

Providing Access to Safe Drinking Water: What Role Do Water and Sanitation Committees Play?

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Background

Current drinking water policies for developing countries are based on the premise that rural water supply facilities, such as improved hand-dug wells or hand pump-fitted boreholes, are best managed by community organizations of local water users. Similar to many other developing countries, Ghana first implemented a community-based management approach under a countrywide National Community Water and Sanitation Program. The “Community Water and Sanitation Agency (CWSA)” was created as an independent agency with the mandate for rural drinking water supply. At the local level, Water and Sanitation Committees (WATSANs) are formed, which are supposed to be gender – balanced. They are assisted by Water and Sanitation Teams, comprised of staff of the district administration.

In principle, the WATSANs are responsible for operation and maintenance of their water facilities, and they are expected to collect fees to pay for maintenance. They are also expected to contribute up to 5% of total capital cost. The private sector and NGOs participate in rural water supply provision through the construction and maintenance of facilities, and the provision of equipment. NGOs are also hired to facilitate the formation of WATSANs and develop their capacity.

In spite of its wide application in many developing countries, the community-based approach to rural water supply is not without challenges. In fact, the evaluations of this approach in various countries show mixed

results. While some studies attribute substantial improvements in access to rural drinking water supply to community-based management, other studies found major challenges in terms of assuring the sustainability of water and sanitation committees over time. A study from Ghana found that the fees collected by WATSANs discouraged the use of safe drinking water from improved facilities (Engel, Iskandarini and Useche, 2005).

There are also concerns that setting up community-based organizations for water management may undermine decentralization efforts by creating a parallel structure to the local government system. Ghana’s decentralization policy is currently under review, but limited attention has been paid to the following questions: How well do the WATSANs function? What is their relationship to the local government system? How accountable are they to their users? Which lessons can be derived from the WATSAN experience for the current debate on decentralization reforms in Ghana?

Objectives and approach of the study

The study that is summarized in this note had the objective to examine the role that WATSANs play in providing access to safe drinking water. The study aimed at analyzing how well they function, how gender-balanced they are, and how they relate to local government institutions so as to inform the debate about decentralization policy reform in Ghana.

The analysis was based on two data sets, which were jointly collected by the Institute

of Statistical Social and Economic Research (ISSER) and the International Food Policy Research Institute (IFPRI). The first data set was collected in 2005 in the Upper East region under a project financed by the Challenge Program for Water and Food. The second data set was collected under the project “Gender and Governance in Rural Services: Insights from India, Ghana, and Ethiopia”, which was funded by the

World Bank and the Ghana Strategy Support Program (GSSP). This project was conducted in 2008, and covered six districts, two each in three agroecological zones: the Forest Zone, the Transition Zone, and the Savannah Zone. Both data sets include data from a random sample of households, communities and WATSAN committee representatives in the sampled communities.

Main findings

As shown in Table 1, more than 50% of the sample households in all three agroecological zones had access to safe drinking water. Household members have to spend between 20 and 30 minutes every day to fetch water (Figure 1). Female household had to spend somewhat more time to fetching water in all three zones. (For comparison, in Ethiopia the average time to fetch water was more than one hour).

The percentage of households who pay for drinking water is rather high (above 80%) in the Transition and Savannah Zones, and intermediate (around 50%) in the Forest Zone (Figure 2).

Table 1: Access to safe drinking water

	Forest	Transition	Savannah
Potentially unsafe water source			
River/lake, spring	22.3	31.2	18.8
Well without pump	8.6	12.4	12.7
Other	0.6	4.7	8.8
Safe water source			
Borehole/well with pump	40.7	29.4	27.9
Public stand pipe	22.3	17.3	28.9
Private stand pipe	2.1	2.1	0.8
Other	3.6	3.0	1.8
Subtotal - safe	68.7	51.8	59.4

Figure 1: Minutes spent by household members to fetch drinking water

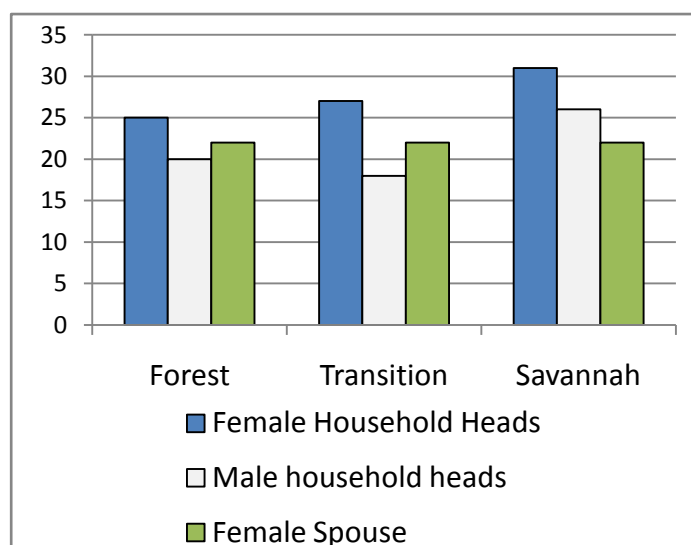


Figure 2: Percent of households who pay for drinking water

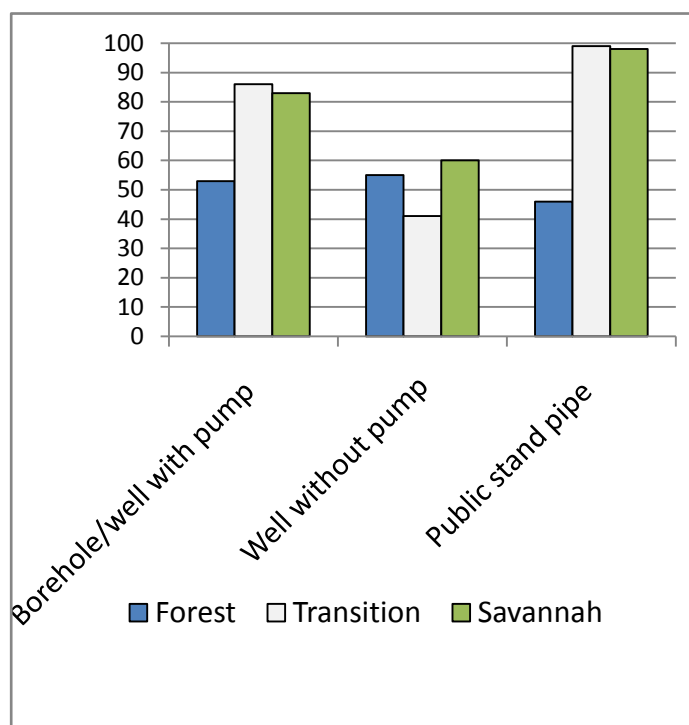


Figure 3: Coverage of Water and Sanitation Committees and Residence of District Assembly Member (percent of surveyed communities)

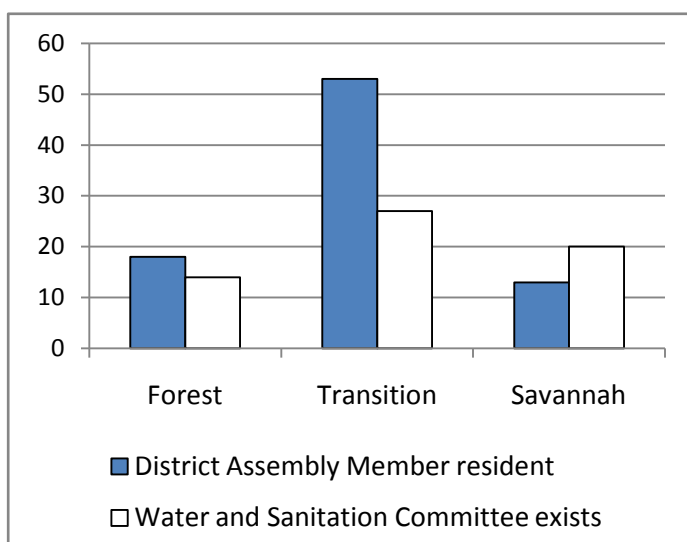


Figure 3 indicates that the percentage of communities in which a water and sanitation committee (WATSAN) exists ranges from 14% in the Forest Zone to 27% in the Transition Zone.

For comparison, the figure also displays the percentage of communities in which the District Assembly Member is resident. Except for the Savannah Zone, the percentage of communities that have direct access to a District Assembly member is higher than the percentage of communities that have a WATSAN.

The survey also found that although there is a policy to promote women in WATSANs, and although drinking water is mainly the responsibility of women, less than 20 percent of WATSAN committee members surveyed were female.

Table 2: Household satisfaction with quantity and quality of drinking water

(percent of respondents who indicate that they are satisfied with drinking water quantity / quality)

	All water sources	Borehole with pump
<u>Quantity</u>		
Community with WATSAN	87%	88%
Community without WATSAN	78%	79%
Difference statistically significant (P-value)	Yes (P=0.001)	Yes (P=0.052)
<u>Quality</u>		
Community with WATSAN	85%	96%
Community without WATSAN	77%	85%
Difference statistically significant (P-value)	Yes (P=0.005)	Yes (P=0.005)

While the coverage of WATSANs was limited, the study found that a higher percentage of households in communities with a WATSAN were satisfied with the quantity and quality of drinking water than in communities without a WATSAN (Table 2). These differences were also statistically significant. While a correlation does not establish a causal relation, this is still an indication that WATSANs may improve drinking water supply.

However, even in communities without WATSANs, the reported satisfaction rates for the quality and quantity of drinking water were high.

One needs to interpret the satisfaction data with some care, because many households that had only access to unsafe drinking water, such as rivers, still reported high satisfaction rates, indicating that satisfaction

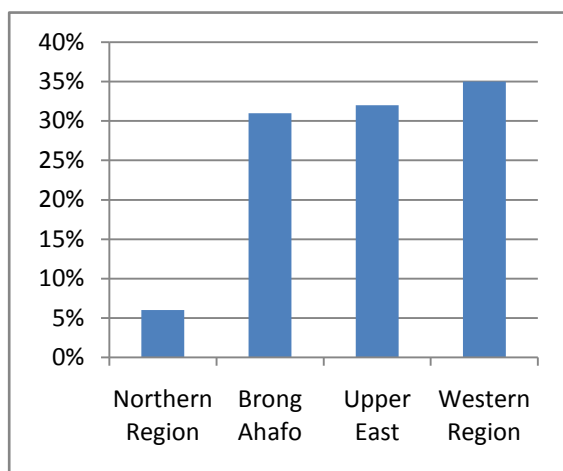
may not be the best indicator of quality of services.

The regression analysis also showed that the presence of a WATSAN in the community had a significant positive

influence on the payment for water services, indicating that they fulfill their expected role in this regard.

Since many communities do not have a WATSAN, a regression analysis was also conducted to find out which factors are associated with the functioning of a

Figure 4: Percent of WATSANs who are consulted regarding the choice of the contractor in charge of constructing or rehabilitating water facility



WATSAN in the community. This analysis indicates that communities that made a contribution to the construction of the facility, and communities that have a larger number of other organizations, are more likely to have a functioning WATSAN.

However, communities that have a larger number of different ethnic groups are less likely to have a functioning WATSAN. These findings are consistent with the literature on community-based water management, which holds that this approach works better in communities that have more social capital and cohesion, resulting in better conditions for collective action.

The study also raised the question whether the WATSANs have a say in the choice of the contractor who are in charge of constructing or repairing drinking water facilities. Figure 4 suggests that this was the case in only 30% of the WATSANs. In the Northern Region, this percentage below 10%. According to the survey, WATSANs also play a rather limited role in evaluating the drinking water facilities after the construction or rehabilitation is completed.

Table 3: Method of selecting chairperson

Method	<u>Upper East</u>	<u>Northern Region</u>	<u>Brong Ahafo</u>	<u>Western Region</u>
	n=60	n=15	n=17	n=13
Elected by users	32%	7%	17%	46%
Informal agreement amongst users	13%	0%	0%	8%
Consensus reached by users	50%	67%	71%	31%
Appointed by chief	3%	19%	0%	15%
Others	2%	7%	12%	0%

The study aimed to find out how the WATSANs function in practice. Table 3 indicates that WATSANs do not necessarily function according to the principles of competitive elections. Except for the

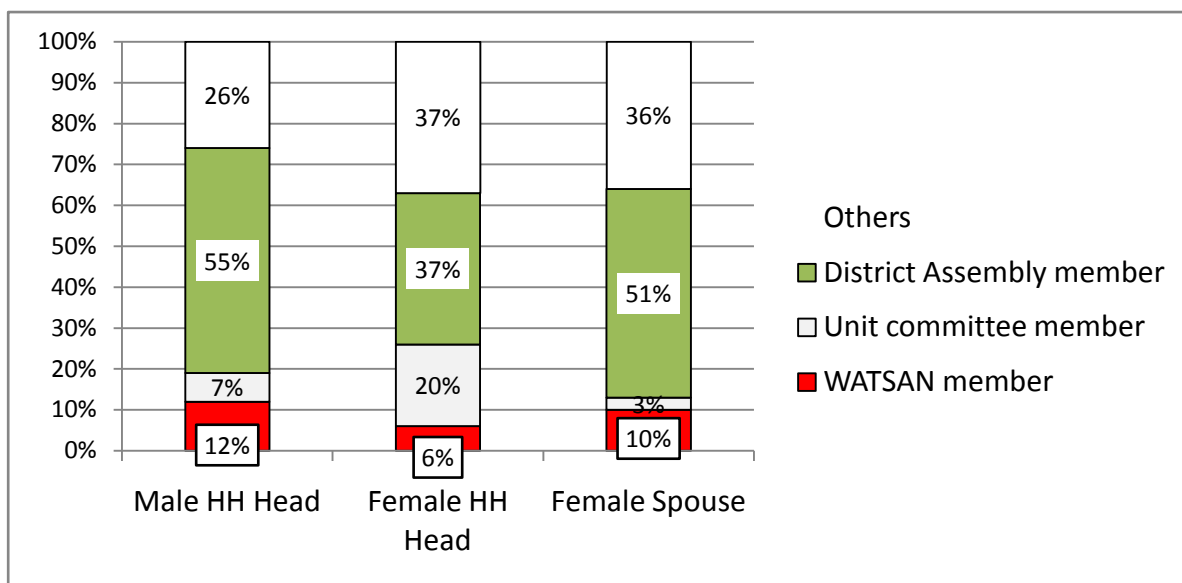
Western Region, chairpersons were elected in consensus reached among the users. Elections were also not very frequent, and the WATSAN committee members often stayed in place until as long as the

community was content. Decisions about water fees were most frequently made by consensus in community meetings. In the Northern Region, the chiefs (traditional authorities) appointed the WATSAN chairperson in almost 20% of the cases (Table 3). These findings indicate that the WATSANs use mechanisms such as respect in the community, rather than competitive elections, to create accountability. The study found that it is also quite typical that WATSANs do not function as membership organizations with regular membership meetings, it is rather the executive members who perform all tasks. Still, community meetings seem to play a

role in creating accountability.

Figure 5 shows that the majority of the rural citizens do not approach a WATSAN committee member if they are dissatisfied with drinking water, most likely because they do not have a WATSAN in their community. More than half of male household heads and female spouses contacted the District Assembly Member for water related problems. For female household heads, the unit committee member was an alternative in 20% of the cases.

Figure 5: Whom do respondents approach when they are dissatisfied with drinking water?



Policy implications

Ghana has made considerable progress in increasing access to safe drinking water, and the share of rural households that pay for drinking water, thus contributing to the maintenance of drinking water facilities is remarkably high. The formation of Water and Sanitation Committees (WATSANs) has been a central element in the strategies used by the governments and donors to improve access to drinking water in rural

areas. The study indicates that this approach has remarkable advantages, such as promoting the collection of fees to support the maintenance of the water facilities. The strategy to rely on WATSANs is, however, also confronted with some challenges. Considering the efforts that have been made by the government and donor agencies to promote WATSANs, the coverage of the WATSANs seems still rather low. The study also indicates that WATSANs play a limited role in the

construction of drinking water facilities, such as the choice of the contractors, even though they have to contribute funds for the construction. The following approaches can be used to address the challenges:

- ***Understanding the reasons for low coverage:*** In view of the rather low coverage of WATSANs, it appears useful to conduct further research to better understand the reasons for this observation. The quantitative study confirmed that WATSANs function better in communities that have better conditions for collective action. However, the question is what to do in communities that lack this precondition. Ethnically diverse communities seem to face more challenges in using a community-based approach. Qualitative information collected under the study indicates that WATSAN often members lose interest in performing voluntary tasks without any remuneration, while the WATSANs collect funds. Compensating WATSAN members might be an approach to be considered where sustainability of WATSANs is a problem.
- ***Strengthening the role of women in WATSANs:*** Even though this is already a policy priority, the study indicates that the participation of women in WATSAN committees is rather limited.

There is a need to further understand the reasons for limited participation, so as to design strategies to overcome this challenge. Targeting women specifically in capacity development activities might be one strategy. The study also found that NGOs who work with WATSANs often have predominantly male staff. Increasing the number of female staff who interacts with WATSANs may also be a useful strategy to increase female participation in WATSANs.

- ***Strengthening Unit Committees as an alternative strategy:*** Since drinking water supply is a service needed by the entire population rather than specific groups, the Unit Committees may be considered as an alternative organization that can perform the tasks of the Water and Sanitation Committees, especially in communities that lack the social capital to create functioning WATSANs. At the same time, Unit Committees can carry out functions for other rural services. Considering that public resources are limited, investing Unit Committees as “multi-purpose” committees, which also play a formal role in the local government system, could be considered as an alternative to the formation of specialized user organizations for services that everyone needs.

The Ghana Strategy Support Program (GSSP) is a research, communication, and capacity-strengthening program to build the capabilities of researchers, administrators, policymakers, and members of civil society in Ghana to develop and implement agricultural and rural development strategies. With core funding from the U.S. Agency for International Development (USAID)/Ghana and a mandate to develop a multi-donor-funded program, IFPRI launched GSSP as a partnership between Ghana and its development partners. Any opinions stated in this note are those of the author(s) and do not necessarily reflect the policies or opinions of IFPRI.

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