li>• Good participation</li> </ul>	<ul style="list-style-type: none"> <li>• Attendance was not good due to the high cashew nut harvest season</li> <li>• Demand for water is very high</li> </ul>

**NOTE:**

- *Members of some villages were enlightened with the latrine squatting slabs demonstration and they would wish to make the slabs and even sell them to their fellow villagers and wished to have at least 10 or more models per village.*
- *The villagers were also very happy to receive hygiene and sanitation training once again since they said that it reminds them of their duties towards keeping their environment clean and also seeing TAEs coming again to their villages*

## CHAPTER TWO

### 2.0 Construction of rain water harvest tank

With the aid of the district council, TAEs was able to successfully construct the rain water harvest tanks both in Rudipe and Ding'wida as it was planned. The villagers in both the villages highly participated in ensuring that the process was a success, in that they were ready to learn and help handily in whenever they were required.

#### 2.1 Rudipe

##### 2.1.1 Water Storage Tank

This is a sub-village of Mihembe village with a low population yet they worked very hard to ensure that the tank was constructed. Water is a major problem faced by people from this village in that they had to go fetch water about 1km away this would at times slow down the construction process and therefore we were at times forced to use our vehicle to get water for construction. Because of this, we had to construct a dug shallow well that would be used to store water for construction purpose, though it was not enough. But it really helped during the whole period of construction since water was stored there to be used for curing on the next day. In this village, there were no village local artisans at all and so it was very difficult to work with them since they did not even have any building/constriction materials or any other equipment; we had to buy two trowels for the village local artisans to be trained with and to help the district local artisans during the construction of the tank. We were able to train 4 of the villagers who had no skills at all and by the end of the construction; they had gained a lot of knowledge over constructing these rainwater tanks. Trained villagers included:

1. Lucus Tovino
2. Ismael Mpwago
3. Saidi Athumani
4. Hassan Livenga

In this village, there was no any water catchment structure and there was no budget for that however, it had to be built so that water could be collected into the tank. This catchment was constructed using local materials since it was not in the budget and yet the tank was meant to be collected over a roof. An extra cost was incurred by TAEs over this.

Nevertheless, by the end of constructing the tank, it was realized that the tank in total had a capacity to collect 12m<sup>3</sup> contrary to the initial plan which was to construct 10m<sup>3</sup>

##### 2.1.2 Catchment area

In this village, a temporary structure was made using local materials of which was out of the budget but had to be constructed. The villagers during the construction of this structure urged that we should construct a permanent structure but due to the limited budget, we constructed what we could just afford.

## 2.2 Ding'wida

### 2.2.1 Water Storage Tank

In this village, there was maximum cooperation amongst the villagers as well as the leaders. They at least had one person who had experience on building and construction and therefore we found some of them with construction equipments unlike in Rudipe village. We could also go there and find them already started on the next step of construction, this was very pleasing to the team and also the local artisans though water in this village was a problem, and they were very punctual in bringing water for construction. It was only one day that our vehicle was used to fetch water in this village ever since the construction began though they also get water from the next village Moma which is also far.

Since they had a village cereal storage house (go down) from which the rain water could be captured from, we therefore did not have to build another one. Four of the villagers were able to gain skills on building and construction of the Ferro-cement tank, namely:

1. Shamte Athuman
2. Ahmed Hassan
3. Issah
4. Mponda Ismael

The Ding'wida storage tank whose measurements were a bit adjusted to 2.3m height and 2.7m diameter ended up with 13.16m<sup>3</sup> storage capacity from the initial 10m<sup>3</sup> designed and budgeted storage capacity

After the whole task of construction was completed, the tanks were handed over to the villagers officially in the presence of a representative from the District Council (water department - **Mr. Charles Malisa**). Among his comments was that more tanks of this type are needed to help Mtwara community especially during dry season as people are starving to get water for drinking.

## CHAPTER THREE

### 3.0 General Challenges

During demonstration sessions of improved pit latrine squatting slabs, the facilitation team faced various challenges including the following:

- The issue of allowances seems to be a serious problem since there was no amount set aside to pay them; participants highly demanded something like meal allowances, water, soda, (snacks and drinks) etc. Since they use their time for the benefit of the community where they could do their own economic activities to get something for their families. Also, they stay a bit longer without eating or having anything drink or bite.
- Other WATSAN committees have been replaced by the new ones which make it difficult to cope during the training since the new committee find to have no background of what were previously taught. For instance, the previous committees in Mabatini, Ndumbwe, received the first phase training and all went off and new committee was formed which were realized in phase II (July-December). As a results, this resulted to confusion where the new committee needed the whole package of topics be covered.
- Attendance was not good due to the peak cashew-nut harvest season and hence many people went for harvesting and left gaps in attending the trainings
- Many of the villages lack water to an extent that we had to wait for someone to rush for about 4 kilometer to get water for the constructing demonstration squatting slabs.
- During the construction of rainwater harvesting tanks water for construction was the major challenge.
- Another challenge ahead of all was that regardless of the constructed RWHTs, still the tanks would not have solved their problem of lack of water as they had to wait until rain season. Nevertheless, 12m<sup>3</sup> storage tank for the whole village isn't enough at all.

### 4.0 Conclusion

Taking general project design objective, goal and reflecting back to the activities implemented and the villagers and village leaders support, this project has brought a notable changes, support and coordination between implementing stakeholders namely WaterFinns, TAEs, Mtwara DC, village and ward leaders and community at large. Regardless the challenges ahead which merely are water scarcity in large parts of Mtwara DC, the project has been accepted by Mtwara DC, ward executive officers (WEOs), village leaders as well as community and the demand to extend such service is still needed by district council as well as neighboring villages.

Finally, more appreciations have been bestowed to WaterFinns as well as TAEs for supporting and implementing this project especially in Mtwara DC whose people have

starved for water for a long time. They still believe and request this support to continue be centered in Mtwara as still water scarcity is still a problem.

## 5.0 Recommendation

The implementation team came up with the following recommendations

- Demand for water is very high in all villagers so more funds are needed to ensure provision of clean and safe water is fulfilled as per project objectives.
- Close contact should be done by all stakeholders of the project to make sure that the action plan set is implemented as planned (there should be a budget for follow-up, monitoring and evaluation of project impacts)
- Facilitation team recommends that something to eat or allowances should be prepared to make participants participate fully during the training sessions in subsequent trainings.
- Also, the trainings and other undertakings if possible should be well designed such that it doesn't highly interfere agricultural undertakings to ensure that there is high participation of many community members but it shouldn't be a hindrance for project implementation since not that all people do go to farms.



*Inside plastering of Ding'wida tank*



*Constructed catchment area in Rudipe*



*Inside of water tank, Ding'wida*



*continue smearing of Ding'wida tank*



*The skeleton structure of Rudipe tank*



*skeleton of the tank covered with sucks, Rudipe*



*Rudipe tank after plastering*



*construction of concrete bucketbase*



*Connection of gutters to the tank*



*smearing of concrete to the slab*



*Oiling the Squatting slab during demonstration*



*concrete mixing during demo*