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COMMUNITY OWNERSHIP AND MANAGEMENT OF WATER AND SANITATION FACILITIES: ISSUES AND PROSPECTS IN THE NADOWLI DISTRICT OF THE UPPER WEST REGION OF GHANA

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ABSTRACT

Over the last decade, community ownership and management (COM) has become the leading concept in rural water and sanitation provisions in Ghana. The purpose of this study was to assess the main issues and prospects of COM as a strategy for improving sustainable access to rural water and sanitation in the Nadowli District of the Upper West Region of Ghana. The main issues identified included community participation, access to spare parts, effectiveness of water and sanitation related institutions, economic situation of the people, and availability of alternative sources of water. The study revealed that the prospects of COM ensured that sustainability was good, but it depended on how the District Assembly (DA) addressed the major challenges of poverty and transparency of the relevant institutions.

Keywords: Water and Sanitation; Community Ownership; Management

INTRODUCTION

Just as in many African countries, the central government and external support agencies in Ghana were responsible for planning, constructing, and maintaining of the rural water supplies (Salim, 2002), with little or no involvement at all of the beneficiary rural communities. 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. Community participation was therefore espoused as one of the key strategies of the International Drinking Water and Sanitation Decade (IDWSD), which spanned 1981 to 1990 (McCommon, Warner, & Yohalem, 1990).

Following a review of policies on water and sanitation provision to keep pace with the changing conditions in Ghana and in 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), 2007a). The same Act that established the CWSA also transferred ownership and implementation responsibilities to districts and communities.

However, it was realized that community participation in water programs was limited to mobilization of self-help labor or the organization of local groups to ratify decisions made by project planners outside the community (Laryea, 1994). This narrow

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conception had inherent limitations to the successful implementation of rural water programs. Thus, the emphasis was again shifted to community management. Presently, 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).

As stipulated in Act 564, the principle of Community Ownership and Management (COM) is expected to ensure sustainability of water and sanitation facilities that can guarantee that the steady increase in access does not decline or stagnate as a result of facilities breaking down. Paradoxically, data from the Nadowli District Water and Sanitation Plan (2005-2009) indicated that 12.2% of the boreholes (i.e. 48) in the district were not functioning, while 1 out of 3 Small Town Water System (STWS) was not functioning. What are the issues responsible for the non-functioning of these facilities in spite of the attempt to institutionalize COM? It is on the basis of the above that this research was designed to assess the issues and prospects of COM as a policy to improve sustainable access to potable water and safe sanitation.

Objectives of the Study

The main objective of the study was to identify the issues influencing COM of water and sanitation facilities for sustained access to potable water and improved sanitation. The following specific objectives were defined for the study:

- (i) To examine how stakeholders adopt and practice COM of water and sanitation facilities;
- (ii) To examine the issues governing community ownership and management;
- (iii) To examine the impact of COM on access to water and sanitation services;
- (iv) To analyze the prospects of COM in improving access to water and sanitation services; and
- (v) To make recommendations for improving COM of water and sanitation facilities.

RESEARCH METHODOLOGY

The variables studied included the functionality of water and sanitation facilities, operation and maintenance (O&M) of the facilities, structure and functionality of Water and Sanitation (WATSAN) Committees and Water and Sanitation Development Boards (WSDB), management of water and sanitation facilities as well as community perspectives on COM.

Sampling

For a qualitative study of this nature, purposive sampling was considered suitable. The communities in Nadowli District were classified into three strata, namely; communities with point sources or boreholes, communities with STWS and communities without potable water and safe sanitation. For the purpose of this study, 10 communities were selected: all three communities with STWSS, two out of the eight communities without water and sanitation facilities and five communities from those with boreholes. The institutions sampled included WATSAN Committees, WSDB, DWST and the Regional Water and Sanitation Team (RWST).

Four sets of Focus Group Discussions (FGD) were held in each community. These included one FGD with the WATSAN/WSDB, one with women and one with men. Finally, a community meeting was held with all these groups

including children to validate the findings of the three FGDs. As part of the triangulation, households in eight out of the 10 communities were interviewed to give individual households the opportunity to express their views on the same issues. In the two other communities i.e. Dunjaang and Orikutuo, where potable water and safe sanitation facilities did not exist, only community meetings were held.

Three factors were considered in the sampling of the households; the desired level of confidence (92%), the error tolerance level (8%) and the proportion of the population with access to potable water in the district (88.2%). The sample size was then determined using the following formula (Kendie, 2002):

 $N = (z/e)^2$ (p) (1-p), where:

N =sample size, z =standard score at 92% Confidence Level (1.76)

e = sampling error allowed (0.08)

p = proportion of population with access to potable water in the district (88.2%)

Therefore $N = (1.76/0.08)^2 (0.882) (0.118) = 50$

Hence 50 persons (representing Household heads) were randomly sampled from the eight communities and interviewed. Participant observation was employed by taking an "environmental sanitation walk" in each community to note the conditions surrounding the water and sanitation facilities. The data collected from both primary and secondary sources were then collated, synthesized and analyzed using both qualitative and quantitative approaches to draw valid conclusions and inferences.

OVERVIEW OF THE DISTRICT

The Nadowli District Assembly was established in 1988 under the Local Government Law 1988 (PNDC Law 207). The District is bordered on the south by Wa Municipal, west by Burkina Faso, north by Jirapa District and east by Sissala East and Wa East Districts. It covers a total land area of 2,742.50 km². The major stream, the Bakpong and several temporary streams flow into the Black Volta. Though water from these streams is not potable, households depend on them for laundry purposes and in the rainy season, they serve as sources of drinking water for farmers who stay on their farms throughout the season.

Geophysical Characteristics

Geologically, there are three main types of rocks- Birimian, Granite and Basement complex. Unlike the Voltaian rocks in Northern Ghana, these rocks hold considerable quantities of water, which can readily be made available for use by drilling of boreholes. The District has a mean annual rainfall of 1100mm. However the poor vegetation cover in the District has the potential of further reducing the amount of rainfall. This can also reduce the water table, thus affecting the drilling of boreholes and hand dug wells (HDW).

Demographic Characteristics

According to the 2000 Population and Housing Census, the District had a total population of 82,716 in 2000 with an annual growth rate of 1.5%. The District had a male/female ratio of 80:100 as compared with the national ratio of 98:100. The high proportion of women calls for specific policies to address their concerns such as access to potable water.

COMMUNITY OWNERSHIP AND MANAGEMENT IN PERSPECTIVE

There are two types of community managed STWS. One is the STWS built with the support of CWSA (with 5-10% capital cost contributions from DAs and community members). The other type is STWS transferred from GWCL to DAs for community management. The latter are often governed by a memorandum of understanding signed between GWCL and CWSA (Berkoh et al, 2004). As part of the reforms in the water sector, 124 STWS were transferred from GWCL to the DAs for community operation and management (CWSA, 2007b).

According to Hiroko (2008), the sense of ownership that the WATSAN and WSDB have over their facilities is in direct contrast with the understanding that communities had in the past. The implementers used to work alone in identifying sites and constructing the schemes, and when they broke down, the villagers did nothing to repair them but rather waited for the implementers because the systems belonged to them. With the advent of COM there is a widespread idea that ownership of facilities will lead to responsibility for their management; though in reality, just because a community owns a facility does not necessarily mean that it will acquire a sense of responsibility for its management, nor does it guarantee a willingness to manage or pay for its O&M. Therefore, it may be more effective to abandon the desire to achieve COM and rather develop a sense of responsibility for financing the upkeep of the facility (Harvey and Reed, 2007). This view cannot hold universally because knowledge of ownership influences attitude and behaviour towards facility management. On the contrary, Maganga and Butterworth (2002) see community ownership as a means of achieving sustainability through community investment and commitment to their schemes, and specifically through the mechanism of village water committees. Therefore the creation of a sense of ownership could guarantee sustainability of facilities.

Though different meanings have been given to the term community management in service delivery, the definition given by the World Health Organization (WHO) has been adapted for this study. According to WHO (1996), community management means that the beneficiaries of water supply and sanitation services have responsibility, authority and control over the development of their services. Responsibility implies that the community takes ownership of the system, with all its attendant obligations and benefits/liabilities whilst authority indicates that the community has the legitimate right to make decision about the system. Control implies that the community has the power to implement the decisions regarding the system. McCommon et al (1990) continued that the control element as contained in this definition distinguishes community participation (where the government and other institutions may have control) from community management (where the community has control). The community may receive external support, but it must be the community itself that actually owns the system, makes the decisions on when to call for this support, and exercises control over access to the system. It is a model in which professionals are "on tap, not on top" (Brennan, 1994).

Karikari (1996) and Yelbert (1999) identified the key principles of community ownership and management as a situation where the community has legal ownership and control of the services, including formal agreements with the project agency. Ownership requires that the community contributes real (not token) cash of between 5 - 10% to the capital cost of facilities and setting up a committee/board for managing the facility. COM therefore implies community participation, willingness and ability to pay for services to ensure sustainability of the services.

COM IN THE NADOWLI DISTRICT

The NCWSP stresses on COM as a means of promoting sustainability of facilities. From the communities' perspective, sustainability implies ability to recover from technical breakdown of facilities with the communities' own resources. This implies communities' abilities to invest in facilities to ensure sustainability as indicated by Maganga and Butterworth (2002).

In the study communities, perception about ownership of facilities influenced attitudes of users (either positively or negatively) towards the facilities. All WATSAN/WSDBs indicated that the water facilities were owned by the communities. This may be attributed to their awareness of the principles of the NCWSP. In communities where public KVIPs existed, they were considered to be owned by the DA because the DA constructed them and pays for their O&M. There was poor community attitude towards public toilets because they do not incur any O&M cost. Meanwhile community members were vigilant on the proper use of water facilities. It can be deduced here that COM generated some sense of responsibility for water facilities but the absence of COM for KVIPs had resulted in the absence of a sense of responsibility for their management.

At the household level, similar views seem to confirm the presence of COM for water and non for sanitation facilities. About 79.1% of the respondents stated that the water facilities were community owned while 11.6 % said they were owned by households. Another 7% and 2.3% were of the opinion that the facilities belong to government and WATSAN/WSDB respectively. Management of water facilities was seen as the responsibility of WATSAN/WSDB, whilst management of public toilets was considered the responsibility of the DA. Households could not clearly indicate the role of the community as owners of the facilities. This is likely to affect COM since clarity and understanding of roles are central in COM (McGarry, 1991).

ISSUES THAT INFLUENCE COM IN NADOWLI DISTRICT

The study identified community participation, willingness and ability to pay, access to spare parts, institutional capacity and fund raising strategies for O&M as the issues that influence COM and for that matter sustainability of the facilities. Some of these issues complemented or contradicted established principles and practice.

Community Participation

The decision to adopt a particular practice is often made by community leadership and generally adopted or endorsed by community members (Yelbert, 1999). The results of the study confirmed this because as many as 62.8% of the respondents

indicated that chiefs and elders were the most influential in decision making in the communities especially regarding water and sanitation provision and management. Drawing on Pretty's (1995) typology of participation, the forms of participation of WATSAN, WSDB and household members were analysed. From projects design through to their implementation and operation, a number of indicators were identified and used to examine the participation of beneficiaries (See Table 1).

Table 1: Household's Participation in Water Facilities Provision

Indicators	Participated	Did not	Could not
		Participate	Remember
Choosing the type of technology (BH, HDW, mechanized	27.9%	69.8%	2.3%
or with hand pump)			
Identifying possible sites for the facility	55.8%	41.9%	2.3%
Election of WATSAN & WSDB	69.8%	20.9%	9.3%
Determining hours of operation of facility	60.5%	39.5%	-
Deciding on Capital Cost Contribution for construction of	72.1%	27.9%	-
facility e.g. labour or cash			
Setting the tariff & contribution towards O & M	37.2%	55.8%	7.0%

Source: Field Survey, April 2009.

Whilst all users of pipe borne water did not actively participate in the choice of technology only 27.9% participated in the case of point sources like boreholes and hand dug wells. This is what Pretty (1995) termed Passive Participation. Similarly, the choice of facility site was considered technical hence the limited participation (27.9%). However, the common practice is that, households jointly demarcated areas within which the facilities could be located. Prior to the introduction of modern hydrological instruments, the indigenous people had their own methods of identifying where the water table was near for the purpose of digging wells. This practice was recently carried out in Buoyiri and the site identified. This became necessary because two dry wells were hit following the hydro geologist site identification. This suggests the need for involvement of communities in the sitting of facilities.

Willingness and Ability to Pay

Willingness to pay is essentially the maximum amount of money that beneficiaries are willing to pay for a service. According to Bin-Seraj (2007) in the design of a tariff structure, it is essential to match households' willingness to pay with their ability to pay. Ability to pay is purely a financial phenomenon that is derived from income or expenditure information of households and helps in determining the optimal tariff structure of a service. Ability to pay is primarily a function of income and cost of living, which in turn is a function of employment (Brikke, 2000).

Discussions with the institutions on willingness and ability of households to pay for water and sanitation services revealed that households were unwilling to pay for repairs in the rainy season though they had the ability to pay. This was due the availability of alternative sources of water. Households were asked to indicate the amount they paid for water services. Based on the households' responses, a follow up question was whether they were willing to pay for the same service if the amount

was doubled. About 93% of the respondents were willing to pay. Generally, investigations on willingness and ability to pay yielded mixed results. The views of two women on willingness and ability to pay for water and sanitation services in the District were expressed as follows; one of them from Nadowli had this to say:

Before they brought the water system I was asked to pay GH¢3.00. To me, paying GH¢3.00 to get water throughout your life is good. But upon installing the system, I never fetched water free and I cannot continue to pay GHp5.00 per basin (25 litres). So I resorted to drinking from a well (Unimproved). After all, a similar water source was our only source of water in a farming community in Brong Ahafo Region.

However a woman in Nator saw water as a basic necessity. She had this to say:

When Nator was Nator, water management was effective and people were committed to paying for water services. But with the 'Kondiëdeme' (people who do not accept or take advice) now in place, management is terrible but as you said if they increase the cost, I will struggle and pay because water is not a good that can be borrowed from a neighbour always. Moreover, there is no alternative to the borehole.

Similar to the findings of World Bank (1993), the study revealed that willingness and ability to pay was influenced by the presence of alternative sources of water and income levels. However in the communities without water the study revealed that contribution towards capital cost of water was never the reason for lack of access to potable water.

Financing Arrangement for Water and Sanitation Services

Community contribution is simply a vehicle of policy and not a financial necessity because its share in the funding of the NCWSP is very marginal. Cost sharing arrangement between development partners and beneficiaries of the project as determined by the NCWSP is that beneficiary communities pay 5% of the capital cost of facilities. External Support Agencies and the DA (i.e. government) pay 90% and 5% respectively. While this beneficiary contribution is functional in better-off regions, it turns into a constraint in northern Ghana due to high poverty levels (Eguavoen, 2006). Similarly, Karikari (1996) espoused that the premium placed on community financial obligation might create obstacles for meeting the set objectives of providing rural areas with potable water. This is because most settlements have very small populations, and many of these, particularly in the savannah zones, cannot afford the 5% capital contribution. The study revealed that communities without water were willing to contribute the 5% so it was not necessarily a barrier.

Fund Raising Strategies for Water and Sanitation

It is widely accepted that community financing strategies need to include appropriate mechanisms for revenue mobilization towards the O&M cost of water facilities (Harvey and Reed, 2007). Communities raise funds for O&M through a number of ways including: water vending, "house" or "household" levying, auctioning of donated farm products or "harvest", voluntary contribution from the rich, cash crop deductions or "kilo kilo", income generation ventures, and funeral tax/levy (Braimah and Jagre, 2007; Yelbert, 1999).

The idea of selling "ordinary" water (not "iced" water) which is a symbol of life and sustenance is generally, not culturally acceptable in most rural communities. Cash crop deductions occur most in the forest regions where cocoa and coffee are cultivated (Yelbert, 1999). In the study communities, fund-raising for O&M were done on ad-hoc basis. Respondents confirmed that they paid only when repairs were needed. The common practice was to value the fault and spread the cost of repairs among household heads and their spouses. Pay as you fetch was practiced only by communities with functional STWSs. The cost per basin of 25 litres was GHp5.00 while the cost of a 10 litre container was GHp2.00. The average monthly payment by households with connection was GH¢18.40 though some households paid as high as GH¢50.00 and others as low as GH¢4.00. It has been observed that those who paid as high as GH50.00 were households that used the water for commercial purposes, mostly pito brewing and selling water to the public. As many as 37.2% of the respondents indicated that mode of payment limited the quantity of water households used daily.

In the study communities, capital cost contribution was mobilized through household levies ranging from GHp0.50 to GH¢4.00 per head. Spouses who were not able to pay were made to gather sand and stone for construction. However defaulters were not prevented from fetching water because denying someone water was contrary to the tradition. From the household survey, 76.7% contributed money toward capital cost while 14% and 9.3% contributed labour and nothing respectively. With sanitation facilities, households contributed labour while donors provided cement, iron rods and technical support for construction. Although as many as 23% did not contribute cash, capital cost contribution did not appear to be a barrier because natives residing outside the communities also contributed.

Financial Management

Prior to the provision of water facilities, communities were required to open bank accounts where their counterpart funding of 5% would be lodged. It is expected that funds for O&M and acquisition of new facilities would be saved in those accounts. However, discussions with the WATSAN committees revealed that no money was saved in the bank after acquiring the facilities. This was because communities contributed towards O&M only when repairs were needed. After repairs the remaining money (if any) was saved with the chairman of the WATSAN committee. As many as 67.4% of respondents did not know how the remaining money was spent. This often generated conflict when households were required to pay for subsequent repairs. The WSDBs however, saved with banks.

Access to Spare Parts

To ensure easy access to spare parts, eight spare parts dealers/stores in the region were identified by the CWSA and tasked to supply spare parts to WATSAN/WSDB. These stores are monitored by the CWSA to prevent consumer exploitation. According to Harvey and Reed (2006), a sustainable spare parts supply system has to fulfill the requirements of availability, accessibility, affordability and appropriateness (i.e. 4As).

However, discussions with the WATSAN committees revealed that there were instances where they had to buy spare parts from other regional capitals (i.e. Tamale and Bolgatanga) because they were not available in the Regional capital, Wa. In some communities, the borehole pumps were so obsolete that getting their spare parts remained a challenge anytime there

was a breakdown. Moreover, high cost of spare parts was a challenge faced by the communities though the parts are said to be appropriate. Going by Harvey and Reed's (2006) indicators, supply of spare parts emerged as a major challenge.

THE STRUCTURE AND OPERATIONS OF INSTITUTIONS FOR COM

As noted by WELL (1998), the structure and capacity of water and sanitation management institutions influence the success of COM of facilities. At the District level, the DWST had the full complement of staff and they had recently received a number of training programmes to enhance their performance. However, inadequate logistics had affected their supervisory roles. Due to lack of periodic training for WATSANs, new members had not received any training. According to the DWST and WATSAN committees, some of those who were trained had either migrated to Southern Ghana, left the committee or passed away. Carter et al, (1999) identified this as a factor affecting sustainability. In terms of composition, none of the WATSAN committees had the minimum membership of seven persons. Membership ranged from two to five resulting in some members playing dual roles.

Performance of WSDB/WATSAN

An evaluation of the performance of the WATSAN/WSDB in the study communities was carried out during the focus group discussions. This was to ensure that the scoring reflected the true performance of the institutions from the perspective of the stakeholders. Similar to the findings of the WHO (1996), the poor performance of the institutions in the selected communities were attributed to the low profile accorded to O&M, inadequate funds for O&M resulting from poor fund-raising strategies and lack of directions (no action plans) for their operations. It was revealed that the nomination of committee members rather than election as pertained in some communities contributed to the malfunctioning of the committees. This confirms what Kalyan and Kakebeeke (2001) identified in Mozambique.

Whilst WATSAN/WSDB performance in Nadowli, Daffiama and Loho were said to be good that of Kaleo-Bazaoyiri was said to be bad. In the latter community only two persons (a caretaker and a chairman) constituted the WATSAN Committee. The other members had either left the community or refused to work because they wanted to avoid derogatory remarks from the public. An interview with the ex-secretary of the committee revealed that lack of transparency was the main cause of the poor performance of the WATSAN committee. This is similar to what Adomako (1998) identified in the Manya and Yilo-Krobo Districts as the cause of non-payment and ineffectiveness of community management of facilities. The voluntary nature of their work was another reason for the poor composition and non functioning WATSAN committees.

Management of Facility Sites

Management of water and sanitation facilities is the responsibility of the WATSAN/WSDBs. In Nadowli district, communal cleaning was unscheduled. It was done as and when the place was perceived to be weedy or filthy. In all sampled communities, there were no by-laws on the use and management of the facilities. Contrary to what Yelbert (1999) identified, school children were not involved in public facility management in the district. Discussions with some women indicated that, they contributed money to construct soak away and pads around boreholes in Yiziri and Kaleo-Bayaoyiri communities. In communities where public toilets existed, sites were poorly managed as compared to public water facilities. The management

of public toilets was carried out by the DA. Caretakers of the toilets were paid monthly allowances ranging from GH¢20.00 to GH¢30.00 from the DA's Internally Generated Funds. Even though the amount was so small, an interview with a caretaker indicated that, they were often frustrated before being paid. This served as a disincentive to work, thus resulting in unkempt public toilets. As such, residents preferred indiscriminate defeacation or "free range" despite its health implications.

In spite of the training of the WATSAN and WSDB members in the preparation of facility management plans, none of them had action plans so they performed their activities on ad-hoc basis. The study revealed that some had forgotten the procedure of action plan preparation whilst others considered it as something they could manage without. A WATSAN Committee member in Buoyiri expressed his view about action plans as follows.

"We were taught how to prepare action plans and we realized that the purpose was to ensure the proper functioning of the facilities. My brother, if we did not prepare an action plan but are making sure that the facilities are functioning as expected, then the same purpose is achieved. We will continue to make sure that the facility functions even without the Action Plan".

The WATSANs failed to prepare action plans mainly because they did not want to be held accountable. However accountability of the WATSAN/WSDB to community members is critical for sustainability of the facilities. It is therefore essential for COM to promote accountability of these local level institutions to community members in order to guarantee sustainability of facilities. The study revealed that those committees that were considered ineffective were not accountable to the community members.

Consumer Satisfaction with Facilities Management

Analysis of consumer satisfaction revealed that water sufficiency and reliability of supply, trustworthiness of the WATSAN committees, prompt repairs of facilities and cleanliness of facility sites were the prime indicators of consumers' satisfaction. However 11.6% of the households were not satisfied with management for lack of transparency in the use of public funds, lack of community interface, irregular flow of water (without explanation), low water pressure (for the STWSs) as well as lack of enforcement on payment of fees for repairs.

Gender Dimension in Service Delivery and Management

In the study communities, women played crucial roles in the management of facility sites. In most communities, women paid half of what men paid as contributions towards capital and O&M cost. Contrary to the findings of Laryea et al (2008) that women were reluctant to take up positions in water and sanitation committees, the study found that women occupied key positions in WATSAN/WSDBs in the District.

KEY CHALLENGES

The study revealed the following key challenges with regard to COM and sustainability of water and sanitation facilities. The first challenge is the ability of the WATSAN/WSDB to ensure regular payment for O&M of facilities. After the payment of the 5% capital cost contribution community members expect to fetch water free until there is breakdown so they contribute

towards that problem. The pay as and when repairs are required strategy adopted by communities in raising funds for O&M adversely affects the sustainability of facilities.

The second challenge was the ineffectiveness of the WATSAN/WSDB due to a number of reasons such as lack of interest or weak community participation in the selection of committee members, lack of transparency in the operation of WATSAN/WSDB and the failure of the committees to account to the community members. This challenge affects the willingness to pay for sustainable services delivery which the COM concept seeks to achieve.

Another key challenge was that the WATSAN/WSDB identified themselves more with water facilities than with sanitation facilities. Consequently community members identify COM with water whilst associating sanitation facilities with District ownership and management (DOM). This is due to the fact that the lead agency, CWSA in collaboration with some development partners adopted a principle that concentrates on water with limited roles in sanitation.

PROSPECTS OF COMMUNITY OWNERSHIP AND MANAGEMENT

With the current trend in access to potable water, Ghana is likely to achieve the Millennium Development Goals (MDG) targets on potable water but that of sanitation requires concerted effort. Some communities have been able to sustain their water facilities without external financial support. The view that "water is life and a basic service that cannot be borrowed continually" in most communities, indicates a growing sense of responsibility towards the maintenance of their water facilities. This basic understanding gives a promising future for COM in sustaining water facilities. However, the prospects of maximising health benefits could be compromised by the limited access to improved sanitation. A serious policy direction focusing on sanitation is now required as a matter of urgency and it is yet to be ascertained whether COM will be able to impact positively on sustainable sanitation services provision.

RECOMMENDATIONS

In view of the rather low levels of human resources at the community level in rural Ghana the WATSAN/WSDBs, which are institutions established to facilitate the COM concept, must be given the necessary support by the DA. They need to be constantly monitored to ensure that they make use of the training given them and that they are transparent and responsible to the community members. Some reward packages should be instituted for good performance and recognition at the DA level as a way of sustaining interest.

Due to poor management of public toilets, it is recommended that DAs should uphold the CWSA policy of discontinuing the building of community KVIPs and promoting them for institutions and public places such as markets and lorry parks. The DA should rather intensify its support for household latrine construction. In view of the ongoing attempt to institute a more comprehensive strategic planning of the sanitation sector it is expected that the inability of the WATSAN/WSDB to extend their operations to cover sanitation will be addressed. The establishment of institutions to cater for sanitation must use the lessons with COM for water if sustainable service delivery is to be achieved.

It is also recommended that the approach adopted to implement COM through community animation be made gradual, flexible and adaptive such that in the process of execution, modifications can be made to suit the socio-cultural milieu of the beneficiaries while maintaining the broad goals and objectives of community management. The WATSAN/WSDB should adopt flexible operational policies to allow competent and willing members who want to continue to serve to do so beyond their tenure. WATSAN/WSDB members should be given the opportunity to visit other schemes so that they can share problem solving strategies. This could be done through district fora that allow WATSAN/WSDB members to meet at least once a year or visit others to study how they manage their facilities. The DWST in consultation with the RWST could be charged with the responsibility of implementing this recommendation.

CONCLUSION

The COM concept in the water and sanitation sector was meant to ensure sustainable delivery of services. The study examined how the various stakeholders in the Nadowli District have adopted the concept especially for water. The prospects for achieving sustainable service delivery therefore look better for water than for sanitation provided the key challenges identified especially with regard to the WATSAN committees and the WSDBs could be addressed. These local level institutions need the support and encouragement of the district and regional level institutions such the DWST and the RWST. If the recommendations mentioned in this study are implemented the NCWSP could play a very important role in ensuring sustainability of water and sanitation facilities provided through the adoption of the COM and DOM concepts.

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