CrossRef DOI of original article:

Cultural Challenges Affecting Effective Community Participation in Potable Water Management in Selected Rural Communities in the Upper West Region of Ghana

Shirley Dankwa

Received: 1 January 1970 Accepted: 1 January 1970 Published: 1 January 1970

Abstract

The purpose of the study was to examine the challenges affecting effective community participation in potable water management in the Wa-West District of the Upper West Region of Ghana. A qualitative approach and a case study design were employed for the research. The core objective of the study was to examine the challenges affecting effective community participation in potable water management in the Gbaalwob, Chogsia, and Gadi, communities in the Wa West District in the Upper West Region of Ghana. The sample size of the study was seventy-two participants. A purposive sampling technique was employed in selecting the participants for the study. This included thirty residentseach from the three communities, namely; Gbaalwob, Chogsia, and Gadi. Also, three key officials from the District Assembly and three opinion leaders each from the Gbaalwob, Chogsia, and Gadi communities sampled for both the interviews and focus group discussion. A semi-structured interview guide and a focus group discussion checklist were employed in the data collection. Data was analysed thematically. Emerged themes from the interviews and the focus group discussion were analysed based on the emerging themes from the data collection. It was revealed that inadequate finance is a foremost impediment to effective community participation in water management in the district. As a result, people are unable to make regular contributions to maintenance services of boreholes when they break down. It was therefore suggested that there should be the provision of credit facilities to households who are deprived of diversifying their livelihood to enhance household to effectively contribute monthly towards the borehole?s maintenance in the various communities.

Index terms— challenges, community participation, ghana, potable water, water, water management

1 I. Introduction

ccording to Obeng, Iddrisu and Eshun (2020), "Potable water is a basic need in every community and should be made accessible and affordable to community members daily" (p. 21). It is highly believed that "Just as in many African countries, the central government and external support agencies in Ghana have been responsible for planning, constructing, and maintaining the rural water supplies with little or no involvement of the beneficiary rural communities" (Salim, 2002). Several approaches to community participation in managing resources have been in place for many years. But it seems that "After many years of failure of top-down or centralized planning and provision of such services, the emphasis has shifted to a decentralized community-oriented approach" **??**McCommon, Warner, & Yohalem, 1990). Subsequentseries of community participation of potable water culminated in "a review of policies on water and sanitation to keep pace with the changing conditions in Ghana and on the international scene, the National Community Water and Sanitation Programme (NCWSP) was launched in 1994. Subsequently, the Community Water and Sanitation Agency (CWSA) was established by Act

564 in 1998 with the mandate to facilitate the provision of safe drinking water and related sanitation services to rural communities and small towns in Ghana (Community Water and Sanitation Agency"[CWSA], 2007). The provisions in the very Act which recognised the CWSA also transferred rights and operation responsibilities to the communities and the district.

Nevertheless, it was understood that participation in community water programmes was restricted to the "mobilization of self-help labour or the organization of local groups to ratify decisions made by project planners outside the community" (Laryea, 1994 cited in Obeng et al., 2020). This shallowmeaning had characteristicboundaries to the effectiverural water implementation programmes. Consequently, the prominence was once moretransferred to community management. Currently, "drinking water and sanitation policies assume that the facilities can and should be best managed by local user communities. It is expected that the so-called communal management will guarantee the technical sustainability of the facilities needed to maintain access to the facilities provided" (Eguavoen, 2006). This should have always been the ideal situation. However, this culture is not what is experienced in most communities concerning participation in potable water management in the northern part of Ghana.

Therefore, the main objective of the study was to examine the challenges affecting effective participation in community management of potable water in the Wa West District. This research question guided the study - What are the challenges affecting effective community participation in potable water management? The research was delimited to the challenges affecting effective participation in community management of potable water in Gbaalwob, Chogsia and Gadi Townships in Wa West District in the Upper West Region of Ghana Significantly, the outcome of this research is to help various stakeholders in promoting and developing policies for safeguarding safe drinking water sources in rural areas and the need for promoting participation and ownership of potable water by locals. It also intends to create awareness among the people of Wa West District on the benefits of effective participation in community management of potable water.It is to equally providean opportunity for residents of Wa West to determine the importance of potable water being a shared responsibility. In the sense that community members have a role to play as well as government or service providers.

2 II. Literature Review

This section reviews related literature on participation in community management of rural potable water supply systems. It reviews the literature on potable water management, community participation and challenges of community participation in accessing potable water.

According to Obeng et al. (2020), "safe drinking water is very important in the daily lives of human beings, and also vital for public health."This has been the agenda for countries in the West all these years. Countries of the European Union (EU) have made highquality tap water easily accessible to their citizens through the EU drinking water policy, which has been in force since the mid-seventies (European Commission, 2014). The policy, since its institution in the mid-1970s, has ensured high drinking water quality across the EU countries by further ensuring restrictedcompliance with the standards of the policy by member countries and state institutions. According to the European Commission (2014), about 65 million EU citizens who are predominantly dwelling in rural and remote areas rely on small drinking water supplies. This ideal situation is not the same everywhere on the planet.

Water Supply and Sustainability in Sub-Saharan Africa (SSA)has been a grappling issue all this while.It is believed that "Africa has the lowest quality water service coverage of any continent and accounts for almost onethird of the global population without access to improved water supply" (Harvey &Reed, 2007). The disparity gap in accessingsafe drinking water in Africa has been higher in rural areas as compared to urban areas. Rural water coverage in 2000 in Africa was found to be around 45% still leaving about 237 million people unservedwhile, urban water coverage was about 83% in the same yearwith only about 37 million urban dwellers unserved (WHO/UNICEF, 2000). This presents evidence that rural communities in Africa are lagging significantly behind urban areas in potable water supply.

The sustainability of potable water services in Africa has also been found to be a challenging task after the withdrawal of donors and other agencies that provide water services for communities. The reasons for this low sustainability of water services are related to environmental and technical issues, as well as social and management issues. Therefore, adequate attention should also focus on sustainability as we focus on the goal of increasing potable water service coverage through the implementation of new water systems and facilities (Harvey & Reed, 2007).

In Africa, potable water is "a scarce resource both in quantity and quality and when available it is mostly of poor quality" (Mtinda, 2006). This is particularly experienced in the rural and urban slum areas. Inadequate potable water and basic sanitation services present themselves asa major challenging health issue, not only among African countries but globally. According to the UNDP (2006), "an estimated number of 1.1 billion people in developing countries have limited access to safe drinking water while about 2.6 billion people lack access to basic sanitation." It is estimated that "in Sub-Saharan Africa, about 250 million people in rural areas lack safe and accessible water as well andabout 81% out of an estimated 67% of the total rural population lack some sanitation facilities" (Mtinda, 2006). Unsafe water coupled with poor sanitation and hygiene in rural Africa are drivers of child mortality. For instance, "about 43% of children in Sub-Saharan Africa are reported to drink unsafe water and one in five dies before their fifth birthday"(UNICEF & WHO, 2005) Correspondingly, "lack of potable water

and basic sanitation is said to account for about 1.6 million preventable child deaths each year with millions of other children suffering from waterborne diseases such as diarrhoea, typhoid and worms" (UNICEF, 2005). More so, "inadequate water supply, insufficient sanitation and unsafe hygiene are observed to have caused and reinforced poverty and deepened the disparity between rich and poor" (Nicol, 2002). As noted earlier, "the rural and urban poor communities are mostly affected by inadequate water supply and sanitation services both socially and economically" (Mtinda, 2006). This, consequently results in the vicious cycle of poverty. Hence, the community management system needs to be embraced by "stakeholders involved in water supplies and sanitation provision in rural areas" (IRC, 2003).

According to WHO (2011), some African countries particularly countries south of the Sahara and in southern Asia have less than half their population using improved facilities, thus, "the largest number of people are without access to basic sanitation." In terms of regional disparities, Africa is reported to be home to about "40% of all people without access to an improved drinking water source. The rural populations in African countries are severely vulnerable, as the number of people living without access to an improved drinking water source is estimated to be more than five times greater than that of urban populations" (WHO, 2011). There were further disparities in terms of socioeconomic levels of the people in accessingan improved drinking source of water, as well as receiving minimum water service levels and the normal rate of receiving pipeborne water to their residences. These inequalities are projected to be exacerbated by the impact of climate change and hence present several health risks associated with poor water safety to poor people. According to Golo and Eshun (2018), "The socioeconomic impact of climate change, resulting from anthropogenic activities is a major concern for the international community and governments as it has emerged as a key human rights violation, global security issue and socio-economic development threat for many countries of the world" (p.1). Ghanaians are facing the brunt of climate change in accessing potable water, especially within rural communities in the northern enclave of the country.

Recognizing the significance of water and elementary sanitation facilities and their connection to the SDGs has become very necessary. It is thus, relevant to have a clear conception of how rural communities in Africa are participating in the management of potable water systems.

There has been an increased involvement in water development which changed the traditional roles adopted by government and communities, where governments changed from "provider" to "facilitator" and the community from "receiver" to "doer" (Amerasinghe, 2009). The concept of "community participation" in water supply has since proven to be an effective way of achieving sustainability in potable water management. Potable water supply and basic sanitation services that have neglected active community participation in the planning and management of these services have lacked sustainability due to poor operation and maintenance by the beneficiary communities. There is evidence that sustainable potable water interventions in rural communities "are characterized by significant community investment of labour, other in-kind services, and user fees in the design, construction, maintenance and operation of the facilities" (United Nations, 2015). When it comes to water management services, the community should be the principal stakeholder while receiving support from "local government and other development partners such as NGOs and private sectors for proper functions of the community-managed water projects" (Mtinda, 2006). Therefore, community management of potable water services should be backed by measures that turn to strengthen local institutions in the implementation processes of community water services, as emphasized by "the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro 1992 and the World Summit on Sustainable Development (WSSD) in Dublin 2002, South" (Doe &Khan, 2004).

Community participation has great potential to ensurethe sustainability of potable water supplies. It is, however, important to note that communalinvolvement may not inevitablyresult in effective community management of potable water systems at all times in communities. There may be some aspects of the project services that may not have to be managed by the community and so should be explained during community consultations. Nonetheless, community participationis a prerequisite for achieving a sustainable potable water system that is efficient, effective, equitable and replicable in rural communities. Therefore, effective community participation is achieved through effective community consultation and participatory planning processes (Harvey & Reed, 2007). It is against this that, Thorpe **??**2002) suggests that participation by community members in potable water projects should start early, from problem identification to ensuring and enhancing community ownership of projects. He further noted that, if community participation is effectively done from the beginning to the end, then there will be no need for handing over projects to beneficiaries when the project is completed. He argues that, if there is a need for an agency to hand overa project to the community, then the process is already flawed since the community should already own the project. Batchelor, Mckemey and Scott (2000) also contend that "community participation at the early and simplest level of involvement greatly enhances the future sense of ownership by communities." The authors added that ongoing motivation is required for continuing participation because participating in the planning process does not necessarily mean that the community will sustain participation in ongoing service delivery.

There are "key stages of the planning process which involve community participation, among which include; the community established as a body with decision-making power, demand assessment, option identification and informed decision-making" (Harvey & Reed, 2007). Community participation at these stages is very important and must be emphasized. It is during these stages that the communities to better understand through effective

participation which will eventually enhance ownership and sustainability of the project. Any © 2023 Global Journals community potable water project will fail if members of the community do not participate in the activities and decision-making processes involved at every stage. This illustrates how community participation-associated challenges in the management of potable water should be addressed by all stakeholders in the field.Any breakdown in the supply chain process should be tackled with all the desired effort.

In asmuch as there are benefits to community participation innatural resources, management of potable water in rural communities has its challenges. It is accepted thatthe community participation approach provides an avenue for stakeholders to play a "key role in project planning, implementation and monitoring of projects, which serves as a prerequisite for project ownership, successful implementation and sustainability" (Mwakila, 2008). The participation of beneficiaries in potable water supply project initiation, implementation, operation and maintenance is very significant because it provides "them greater opportunity to manage and decide on issues that are affecting or may affect their water supply systems" (Tadesse, Bosona, & Gebresenbet, 2013).

Low community participation in some rural development projects including rural water supply in many developing countries has resulted in projects' inability to bringprofits to rural communities over an extended perioddue to insufficient community involvement and understanding to ensure sustainability (Toyobo & Muili, 2013). According to Harvey and Reed (2007), "the low rural water supply sustainability levels throughout Sub-Saharan Africa are indicative of severe limitations of community participation and management approach."For instance, in Western Kenya,"very few water projects out of the many projects implemented in the last 20 years lasted for more than 5 years from the date of initiation due to inadequate community participation" (Sei, 2016).

Inadequate access to financial and other resources reduces the capacity of local communities to participate in potable water management projects, as well as affects communities' "ability to pay for water services" (Kakumba & Nsingo, 2008). The resource constraints are real and do not only affect the level of participation and management of community water projects but also, the sharing of best practices is not always easy among communities and stakeholders (European Commission, 2014).

Another challenge affecting community participation in the management of potable water has to do with the lack of adequate knowledge and skills of community members stemming from a high level of illiteracy. "This limits the scope of community participation in rural water development thus, perpetuating the continuous lack of safe and clean water among many communities" (Kakumba & Nsingo, 2008).

Again, lack of knowledge and ignorance on the part of the people in most rural communities, makes them ineffectively participate and manage their sources of potable water. A lot of people do not know that building of proper water facility is a cost-sharing between themselves, the district assembly and the service providers. Whereby the beneficiary community pays 5%, the assembly pays 5% and the service provider pays 90% of the total cost of the facility (CWSA, 2005). Cultural practices and customs whereby women and children are denied active participation in decisionmakingare a cause of ineffective participation in the management of potable water. Women and children are the major users of water in a community so they should take a leading role in planning and managing the new or rehabilitated water system.

Traditionally, water is seen as a gift of nature. The view that water is a natural resource and therefore should be provided freely is still very alive today (Bacho, 2001). This lingering perception of water as a gift of nature emanated from the traditionalconcept of water that, water bodies are the natural bodies of the spirits, both evil and good. These spirits can be offended through disturbances or breaking of a taboo which would be tantamount to abusing their natural place of abode (Bacho, 2001). These cultural values and belief systems turn out to limit the participation of traditional people in discussions on the need to discard outmoded practices that serve as obstacles to potable water provision.

Apart from the universal household uses of water, economic activities and personal hygiene, water is also used for spiritual cleansing and pouring of libation. Water is also a cleansing medium of the unclean and abrogating consequences that the spirit oaths to forestall the devastating consequences that the spirit will unleash on the unfortunate victim. In everyday social interaction, water is important in fostering social relations. Among many ethnic groups in Ghana, a visitor is granted an audience only after he or she has been served water to quench his or her thirst. The worst one can do his fellow is to refuse him or her water. This would be viewed as extreme social misconduct since water is God's gift (Bacho, 2001). Depending on the established ideas above, the people especially, traditional societies do not see the need to pay money as a counterpart fund for the building of water facilities, so they continue to utilize the streams, rivers and rainwater as the will of the gods providing it.

With this notwithstanding accessing water for domestic purposes has been a major issue in the northern parts of Ghana. According to the Wa West District Assembly Annual Progress Report (2020), "CWSA defines access to safe water to include the following elements: Ensuring that each person in a community served has access to no less than 20 litres of water per day; Ensure that walking distance to a water

 facility does not exceed 500 meters from the furthest house in the community; That each sprout of borehole or pipe system must serve no more than 300 persons and 150 for a hand dug well; The water system is owned and managed by the community; and Water facility must provide all year-round potable water to community members" (p. 30). However, Table 1 which spelts out the annual report on "access to safe drinking water sources and the proportion of the population with access to improved sanitation services as an indicator (Categorised by Development Dimension of Agenda for Jobs)" is not encouraging. 1 indicates that the Wa West District is grappling with issues in helping with provisions of accessible and safe drinking water sources and improved sanitation for all. This calls for the proper involvement of the various catchment communities within the district in realizing Sustainable Development Goal (SDG) six which is to "Ensure access to water and sanitation for all."

The lack or failure of many facility providers to involve the beneficiary community is one of the causes of ineffective participation in potable water management in communities. The deliberate non-involvement or low involvement of community members in water projects by project implementers is a concern to worry about. Involvement of the communities "is an important component of water projects as it maximizes the potential benefits of improving water supply. It also helps users appreciate the need for their proper operation and maintenance and creates a willingness to contribute to their costs. It is not sufficient to construct an improved water supply. New facilities must be used continuously by everybody and in a safe way" (CWSA, 2005).

The rapid breakdown of systems, low sense of ownership and growing proportion of unserved population generated concerns about how existing systems could be maintained and new demand met, and service sustainability became a focal concern. The realization is that "where there is no local participation in planning and local decision making and no local commitment to operation and maintenance including financing, the system has a short life span (Obeng et al., 2020). The need for access to safe water, sanitation and hygiene has become a clarion call for all humans because they are seen as one of the basic criteria for hale and hearty human health and wellbeing. Hinging on these calls for the methodological processes to realise the focus of the research.

III. Methodology and Research Setting

The The study adopted a qualitative approach to research with a case study designfor the study. The core objective of the study was to examine the cultural challenges affecting effective community participation in potable water management in the Gbaalwob, Chogsia, and Gadi, communities in the Wa West District in the Upper West Region of Ghana. The population for the study included twenty residents each from the three communities, namely; Gbaalwob, Chogsia, and Gadi. Also, three key officials from the District Assembly and three opinion leaders each from the Gbaalwob, Chogsia, and Gadi communities were sampled for the study. In all the seventy-two (72) participants for the study were made up of sixty (60) residents, nine (9) opinion leaders, and three (3) officials from the district assembly.The sample size of the study was seventy-two participants. A purposive sampling technique was employed in selecting the participants for the study. "Purposive sampling therefore allows for the picking of interview objects that fit the focus of the study based on the judgement of the investigator" (Sarantakos, 2005). As a result, the participants were selected based on the fact that they had the desired knowledge to be able to contribute to the findings to achieve the objective of the study. A semi-structured interview guide and a focus group discussion checklist were employed in the data collection. Data was analysed thematically. Emerged themes from the interviews and the focus group discussion were analysed based on the themes from the data collection. Ethically, participants were assured of anonymity and free will to either leave or continue with the research process after the purpose of the study was made known to them.

IV. Findings and Discussion

This section presents the demographic characteristics of participants, and challenges affecting effective community participation in the management of potable water in the Wa West District of Ghana.

a) Demographic Characteristics

The demographic characteristics comprised the education, occupation, and the number of years the participant had lived in the community. The level of education of participants is relevant in assessing the level of participation of community members in the management of rural water services and systems. The educational level of participantsis presented and discussed as follows. With the total number of sixty residents selected, the study revealed that the majority, thus, 23 participants did not go to school or had formal education, while 18 participants had primary school education. The results further show that 16 participants had Junior High School (JHS) education and three participants had Senior High School (SHS) education. No respondent had a tertiary education. The above findings show that there is a low level of education among participants and for that matter confirms that educational levels are low in rural communities in the Upper West Region. Also, with the

occupation of participants, 24 of the participants were farmers, 15 were dressmakers, 12 were traders, and 9 were students.

The majority of the participants being farmers reflects the rural nature of the study communities. Also, 15 of the participants were found to be dressmakers, 12 were traders and nine were students. The results reveal that the setting was typical rural and farming communities but with other livelihood portfolios as supporting systems for household food security and income. So, being farming communities will mean that there will be a high demand for water for farming and related activities both during the rainy and dry seasons. This is particularly so becauseaccording to the Ghana National Climate Change Policy document, agriculture in Ghana is rainfall dependent and rainfall over the years has demonstrated increasingly decreasing trends in amount/quantity and is highly inconstant in terms of onset and end of the season (Ministry of Environment, Science, Technology and Innovation [MESTI], 2013). This indicates that climate change is exerting unwavering socio-economic consequences on the livelihood of people (Eshun, Golo, & Dankwa, 2019).

The last demographic characteristic considered is the number of years participants have lived in their respective communities. It was revealed from the study that, all participants have lived for more than 15 years in the communities. The results show that six participants representing 10% of the total participants have lived in the communities for 16-20 years, a majority of 36

8 Global Journal of Science Frontier Research (H) XXIII Issue VI Version I Year 2023

9 39

 participants representing 60% also lived for 21-25 years, while 20% and 10% of the participants were found to have lived in the communities for 26-30, and 31 and more years respectively. This shows that participants' opinions on the issues of the study reflect the real subject matter in the communities since they have extensive experience regarding the problemsassociated with the participation of water management activities in the selected communities. The presentation of the demographic characteristics provides a deeper analysis and interpretation of the other findings in the next section. The next section explains why the educational level, occupation, and years of residency are relevant to understandingcommunity participation in potable water management. The demographics will also explain how beliefs and values as concepts in culture come in handy to influence participation levels and attitudes.

10 b) Challenges Affecting Effective Community Participation in Potable Water Management

Even though the findings show an appreciable level of community participation in the supply of potable water and in the decision-makingprocess involved in water management in the communities, therestill exist some challenges. A major challenge in the study affecting community participation in potable water management was the issue of financial constraints confronting both providers of potable water and beneficiary communities. Providers are constrained in terms of funding for providing adequate potable water to rural communities and are also unable to monitor and evaluate the use of existing potable water facilities. The Wa West District Assembly and other providers are unable to provide facilities to adequately meet the water demand of communities in the district and hence there is pressure on existing facilities and on the assembly to provide more for the populace. Corroborating this, the District Planning Officer noted during an in-depth interview that: "The assembly is overwhelmed with increasing requests for more boreholes to be drilled in almost all the communities in the district. There is a wider gap between the demand for boreholes and the number that we (the assembly) have provided to communities in the district. There is a need for the assembly to drill more boreholes in communities for the people to use, but we are challenged with inadequate funds to do that. Our major source of funds is the District Assembly Common Fund (DACF) which is also inadequate to cater for other needs and still provides an appreciable number of boreholes. ?.so we have been engaging community members and other relevant stakeholders in the water sector on how we can meet the demands of the communities?. but it is not easy to get the people to fully understand our (assembly) situation." (Planning Officer -Wa West District Assembly).

Another opinion leader had this to say: "Some of my people believe that all sources of water are gifts from the gods and they should not be asked to partake in its provision. To them, God gave us all these. They were there before our forefathers. They believe that the rainwater that fills the rivers, the streams and all other water sources are not manmade. This makes their participation and management of water very difficult." (Community Opinion Leader -Wa West District). Apart from the above excerpts from the study, the findings also show that the ability of some community members to actively participate in the management of potable water systems in the communities is limited due to the inability to make contributions regularly. Members who are not able to pay their contributions were said to usually dodge community water management meetings. The inability of members to pay maintenance and repair dues makes it difficult to ensure the sustainability of potable water facilities.

Another challenge the study found was the poor attitude of some members of the communities in attending communal meetings relating to potable water supply and management. It is only when all members attend

meetings that popular views can be expressed and heard on important matters such as potable water supply and management in rural communities. So,when people do not attend meetings, they are not well informed about the processes of the acquisition of water facilities and the need for proper management for sustainability. This is particularly worse when it comes to farming where every community member turns to concentrate on working on their farms since they are predominantly farmers. Also, women are equally busy on their farms coupled with the picking of sheanuts. The patriarchal nature of the communitiesalso affects decision-making as collaborated by Dankwa (2018). Meetings during this period are not effective and participation therefore turns out to be low, because only a few people attend and deliberations cannot be effective and easily accepted by the whole community. Most people lack the commitment to attend waterrelated meetings even though water is used by everybody in the communities.This relates to the opinion of Schonten and Moriarty (2004) that, "a lack of community cohesion, commitment and management skills, unrepresentative from water communities, technical issues and financial problems are some of the drawbacks." The deduction has been underlying cultural factors.

An officer of the Community Water and Sanitation Agency (CWSA) revealed that poor attendance to meetings before and after the facilities are provided affects effective participation and hence affects management for the sustainability of the facilities provided. He noted that: "Duringthe engagement of community members before provision of the facilities, we have always realized that many people do not turn up for the meetings. Meanwhile, management and sustainability issues regarding the water facilities are discussed during such meetings. It is in such meetings the communities select some people to be trained on repair and maintenance of the facilities. We trained these selected people as a team known as Water and Sanitation Management Teams (WSMT) and they are responsible for ensuring that the facilities are managed well. They report to us their issues that are beyond their control" (Officer, CWSA-Wa West District Assembly).

The results also show that there was a low level of education among the community members. As seen in the demographics, the majority of the people had not been to school, followed by those with primary and junior high school education. This affects effective participation during meetings and discussions since they may not be able to appreciate certain important issues relating to water supply and management. For instance, some community members do not understand the need for them to be engaged many times before drilling a borehole. They equally do not understand why authorities would attach the construction of household latrines as an automatic activity for community members. That is, they are unable to understand the link between water and sanitation due to their low level of education. It stemmed from the fact that most of them are not ready to relegate their beliefs and values when it comes to water as a gift from the gods. This makes them believe that their participation should not be compulsory. It takes much time and resources to organise several community sensitisation fora to explain and discuss to their understanding to ensure effective management sustainability when the facilities are provided.

The study also reveals that the communities are confronted with sanitation issues such as open defecation which is making it difficult to meet the sanitary aspects of potable water provision by providing authorities. The principles in providing potable water are merged with sanitary and hygiene issues dubbed Water, Sanitation and Hygiene (WASH) and hence the provision of one automatically goes with other issues. According to **??**HO (2011), the provision of a safe water supply "is an important environmental determinant of health that seeks to prevent and control waterborne diseases. Therefore, potable water supply and sanitation and hygiene education are effective health interventions towards minimising morbidity and mortality related to diarrhoeal and other related diseases among children in rural communities in particular." According to the outcomes from the focus group discussion, even though discussions held with the communities on the matter of open defecation are yielding results, the results are not very encouraging. They noted that it has not been easy mobilising communities for activities to curb open defecation in the communities. The Environmental Health Officer noted that:

"The people are quick to request boreholes but they are very reluctant to attend meetings to discuss sanitary issues especially issues relating to curbing open defecation in the communities. Meeting them to discuss matters of open defecation is not easy because they think that it is not important for now, despite telling them that curbing open defecation is a prerequisite for the provision of boreholes. Meetings on open defecation are in most cases attended by few young men and old people. Meanwhile, the young people have the strength to construct the household latrines that we have advocating and promoting".

The above narration relates to the view of Harvey and Reed (2007) who noted that low sustainability of potable water services is not only related to social and management issues but also to environmental and technical issues.

Also, it was deduced from the focus group discussion that there was a clear cultural issue as most of the indigenous people think water is supposed to be a gift of nature. This makes it difficult for them to simply accept the need to participate and pay for its management. Most of them believed that there was no need to pay for the provision of water-related facilities. This echoed the outcome of research by Bacho (2001), that traditionally, water is seen as a gift of nature. The view that water is a natural resource and therefore should be provided freely is still very alive. As a result of this, traditional people normally resort to thecontinueduse of available streams, rivers and rainwater as ordained sources from the gods. These cultural values and belief systems turn out to limit the participation of traditional people in discussions on the need to discard outmoded practices that serve as obstacles to potable water provision.

The foregoing cultural and socioeconomic factors serve as barriers to effective community participation relating

to potable water supply and management towards sustainable development among selected communities in the Wa West District.

11 V. Conclusion and Recommendations

Inadequate finance is a foremostimpedimentto effective community participation in water management in the Wa West District. Low incomes among households constrain the people's ability to make regular contributions every month towards the repairs and maintenance of borehole facilities when they break down. Inadequate finance at the district assembly also affects the assembly's ability to provide adequate boreholes for the communities. Mobilization of internally generated funds of the assembly is poor as the district

12 Global Journal of Science Frontier Research (H) XXIII Issue VI Version I Year 2023

13 41

 has only four (4) major market centres. Therefore, the Wa West District Assembly and other providers are unable to adequately meet the water demand of the communities.

Also, some members of the communities do not attend communal meetings regularly and hence are left out of decisions that are taken in such meetings. Such people turn out to be not well informed about decisions and regulations on water facilities and proper management for the sustainability of the facilities. The farming season presents an obstacle to regular attendance at gatherings on community water supply and management. Because the communities are predominantly farmers, people turn to go to work on their farms rather than attending meetings to participate in discussions on water-related matters. Hence, meetings during this period are not effective and participation therefore turns out to be low. Many people lack commitment to attend water-related meetings even though water is used by everybody in the communities.

Endemic cultural issues and low educational backgroundsamong the members of the communities also affect community participation. It makes it difficult for them to appreciate certain important issues relating to water supply and management. As traditional societies, they do not see the need to pay money as a counterpart fund for the building of water facilities. So, they continue the utilization of available sources of water as the will of the gods providing it.For instance, community members do not understand the need for them to be engaged in sanitary issues when the main issue has to do with drilling a borehole. Thus, they do not understand why authorities would attach the construction of household latrines to drilling a borehole in a community. There is no understanding of the link between water and sanitation due to the low level of education. It will take much time and resources to organizesensitizationprogrammes to explain their understanding to ensure effective management and sustainability.

14 Grounded on the conclusion of the study, the following recommendations are made:

It is appropriate that boreholes are mechanized and operational processes commercialized by the communitiesat a small fee within the district.Amongstthe other water services, the provision of boreholes in each of the communities should be prioritised. The mechanization will helpsafeguardthe larger population to securewater from each of the boreholesdotted in each of the communities thereby helping everyone to be served. This will solve or reduce the pressure and demand for more boreholes to provide potable water. It is also suggested that there should be the provision of credit facilities to households who are deprived to be able to diversify their livelihood to enhance them to effectively contribute monthly towards the borehole's maintenance in their various communities. In addition, this can be done through the formation of Village Savings and Loans Associations (VSLA) in the communities to improve the income of women in particular.

Also, the District Assembly through the Information Service Department and the National Commission on Civic Education (NCCE) should intensify community sensitization programmes to explain to community members the need for them to actively participate in matters relating to water and its related matters.

It is further recommended that conscious effort should be put in place by the Ghana Education Service (GES), and the National Commission on Civic Education (NCCE) to sensitize the population on the need for access to and use of potable water. The district assembly should collaborate with the needed agencies to improve on the unhindered access to education on the inculcation of a positive attitude towards access, community participation and the sustainable management of drinking water. This in due course will increase the awareness levels among community members. Deliberate educational campaigns on the link between water and sanitation will help address endemic cultural issues and the low level of education mentioned in the findings. [1]

[1]

40

Figure 1: Global 40 ©

1

Table

Figure 2: Table 1 :

[GSS], 2015). The population of the district, according to the 2010 Population and Housing Census, is 81,348 representing 11.6 percent of the region's total population. According to GSS (2015), "agriculture accounts for 86.0% of the district's economy. The predominant agricultural activity is farming. Most farmers undertake a combination of crops and animal production. The main crops grown are maize, millet, cowpea and groundnut. The district has a comparative 1 advantage in groundnut and cowpea production." "The "Indicator district is blessed with several water bo

ii. Urban are 0.2 percentof each household" (GSS, 2015). -

3	1	"The proportion of the population with access to improved sanitation services"	i. District	39.**5**4	54.7
			ii. Urban	39.**5**4	54.7
			iii. Rural	N.A	

Source: Wa West District

Figure 3: Cultural Challenges Affecting Effective Community Participation in Potable Water Management in Selected Rural Communities in the Upper West Region of Ghana

[Amerasinghe ()] *A study of the factors affecting the sustainability of community-managed rural water supply schemes in Sri Lanka*, N M Amerasinghe . 2009. p. . Massachusetts Institute of Technology

[Nicol ()] *Adopting a sustainable livelihoods approach to water projects: Implications of policy and practice*, A Nicol . 2002. p. 133. (Working Paper)

[Mwakila ()] 'An Assessment of Community Participation in Water Supply and Sanitation Services: The Case of Yombo Dovya and Barabara ya Mwinyi, Water Community Projects'. W Mwakila . https://www.semanticscholar.org/paper/ *An-Assessment-of-Community-Participationin-Water-Mwakila*, (Temeke, Tanzania) 2008. p. .

[Annual progress report on implementation of agenda for jobs: Creating prosperity and equal opportunity for all ()] *Annual progress report on implementation of agenda for jobs: Creating prosperity and equal opportunity for all*, https://ndpc.gov.gh?UW_Wa_West_APR_2020 2020. 2018-2021. Wa West District Assembly.

[Golo and Eshun ()] 'Assessing climate change-related events on the rights of subsistence in the rural coastal communities of Ghana. InternationalJournal of Weather'. H K Golo , I Eshun . *Climate Change and Conservation Research* 2018. 4 (2) p. .

[Laryea ()] *Challenges and prospects of community management in Ghana*, N O Laryea . 1994. Colombo: WEDC Publication.

[Kakumba and Nsingo ()] 'Citizen participation in local government and the process of rural development: The rhetoric and reality of Uganda'. U Kakumba , S Nsingo . *Journal of Public Administration* 2008. 43 (2) p. .

[Thorpe ()] 'Cmup2-35] contribution to 'beyond the community' e-conference on scaling up of community management of rural water supplies'. I Thorpe . http://www.jiscmail.ac.uk/lists/WSSCMANP.html *Participation, appropriate technology (Pump Aid and the Elephant Pump) -Zimbabwe*, 2002.

[Harvey and Reed ()] 'Community managed water supplies in Africa: Sustainable or dispensable'. P A Harvey , R A Reed . *Community Development Journal* 2007. 2 p. .

[Mccommon et al. ()] *Community management of rural water supply and sanitation services*, C Mccommon , D Warner , D Yohalen . 1990. Washington D.C.: UNDP-World Bank.

[Obeng et al. ()] 'Community participation and management of available potable water sources in the Gadi Township in the Wa West District of Ghana'. I Obeng , O Iddrisu , D Eshun , I . *American Journal of Environment and Sustainable Development* 2020. 5 (1) p. .

[Cwsa ()] 'Community water and sanitation agency'. Cwsa . *Annual Report. Accra: CWSA* 2010.

[Cwsa ()] *Community water and sanitation agency corporate brochure*, Cwsa . 2007. Accra: CWSA.

[Irc ()] *Community water supply management: About community management*, Irc . http://www2.irc.nl/manage/whatisit/index.htmlon 2003.

[Dankwa ()] 'Culture of family ideals and perceived subjugating positions of women in patriarchy society: The way forward'. S Dankwa . *Research on Humanities and Social Sciences* 2018. 8 (24) p. .

[Cwsa ()] Cwsa . *Strategic investment plan, 2008-2015 & the Medium-Term Plan*, 2005. 2008-2012 Accra, CWSA.

[Eguavoen ()] *Drinking water policy, water rights and allocation practice in rural Northern Ghana*, I Eguavoen . 2006. Bonn, Germany. Centre for Development Research (ZEF)

[Batchelor et al. ()] 'Exit Strategies for Resettlement of Drought Prone Populations'. S Batchelor , K Mckemey , N Scott . *Gamos Ltd: Reading*, (UK) 2000. (Project Technical Report)

[Ghana Demographic and Health Survey ()] *Ghana Demographic and Health Survey*, 2015. 2014. Rockville, Maryland, USA: GSS, GHS, and ICF International.

[Ghana National Climate Change Policy ()] *Ghana National Climate Change Policy*, https://pef.org.gh/documents/climate-change/national-climatechange-policy.pdf 2013. Ministry of Environment, Science, Technology and Innovation (MESTI.

[Undp ()] *Human development report*, Undp . http//hdr.undp.org/hdr 2006. 2006.

[Bacho ()] 'Infrastructure delivery under poverty: Potable water provision through collective action in Northern Ghana'. Z L F Bacho . *Spring Research series* 2001. Spring Centre. 34. Universitat Dortmund

[Eshun et al. ()] 'Livelihood strategies and outcomes of fisher folks in selected rural coastal communities of Ghana'. I Eshun , H K Golo , S Dankwa . *Journal of Culture, Society and Development* 2019. 48 p. .

[National Water Policy ()] *National Water Policy*, (Accra) 2007. GoG.

[Salim ()] *Rural water sector reform in Ghana: A major change in policy and structure, water and sanitation program-Africa Region (WSP-AF)*, A S Salim . 266200A PER0English0Blue0Gold02.pdf. https://documents1.worldbank.org/curated/en/603071468591235401/pdf/ 2002.

[Tadesse et al. ()] 'Rural water supply management and sustainability: The case of Adama Area, Ethiopia'. A Tadesse , T Bosona , G Gebresenbet . 10.4236/jwarp.2013.52022. https://doi.org/10.4236/jwarp.2013.52022 *Journal of Water Resource and Protection* 2013. (02) p. .

14 GROUNDED ON THE CONCLUSION OF THE STUDY, THE FOLLOWING RECOMMENDATIONS ARE MADE:

[Sarantakos ()] S Sarantakos . *Social research*, (New York) 2005. Palgrave Macmillan. (rd ed.)

[Schonten and Moriarty ()] *Scaling up the community management of rural water supply*, T Schonten , P Moriarty . 2004. Water Lines. 23 p. .

[Sei ()] I O Sei . *Factors influencing community participation in rural water project development: A case of Matete sub-county Kakamega county. Research project report submitted in partial fulfilment of the requirements for the award of the degree of Master of Arts in Project Planning and Management*, (University of Nairobi, Kenya) 2016.

[Small drinking water supplies: A framework for actionto improve management ()] *Small drinking water supplies: A framework for actionto improve management*, 10.2779/937641. 2014. European Union.

[Cwsa (2011)] 'Status of rural water and sanitation in Ghana, presentation at 3rd -5th to'. Cwsa . http://ghanawaterforum.files.wordpress.com/2011/09/status-of-rural-water-supply- *Ghana Water Forum*, (Accra, Ghana) 2011. 7th September 2011.

[Strategies for the safe management of drinking water for human consumption Sixty-Fourth World Health Assembly A ()] 'Strategies for the safe management of drinking water for human consumption'. *Sixty-Fourth World Health Assembly A* 2011. World Health Organization (WHO. 64 (24) p. 15. (Provisional agenda item)

[Toyobo and Muili ()] 'Sustainability of borehole water schemes through community participation in Ejigbo'. A E Toyobo , A B Muili . *Special Issue -2nd International Conference on Engineering and Technology Research*, (Osun State) 2013. 4 p. .

[Mtinda ()] *Sustainability of rural water supply and sanitation services under community management approach: The case of six villages in Tanzania*, E O Mtinda . 2006. Department of Water and Environmental Studies, Linkopings Universitet (Unpublished Master Thesis)

[Doe and Khan ()] 'The boundaries and limits of community management: lessons from the water sector in Ghana'. S R Doe , M S Khan . *Community Development Journal* 2004. 39 (4) p. .

[Fao ()] *The state of world fisheries and aquaculture*, Fao . 2000. 00100 Rome, Italy: VialeDelleTerme di Caracalla. (Information Division, Food and Agriculture Organization of the United Nations)

[Transforming our world: The 2030 Agenda for Sustainable Development ()] https://sustainabledevelopment.un.org/post2015/transformingourworld *Transforming our world: The 2030 Agenda for Sustainable Development*, 2015.

[Unicef and Who ()] *Water for Life report*, Unicef , Who . 2005.

[Unicef ()] *Water, Environment and Sanitation: World Water Day*, Unicef . 2005. 2005.

[Who/Unicef ()] Who/Unicef . *Global water supply and sanitation assessment 2000 report*, (New York) 2000. WHO/UNICEF.