

Community participation in water delivery services and sustainability in the Savelugu/Nanton Municipality, Ghana

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Accepted 7 April, 2014

ABSTRACT

The problem of good sources of water has persisted in the Northern part of Ghana for a long time. In most communities, depending on the population, a number of people comprising males and females are chosen by some influential members of the community to form the water and sanitation committee (WATSAN) to participate in all activities pertaining to water sources and sanitation. This study tended to focus on the Savelugu/Nanton Municipality where access to potable water ranks first on their list. The study population involved all residents who were members of water and sanitation committees in the five communities, namely Moglaa, Tarikpa, Savelugu, Nanton and Tampion in Savelugu/Nanton Municipality where The Network conducted the pilot research on water delivery service. The study population also included the partner organisations which are the District Water and Sanitation team, other service providers and Wuni Zaligu Development Association (WUZDA). The study found out that should programme planners involve community members from the planning to utilisation level; this would lead to the empowerment of the community members so as to enable them to take total control, ownership, maintenance and sustainability of the water facilities and eliminate barriers to real and effective participation in water delivery services in Savelugu-Nanton Municipality. The use of the community scorecard showed promise of engendering community participation in water delivery services in the Savelugu-Nanton Municipality hence the need to introduce it to other communities in the districts and other parts of the country.

Keywords: Water and sanitation, project development, project implementation, sustainability, ownership, community participation.

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INTRODUCTION

Water is one of the most vital natural resources for all life on earth. The availability and quality of water always have played an important part in determining not only where people can live, but also their quality of life. Even though there has always been plenty of fresh water on earth, water has not always been available when and where it is needed, nor is it always of suitable quality for all uses.

Safe water for nations and their peoples is fundamental to development. Access to water is a basic human need and a fundamental human right, vital for the dignity and health of all people, yet in our increasingly prosperous

world, more than one billion people are denied the right to clean water (Human Development Report, 2005). According to the report, water pervades all aspects of human development and when people are denied access to water as a productive resource, their choices and freedoms are constrained by ill- health, poverty and vulnerability.

Statistics from the Human Development Report (2005) indicates that about 1.1 billion people in developing nations have inadequate access to water. The water situation is not different in Ghana as a developing nation, especially in the rural settings. The Ghana Water and

Sewage Company (GWSC), the sole provider of clean and safe water in 1986 focused its attention on the provision of water and sanitation for the rural sector hence the formation of Community Water Sanitation Agency (CWSA) in line with the declaration of the UN General Assembly to mark 1981 to 1990 as the International Drinking Water and Sanitation Decade. After several deliberations, the National Community Water and Sanitation was launched in 1994 as part of the government's decentralisation policy. This was backed by an Act of Parliament, Act 564, to facilitate the provision of safe water and sanitation to rural communities and small towns in Ghana (WaterAid Report, 2006).

Sufficient supply of safe water is vital to human life. Improved systems are needed for the protection, extraction, treatment, delivery and storage of water to support healthy economically active communities. Appropriate sanitation technologies with improved hygiene practice are critical for preventing water born diseases such as diarrhoea and guinea worm. As the world strives to meet the Millennium Development Goals (MDG) by the year 2015, many donors and governments realize that much greater effort is required to increase people's access to improved water and sanitation (RTI Report, 2012).

According to the RTI (2012) report, lack of clean drinking water and sanitation systems is a severe public health concern in Ghana, contributing to 70% of diseases in the country. Consequently, households without access to clean water are forced to use less reliable and hygienic sources, and often pay more. Water supply and sanitation sector in Ghana faces a number of challenges, including very limited access to sanitation, intermittent supply, high water losses and low water pressure (WaterAid Report, 2006).

According to the Joint Monitoring Program in water supply and sanitation of UNICEF and WHO, access is about 86% in both rural and urban for water and 14% for sanitation in Ghana (RTI report, 2012). According to this report water supply and sanitation infrastructure in Ghana is insufficient, especially in rural areas in Ghana. However, in reference to the multi-donor Africa MDG assessment access to an improved water source is much lower (56%) and access to improved sanitation is higher (35%) (RTI Report, 2012).

Research indicates that in the 1960s and 70s, members of communities participated actively to provide basic social services such as wells, schools and path or roads leading to and from the community (Amedzro, 2005). These days, they rely solely on the government, with the assumption that they know the social problems and social services needed by communities as well as the solution to these problems, thus, making the government become the sole planner, implementer, monitor and evaluator of social services meant for their development. The citizens therefore remained passive recipients of development programmes, which are usually

planned and executed for them by their government. This approach to development is associated with many challenges such as unsuitable programmes and projects, wrong citing of projects, corruption and limitations, all mainly due to the non-involvement of the recipients in the planning, implementation and even in the assessment of the impact of the programmes on the beneficiaries (Amedzro, 2005).

Community members these days are actively involved in all aspects of projects and programmes rather than being passive recipients of development initiatives (World Bank report, 1996). According to this report, community participation motivates the sense of ownership of development initiatives by the members and eventually ensures the sustainability of the initiatives. One development initiative where community participation had been stressed is by the Northern Ghana Network for Development through the use of the Community Scorecard as a participatory, monitoring and evaluation tool to empower community members to assess the impact of social services rendered to them (Robinson, 2005).

In most communities, depending on the population, a number of people comprising males and females are chosen by some influential members of the community to form the water and sanitation committee (WATSAN) to participate in all activities pertaining to water sources and sanitation (WaterAid Report, 2006). There are criteria such ability to contribute financially, participation in the project and number of water facilities available for these selections, but how often are they followed is debatable. Even though there are limitations and obstacles associated with community participation in water delivery services, this study seeks to assess community participation in water delivery services and sustainability, using the Community Scorecard as a tool for participatory, monitoring and evaluation.

Communities that participate in projects find out that, not only do they derive more satisfaction from the joy that comes from open community involvement, but they also achieve more results, more rapidly which benefit the community as a whole. Community participation has been heralded as a source for sustainability to development initiative particularly for the underprivileged. Therefore, for projects to be sustained, the involvement of community members who are beneficiaries in their own development programmes should be paramount. When people participate in ongoing projects, it increases their sense of control over issues that affect their lives.

Therefore to enhance sustainability, community members need to be empowered (Karl, 1995). According to Karl (1995) empowerment is to enable the community have the capacity to make realistic decisions and implement them with minimal support. Empowerment is obtained by building the capacity of people. Capacity building is achieved through participation of community members in which information about community projects

is made known to the members, so as to be able to mobilize resources to build their capacities to achieve their goals. In this process, they create a “can do” spirit among community members. This eventually leads to sustainability of community projects.

Project sustainability can be ensured when community members are included in the project design, are seriously committed to the programme delivery, and try to put such commitment and zeal into practice. The community must also show a high level of dedication and ensure careful monitoring of the project. Thus, the community must see the programme as their own and find ways of keeping it to improve their lives (Binswager, 2003). In order for such projects like water delivery to be sustainable, there is the need to include plans for the communities to manage both internal and external resources to provide greater sense of ownership. It has also been suggested that sustainability rests on flexible project designs which takes advantage of local knowledge and practices and promote community ownership. Such measures help programme designers to adapt to changing circumstances and respond quickly to new opportunities that may emerge (Haziri and Heather, 2007).

According to Rubin and Rubin (1986), people must learn that they are not helpless, do not depend upon government and business or await decision made by others. Community members should act together to control their own lives. Sustainability could be achieved when the development process is owned and managed by the local community itself and not from outside help (Rubin and Rubin, 1986).

This study is captured in the Savelugu/Nanton Municipality where access to potable water ranks first on their list. The Municipality is noted for high incidence and prevalence of guinea-worm, ranking fifth highest in the world and highest in Ghana (District Repository, 2007). It consists of 149 communities with Savelugu as the Municipal capital and covers a total land area of 1790.70 sq km. It has a population of 121,154 (2010 Population and Housing Census). The communities in this district are predominantly rural with a very high level of poverty and illiteracy. The main occupation of the people is farming and they cultivate crops such as rice, groundnut, yams, cassava, maize, cowpea and sorghum. Trees like sheanut and dawadawa tress found in this area are drought-resistant, most of which are of economic value and serve as an important means of livelihood especially for women (Municipality Profile, 2012).

Statement of the problem

The sustainability of any community project, to a large extent, depends on the involvement of the members of the community because it accounts for the importance and the value the people attach to it. A research conducted by Northern Ghana Network for Development in 2005 on water and delivery services in some

communities in the district revealed that, most community members do not participate in projects because of lack of skills and knowledge on the project. Also, their responsibilities and roles are not made clear. Information flow and feedback between them and the service providers is a problem.

As a result of the above reasons, community ownership and sustainability of projects cannot be guaranteed as soon as the service providers withdraw. In the light of this deduction, the study, therefore, sought to find answers to the following question: How far has community members' participation in water service delivery and sustainability affected development in Savelugu/Nanton Municipality in the Northern Region?

Objectives of the study

The broad objective of the study was to find out the level of participation of members of communities in water service delivery services and sustainability in the Savelugu/Nanton Municipality in the Northern Region.

The specific objectives of the study were to:

- i) Find out the level of participation of community members in water delivery services and sustainability in Moglaa, Tarikpa, Savelugu, Nanton and Tampion communities;
- ii) Identify the challenges community members face in water delivery services, and
- iii) Examine the strategies the community could adopt to enhance the sustainability of water delivery services in the Savelugu-Nanton Municipality.

METHODOLOGY

The study population involved all residents who were members of water and sanitation committees in the five communities, namely Moglaa, Tarikpa, Savelugu, Nanton and Tampion in Savelugu/Nanton Municipality where The Network conducted the pilot research on water delivery service. The study population also included the partner organisations which are the District Water and Sanitation team, other service providers and Wuni Zaligu Development Association (WUZDA).

The research design used for the study was the field survey of descriptive and analytical type. This allowed the analysis of the findings in using descriptive, narrative, frequency tables and percentages. Both quantitative and qualitative approaches, using structured interview schedules and questionnaires were employed to elicit the collection of data on water delivery provided to the communities under study. Water and sanitation committee members were selected from Moglaa, Tarikpa, Savelugu, Nanton and Tampion where a pilot project on the use of 'community scorecard' for assessing social services in the Savelugu/Nanton Municipality in the Northern Region of Ghana and the supporting organisation was conducted.

Out of the population, 46,984 adults were eligible to vote, (2010 Population and Housing Census), but some of them might no longer live in the area and in the absence of a reliable sample frame, it was best to handpick only members of the various water and sanitation committees in the five communities. The sample size

for the study was one hundred and sixty-four (164) in all. Four zones were randomly selected from eight zones outside Savelugu township representing Moglaa (15), Tarikpa (25), Tampion Nayifong (21), Nanton Kanbonyanga (19). In Savelugu township, three (3) zones were also randomly selected namely; Savelugu Limanfong (23), Savelugu Kugafong (25) and Savelugu Nakugufong (21) out of the six (6) zones. Service providers included three (3) respondents for the District Water and Sanitation team, one (1) water and sanitation officer from eight service providers and (4) from Wuni Zaligu Development Association (WUZDA) and their partners.

The study adopted the non-probability sampling approach in selecting the sample for the study, using purposive and quota sampling techniques. This method was chosen because of the absence of a reliable sampling frame and the large size of the population (Peil, 1995).

The study employed structured interview schedule using the local dialect (Dagbani and Mumpruli) for the collection of primary data from the respondents because the majority of the subjects were illiterate.

Pre-testing of the instruments was done in a randomly selected community, Moglaa. This was to determine if any of the questions and statements were confusing, and if the survey was leading or misleading in any way. The result of the pilot study was then used to adequately structure items in the interview schedule and questionnaire in order to enhance their validity.

Four trained field assistants were selected to aid in data collection. The field assistants were selected based on their knowledge of the local languages, Dagbani and Mampruli, previous research experience and ability to understand and write in the local dialect and English. In all, a period of twenty-one (21) days was used in administering the research instrument.

The nature of the interview schedule and questionnaire generated both quantitative and qualitative data. The two types of data were edited for consistency of responses. The researcher used the computer software Statistical Package for Social Sciences (SPSS) and manual approaches to analyse these data. Data was presented in Tables and percentages.

RESULTS

Although, the involvement of community members was encouraging, they were not involved right from needs assessment, planning through to evaluation stages of water delivery services in Savelugu-Nanton Municipality. The central issue in any community development activity is that of participation, this is because, without community participation, there are obviously no partnership, no developments, and no programmes. Possibly, the involvement of community members ensured the sustainability of the water delivery services in Savelugu-Nanton Municipality.

Even though it is commendable to learn that the community members in Savelugu-Nanton Municipality were involved in water delivery services project, the level of their involvement was not so good enough as shown in Table 1.

In terms of grading the level of community members participation in water delivery services, half of the respondents revealed that their participation was moderate with only 30% showing a level of high to very high participation. This shows that in general participation has been just satisfactory or above average as indicated

Table 1. Levels of participation in water delivery services.

Levels of participation	Frequency	Percentage
Very low	3	2.0
Low	20	13.3
Moderate	75	50
High	34	22.7
Very high	11	7.3
No response	7	4.7
Total	150	100

by the mean of 3.2.

Stages of involvement in the water project

The majority of community members (78.1%) indicated that they were involved in the project at the utilisation stage while 25.2% were involved in the drilling of the boreholes. As well, 18.5% of the community members were involved actively in searching for sites for the projects. Another area that the communities were involved in the water projects was the planning stage of the projects in which only 26.4 of the community members participated.

Contributions to the water project

On contributions towards the provision of the source of water as provided in Table 2, less than half (40.2%) of the respondents contributed financially toward the provision of water. Other forms of contributions provided include volunteering as labourers to the project construction, mobilizing people for clean-ups of the site while the women cooked for those who engaged in the drilling of the water. Nearly 10% of the respondents did nothing to develop the project.

That notwithstanding, the water service facilities were found to be very good, hence the majority (68%) of the community members indicated that the project was sustainable.

Level of sustainability of water delivery services

The study further examined the level of sustainability of the water delivery services by considering the following issues: regular interaction with the service providers, channel of communication with service providers; sustainability of participation in water delivery projects in the communities, and how to sustain participation in water delivery projects.

Table 3 shows that the level of interactions was low as indicated by 30 who did so on monthly basis. Also, about half (50%) of the community members never interacted

Table 2. Contribution towards the provision of the sources of water.

Contribution towards the provision of the sources of water	Frequency	Percentage
Contributed in educating the people	15	5.9
Helped in locating site for project	19	7.6
Mobilizing people for clean ups	2	0.8
Did Nothing	21	8.4
Contributed money	101	40.2
Cooking for those who drill	21	8.4
Volunteered as labourer	72	28.7
Total*	251	100

*Multiple responses were made.

Table 3. Regular interaction with the service providers.

Interaction	Frequency	Percent
Fortnightly	3	2.0
Monthly	45	30.0
Quarterly	19	12.7
Yearly	8	5.3
Not at all	75	50.0
Total	150	100.0

Source: Field Data, 2010.

Table 4. Channel of communication with service providers.

Channel of communication with service providers	Frequency	Percent
Letters	2	0.7
Workshops	14	4.7
Durbar	6	2.0
Focus group discussion	98	32.7
Mobile phone	4	1.3
Visits	22	7.3
Through water board committee	120	40
No form of communication	24	8.0
No response	10	3.3
Total	300	100

with the water service providers but rather channeled their communication to water service providers through water boards or committees. This is not a good one for the sustainability of the water project as they will think it was for the service providers.

Table 4 shows the level of communication of the community with the service providers in water delivery.

On sustainability of participation in the water delivery projects in the communities, the majority (87.4%) responded in the affirmative with the rest disagreeing.

Also as to how the water delivery projects could be sustained they offered a variety of reasons as in Table 5.

According to Table 5, less than half (37%) of the respondents indicated that they would continue to attend community meetings to ensure the sustainability of community members participation in the water delivery projects. Another 20% of the respondents would take part in any contributions and dues either financially or material toward the water delivery project. More so others (15.9%) would undertake regular check-ups on the boreholes and water facilities to report problems identified. Other ways through which the community would sustain their participation included educating people on the importance of the water project to the community and

Table 5. Sustainability of community members' participation in water delivery project.

Sustainability of community members participation in water delivery project	Frequency	Percent
Take part in decision making	4	1.3
Ensuring transparency in management	10	3.3
Keeping in contact with service providers	14	4.7
Educating people on the importance/good use of boreholes	26	8.7
Attending committee meetings	112	37.3
Volunteer as labourer	14	4.7
Take part in any contribution/dues	60	20
Help in cleaning around the boreholes	13	4.3
Regular check-ups on boreholes/water to report problems	47	15.7
Total*	300	100

*Multiple responses.

how to take good care of the water facility.

DISCUSSIONS

The study brought to the fore the level of participation of the respondents. The respondents showed moderate to high level of participation. In fact the level of apathy was high among some community members. This is similar to Oakley and Mersden (1984) study on participation to rural development where people showed apathy and lukewarm attitudes towards the development of projects they had not been involved at the planning stages. Many of the inhabitants participated in the implementation (utilization) stages of the water project. Only a few were involved in the site selection and the planning stage. Perhaps their knowledge in such activities might have relegated them to the background at this stage. One would have thought that being community members and indigenes, they would be in their best position to help locate where to site the project particularly the women so that they do not travel long distances from their homes. Thus according to Reid (2000), effective community participation empowers people and brings about sustainable benefits to the communities concerned.

It is to be noted that less than half of the respondents contributed financially to the project. These persons included the wealthy traders, chiefs (traditional rulers) and opinion leaders. It is worthy to note further that individuals who could not contribute financially did so in diverse ways by volunteering their services and time during the construction and providing meals for the volunteers and other workers by the women (Korten, 1990; Karl, 1995) as well as educating the community on the benefits of the project and the need to participate actively (Reid, 2000). This last aspect of their contribution is crucial as such sensitization leads to ownership and sustainability (Amedzro, 2005).

Sustaining a project is a big problem in developing countries particularly where there is very little

involvement and participation (Rubin and Rubin, 1986; UNDP, 2005). This leads to the level of interaction that continues after the project is handed over. The level of interaction was invariably low as many of the people hardly did so. Although a third of the people interacted with the service providers on a monthly basis, more people could have done so. But observing the level of poverty and illiteracy in the area, many would like to engage in commercial and farming activities than such interactions especially when such discussions are not in their local language and meetings are not held in late evenings and the night for a short time. This is corroborated by Morgan (2001) whose study on community participation in health related issues established that the level of interaction in such projects is directed or dictated by the level of literacy and periods of engagement and that people with high levels of education tend to interact better with service providers.

Communication is vital for sustaining water projects as such methods enhance the flow of information. The community members were willing to perform specific functions to keep the project on. Among these were their desires to continue attending committee meetings, contributing in all forms that are desirable both financially and materially and performing regular but routine check-ups to determine the problems facing the water project and reporting them. This is in line with the studies of Binawager (2003) and Haziri and Heather (2007). These services to be rendered by the people of Savelugu-Nanton District are laudable ways to sustain the project.

CONCLUSION

Participation in development projects or activities such as the provision of water facilities in deprived Municipalities such as Savelugu-Nanton in the Northern Region of Ghana tried to involve community members from the planning to utilisation level; this led to the empowerment of the community members enable them to take total

control, ownership, maintenance and sustainability of the water facilities and eliminated barriers to real and effective participation in water delivery services in Savelugu-Nanton Municipality. The people in the communities were prepared to support the project through financial and material ways. The people in the municipality were ready to sustain the project by actively participating in decision making, keeping regular contacts with service providers, educating people on the benefits of having the project and monitoring the success of the project through regular check-ups to report all problems for ready attention. Community members although interacted less with the service providers, the channel of communication adopted was found to be good as they did so through water board committees and personal contacts. These notwithstanding, the water service facilities were found to be very good; hence, the majority of the community members indicated that the project was sustainable.

RECOMMENDATIONS

Based on the findings of the study, the following recommendations are made; to enhance community participation in water delivery services and sustainability in Savelugu-Nanton Municipality it is recommended that water service providers should:

1. Involve community members, and all the key stakeholders, in the provision of water right from designing, planning, implementation, monitoring and evaluation stages of the project.
2. Put more effort in sensitizing, conscientising and educating community members to strengthen and also sustain their active participation in water delivery in the district.
3. Encourage genuine and regular interaction and more communication between the community members and water and sanitation committee members and water service providers and community members through fora or durbars quarterly or yearly to enhance effective participation and sustainability of water delivery services in the Municipality.
4. The study also revealed that, strategically, more water facilities are needed to supplement the existing facilities in the Savelugu-Nanton Municipality there is the need for community members to endeavour to pay their water bills regularly to help sustain the facilities.
5. Community members should be provided with continuous training and education programmes to sufficiently empower them to own, maintain and sustain the water projects in their community. Also service providers should intensify their monitoring mechanism to make sure deliberations between them and the water board are well disseminated to community members.

REFERENCES

- Amedzro, A. K. (2005). *Theory and Practice of Community Education*. Accra: Ghana Universities Press.
- Binawager, H. (2003). Monitoring empowerment in national CDD programs in the African Region. Presentation made to the workshop on Monitoring Empowerment: Cross Disciplinary Perspectives. Washington DC. 4-5 February, 2003. World Bank.
- Haziri, E. K., and Heather, K. (2007). Measuring and accounting for community capabilities in Kordofan, Sudan. Discussion paper 00730. Washington DC. International Food Policy Research Institute.
- Karl, M. (1995). *Women and empowerment: Participation and decision making*. London: Zed.
- Korten, D. (1990). *Getting to the 1st century: Voluntary Action and the global Agenda*. www.gsdr.org/docs/open/HD_508.pdf. Retrieved 18/8/2010.
- Morgan, L. M. (2001). *Community participation in health*. Boston: Perpetual Allure.
- Oakley, P., and Mersden, D. (1984). *Approaches to participation in rural development*. Geneva: International Labour Organization.
- Peil, M. (1995). *Social Science Research Methods: A handbook for Africa*. (2nd Ed), East Africa Educational Publishers Ltd. Kenya: Brick Court Nairobi.
- Population and Housing Census (2010). Ghana Statistical Service, Accra.
- Reid, N. J. (2000). *Community participation: How people power brings sustainable benefits to communities*. USDA. Rural Development Office of Community Development. <http://www.usda.org>. Retrieved 3/5/2010.
- Robinson, L. (2005). *Community Score Card*. www.roboroz.ca/scorecard/infoflow.html. Retrieved 18/6/09.
- RTI Report (2012). *Water Supply and Sanitation*. Retrieved 17/9/2013.
- Rubin, H. J. and Rubin, I. (1986). *Community Organizing and Development*. New York: Macmillan Publishing Company.
- UNDP Human Development Report (2005). *Beyond Scarcity: Power, poverty and the global water crisis*.
- WaterAid (2006). *Bridging the gap: Citizens' action for accountability in water and sanitation*. Citizen section Report. www.wateraid.org. Retrieved 4/03/10.
- Wateraid Report; WaterAid, [org/international/what we do/where we work](http://org/international/what_we_do/where_we_work). Retrieved. 12/12/09.
- World Bank Report (1996). *Participation Sourcebook*. Washington D C: World Bank.