

**WATER AND SANITATION COMMITTEES FOR SUSTAINABLE SERVICE
DELIVERY IN GHANA: THE CASE OF NANUMBA NORTH DISTRICT,
NORTHERN REGION, GHANA**

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ABSTRACT

The achievement of the targets in terms of water and sanitation coverage in Ghana depends to a large extent on the establishment of institutions like Water and Sanitation Committees (WATSAN) for effective operation and maintenance of the water and sanitation facilities. This paper is based on the assessment of WATSAN in the Nanumba North District in the Northern Region of Ghana, where considerable investment in the sector has been made. The study established, among others, that the operations of the WATSAN were limited in terms of scope and effectiveness mainly due to their limited financial strength. It revealed that the institutional environment within which WATSAN operate as well as their modus operandi determined the communities' response to the maintenance and service delivery challenges. In view of these it is recommended that the institutional framework and composition of WATSAN be strengthened and scaled upwards to the District Assembly and the members should be financially rewarded from the proceeds of user fees so that they can effectively ensure sustainable water and sanitation services delivery. These measures are in line with the principles of the new public management strategies for public service delivery.

Keywords: *Water and Sanitation Committees, Community Ownership & Management*

INTRODUCTION

Community Ownership and Management (COM) and District Ownership and Management (DOM) of water and sanitation facilities are derived from the principle of subsidiarity which emphasise on assigning responsibilities according to capability (Kokor, 2001; DeGabriele, 2002). The Community Water and Sanitation Agency (CWSA) adopted these concepts as

a means of ensuring sustainable supply of water to rural communities and small towns in Ghana. The genesis of the new strategies may be traced to the fact that community water systems that were centrally provided and managed have proved unsustainable (World Bank, 1982; 1993; 1994).

The success of the COM and DOM concepts depend on the establishment of institutions to

manage the facilities and their modus operandi. These concepts became operational in Ghana through the adoption of the water sector policy to ensure sustainable water supply through a demand responsive approach in 1993. The adoption of this approach implied a shift from dependence on government towards greater self-reliance of user communities. For rural areas, the policy focuses on the provision of services through community participation not only in project conception and implementation but also in terms of ownership and management of the facilities. The policy framework seeks to de-link rural water supply from the urban water supply, with management of rural water supply being placed under the responsibility of beneficiary districts and communities. To address these concerns, a National Community Water & Sanitation Programme (NCWSP) of Ghana was launched in March 1994. The strategies adopted in the NCWSP included among others beneficiary communities' contribution of 5% towards the capital cost of water and sanitation facilities, their responsibility for all operation and maintenance costs of the facilities as well as their participation in planning, design, siting, construction and management of facilities. It also included the integration of water, environmental sanitation and hygiene education activities, the allocation of a significant role to the private sector in the provision of goods and services with the public sector playing a coordinating and facilitation role (Kleemeier, 2002).

The COM concept that the programme adopted had the following features:

1. A popularly elected Water and Sanitation Committee (WATSAN) of 5-9 members in every community. Communities of over 2000 population (small towns) should have WATSAN at ward level and Water and Sanitation Development Boards (WSDB) at larger community levels.
2. Community expression of demand for facilities through their commitment.
3. Community choice of type, number and site of facilities and in small towns an initial design of piped systems (within limits of options available).
4. Community preparation and implementation of facilities and management plans which outline how communities will raise funds for capital cost and organisation and management to ensure continued functioning of facilities and improved hygiene practices.

Following the enactment of Act 564 in December 1998 the Community Water and Sanitation Division (CWSD) of the then Ghana Water and Sewerage Corporation (GWSC), now Ghana Water Company Limited, was transformed into the Community Water and Sanitation Agency (CWSA) to facilitate the development and operations of water systems and seek funding for community management systems. The mandate of the CWSA is to support local communities to set up local committees to manage local water systems.

According to Galaa and Bandie (2004), the search for appropriate institutional arrangements and models for sustainable water and sanitation provision and maintenance in rural communities is yet in the teething stages. The purpose of the study was to examine the institutional arrangements in the Nanumba North District in the Northern Region of Ghana where an initial enthusiasm in the establishment of WATSAN existed. This paper seeks to make a significant contribution to the search for institutional models within the emerging concepts of New Institutional Economics.

Research Methodology and Sources of Data

From a list of boreholes and their locations a sample of 75 WATSAN representing 40% of the sampling frame was targeted but due to the existence of "orphan boreholes" (i.e. boreholes without WATSAN) only 67 (i.e. 36%) were randomly selected according to Area Councils for investigation. The distribution of the sampled

WATSAN according to area councils is shown in Table 1.

Table 1: Distribution of Boreholes and Sampled WATSAN

Area Council	Population 2005	WATSAN	Sampled WATSAN		"Orphan Boreholes	Functioning Boreholes		Water Coverage %
			No.	%		No.	%	
Darikum	9973	20	8	40.0	1	70		42.1
Kakuhi	5432	8	3	37.5	1	75		33.1
Nabanga	10719	29	10	34.5	0	21	72	58.8
Varibiegu	21017	25	15	60.0	6	17	68	24.3
Gmantambu	32196	45	10	22.2	2	30	67	28.0
Kumbo	29514	60	21	35.0	1	43	72	43.7
Total	108851	187	67	35.8	11	131	70	36.1

For the communities with "orphan boreholes", assembly members were interviewed in order to find out why those boreholes had no WATSAN and how they were managed.

Questionnaires were administered to the members of the 67 sampled WATSAN. Focus group discussions were also held with six committees selected from the six area councils (i.e. one committee from each of the five area councils and one WSDB) to validate the data from the interviews. Interviews were also held with members of the District Water and Sanitation Team (DWST), the District Planning Officer (DPO), a Supervising Officer of the CWSA based in Tamale, and the Parish Priest of the Catholic Church in Chamba.

The Effectiveness of WATSAN

In spite of the initial enthusiasm in the establishment of WATSAN for the management of water facilities in the District, some eleven communities in the Nanumba North District still did not have any WATSAN. As at January 2005 as many as 56 out of the 187 boreholes (i.e. 30%) in the district were not functional, thus reducing the water coverage from 51.5% to 31.2%. Thus the main objective of the study was to find out why the establishment of WATSAN has not guaranteed sustainable water supply through the

effective operation and maintenance of water facilities using the Nanumba North District as a case study. A theoretical framework for the effective operation of WATSAN precedes this analysis.

Theoretical Framework for WATSAN

The theoretical framework for the establishment of WATSAN is consistent with the rapidly growing body of knowledge on New Institutional Economics (NIE), with particular reference to Davis and North's (1971) distinction between institutional environment and institutional arrangements (cited in Klein, 1999). The institutional environment here refers to the rules (both formal or explicit and informal or implicit) that govern the establishment and functioning of WATSAN, whilst the institutional arrangements refer to the application of the guidelines including the policy implications.

The WATSAN and Water Board together with other stakeholders are all helping to deliver public services (in this case water and sanitation services), in a decentralised governance system that can be associated with the emerging trends known as New Public Management (NPM). The NPM just like the NIE refers to the introduction of incentive structures into public service provision, stressing aggregate bureaucracies, intro-

duction of competition through contracting-out and quasi-markets and consumer choice (Gratto et al, 2002).

The major stakeholders involved in the sustainable water and sanitation services delivery include the community members, WATSAN/ Water Board, the Assembly, Development Partners and local NGOs (Fig. 1).

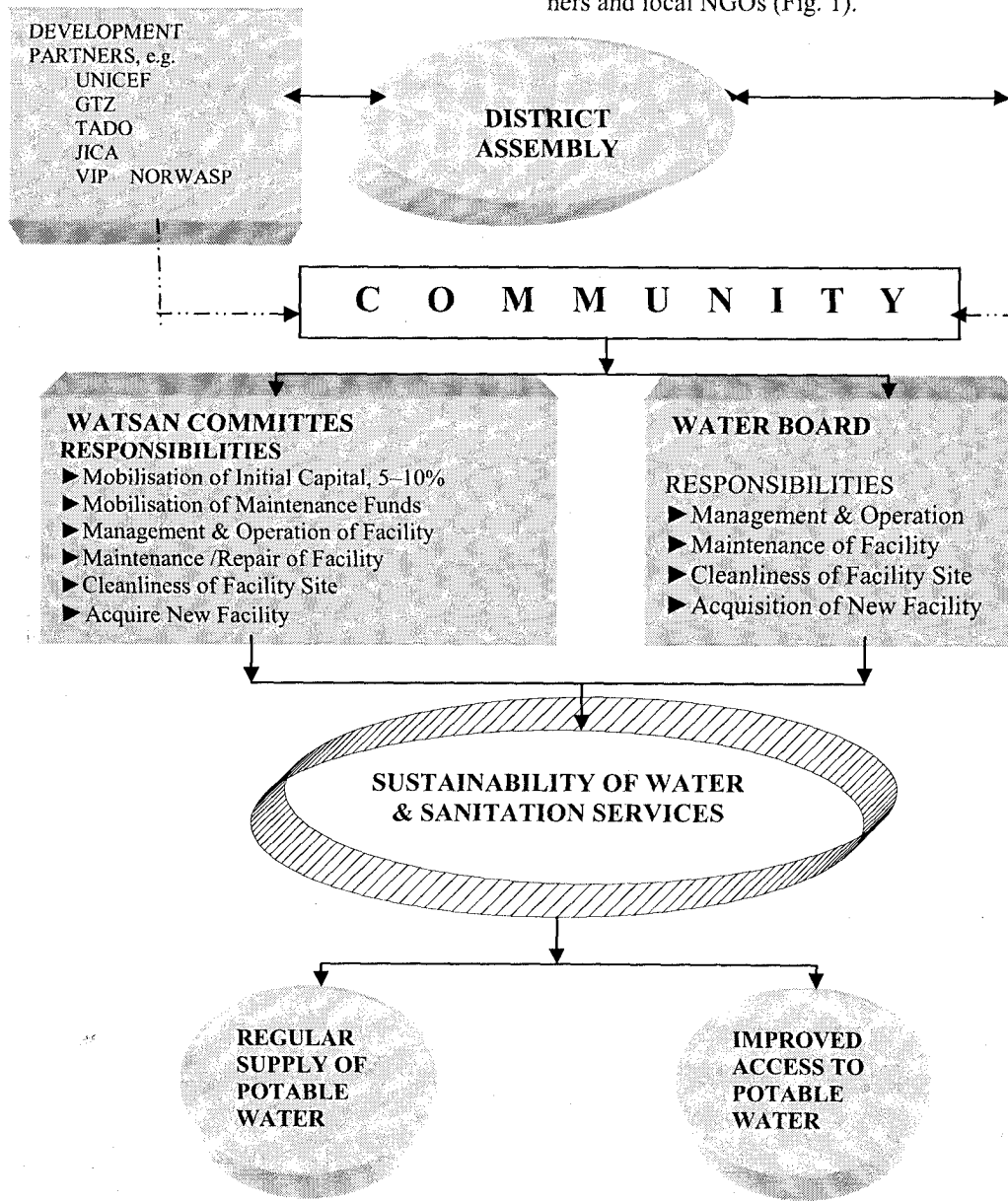


Fig 1: Framework of the COM Concept for Sustainable Water Supply

These stakeholders relate in diverse ways with one another for a common interest. The community members need potable water on a sustainable basis but are not in a position financially and technologically to provide it. The District Assembly on the other hand is obliged by the tenets of good governance, through administrative and political decentralisation, to provide the communities with water and sanitation facilities but it is also financially handicapped. Development Partners however, have the funds and technology to provide the water and sanitation needs of the communities but they need the trust and commitment from the communities to ensure that the use of facilities, which they will support in providing, is maximised and sustainable.

The District Assembly serves as a link between the communities and the Development Partners by organising the communities through animation to form WATSAN and Water Boards, whose capacities are built and strengthened to be able to manage the facilities in a sustainable manner. The District Assembly plays an overall supervisory role by supporting the committee members to manage the facilities in their communities effectively.

However, the establishment of WATSAN and Water Boards does not appear to have any direct link with the institutional framework for the establishment of the District Assembly system within the sub structures such as area councils and unit committees. They appear to be parallel to unit committees.

Formation of WATSAN Committees

The Village Water Reservoir (VWR), an NGO of the Catholic Archdiocese in Tamale, started drilling boreholes in the Nanumba North district in 1985. The Japanese International Cooperation Agency (JICA) followed in 1986 and has since drilled 122 boreholes whilst the VWR has drilled 27. A number of organisations including the German Technical Cooperation (GTZ), the Church of Christ Mission, Adventist Development and Relief Agency (ADRA) and

the 31st December Women's Movement (31st DWM) drilled the remaining 39 boreholes. Most of these facilities were drilled between 1996 and 2000.

In the Nanumba North District, the establishment of WATSAN was based on boreholes and not according to settlements. Every borehole had its own independent WATSAN so communities with more than one borehole had more than one WATSAN. Out of the 187 boreholes in the district, 11 of them were "orphan" boreholes. Six of the "orphan" boreholes were located in the Varibiegu area council (see table 1). The 11 "orphan" boreholes were incidentally not functioning at the time of the study suggesting that the functioning of a borehole was related to whether or not it had a WATSAN. It is worth noting that although the other boreholes did break down occasionally, but the WATSAN ensured that they were maintained.

Many of the boreholes drilled before 1994 formed WATSAN after the facilities were drilled. Those that were drilled after 1994 formed WATSAN before the drilling of the boreholes. Thus 44% of the facilities had WATSAN formed after drilling, 42% before drilling whilst 14% of the facilities had none.

Majority (i.e. 81%) of the WATSAN members were appointed with only 19% having been elected. The appointees were mostly opinion leaders and influential people within the communities who were perceived by the communities as capable and responsible. The sex composition of WATSAN members in the district varied widely. Although the CWSA advocates for gender balanced committees, only about 32% of WATSAN members in the district were females.

Operations of WATSAN

As many as 90% of the members of the WATSAN sampled claimed that decision making was more participatory and that all members were considered equal and their views equally respected. Opinions of the chairpersons in particu-

lar were not imposed on other members. The level of participation of members could not however be classified as active because as many as 68% of the committees relied very much on the initiatives of a few members usually the chairpersons. This suggests that even though in theory there appeared to be maximum participation in practice only a few individuals managed the WATSAN.

The effectiveness of the operations of the WATSAN were analysed in terms of the frequencies of their meetings, record keeping, mobilisation and management of revenue, maintenance of boreholes, sanitation activities and motivation of committee members.

Frequency of Meetings

The general trend across the six area councils is that meetings of committees were irregular. Those in Kumbo area council and the WSDB in Bimbilla held quarterly meetings. Some committees in two other area councils (i.e. Darikum and Nabanga) claimed they held regular meetings but they did not have any written records to substantiate those claims. Most of the WATSAN especially in Varibiegu area council held meetings only when there were problems with the boreholes they managed. Issues discussed during the regular meetings of the committees included tariffs determination, resource mobilisation, disputes resolution among women and seasonal fluctuation of household incomes. It was only in Kumbo and Gmantambu area councils that committees rendered accounts to community members.

From the analysis of the data collected there appears to be a relationship between the regularity or frequency of meetings and sustainability of the water facilities. In the Varibiegu Area Council, the committees there did not meet regularly and attendance at the irregular meetings was very low. The committees in Varibiegu area council relied solely on irregular meetings to manage their boreholes. As a result of this, broken down boreholes were not quickly attended

to. The same area council had the highest number of orphan boreholes, which were not functioning. Because of all these, the percentage of the population covered with potable water in 2005 was the lowest (24.3%) among all the area councils in the District. In Bimbilla, where board members received allowances at meetings, attendance was good and the meetings were held regularly but in areas like Varibiegu where no allowances were paid meetings were not regularly organised and attendance of the irregular ones was poor.

Record Keeping

Some WATSAN kept records of their meetings, income, expenditure, stocks and byelaws. Whilst there were no written records in Varibiegu Area Council, the Darikum, Kakuhi, Nabanga and Kumbo area councils kept scanty records of minutes, income and expenditure. In Darikum and Kumbo area councils, records on income and expenditure were in the form of receipts received or issued out for payment of levies and purchase of items, usually spare parts. Such records were kept in notebooks with the secretaries in the Kakuhi and Nabanga area councils. In Bimbilla detailed records were kept on all the activities including stock of chemicals for water treatment. Once again the lack of written records on all activities of the committees within the Varibiegu area council did not promote smooth operation and continuity of the activities of the committees as compared with the other committees in the other area councils.

Mobilisation and Management of Revenue

Mobilising funds for the operation and management of boreholes in the area councils were very similar. Majority of the committees (i.e. 71%) relied on household levies and donations to repair their facilities and hence could not meet their targeted amounts of at least ₦500,000.00 per year for the maintenance of one bore hole. Dependence on household levies and donation is however not reliable and does not yield sustainable funds for the maintenance of borehole

pumps. They could only raise funds for workmanship and the purchase of less expensive spare parts. Apart from Bimbilla where the WSDB billed water users on a monthly basis, all the other WATSAN committees relied on fixed (some irregular) household levies ranging from ¢1000 to ¢10,000 to raise the greater proportion of their revenue. The Committees fixed these levies during their meetings and they subsequently tasked volunteers to go round every household to collect the money. Response to payment in all the area councils was very good during the harvest seasons but dwindled during the lean seasons when most of the people were poor. The implication for planning is that contributions/levies should be collected during the harvest season and managed to cater for contingencies during the lean season. Thus issues regarding money need to be implemented only during the harvest seasons rather than the lean season.

Donations both in cash and kind were made in four area councils but such donations were often rare and unreliable. Donations in kind were sold and the proceeds added to the funds of the boreholes.

WATSAN in Darikum, Kumbo and Gmantambu area councils used water vending to mobilise funds for operation and maintenance. Individuals were tasked to sell the water either from the boreholes or public stand pipes at ¢100 per bucket. Vendors in Bimbilla received a commission of 10% but those in the other area councils did not receive fixed and regular commissions. They received token payments but very often, their services were purely voluntary. This affected accountability for the money they collected.

All the WATSAN committees in the district operated bank accounts where funds raised for the management of the boreholes were kept and withdrawn to purchase spare parts when the pumps broke down. This is a condition under the COM concept and all committees were only

complying. The WSDB in Bimbilla however invested about 80% of its income in treasury bills through the Association of Water and Sanitation Development Boards in Tamale. This was to ensure that the boards had enough funds to undertake repairs and rehabilitation of the water plants. The remaining 20% was used for the daily operations of the plant and salaries of staff and allowances for the board's activities. The WATSAN committees in Kumbo operated a credit union in addition to the bank accounts in order that they could always have money to manage their boreholes.

The major economic activity in the district is agriculture with very bright prospects of grain banking as an additional investment opportunity. However, WATSAN committees in all the area councils were not exploring the opportunity to increase their revenue base. There is the need for the stakeholders to encourage the WATSAN committees to invest in grain banking and other viable investment opportunities in the district.

Maintenance

Maintenance of pumps of boreholes in the district had been the sole responsibility of the DWST from Bimbilla. The distance coupled with unreliability of means of transport and other responsibilities have resulted in very long response time to reported cases of breakdowns of borehole pumps that needed maintenance. Consequently, many people had no access to potable water when their boreholes broke down and they had to rely on non-potable sources such as dams and streams. Five mechanics were trained to handle minor repair works in the District but they have all not been practicing for a number of reasons including non-availability of spare parts, means of transport and lack of motivation.

In the Darikum area council, the people had to rely on a mechanic of the Church of Christ Mission in Yendi (which is outside the district) for the maintenance of some boreholes that the Church drilled for them. This was mainly be-

cause the response time of the church mechanic was shorter and the service was free.

Sanitation Responsibilities of WATSAN

WATSAN committees in all the area councils did not handle sanitation issues as an integral part of their responsibilities. Their sanitation activities were limited to the cleaning of the surroundings of the boreholes that they managed. The community sanitation concerns were handled by the District Assembly through the Environmental Health officers of the Department of Environmental Health in the form of periodic inspections to communities. Their visits were often characterised by summons and threats of prosecution to defaulting community members.

There were only 16 VIP and five KVIP latrines and one public Water Closet (WC) in the entire district. Consequently, the percentage of the people with access to toilet facilities was as low as 4.9%. The Kakuhi and Nabanga area councils had no public toilet facilities. This explains why majority of the people in the district defecated in the bush. The household latrine project where the DA assists households with about 95% of the cost needs to be seriously given attention in the district.

With the exception of Bimbilla, corpses in all the area councils were buried in their houses in spite of the possible threat to health acknowledged by committee members. The practice of burying corpses at homes in the district has been raised a number of times during the Assembly sessions and letters had been written to Assembly members in the communities to consult with traditional authorities to earmark places for use as public cemeteries.

Conflict Resolution Functions

The commonest conflict situations in all the area councils were petty quarrels among women mostly at borehole sites. Such conflicts were resolved through persuasion and dialogue. In communities like Makayili and Bakpaba where there was a mixture of different ethnic groups,

boreholes were allocated based on ethnicity because the ethnic conflict in 1994 polarised the two major ethnic groups (i.e. Konkombas and Nanumbas). It was envisaged that this polarisation would be minimised by separating them to avoid the escalation of petty quarrels that are rife at water sources. On the other hand, access to water facilities in Bimbilla, which served as a destination for refugees generated by the conflict, was based on proximity and ability to pay and not ethnicity. Kumbo area council also had a relatively mono ethnic composition and so access to bore holes was simply based on proximity and ability to pay.

Although boreholes served as points where petty quarrels especially among women were rife, they could also be used as opportunities of reconciling the two ethnic groups. When members from both groups share a common borehole and come together to resolve problems regarding the facility, they will integrate faster than when they stay apart. Furthermore if water facilities are shared there is a lesser probability that those facilities would be attacked in times of conflicts.

Motivation of WATSAN Members

The work of WATSAN committee members in all the area councils, apart from Bimbilla, was purely voluntary. They were only intrinsically motivated by the fact that their community members had access to potable water. However, the WSDB members in Bimbilla received allowances for attending board meetings while the employees were paid regular monthly salaries. Since performance is positively related to motivation, it was not surprising that the WSDB was more effective than all the WATSANs. Besides, majority of the committee members suggested regular financial payment as the form of motivation that will encourage them to do their work well.

This is in conformity with what Gratto et al (2002) advocate for as a way of public service delivery devoid of corruption in their new public management concepts. The relative success of

the WSDB as compared to the WATSAN committees is because the former is gradually becoming a formal institution whose sustainability and efficiency is guaranteed through the accumulation of institutional knowledge apart from considerations of opportunism, incentive alignments etc (Nicolai, 1996; Klein, 1999).

RECOMMENDATIONS AND CONCLUSION

It is obvious from the analysis that the only motivation for WATSAN Committees to meet regularly is the payment of allowances to members. It is only then that the DA could mandate them to hold regular meetings and to submit minutes of their meetings through the DWST to the DA. This will help streamline the activities of the committees and ensure continuity (through the accumulation of institutional knowledge) even in the absence of key members either through death or transfer/migration. It is possible to ensure the regularity and level of attendance at meetings if more revenue could be mobilised and invested to yield more income to pay allowances to committee members.

The study revealed that the use of household levies for the operation and maintenance of facilities was not sustainable. WATSAN should therefore widen their revenue sources by encouraging the youth to organise themselves for revenue mobilisation through water vending for a fee for sustainable water supply. The youth often employ this method to mobilise funds for their club activities such as buying footballs, jerseys and musical gargets among others.

Since most of the people are peasant farmers and as such experience seasonal fluctuating income levels, levies and other forms of contributions including water vending should be encouraged during the harvest periods in order to ensure favourable responses. This money could be invested and used when facilities break down. Most of the committees did not invest their money in other income generation ventures apart from depositing it in the bank. The WATSAN could invest this money in grain banking since

prices of foodstuffs are very low during harvest seasons and rise very high during the lean seasons. The DWST could assist the communities in their educational campaigns to identify multiple and reliable sources of income generation activities such as processing of groundnuts into paste and oil, pito brewing and shea butter extraction to generate income to support the maintenance of their boreholes.

Also the WATSAN members could be trained to improve their indigenous knowledge and skills in managing small scale enterprises so that they could apply those skills for the management of the water facilities. The identification of appropriate training needs especially concerning entrepreneurial skills and financial management will be useful. The training should aim at building upon the existing knowledge and experiences of the groups. This approach will ensure that the local knowledge base is maintained and upgraded. This means that the assessment of the training should be participatory to take into consideration the peculiarities of the committees.

Communities with more than one borehole should be encouraged by the DA through the DWST to form only one common WATSAN to oversee the management of the facilities. Particular attention in this regard should be paid to Chamba, Makayili, Bakpaba, and Bincheratanga since their respective population exceed 2000 people, and they could be considered to benefit from the small town water systems.

Record keeping has been one of the areas that most WATSAN in the district have woefully failed to deliver. Although most of the committee members could not read and write at least one, and normally the secretaries, were usually literates and further training should be organised by the DA through the DWST on record keeping for them to appreciate its importance in the management of the boreholes.

Repair of borehole pumps in the district was done by the DWST from Bimbilla. This team was not well resourced and so was not able to

respond promptly in times of need. There was only one motor bike for the team, which, according to them was fuelled and repaired from their meagre salaries. The office of the DWST needs to be well resourced by the DA, and other NGOs and stakeholders in the district to enable them monitor and keep accurate records of WATSAN activities and operations.

The five trained area mechanics were ineffective mainly because of lack of spare parts in the district. Since the parts were often bought from Tamale, the DWST normally wait for the number of orders for parts to accumulate before they procure from Tamale because it was expensive in the end to travel such a distance only to buy just one or two small parts. Besides, the area mechanics were only volunteers who were paid token fees as workmanship to meet their transportation. This condition defeated the rationale of the COM and subsidiarity concepts since the DWST were carrying out the responsibilities of the area mechanics (DeGabriele, 2002). The WATSAN should be encouraged to stock spare parts that are frequently required to save them time and inconvenience in times of breakdowns.

No WATSAN committees concerned themselves with issues of sanitation in the district. This could be due to inadequate community animation by the DWST and the Tiyumtaba Integrated Development Association (TIDA), a local NGO that serves as a Partner Organisation. The DWST, TIDA and the District Assembly need to seriously consider how the sanitation aspect of the district should be handled since it is obvious that the WATSAN can widen their activities to include the other daunting sanitation activities such as the management of public toilets, solid waste disposal and the disposal of corpses. If WATSAN are to take up the sanitation duties effectively, their composition and relationship with the Environmental Health staff of the DA must be well defined to avoid duplication and/or conflicts and ensure complementarities.

It is however not realistic to insist that WATSAN should do their sanitation tasks when most

of them are not living up to expectation in their water related activities. It does seem rational to empower the Department of Environmental Health to take up the sanitation aspect but collaborate strongly with the WATSAN. One other possibility is to ensure that the WATSAN committees incorporate the environmental health officers. Even if the latter are motivated they are more likely to concentrate their efforts in improving their water related activities and a little bit of sanitation by keeping the water points and their surroundings clean.

Several of the community members were not aware of the household latrines programme where the households were expected to pay only five percent of the cost while the DA through the CWSA bear the remaining 95% of the cost. The DA seemed to have shelved this programme for sometime now probably due to financial difficulties but this has to be revisited with more innovative financial arrangements if the target of the Millennium Development Goal of halving the number of people without access to water and sanitation facilities by 2015 is to be achieved. Although a few communities including Bimbilla, Chamba, Makayili, Lanja and Bakpaba have benefited from the highly indebted poor countries (HIPC) initiative support for the construction of KVIP latrines, the sanitation coverage still lags behind the national strategic investment plan (SIP) targets. In many other communities defecation in the open normally referred to as 'free range' continues unabated.

Although minor conflicts arose among women at borehole sites, they could promote ethnic harmony and thus foster ethnic integration if access to the facilities is based on ability to pay and proximity to the facility. In that case, the composition of WATSAN for entire communities could be a blend of the feuding parties (in this case Konkombas and Nanumbas). Their women could become friends at the water points when they all fetch from the same source. This kind of interaction will help minimise suspicion between

the two groups and promote active participation in communal activities.

Emerging Trends and the Institutional Requirements

The implementation of the Strategic Investment Plans (SIP) for the water and sanitation sector in Ghana has received significant support from several development partners including DANIDA, World Bank, GTZ, JICA, EU etc. This has generated a trend in the preparation and implementation of District Water and Sanitation Plans (DWSP) as detailed aspects of District Medium Term Plans (DMTP) just like education health and agric. The institutional set up for the implementation of these DWSP is the District Water and Sanitation Team. If this trend continues Ghana's decentralised development could be strengthened by effectively integrating the Area Councils into the institutional framework for the preparation and implementation of the DWSP and the DMTP. This could generate an effective link between the DWST at the District level, through the Area Council and down to the WATSAN and the community level. The active involvement of the area councils in the coordination of WATSAN at the community levels could be one way of making them active and that will ultimately lead to the establishment of those area councils that are yet to be.

CONCLUSION

This study sought to examine how communities were responding to the COM concept by operating and managing their water and sanitation facilities through WATSAN/Water Board. The study revealed that the main weakness of WATSAN was financial mobilisation.

The recommendations seek to address the weaknesses of the WATSAN to ensure sustainable provision of water and sanitation services to rural Ghana. They include among others a re-examination of the responsibilities of the committees with regard to sanitation and their level of motivation and their relationship with the

Department of Environmental Health all in a bid to formalise them and re-engineer them in line the new and evolving concepts of new institutional economics.

REFERENCES

- Davis, L. E. and North, D. C. (1971). Institutional Change and American Economic Growth, Cambridge University Press, London, *The Economic Journal*, 82(328):1468-1470
- DeGabriele, J. (2002). Improving Community Based Management of Boreholes: A Case Study from Malawi. The BASIS Management Entity, University of Wisconsin-Madison, pp. 1-42, <http://www.ies.wisc.edu/itc/live/basprog9.pgd>
- Galaa, S. Z. and Bandie, R.D.B. (2004). Pump Management Committees and Sustainable Community Water Management in the Upper West and East Regions of Ghana, *Ghana Journal of Development Studies*, 1(1):72 - 90
- Gratto, A., Bryan, P. and Thor, S. (2002). Mitigating Corruption in New Public Management, World Bank, Washington D.C. pp.3-4, <http://government.cce.cornell.edu/doc/pdf/Corruption.pdf>
- Kleemeier, E. (2002). Rural Water Sector reform in Ghana: A Major Change in Policy and Structure, Field Note 2, Vandana Mehra, www.wsp.org/publication/af_bg_ghana.pdf
- Klein, P. G. (1999). New Institutional Economics, Department of Economics, University of Georgia, in *Encyclopaedia of Law and Economics*, 1:456-480, <http://encyclo.findlaw.com/0530book.pdf>
- Kokor J. Y. (2001). Local Governance of Development in Ghana, SPRING Research Series No 30, SPRING Centre, University of Dortmund, pp. 84-87
- Nicolai J. F. (1996). On the Relations between Evolutionary and Contractual Theories of the firm, Department of Industrial Economics

-
- and Strategy, School of Business, Copenhagen, pp. 2, <http://ep.lib.cbs.dk/download/ISBN/8778690099.pdf>.
- World Bank (1982). Sanitation and Clean Water. The World Bank, Washington, D.C.
- World Bank (1993). Water Resources Management. The World Bank, Washington, D.C.
- World Bank (1994). World Development Report, 1994. Oxford: OUP/World Bank