

A STUDY ON COMMUNITY-BASED BOREHOLE MANAGEMENT IN GHANA, AFRICA

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1. BACKGROUND AND OBJECTIVES OF THE RESEARCH

There are about 1.1 billion people who don't have access to safe drinking water all over the world, and around 320 million of them are found in the Sub-Saharan Africa. Many of rural communities in this region mainly utilize boreholes as their major source of safe drinking water. However, many of these boreholes were already broken primarily due to lack of maintenance. Hence, the main objective of this research was to determine the actual situation in the area and clarify some issues about borehole management through actual field observations and related activities in Ghana, Africa. This research also aimed to provide significant suggestions on how community development can be improved through the borehole management.

2. OUTLINE ON WATER SUPPLY IN RURAL AREAS OF GHANA

People in rural areas of Ghana mainly used boreholes in their community to get safe drinking water. The water law in 1994 introduced the concept of "Community Ownership and Management (COM)". One of the goals of COM is to shift the responsibility of the ownership and management of boreholes from the government to the community level. In line with this, communities have to establish a Water and Sanitation Committee (WATSAN) every time a borehole is built in their community. WATSAN acts as a volunteer organization to primarily oversee the management of the boreholes. The WATSAN is likewise tasked to manage the collection of user's fee for the repair and maintenance of these structures.

3. FIELD WORK

The field work in Ghana included 17 communities in five districts and there were a total of 40 boreholes visited and inspected during this period (Figure 1). Furthermore, interviews were conducted which include the people in the communities, WATSAN members, NGO, and the District Water and Sanitation Team (DWST), among others.

4. RESULTS

The study, in general, found 25% of the boreholes visited were already broken and thus it was clear that borehole management was not always that successful in this area. Some of the main reasons observed that affected the borehole management in Ghana include lack of training for WATSAN members to manage their borehole, lack of the ability to undertake "regular maintenance" works such as checking inside of it, the difficulty with agreements particularly on user's fee within the community, the economical ascendancy of natural water, and the lack of DWST's support for WATSAN. On the contrary, a good example of effective management of boreholes was also observed in one of the communities visited in Ga West district. WATSAN members in this community had collaborated with an area mechanic –repairmen- to carry out the regular maintenance once every month. The borehole had been broken down 4 times so far in the last 10 years but WATSAN members and community people have still managed to overcome these predicaments with their good township and the effective borehole management.

5. CONCLUSION

The WATSAN should collaborate more with community people, DWST and the area mechanic to carry out the regular maintenance because it needs the additional cost and the high ability of the management. This thesis suggests that significant focus must be given on the regular maintenance because this is one key factor for the attainment of sustainable management and community-based development through the borehole management in Ghana, Africa.



Figure 1. Location map of the different sites visited in Ghana