

**WATER AND ENVIRONMENTAL SANITATION PROJECTS
MAINTENANCE ORGANISATION
(WEPMO)**

**REPORT ON ECOLOGICAL SANITATION LATRINE INITIATIVE
PROMOTION IN DAR ES SALAAM CITY.**

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1.0 INTRODUCTION:

WEPMO is a technical non- governmental and non-profitable organisation for community water and sanitation sector. The organisation comprises water, sanitation, and community development with participatory skill experts.

Since WEPMO established was working as partnership on going community water and Sanitation projects in the City of Dar es Salaam, and other regionals. Now WEPMO is current working as partnership with water Aid -UK Dar es Salaam programme, Plan International, Urban water and Sanitation programme, and water & health department of Temeke Municipal, SIMAVI, WaterCan, PEVODE, WAHECO and Ministry of water and livestock development.

Ecological Sanitation latrines promotion programme started in Keko Mwanga "B" Street and Zamecargoo street under WaterAid financial support. Sanitation issue is the major problem in the Dar es Salaam City and other areas in Tanzania mostly in for poor people. This problem cause the out break of cholera, typhoid, diarrhea, dysentery and mostly the Temeke and Ilala residents are poor and lack of sanitation education to afford the Construction of improved latrines.

After carrying the Sanitation research of the availability of toilets in various areas in the city of Dar es Salaam, particularly in Temeke Municipal, many people are living without latrines, or two - three sharing the single toilet. After conducting the research with questionnaires, the result realized that, the major problems of not having toilets are:-

- ❖ **Designing** : In adequate appropriate technologies:
Many available designing toilets in the area not equal to the population density. E.g. Pit latrine are taking short time to be full, emptying is too expensive to be difficult to the poor people and also especially to the squatter areas where trucks can not pass.
- ❖ **Space**: Rapid population growth and settlement patterns:
Many areas in the city of Dar es Salaam e.g. in Slum area particularly in Temeke Municipal and Ilala Municipality, the houses are tight / closed one to another, no space for construction of toilets, e.g. after pit latrine full no space to dig another pit latrine.
- ❖ **Hydrogeological situation or Difficult soil condition**:
a) Water table: In many areas in the city of Dar es Salaam water table is too high 1-2 meters, which is too difficult when the communities are digging or construction of pit latrine. Water table is the major problem in construction and takes short time to full due to high water table.

b) Soil loosening: In the city of Dar es Salaam it is very difficult to dig a hole for a pit latrine more than 1 meter deep due to loose soil, the type of soil cover more than 3/4 is loose sand.

- ◆ **Poverty:** Many families are poor and unable to construct the good toilets according to the hygiene Standard. Most of them are using drum toilets, or plastic bags and disposing in the drainage system or roads during the night.

After sitting together with various water and sanitation stakeholders in the city of Dar es Salaam, we end up with an ecological sanitation latrine option, which is an appropriate technological option. In our discussion and selecting the appropriate technology, ECOSAN is the simple technology which can be acceptable by the community, affordability, the local materials are available with the community, hydrogeological situation this toilet starts on the ground level to construct the structure, low cost in the construction. To construct ECOSAN latrine for demonstration the community to look and study how to use and advantage of it, that was the major topic.

2.0 STRATEGIES FOR INTERVENTION

ECOSAN latrine is the new technology in the most city residents; in two streets already they are pilot study on the construction of ECOSAN latrine under UNICEF financial support. Still few people know about ECOSAN latrine.

- ◆ Therefore to promote the ECOSAN with demonstration latrine is very important.
- ◆ Training or to influence the ECOSAN technology in the community level.
- ◆ Assistance to be directed to vulnerable community e.g. who have not latrines.
- ◆ Cooperate the community awareness/hygiene education 'PHAST' and the uses of ECOSAN latrine.
- ◆ To promote income-generating activities in order all communities to afford to have latrines.

3.0 THE ECOSAN IMPLEMENTATION INITIATIVE IN DAR ES SALAAM:

Most of the streets in the City are vulnerable on sanitation issue for example Keko Mwanga "B", Zamcargo Street, Mbagara streets, Gongo la Mbotto street, Buguruni ward, Vingunguti ward and Tabata areas. These streets are slum areas with Rapid population growth and unplanned settlements. During the water and sanitation research particularly environmental sanitation research in these streets, the results show only 30% of households have pit latrine the rest households have no latrines and more three households share a single pit latrine.

Mostly of the community depends on groundwater sources, shallow well, for drinking and domestic uses. Due to the hydrogeological situation the groundwater has been

polluted by pit latrines, in our research we test, "laboratory water analysis". There fore there is outbreak of cholera, typhoid, diarrhea diseases etc

4.0 COMMUNITY TRAINING AND PARTICIPATORY

In this initiative ECOSAN latrines training we start to the water, health and environmental sanitation committees that were selected by the community and working under local government leaders. We mobilize them and train on the ecological sanitation latrine. We train these committees as corps or promoters to the communities. This training was including technical skills (in planning, designing and construction), hygiene education, the advantages and disadvantages of ECOSAN latrines and the products from latrines. E.g. for fertilizer, biogas.

5.0 CONSTRUCTION OF ECOSAN LATRINES FOR DEMONSTRATION

PURPOSE:

After finished the training of water, health and environmental sanitation committees. We had meetings with the community in each street under local government leaders objectively to introduce the ECOSAN latrine technology and the team / committees that have get the training on the construction and the uses. The advantage of ECOSAN latrine, secondly to select the vulnerable community for construction ECOSAN latrines for demonstration which are committed to contribution local material e.g. space, sands, and helping the masonry (fundi's).

In each street we selected two households for construction ECOSAN latrines for demonstration. After two days the construction starts and all the community participating in all stages of construction with technical explanation from WEPMO field staff.

All construction of ECOSAN latrine for demonstration was financially support by water Aid –UK, SIMAVI, Watercan and community contribution under technical of ECOSAN and community participatory approach experts from WEPMO organisation.

6.0 ACHIVEMENTS OF ECOLOGICAL SANITATION

We have constructed total number of 50 Ecosan latrines in the City of Dar es Salaam. Under WaterAid support we constructed 32 Ecosan latrines as follows, Zamcargo 21 Ecosan, Ferry 3 Ecosan, Makangalawe3, Kurasini 2 Ecosan and 3 Ecosan at Keko. In Kimbangulile we construct 5 Ecosan latrines under SIMAVI support and six (6) Ecosan constructed at Gongo la Mbotto Street under WaterCan support. We also achieved to promote ecosan in other areas of the city which the community covered all the cost required e.g. Tabata street we have three ecosan latrines and four at Mbagala charambe constructed for their own cost.

All these constructed Ecosan latrines in Community level need monitoring and give them direction whenever a rise some problems they contact us and give them advice or solution.

6.0 THE RESULT AFTER CONSTRUCTION AND STARTED TO USE ECOSAN LATRINES.

- Ecological sanitation (ECOSAN) possibility is too high and acceptable by the community.
- The community interesting to ECOSAN is very high and some of them are willing to cover all the cost of construction and other willing to contribute, due to the important and the profit of having ECOSAN latrine.
- Prevent ground water pollution hence minimize inflectional diseases.
- It occupies a less area than pit latrine and easy to clean.
- It is safe and easy for every user, i. e kids, adult e.t. c.
- It's cheaper compare to other technologies.
- Ecosan can separate urine and faeces.
- Ecosan toilet provides quality fertilizer for agricultural activities.

After of this short training and toilet promotion and construction of demonstration latrines activities. Other communities from the neighbor streets are interesting and willing to contribute and construct and they need ECOSAN latrine and say the ECOSAN LATRINE is the one durable toilet can exist years to years.

7.0 COMMUNITY NEED ON PROMOTING ECOSAN LATRINE IN TANZANIA PARTICULARLY IN VULNERABLE COMMUNITY:

Ecological Sanitation latrine in a new technology in Tanzania to the community, if some of Expertise professional hold this technology they did not disseminating to the community. Because sanitation issues are the major problem in Tanzania especially to the poor people particularly the construction of toilets uses of it, and hygiene promotion. Many people die every year due to sanitation problem.

We realized in our initiative of ecological sanitation in a small community in all streets constructed. In addition their is need to the dissemination of appropriate technology option and ECOSAN is one.

Because at the short time or lack of ECOSAN latrine promotion in other areas, but from this initiative we realized, that many people are interesting on this technology. Therefore they're a need of in adequate information dissemination on the simple appropriate technologies option, which is simple design, low cost, Promoting income generating to the community, last long (durable) etc.

8.0 CONCLUSION.

The community are the final decision to accept the technologies which they can apply to solve the sanitation problem. In this case when we are introducing the ecological sanitation latrines in Keko Mwanga and Zamcargo streets, the result is good which the community show very high interest in constructing and using Ecological sanitation latrines.

The need for this technology is too high in other streets in the city and out of the city of Dar es Salaam, where the sanitation situation, particularly toilets, is too bad.

As WEPMO organization we are facing big financial constraints for developing and promoting ecological sanitation latrines in the initiative streets and other streets where there is a critical toilet problem.

9.0 RECOMMENDATION

To educate the community the importance of having and using the latrine, and to educate on appropriate technologies which they can afford and for hygienically.

To create the sanitation centers, particularly on the Ecological sanitation latrine promotion where the community can be organized and get information about ECOSAN

To create the community ECOSAN promotion programs with hygiene education, through water, health and environmental sanitation committees and local government leaders.

To promote income generating activities to the poor communities for construction of ECOSAN latrine

To create the networking to the local government leaders on ecological sanitation promotion to the community in urban and rural areas.