

UNIVERSITY OF CAPE COAST

GOOD GOVERNANCE IN THE MANAGEMENT OF WATER AND  
SANITATION SYSTEMS. A CASE STUDY OF WATER AND SANITATION  
DEVELOPMENT BOARDS (WSDBs) IN WESTERN REGION

BY

ABREFA MENSA

A DISSERTATION SUBMITTED TO THE CENTRE FOR DEVELOPMENT  
STUDIES OF THE FACULTY OF SOCIAL SCIENCES, UNIVERSITY OF  
CAPE COAST IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR  
THE AWARD OF MASTER OF ARTS DEGREE IN DEMOCRACY,  
GOVERNANCE, LAW AND DEVELOPMENT

CLASS No.	
ACCESSION No.	
232342	
CAT. CHECKED	FINAL CHECK
23/6/08	

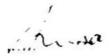
JUNE, 2008

THE LIBRARY  
OF CAPE COAST

## DECLARATIONS

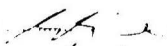
### Candidate's Declaration

I hereby declare that this dissertation is the result of my own original work and that no part of it has been presented for another degree in this University or elsewhere

Candidate's signature  Date 7/7/08  
Name ABREHA MENA

### Supervisor's Declaration

I hereby declare that the preparation and presentation of the dissertation were supervised in accordance with the guidelines on supervision of dissertation laid down by the University of Cape Coast

Supervisor's signature  Date 13/7/08  
Name S. B. K. de

## ABSTRACT

The National Community Water and Sanitation Programme (NCWSP) adopted the Community Management policy, as a key strategy to ensure the sustainability of water supply and sanitation services. The main problem however, was the low governance and management capacity of the Water and Sanitation Development Boards (WSDBs) which threatens the sustainability of the water supply and sanitation systems.

The purpose of the study was to examine how good governance and management practices by the WSDBs affect the sustainability of Small Towns' water supply and sanitation services. The study adopted a survey research method which included interviews and discussions held with 213 respondents made up of WSDBs, District Chief Executives, District Coordinating Directors, Traditional Authorities, Area Councils, Unit Committees, Assembly members and Water Users, using structured interview guide.

The results of the study revealed low calibre of the WSDB membership; low representation by women, conflicts, poor communication and inadequate control systems. Based on the findings of the study, recommendations were made for a review of the qualification of the membership, the bye-laws, regular training and effective control systems. In particular, it is stressed that platforms should be created to provide avenues for dialogue between the WSDBs on the one hand and the District Assembly authorities and Traditional authorities on the other. This will improve communication and reduce the conflicts in water management.

## **ACKNOWLEDGEMENTS**

I sincerely thank Professor S.B. Kendie, who was my supervisor for his support and input provided for the completion of the dissertation. My gratitude also goes to the Chief Executive of CWSA and the Staff in the Western Region for their comments and encouragement for the completion of the dissertation.



## **DEDICATION**

I dedicate this work to my late father, Joseph K Awuah through whose toil I have come this far, and my children for the hardships they endured during the pursuit of higher academic laurels.

## TABLE OF CONTENTS

Contents	Page
DECLARATION	ii
ABSTRACT	iii
ACKNOWLEDGEMENTS	iv
DEDICATION	v
TABLE OF CONTENTS	vi
LIST OF TABLES	ix
LIST OF FIGURES	x
LIST OF ABBREVIATIONS	xi
CHAPTER ONE: INTRODUCTION	
Governments and how they operate in Ghana	1
Statement of the problem	6
The objectives of the study	8
The scope of the study	8
Justification for the study	9
Organisation of the study	10

<b>CHAPTER TWO: UNDERSTANDING THE CONCEPT OF GOOD GOVERNANCE AND COMMUNITY DEVELOPMENT MANAGEMENT</b>	
Evolution of community management	11
Good governance and community management	15
The role of participation in good governance	18
Conceptual framework	21
<b>CHAPTER THREE: METHODOLOGY</b>	
Introduction	24
The study design	24
Sampling procedures	24
Data collection techniques	28
Description of the study area	29
<b>CHAPTER FOUR. DRINKING WATER AND SANITATION IN GHANA GOVERNANCE AND MANAGEMENT ISSUES</b>	
Background	32
The functions of CWSA	33
The role of the district assemblies	34
Achievements of National Community Water and Sanitation Programme (NCWSP) (1994 – 2003)	34
Functions of the Water and Sanitation Development Board (WSDB)	35
The composition of the Board	37

Small towns' water projects in the Western Region	41
Evaluation of the small town's water projects	43

#### CHAPTER FIVE: ANALYSIS AND DISCUSSION OF RESULTS

Background characteristics of respondents	44
Evaluation of the WSDBs performance	47
Evaluation of gender representation on the WSDB	59
Evaluation of calibre of WSDB members	61
Evaluation of the sustainability of the water systems	64

#### CHAPTER SIX: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction	67
Summary	67
Conclusions	70
Recommendations	71

REFERENCES	73
------------	----

APPENDICES	76
------------	----

A. Questionnaire for WSDBs	76
B. Questionnaire for O&M Staff	85
C. Questionnaire for Households	87
D. Questionnaire for chiefs/community leaders	89
E. Questionnaire for DAs	91

## LIST OF TABLES

<b>Table</b>		<b>Page</b>
1:	Number of small towns water projects in the districts and source of funding	25
2	Sample communities of WSDBs	26
3:	Sample of WSDB/Staff members interviewed	27
4:	Water users/household sampling in the selected communities	28
5:	Small towns project with funding from EU under community management-Western Region	41
6.	Small towns project with funding from IDA under community management	42
7:	GWCL Small Towns Pilot Communities under community management	42
8:	Age distribution of respondents	45
9:	Level of education of respondents	46
10:	Occupational distribution of respondents	47
11.	Number of years served by the WSDBs and rules	56
12.	Examples of audit reports of WSDB accounts	58
13:	Gender representation on the board	60
14:	Key positions by gender	60
15:	Qualifications of WSDB executive officers	62
16:	Staff qualification	63
17:	O&M breakdowns	65

## LIST OF FIGURES

Figure	Page
1: Factors affecting good governance in the management of water and sanitation systems	23
2: The study Community	30
3: Community management structure for water and sanitation services	39

## **LIST OF ABBREVIATIONS**

COM	Community Ownership and Management
CWSA	Community Water and Sanitation Agency
DA	District Assembly
DWST	District Water and Sanitation Team
ESA	External Support Agency
EU	European Union
GWCL	Ghana Water Company Limited
IDA	International Development Agency
JICA	Japan International Co-operation Agency
NCWSP	National Community Water and Sanitation Programme
O&M	Operation and Maintenance
WATSAN	Water and Sanitation Committee
WSDB	Water and Sanitation Development Board
AIA	Association of International Accountants
SSF	Social Security Fund

## CHAPTER ONE

### INTRODUCTION

#### **Background to the study**

Since the re-emergence of civil rule in Ghana in 1992 a great deal of interest has been shown in the prospects of consolidating democracy. The hope of all Ghanaians is that, the process of democracy will be ingrained in all facets of the Ghanaian society. It has also been generally understood that democracy can only be sustained through a holistic approach in which the entire nation is made to participate fully in the process (Amponsah and Bofo-Arthur, 2002)

Decentralized government in Ghana began with the introduction of Indirect rule by the British colonial administration in 1878. Indirect rule was a policy aimed at providing statutory basis for the exercise of local government functions by chiefs and at effecting measures of reform to modify the indigenous system to suit modern conditions. In order that chiefs (who were the cornerstone of indirect rule) could carry out the decisions of the British government conveyed through District Commissioners, the government established what was called Native Authorities (NAs). The NAs did not only perform judicial functions, like cases relating to disputes over ownership, possession or occupation of land within the areas of their jurisdiction, but also operated as local government units and given the power to pass bye-laws relating to local matters and to raise funds in



order to improve development programmes. The NAs did not offer opportunity to develop local democracy and democratic local government because of their limited composition. They were made up of non-elected paramount chiefs, sub-chiefs, and elders, who behaved like an enlightened and benevolent oligarchy (Aryee, 1994).

In 1952 a new form of decentralized authority based on the recommendations of the Watson Commission (1948) and the Coussey Committee (1949) was introduced. The local councils were made up of two-thirds elected membership and one-third chiefs, with paramount chiefs as presidents of the councils. The areas of jurisdiction of the councils were re-demarcated not on the basis of chiefdoms, as was the situation under the NAs but on the basis of two factors: population, size and viability, that is, potential ability of the areas to generate local level revenues to support the local government units.

In 1974, another attempt at reform of decentralization resulted in the establishment of 65 district councils. Membership was again two-thirds elected and one-third representatives of traditional councils. This reform, which sought to assign central government functions of administration to local government units, also failed. In November 1978, the Supreme Military Council (SMC) government held district council elections. Before any progress could be made on the new system, the SMC government was overthrown in June, 1979. In December 1988, the PNDC government announced a new policy on decentralization but like the previous regimes before it, the PNDC at this point was interested in deconcentration or administrative decentralization because it regarded

decentralization as the devolution of central administrative and local political authority to the local level (Aryee, 1994).

In response to these problems, a local government reform with decentralisation as major component was introduced under the local government law 1988 (PNDC Law 207). The policy devolves central administrative authority to the district level and fuses government agencies in any region, district or locality into one administrative unit. It also assigns functions and responsibilities to the various levels of government and promotes popular grass root participation in the administration of the various areas concerned. Subsequent amendments to these laws up to 1992 were enacted, which culminated in the recognition of local governance in the 1992 Fourth Republic Constitution. Under the new local government Act 1993, Act 462 that replaced the PNDC Law 207, the present local government system in Ghana (the District Assembly concept) is therefore intended to become the standard of the on-going democratization process, which is based on the concept of transferring power from the Centre to the grassroots. To achieve this process of transfer of power and grassroots participation in the democratization process, various structures were provided under the Act, which include:

- The Regional Coordinating Councils.
- Metropolitan/Municipal/District Assemblies
- Sub-district political/administrative structures like Urban/Zonal Town Area councils and Unit Committees

Another level of government is the traditional setting at the community level with its own structures and practices. There are many misconceptions about the functions of traditional political systems and their impact on the grounds that they are undemocratic. For instance, Simiyu (1987) sees African political practice as hierarchical system that promotes gerontocracy and stifles upward social mobility. On the contrary, democratic systems, he posits, should allow for equal opportunity for citizens to rise on the social ladder.

Dake (1993) has expressed views on the traditional political structure in Ghana that are similar to those expressed by Smimiyu. Dake reflects on the "traditional background" and holds that every Ghanaian and, generally, every African grows up in an environment premised on unquestionable obedience to seniority and authority. The author makes clear that this environment in which the African grows up has a debilitating effect on one's political consciousness, which he thinks can reduce to the thought that "I grew up obeying authority absolutely and, therefore, expect to be obeyed absolutely when we have authority" (Dake,1993:93)

On the contrary, Ajei (2001) views democracy as a form of government whose practices derive entirely from the historical and cultural experiences of a people, and is in conformity with their vision of how they want to be governed or to govern themselves. Using some features of the Akan political structures, many eminent sociologists and philosophers including Casely-Hayford, (1903) Sarbah, (1906) Danquah, (1928) Ratray, (1929) Busia, (1954) and Gyekye, (1997 ) all cited in Ajei (2001) have agreed that, traditional Akan social organization

revolves around a well-regulated constitutional system of government of which representation of the people is the essence. For example the chief would have a council of elders who would mostly be the heads of the clans. In the conduct of its affairs, each lineage in a town, or each town in a district in paramountcy, acts without interference from the larger political unit. Thus, decentralization is an outstanding feature of the Akan political system.

The Community Water and Sanitation Programme was designed to follow the government decentralization policy with the hope of promoting popular participation, transparency, accountability and efficiency in the management of the water and sanitation systems through capacity building and good governance. However the extent to which governments are amenable to participation determines the level of participation at the community or grassroots level (Kendie, 1995). Undoubtedly, issues about participation are about governance and accountability. They are also about equity as well as efficiency in service delivery. If the local people are convinced that the political leadership delivers in terms of performance and equity they would be motivated and their morale boosted and they would be highly inclined to be involved in the governance process.

In Ghana, there are 488 Small Towns provided with pipe schemes in communities with population ranging between 2,000 and 50,000 managed by Water and Sanitation Development Boards (WSDBs) (CWSA, 2003). In the Western Region, 14 Small Towns have been provided with small towns' pipe schemes and managed by WSDBs (CWSA-WR, 2003).

In carrying out their functions, the WSDBs are supposed to involve the communities in the day-to-day management of the water facilities by holding regular meetings with the community. They are to encourage every citizen including women to take part in making decisions regarding the management of the water and sanitation facilities, supervise the activities the Water and Sanitation (WATSAN) Committees, mobilize funds for the operation and maintenance (O&M), recruit and supervise staff to manage the facility and conduct hygiene education. They are to maintain records of all water and sanitation activities, determine tariffs and prepare bye-laws for the management of the water and sanitation facilities. The Board also forms a link between the DA and the Community as far as water and sanitation issues are concerned.

#### **Statement of the problem**

Monitoring and evaluation reports show that water systems provided in the small towns are poorly managed (EU Small Towns Evaluation Report, BURGEAP Consult, 2004). The evaluation of WSDBs' performance and monitoring reports conclude that they are unstable in membership. Disharmony also exists among members and between the WSDB and O&M staff, the community, the DAs and its sub-structures. This situation invariably affects the operation and maintenance of the water systems. The fear is that the overall goal of encouraging community management of the systems to ensure sustainability and to improve the health and economic well being of the rural communities will

Evaluations of six European Union (EU) small towns' water projects namely, Agona Nkwanta, Half Asini, Asankrangwa, Bibiani, Sefwi Wiawso and Juabeso in June 2004 confirmed poor social relationships between the community, operating staff, WSDBs and the District Assemblies (DAs) in most of the communities (EU Evaluation Mission Report, 2004). It was also established that even where Area Councils and Unit Committees exist they seem not to be playing any active role in either supporting the WSDBs or the management of the facilities. Even at the unit or ward level where the WATSAN Committees are established, their involvement in most of the decisions affecting the management of the facilities is very minimal. The major factors contributing to the problem have been identified as ineffective monitoring and control systems, inadequate representation and the selection of the WSDB members, non-existence or ineffective bye-laws, political influence on the Boards' activities or membership, and poor communication with the community in terms of transparency and accountability. The above revelations from the evaluation reports provide enough evidence to suggest that the National Community Water and Sanitation Programme's effort to promote good governance among WSDBs particularly in ensuring stability has remained ineffective in most Small Towns.

From these reports and observations, the core problem which the study seeks to investigate is the poor governance and management capacity of the WSDBs. These observations raise certain fundamental questions as

- How are the WSDBs constituted and organised?
- What is the management capacity of the WSDBs?

- What is the nature of the relationship between the DAs, Traditional authorities, Area Councils, Unit Committees, the WSDBs and how does this affect the sustainability of the water systems?

### **Objectives of the study**

The main objective of the study was to examine how governance and management practices of the WSDBs affect the sustainability of small towns' water supply and sanitation services.

The specific objectives were to:

- Examine the composition and organization of the WSDBs
- Assess the management capacity of the WSDBs to promote good management practices
- Understand the nature of the relationships between the DAs, Traditional Authorities, Unit Committees and the WSDBs and how these affect management of the water systems;
- Make recommendations to all parties concerned to enhance good governance for water resource management

### **The scope of the study**

From the problem statement, the focus of the study is to examine how good governance and management practices can be tools for ensuring the sustainability of the water systems. The study covers the 14 small towns with trained WSDBs managing their water systems in the Western region since 2002

A unique feature of this study is the attempt to concentrate on the management body of the water system, which is the hub for the functioning of the water system. This attempt therefore is a departure from the various studies, which concentrated more on the O&M. However, this study does not claim to exhaust all the possible factors that contribute to the unstable situation of the WSDBs. Instead, the emphasis is on identifying the management and governance factors that account for the stability or otherwise of the Boards

#### **Justification for the study**

The vision of Community Water and Sanitation Agency (CWSA) is to develop the capacity of District Assemblies and community management groups to ensure sustainability of Water and Sanitation facilities. This requires the transfer of appropriate technical skills and knowledge to District Assemblies, community groups and associations. However, experience and observations through monitoring show that the WSDBs are unstable in membership, weak in performance and fail in most cases to replicate the interventions provided

Despite the fact that millions of cedis are being spent on facilities' provision and capacity building, not much have been done to explain some of these problems and this is what this study seeks to contribute. The study results will help CWSA and other stakeholders in the water and sanitation sector to improve the effective participation in community water and sanitation programme in order to enable the Government achieve overall objective of providing water for all by the year 2020.



### **Organisation of the study**

The research work is presented in six chapters. Chapter one gives a general and simple overview of forms of government and how they operate in Ghana, the problem and objectives of the study, the scope and the justification for the study. Chapter two presents the evolution and understanding of good governance and community development management and how they are interrelated. Chapter three explains the methodology used for the study which covers the study design, the sampling method and the description of the study area. Chapter four presents an overview of drinking water and sanitation in Ghana, the roles and functions of key stakeholders, the achievements and evaluation of the performance of the Water Boards. Chapter five presents discussions and findings of the study and lastly, chapter six provides the summary, conclusions and recommendations of the study.

**CHAPTER TWO**  
**UNDERSTANDING THE CONCEPT OF GOOD GOVERNANCE AND**  
**COMMUNITY DEVELOPMENT MANAGEMENT**

**Evolution of community management**

Over the last decade community management has become the leading concept in rural water supply. It started with community involvement in system construction and developed into community participation and community management. In the process the responsibility for service provision gradually moved from national government to local people. For most water supply and sanitation projects now, community management is the guiding principle. Implementing management institutions and capacities is common practice and a whole range of participatory methods have been developed to facilitate the process.

The rural water supply and sanitation sector gradually emerged in the two decades prior to the 1980s International Drinking Water Supply and Sanitation Decade (IDWSSD). It developed in reaction to the struggles of post-colonial states to extend the benefits of 'modern' infrastructure to their rapidly increasing populations. In the past, rural water supply was the responsibility of the national government. If a single starting point for the more recent development of the

sector is sought, it should be the 1977 Mar del Plata conference, which set the groundwork for the IDWSSD.

According to Chambers (1983), by the early 1980s there were three main drivers to 'community participation' based approaches. There were:

- A new paradigm for development rooted in the concept that development should come from the roots of a society, instead of from the top
- A widely shared perception that many 'conventional' water supply policies and programmes were failing to achieve their goals, and
- The vision that community participation could replace some of the loss of the state's implementation capacity brought about by the implementation of International Monetary Fund (IMF) promoted Structural Adjustment Programs.

Halfway through the IDWSSD, the donor community assembled in the External Support Agency Collaborative Council, in Mal del Plata, in Argentina, which officially identified community participation as one of the six basic prerequisites for improved performance of the water and sanitation services. As a result many projects started involving women and men in trench digging, system maintenance, and water committees. However, it soon turned out that sustainable water and sanitation could not be achieved without involving people not just in the manual work, but also in the planning of programmes and the selection of technology.

The emphasis on community management was strengthened in the Nordic Fresh Water Initiative (1991) which called for water management responsibility

to be devolved to the lowest possible level. The subject was further stressed in the Dublin Statement on Water and Sustainable Development (1992). The 500 participants at that meeting agreed that water development and management should be based on a participatory approach, involving users, planners and policy makers at all levels. They underlined that women play a central part in the provision, management and safeguarding of water, and suggested that in principle water should be recognized as an economic good.

At the Earth Summit in Rio de Janeiro in June 1992, world leaders committed themselves to a comprehensive programme to provide sustainable water supply and sanitation services to the hundreds of millions of the world's population who currently lack them. At the summit all States and support agencies were urged to implement activities aiming for universal coverage outlined in Agenda 21, a strategy for sustainable development in the 21<sup>st</sup> Century. A guiding principle in the achievement of Agenda 21 is a community management of services, backed by measures to strengthen local institutions in implementing and sustaining water and sanitation programmes.

During the 1980s and 1990s a variety of different actors, with very different agendas signed up to the concepts of community management. Governments saw community involvement as a way of reducing demands on over-stretched resources. Donors saw it as an opportunity to focus and stretch development budgets towards effective implementation of water supply and sanitation facilities, and to bypass the problems posed by corrupt and inefficient governments. Non-Governmental Organisations (NGOs) became the voice of the

community and happily seized the opportunity to increase their role, becoming in many countries a sort of parallel government. Finally, multilateral donors such as the World Bank saw community management as an ideal vehicle for their messages about reduced government involvement, and increased private sector and civil society roles. The World Bank and later Water and Sanitation Programme (WSP) developed the Demand Responsive Approach (DRA), which is heavily geared towards the operationalisation of community management approaches (Evans and Appleton, 1993)

Thus community management has been accepted for a variety of different reasons as a management concept. More and more examples of community management could be found around the world, and Uganda, Ghana, South Africa, India and Tanzania have all made community management a key concept in their national water policies and laws (Black, 1998) However, as was highlighted in the Vision 21 report, the problems of lack of sustainability, inappropriate technologies, and failure to increase water and sanitation coverage all continued to be serious issues which had hardly been addressed. Professionals in the sector are also realizing that Operation and Maintenance (O&M) is not just a technical issue, it encompasses also social, gender, economical, cultural, institutional, political, managerial, and environmental aspects (Brike et al, 1997)

World Bank (1998) describes community management as situation where community takes responsibility for decision making This implies that the community is fully in charge of possible subsidies for investment capital and part or full cost of running the system and support There is also a total community

involvement where all members including women are involved in decision making. The role of “outsiders” should be limited to facilitation and advice. There is genuine commitment and support from the whole community through participatory community education and involvement in decision making from the start. The assumption in community management is that, there is a long term benefits and increased use and sustainability which justify high investment cost in terms of staff, time and costs

The community water and sanitation programme in Ghana was designed taking cue from the global experience and to follow the government decentralization policy with the hope of promoting popular participation, transparency, accountability and efficiency in the management of the water and sanitation systems through capacity building and good governance.

### **Good governance and community management**

The World Bank first used the expression ‘governance’, provided with the negative connotation “bad” or “poor” in a study in 1989 (World Bank,1992). The trigger for this was the analysis by the World Bank of the desperate economic conditions in Africa south of the Sahara regions. A focal point in this respect was an inventory of the negative factors hindering positive economic development, in particular those emanating from the sphere of government and administration. The experience was that, because countervailing power has been lacking, state officials in many countries have served their own interest without fear of being called into account and patronage becomes essential to maintain power. The

leadership assumes broad discretionary authority and loses its legitimacy. The World Bank's interest in governance derives from its concern for the sustainability of projects and programmes it helped to finance and it holds the view that if sustainable development is to occur then a predictable and transparent framework of rules and institutions for the conduct of public and private affairs must exist.

The United Nations Development Programme (UNDP, 1997) has identified nine characteristics or principles of good governance, which represent the ideal. These characteristics of good governance promote the participation of all men and women to have a voice in decision-making, either directly or through legitimate intermediate institutions that represent their interests. It also encourages free flow of information which is directly accessible to those concerned with them to understand and monitor them. Good governance also ensures responsiveness of institutions and processes to serve the interest of all stakeholders. It promotes consensus building and ensures that all men and women have opportunities to improve or maintain their well-being. Good governance promotes effectiveness and efficiency, that ensures that processes and institutions produce results that meet needs while making the best use of resources. Decision-makers, the private sector and the civil society organizations are accountable to the public as well as institutional stakeholders (UNDP, 1997). Good governance therefore refers to the rules, processes and behavior that affect the way in which powers are exercised particularly as regards openness, participation, accountability, effectiveness, and coherence (UNDP, 1997).

A fundamental argument in favour of decentralizing basic infrastructure services is that moving decision-making on investment and implementation closer to clients will yield efficiency gains. These gains can come from two sources. First, production efficiency, which implies that local entities can build and operate, a given infrastructure package less expensively. Cost savings may derive from cheaper local materials, less expensive local labour, more efficient project design, fewer layers of bureaucratic oversight, and less corruption among other sources.

The World Bank has reported that village infrastructure constructed under Indonesia Development Programme , which involves community level planning and implementation , “costs significantly less on average of about one-third but in many cases more than half less than equivalent works built through Ministry of Public Works contracts”(World Bank, 2003.215) Maintenance costs were also reportedly lower because communities provided the labour. Probably the strongest evidence for gains in production efficiency from decentralizing infrastructure comes from studies designed to determine whether latrines and small-scale water distribution projects were still functioning and actually used by villagers several years after installation. Studies in Cambodia, Indonesia, Laos People’s Democratic Republic, and Vietnam all concluded that projects that relied on community consultation on design, and community organizations for maintenance and oversight, were significantly more likely to be sustainable than projects built from a central design without such consultation, or that relied on outside expertise



for maintenance and management (Gross, et al 2003; Chantaphone and Lahiri, 2003; and World Bank 2002).

Such evidence tends to confirm that decentralizing projects to the village or commune level allows community involvement in support of sustainability to emerge. However, simply decentralizing investment and management decisions does little to promote sustainability unless primary users participate in maintenance and management decisions.

### **The role of participation in good governance**

A large body of evidence supports the importance of community-scale participation in infrastructure choices and management. This evidence also provides guidelines on specific responsibilities that communities can handle to extract the maximum value from participation. For example, in a study of 88 communities managed water supply projects worldwide, Gross, et al (2001, 220) found that.

- Community-based water supply projects which were more demand-responsive, that is, those that involved greater community choice in the type of water supply, household to be covered, and the method for paying for operations and maintenance, were more likely to be sustained and better maintained;
- The more broadly participatory and gender representation in the decision-making procedures, the higher the rate of cost recovery.

- Communities that use water management organizations (WMOs) had better project sustainability records than communities that participated only in initial project selection;
- The more equitably WMOs represented women and the poor, the greater their sustainability; and
- Households contributions to the construction were significantly associated with better-sustained water supply services only if the community actively participated in project selection and subsequent management

Hopkins' (2003) study of 33 sites in Flores in the Philippines found higher rates of sustainability where planning included women and men, as well as poor households. The World Bank has reported higher rates of sustainability of locally selected infrastructure projects when project choice reflected direct community participation (World Bank 2003d).

The principle of participation derives from the acceptance that people are at the heart of development. They are not only the ultimate beneficiaries of development, but are also the agents of development. In the latter capacity, they act through groups or associations and as individuals. Since development is both for and by people, they need to have access to the institutions that promote it.

Participation is often related to accountability; however, the benefits of participatory approach may include improvement of performance and sustainability of policies, programmes, and projects, as well as enhanced capacity and skills of stakeholders. At grassroots level, participation implies that government structures are flexible enough to offer beneficiaries the opportunity to

improve the design and implementation of public programmes and projects. This increases ownership and enhances results.

Conceptually, the four elements of governance, namely, participation, transparency, accountability and predictability tend to be mutually supportive and reinforcing. Accountability is often related to participation, and is also the ultimate safeguard of predictability and transparency. In the absence of accountability to affected groups, even predictable decision making of autonomous public institution or agency may result in the latter placing agency interests above those of the former. Similarly, transparency and information openness cannot be assured without legal frameworks.

The characteristics of good governance therefore, are interrelated, and mutually reinforcing and cannot stand-alone. For example, accessible information means more transparency, broader participation and more effective decision-making. Broad participation contributes both to the exchange of information needed for effective decision-making and for the legitimacy of those decisions. Legitimacy, in turn, means effective implementation and encourages further participation. These core characteristics represent the ideal and no society has them all. Even so the UNDP believes that societies should aim, through broad – based consensus building, to define which of the core features are most important to them.

### **Conceptual framework**

The World Bank (1992) explored the meaning of good governance and why it is important for development. The Bank's interest is derived from its concern for the sustainability of projects and it holds the view that if development is to occur then predictable and transparent institutions for the conduct of public affairs must exist.

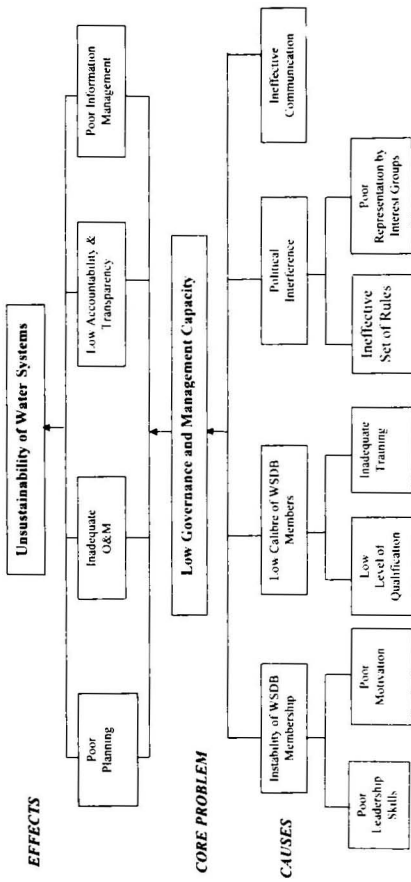
The United Nations Development Programme (UNDP, 1997) has identified nine characteristics of good governance which equally contribute to sustainable development. These principles include participation, which requires the voice of all men and women to be heard in decision making through legitimate institutions which represent their interest. Another characteristic is transparency which is built on free flow of information accessible to those concerned with them. Another principle is accountability by decision makers, the private sector and the civil society. The other principles include responsiveness of institutions to serve stakeholders, efficiency and effectiveness to produce results that meet the needs of the people by making best use of available resources.

The important attributes of managing O&M have also been identified as planning with community, promotion of external relations, strategy development, planning skills, human resource development and staff supervision. Others are communication, monitoring, technical skills and stimulating leadership (PROWESS/UNDP, 1993).

Given the above description and principles there is no doubt that the concepts are relevant to the study, since the major questions being investigated understanding the nature of the relationship between the WSDBs, the Staff, District Assembly, Traditional Authorities and the community and how this affects the sustainability of the water systems. The premise is that one cannot discuss community management without understanding these principles as they are interwoven and inseparable.

As illustrated in Figure 1, the core problem of the WSDBs is identified as low governance and management capacity. The main causes of the problem include instability of the WSDB membership, low calibre of the members, political interference and ineffective communication. The root causes are explained as poor leadership skills, poor motivation, low qualification, ineffective training and set of rules to protect the Board's operations, and poor representation by interest groups with emphasis on women.

The effects of these problems are poor planning, inadequate O&M, low accountability and transparency, and poor information management. The ultimate effect therefore is the unsustainability of the water systems. This framework will thus inform the study.



**Figure 1: Factors affecting good governance in the management of water and sanitation systems**

Source: Monitoring and Evaluation Reports, CWSA, (2004)

## **CHAPTER THREE**

### **METHODOLOGY**

#### **Introduction**

This chapter deals with the research procedures used in the collection of field data. The study design, sampling procedure, the data collection techniques and the setting of the study are presented in that order.

#### **The study design**

Given the knowledge about the problem under study, the type of data required, and the type of research questions asked including resources available, a descriptive case study was adopted. This design was employed because it was the view of the researcher that a good description of the problem and the proper identification of the major contributing factors would provide a reliable, valid and enough information on the issues raised in the study.

#### **Sampling procedures**

From a total of nine administrative districts, seven were selected and the purpose was to cover the three categories of projects funded by the European Union (EU), International Development Agency (IDA) and the Ghana Water Company Limited (GWCL) Pilot Project, also funded by the IDA. The criteria

used were the source of funding of the projects in these districts as indicated in Table 1

**Table 1: Number of small towns water projects in the districts and source of funding**

District	IDA	EU	GWCL	Total
Wassa Amentfi	2	1	1	4
Wassa West	2	-	-	2
Ahanta West	-	1	-	1
Aowin Suaman	-	-	1	1
Setwi Wiawaso	-	1	-	1
Juabeso	-	1	-	1
Jomoto	-	1	-	1
Mpohor Wassa East	2	-	-	2
Bibiani	-	1	-	1
Total	6	6	2	14

IDA: International Development Agency's Development Loans

GWCL: Ghana Water Company Limited

Source: CWSA-WR (2003)

From each district the following staffs were interviewed:

- District Chief Executive
- District Coordinating Director
- Planning Officers



Seven WSDBs out of the total of 14 were selected. The criteria used for the selection was based on funding to cover the three categories of Projects. The selection of the seven WSDBs from the three categories (EU, IDA, and GWCL) of projects in each district was done through a lottery system where there was more than one project community in a district. The names of the communities were written on pieces of paper per selected district and one was randomly selected (Table 2).

**Table 2: Sample communities of WSDBs**

District	Community
Wassa Amenfi	Oppong Valley
Wassa West	Benso
Ahanta West	Agona Nkwanta
Wassa Amenfi East	Wassa Akropong
Sefwi Wiawso	Wiawso
Juabeso Bia	Juabeso
Jomoro	Half Asini

Source, CWSA-WR, (2003)

Forty-two WSDB Staff out of 89 members made up of Chairman, Secretary, Treasurer, Technical Manager, Assistant Technical Manager and Accounts Clerk from each of the seven Boards were interviewed individually from the seven selected projects based on the key positions they occupy. The

rationale for the selected key executive members was to ensure adequate and accurate information (Table 3)

**Table 3: Sample of WSDB/staff members interviewed**

Community	Total No of WSDBs/staff	No Sampled
Oppong Valley	14	6
Benso	8	6
Agona Nkwanta	16	6
Wassa Akropong	10	6
Wiawso	13	6
Juabeso	12	6
Half Asini	16	6
Total	89	42

Source: CWSA-WR (2003)

At the household level, 221 households being 5 percent (5%) of total number of households (4608) were selected using the systematic random sampling techniques. The distribution of the respondents was based on the size or population of each community as shown in Table 4. Also, seven Traditional Authorities were interviewed in the selected communities to buttress what the household informants said as they play a legislative, administrative and executive function in the community.

**Table 4. Water users/ households sampling in the selected communities**

District	Name of community	Population of community	No. Of households	Households sampled
Wassa West	Benso	2500	250	13
Wassa Amenfi	Oppong Valley	3469	347	17
Jomoro	Half Asini	11734	1173	59
Ahanta West	Agona Nkwanta	10031	1003	50
Wassa Amenfi	Wassa -			
East	Akropong	6000	600	30
Juabeso	Juabeso	3639	364	18
Sefwi Wiawso	Wiawso	8714	871	44
Total		46087	4608	221

Source: CWSA-WR (2003)

#### **Data collection techniques**

Given the type of data required, the structured interview guide was used for data collection from individuals. The interview was adopted in order to gain thorough understanding of the problem under study. This technique offered the respondents the opportunity to express themselves as much as possible. The face to face interview provided the opportunity to clarify issues and explain the questions very well. All adults twenty-one years and above who have lived in

each of the study communities for the past five years was qualified to be interviewed.

### **Description of the study area**

The study was conducted in seven out of the nine (9) administrative districts. The districts are Jomoro, Juabeso, Wassa West, Ahanta West, Amenfi East and Amenfi West.

The region is made up of 13 administrative districts and 19 constituencies. By ethnicity it is one of the most heterogeneous in the country. The main ethnic groups are the Wassas, Nzemas, Ahantes, Sefwis, Aowins and Suamans. It has 21 traditional paramountcies.

The Western region is influenced by the wet equatorial climatic conditions and exemplifies the remains of the tropical high rain forest. With 46 forest reserves, the region contains 44 percent (44%) of the total closed forest area of Ghana and 47 percent (47%) of the estimated total volume of standing trees in the country. Soils in the region range from the oxysols in the south to ochrosols in the north. These soils are favourable in a range of commercial tree crops as well as food crops such as cocoa, oil palm, coffee, coconut, citrus, rice, sugar cane, plantain, yam, cassava, vegetables, cocoyam, along with livestock keeping and forest management.



region accounted for 62.5% of Ghana's gold. It is also the leading region in the production of bauxite (100%) and manganese (100%) in the country. The major constraints however, include poor quality of roads linking the districts, poor power and communication system in the district capitals.

Being the wettest region does not necessarily mean having adequate and decent drinking water. Recent statistics indicate that the region lies third from the bottom (32% coverage) in terms of provision of potable water in the rural communities. What makes the situation even worse for the plight of many rural communities in the region have been and continues to be the reckless operations of "galamsey" youth. Rivers and streams which have served as the main source of drinking water for the people, have now been contaminated and turned milky or turbid due to the mining activities. The problem of sanitation in the region is no different from the other regions because of attitudes and cultural practices, and lack of adequate equipment for the districts.

In terms of education, Western Region ranks amongst the highest in terms of illiteracy rate. About 40 percent (40%) of children of 3 years and above are not in school, and 45.6 percent (45.6%) of those aged 15 years and above have also never been in school (Regional Profile, WR, and RCC 2003)

**CHAPTER FOUR**  
**DRINKING WATER AND SANITATION IN GHANA: GOVERNANCE**  
**AND MANAGEMENT ISSUES**

**Background**

Since the early 1970s the Government of Ghana with assistance from several donors have implemented various rural and small towns' water supply systems in the country. The strategy in the delivery of water facilities was central government-managed and was divided up among donors with each donor adopting its own approach until 1994. The sustainability of the facilities constructed was poor, and depended on centralized support systems run by donor projects and government

The supply driven approach failed to involve the communities in planning, construction and the management of the systems. Communities failed to take good care of the facilities and eventually most of the facilities broke down as the support from donors and the central government weaned. There was low motivation and efficiency on the part of government staff from the centralized maintenance unit in servicing the water systems

The lessons drawn from the top down or supply driven approach led to the establishment of the National Community Water and Sanitation programme (NCWSP) and the establishment of a sector agency in 1998 which became the

Community Water Supply and Sanitation Agency (CWSA) under the tutelage of the Ministry of Water Resources, Works and Housing.

The main objectives of the NCWSP are to ensure the sustainability of the facilities through community ownership and management (COM) and to maximize health benefits by integrating water, sanitation and hygiene education interventions. For the attainment of these objectives, the key strategy adopted is the demand responsive approach by which communities decide to participate in the programme and then select their preferred service level based on ability to pay an agreed initial capital cost. All of the operation and maintenance (O&M) and management of services were to be borne by the beneficiary communities and their District Assemblies.

#### **The functions of the CWSA**

The Community Water and Sanitation Agency (CWSA) was established by Act 564 (1998) as a body to facilitate the provision of safe water and related sanitation services to rural communities in Ghana. In performing its functions, the CWSA provides technical assistance to DAs, mobilize resources and encourage private sector participation in the provision of water and sanitation programmes. The Agency coordinates NGOs and collaborate some relevant Ministries like Local Government and prescribes standards and guidelines for safe water supply and related sanitation services in all the rural communities and small towns in Ghana.



### **The role of the district assemblies**

The concept of community management of water supply in rural community and small towns place considerable responsibility on the DAs in ensuring that water service delivery is sustainable. The major reasons are that the ownership of small towns' water supply facilities is vested in the DA on behalf of the community. The WSDBs are set up with the express authority of the DA, which then vests in them the power to manage the water system on behalf of the community.

Therefore, the DA should be kept informed of all activities related to water supply and sanitation in the community. The WSDB should submit regular monthly reports on operations and maintenance, water quality monitoring reports, annual reports (including audited financial statements) and reports on community forums to the DA. The DA approves tariffs set by WSDBs, after the latter have undertaken consultations with the community. The revenues are retained by the communities to meet the operations and maintenance costs of the water supply facilities.

### **Achievements of National Community Water and Sanitation Programme (NCWSP) (1994 – 2003)**

The national coverage for potable water supply in both rural communities and small towns in the country is currently 56 percent (56%). The NCWSP 1998 Strategic Investment Plan (SIP) was designed to increase coverage to 85 percent (85%) by 2008 and 100 percent (100%) by 2020. The NCWSP activities have lent

support to government's overall programme of good governance at the local level by empowering communities and institutions to take charge of the sustainable management of their water and sanitation facilities. At country level, some 488 Water and Sanitation Development Boards and 12,177 Water and Sanitation Committees have been established and trained. Within the same period, 14 WSDBs and 883 Water and Sanitation Committees were established and trained in the Western Region.

#### **Functions of the Water and Sanitation Development Board (WSDB)**

The WSDB is responsible for the management of the facilities in the small town communities. The Board may decide to operate and maintain the facilities directly by employing and training its own staff or through contractual agreement with private companies.

It is the responsibility of the Board to ensure proper accountability by carrying out internal auditing at least quarterly and submit to the DA and the community, technical, administrative, and financial reports at least once every six months. The Board monitors water quality to ensure the safety of potable water at least twice a year after commissioning. It is also responsible for setting tariffs and this should be done in consultation with the community and all the tariffs will have to be approved by the DAs. The Board is required to establish clear procedures for receiving and addressing customer complaints and this should be known to the entire community. The Board prepares plans for rehabilitation and

expansion of water systems, recruits and supervises qualified staff to work as operators and managers of the water system

It recommends necessary bylaws to be enacted by the DA to regulate water use, and promote sound sanitation practices within the community. The Board sets procedures and charges for service connection, disconnection, penalties for default and damages to the water system subject to the approval of the DA.

The WSDBs are formed with representation from a cross-section of people from the community. The representation should include women's organizations, Traditional Authorities, artisan associations, Assembly persons, and WATSAN Committees. The positions of Chairman, Secretary, Treasurer and Organiser are elected as the least to constitute the core of the executive committee, but other positions can be appointed when the need arises depending on the size and the needs of a community. The number of members ranges between seven (7) and thirteen (13) also depending on the size and the needs of each community.

WATSAN Committees are elected at unit or ward level at community forums and operate at the unit level. Each WATSAN is in charge of the promotion of hygiene education and sanitation. The WATSANs also represent its unit in monitoring the behaviour of water consumers related to satisfaction towards the water distribution and the cleanliness at the standpipes.

A WATSAN is composed of four elected members and a member appointed from a corresponding Unit Committee. From the WATSAN Committees, one is nominated as a leader to serve on the Executive Committee of

the WSDB. The posts on the WATSAN Committees are Hygiene Education Organiser, Women Group leader, community mobiliser and representative from the unit committee. The WATSANs are supervised and monitored by the Unit Committee and report on their activities and problems directly to the Board through their elected representative on the Board and through the Unit Committee to the assemblymen and the Area Council. The Unit Committee helps the WATSAN Committees in organizing community meetings and education and enforces the decisions and tariffs of the Board at the unit level. The Unit Committee also mediates in the settlement of conflicts between consumers and the WATSAN and water vendors

#### **The composition of the Board**

The WSDB executives are elected at a general meeting of the Community by the WATSAN Committees from the various units. The positions elected on the WSBD include Chairman, Vice Chairman and Secretary. The others are Assistant Secretary; Treasurer; Organiser, Technical Coordinator and Financial Secretary. The positions of assistants however varied among communities depending on the size and project. These positions constitute the core of the Board in Charge of the day to day running of the system.

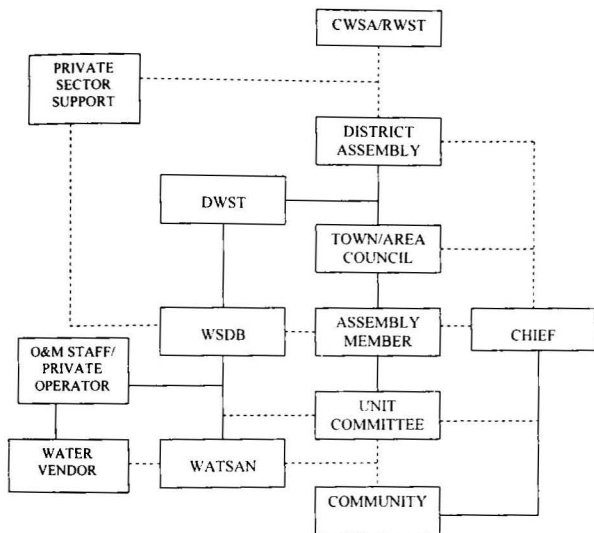
Nominations are made to represent interest groups and institutions which include the Traditional Authority, Area Council, and Assembly member, DWST, Schools, Police Service, Ghana Health Service, Artisan Associations and Food Vendors provided they existed in the community. These interest groups attend the

general and emergency meetings of the WSDB. The voices of these representatives are heard at the general or emergency meetings organised by the Board and this has increased the membership of the board to between 15 and 25.

The main functions of the WSDBs are the preparation of plans for rehabilitation and expansion of the water systems. The Board also proposes appropriate tariff to cover the cost of O&M to be approved by the DA. They recruit and supervise Staff to work as operators and managers of the water system and recommend necessary byelaws to be enacted by the DA that would regulate water use, enforce tariff and other financial obligations and promote appropriate sanitation practices. The Board as well undertakes public education and community training to promote tariff obligations, sound hygienic behaviour and set procedures for service connections, disconnections and penalties for default and damages to the water for the approval of the DA.

Linkages with the DWST/ unit committee/ area council and traditional authorities

In managing the Water system at the community level, the WSDB requires the support of all the community institutions including the DA, CWSA and the private sector as illustrated in Figure 3. The CWSA, DA and the private sector provide back up support services. The DA and the Area council contribute financially to the operation and the maintenance. The Area Council recommends the plans and budget for expansion and rehabilitation for the approval of the DA.



**Figure 3: Community Management Structure for Water and Sanitation Services**

DWST=District Water and Sanitation Team

RWST=Regional Water and Sanitation Team

WATSAN=Water and Sanitation Committee

Source: CWSA (2003)

It also makes recommendations for the approval of tariffs by the WSDB to the DA and monitors their performance

The DWST advises the Board on management problems, report on their performance, takes concerns to the DA and strengthen the WSDB in hygiene and sanitation promotion and general community education. The Unit Committee helps the WSDB in mobilizing community support and funds. The Unit Committee reports the problems of the WATSAN Committee to the Area Council and to the DA member for the Area Council, and enforces rules or decisions of the Board at the Unit level. The Assembly members together with the Area council are represented on the Board. They help in educating the community on tariffs setting and payment, monitor and support the Board.

The Chief and his elders are represented on the Board. They help to mobilize the community for discussions and community education on tariffs, and monitor the Board activities. The Chief, the Area Council and Assembly members facilitate the resolution of conflicts between the WSDB and the community, and the unit committees. Initial discussions on tariff proposals are facilitated by the chief and the Area Council for the approval of the DA.

Generally, little had been done in the area of capacity building programmes for the opinion leaders, and WATSANs to effectively mobilize and educate the community. These community institutions in most cases were dormant and some collapsed due to low motivation and involvement. Similarly, the CWSA and DA monitoring and support was very weak.

### **The small towns' water projects in the Western Region**

In the Western Region, the various projects implemented under the NCWSP between 1995 and 2003 were 14 in nine districts. Tables 5, 6 and 7 show the projects in the Region. These projects include GWCL systems that were transferred to the DAs in 2001 for conversion to community management and they are shown in Table 7.

**Table 5: Small towns' water project with funding from European Union under community management-Western Region**

District	Project Community	Population of Community	Date of completion
Agona Nkwanta	Agona Nkwanta	8000	20-Mar-02
Wassa Amenli	Asankrangwa	12500	14-Feb-02
Bibiani Bekwai	Bibiani	20000	1-Feb-02
Jomoro	Half Asini	17000	12-Dec-01
Juabeso Bia	Juabeso	3500	19-Feb-02
Sefwi Wiawso	Sefwi Wiawso	12000	11-Jan-02
<b>Total</b>		<b>73000</b>	

Source: CWSA-WR (2003)



**Table 6: Small towns water projects with funding from IDA under community management**

District	Project Community	Population of Community	Year of completion
Wassa West	Benso	2500	1999
	Awudua	3500	1999
Wassa Amenfi	Afransie	3346	1999
	Oppong Valley	4486	2000
Mpohor Wssa E.	Atobiase	2300	1999
	Manso	4739	1999
<b>Total</b>	-	20,871	-

Source: CWSA-WR (2003)

**Table 7: GWCL transferred systems-small towns pilot communities under community management**

District	Pilot communities	Population	Year of transfer
Wassa Amenfi	Wassa Akropong	6,000	2001
Aowin Suaman	Enchi	9,270	2001
<b>Total</b>	-	15,270	

Source: CWSA-WR (2003)

### **Evaluation of the small towns' water projects**

An evaluation carried out by BURGEAP and Colan Consult in May 2004 in 25 EU Small Towns communities in Ghana revealed a poor performance of the WSDB. Few meetings were held with the communities generally, and only six out of the 25 projects held meetings quarterly in a year. Again only a few number of audit exercises were conducted since the operation of the Boards in 2002. The report also indicated political interference among the WSDBs members, and recommended that they should remain neutral in their operations. Poor communication between the DA and WSDB also existed. The WSDBs operated without a legal status and the DAs were encouraged to approve and adopt by-laws to give a legal backing to the WSDBs operations. The evaluation revealed that some chiefs and DA officials refused to pay for the use of water using their contribution towards the construction of the facility as an excuse for non-payment. The report also recommended the employment of qualified Accountants and the opening of separate accounts for sanitation activities.

The evaluation also identified ineffective communication skills, lack of transparency, poor coordination between the WSDB and the DA, and autocratic nature of the WSDB chairpersons. Similar evaluation carried out in 5 additional Small Towns in September, 2004 by Colan Consult revealed that none of the WSDBs had held a community forum with the communities and all the WATSANs were dormant or had completely collapsed.

## CHAPTER FIVE

### ANALYSIS AND DISCUSSION OF RESULTS

#### **Background characteristics of respondents**

In all, 263 respondents were interviewed for the study. Efforts were made to find out the socio-economic characteristics of respondents. The respondents' sex, age, marital status, education, occupation and community were probed into as this information is very vital in the understanding of issues.

Out of the total of 263 respondents, as many as 144, (54.8%) of the sample size were males while 119 representing 45.2% were females. The ages of respondents ranged between 25 and 69 years (See Table 8).

From Table 8, one realizes that nearly 70% of the overall respondents were 50 years and below. This age group of the respondents' provides a balance of information collected since the mobilization of the community during the project implementation ensured the active involvement of all members of the community. Similar emphasis was placed on subsequent activities during the handing over of the water systems to the community. Inspection of this table again reveals that, nearly 70% of the respondents were heads of households and 65% WSDBs (See Table 8).

**Table 8: Age distribution of respondents**

Age	Household		WSDBs		Total	
	No	%	No.	%	No	%
25 - 29	15	6.8	3	7.1	18	6.8
30 - 34	30	13.6	5	11.9	35	13.3
35 - 39	38	17.2	4	9.5	42	16.0
40 - 44	32	14.5	4	9.5	36	13.7
45 - 49	34	15.4	5	11.9	39	14.8
50 - 54	28	12.7	8	19.0	36	13.7
55 - 59	27	12.2	6	14.3	33	12.5
60 - 64	9	4.0	5	11.9	14	5.3
65 - 69	8	3.6	2	4.8	10	3.8
Total	221	100.0	42	100.0	263	100.0

Source: Field data, 2005

Table 9, indicate that as many as 38% of the sample had Middle School Leaving Certificate (MLSC), which dominates the other levels of education. This is a reflection of the calibre of people and their capacity in providing the necessary support to the WSDB. About 22% had no formal education which also had influence on their perception and involvement, particularly in monitoring the WSDB activities.

**Table 9: Level of education of respondents**

Level of education	No	%
None	48	21.7
MSLC/JSS	83	37.6
Secondary	34	15.4
Tertiary	56	25.3
Total	221	100.0

Source: Field data, 2005

Table 10 shows that 64 % of the overall respondents were farmers. The major crops grown are cocoa, coconut plantations and oil palm. Since these crops are harvested yearly as the main source of income, the people find it difficult to contribute towards the O&M of the water system during the lean season. Similarly, this Table reveals that 65% of the heads of households were farmers and nearly 64% of the WSDB members were farmers. They are also mostly illiterate or have only the MSLC and SSS level.

**Table 10: Occupational distribution of respondents**

Occupation	Households		WSDBs		Total	
	No	%	No.	%	No	%
Farming	144	65.1	25	59.5	169	64.3
Salary	31	14.1	7	16.7	38	14.4
Fishing			4	9.5	4	1.5
Trading	46	20.8	6	14.3	52	19.8
Total	221	100.0	42	100.0	263	100.0

Source: Field data, 2005

#### **Evaluation of WSDBs performance**

One of the objectives of the study was to examine the relationships between the WSDBs, the DAs and the Communities. In this respect, the issues studied were how the Boards reported on their activities, finances, auditing of their accounts, and the involvement of both the DAs and the communities in the decisions taken, information sharing, review of tariffs, and changes on the WSDB membership.

#### **Evaluation of WSDBs by communities**

A total of 80 (36%) out of the 221 respondents said only a few meetings with the community (once in a year on the average in two communities) were held

in 2004 and 2005. Within the same period, 141 respondents (63%) out of 221 said no meeting was held with the communities.

One hundred and eighty (81%) out of 221 respondents said they were never consulted on the review and increase in tariffs and the explanation for it. However, 41 (19%) said they were consulted in discussing tariff increase but 25 (11%) happen to be opinion leaders such as unit committee members and elders in the communities. Also, 70 (32%) out of 221 respondents said audit reports and financial statements were discussed with the community at community forum twice in one community for the period of four years.

In communities where the tariffs have been reviewed there were no consultations with the communities even though the announcement of the increment was received through the vendors at standpipes and in a few cases through assembly members. With the exception of Half Assin where the people interviewed admitted that the WASH presents progress and financial reports to the Community quarterly, none of the remaining six communities did that.

One hundred and seventy (77%) out of 221 respondents said the Board members should be changed. The reasons given for this included alleged embezzlement, arbitrary increases in tariffs, inclinations to political parties and inadequate communication with the communities.

Two hundred (90%) respondents out of 221 said there were rules for sale of water at standpipes which included the time for opening (generally at 5:30 am) and the provision of 18 litre buckets by the Boards which have been marked for

the water sales. There was a general problem with the low interest in the recruitment of vendors due to low commission and insults from users

Generally, the responses from households suggest that, the Boards have not cultivated the disposition for democratic practices such as criticism, self-criticism, respect for differences and tolerance, using discussion to reach consensus and co-operating in solving problems among community members

#### Evaluation of WSDB's Performance by DAs

Five DA officials (two DCEs, two DCDs, and one Planning Officer) said that the Board's decisions to increase tariffs did not pass through the DA fee fixing resolution and approval and has been a source of conflict between the DA and the Board. The WSDB in Juabeso increased the tariff from €100 to €200 cedis but the DA reversed the WSDB decision as the sole authority to impose levies in the district and as legal owners of the water facility. It was also clear that some DAs failed to approve a review of the tariff for political reasons.

Four DA officials (three DCDs and one Planning Officer) complained of the WSDBs failure to report on their administrative and financial operations, which is required monthly. For instance the Board in Juabeso failed to submit their financial accounts to the DA for three years and this compelled the DA to invite an external auditor from Sekondi to audit the Board's accounts in 2005. All the seven respondents from the DAs interviewed confirmed that the WSDBs are operating only one account instead of three which should be designated as Capital Account, Operational Account and Sanitation Account to ensure that the



signatories to these accounts are varied. They have also failed to involve the DA representative as a signatory to the accounts to monitor their financial administration, which is a requirement in the O&M policy.

The issuing of the WSDB's own receipts was also seen by two DAs (one DCD and one DCE) as a recipe for corruption and instead suggested the use of the Assembly's receipt. Six DA staff (two DCEs, three DCDs and one Planning Officer) said they were not satisfied with the representation on the WSDBs as they are dominated by political interest, chiefs and in some cases by one family where the Chairman and the Treasurer were a married couple with a brother serving as the accounts clerk in Juabeso. In Wassa Akropong, the DA had dissolved the Board and reconstituted it for the Board's failure to report on its activities, lack of transparency, continued accumulation of debt, and dominance of the WSDB by the Chairman. The DA has employed its own technical staff for the operation and maintenance of the system and collects the tariff with its own printed receipts.

The responses also revealed that there were attempts by five DCEs out of the seven (71%) to change the Board Executives when there were changes in government and DCEs in 2002 and 2004 due to political party inclinations and differences among the Board membership. For this reason attempts to approve bye laws for the protection of the WSDB was delayed and has since not been approved in five out of the seven communities. It was also revealed that for the same reason, some Board Executives had failed to visit some of the DCE's offices since their appointment in 2004. Another area of concern was the large numbers

of the WSDB membership with only a few of them being active. For instance, the total number of WSDB members including representations of various interest groups ranged between 15 and 25 in some communities. Three DA staff (two DCEs, one DCD) recommended that the large numbers should be reduced to promote effectiveness and efficiency. Three DA Executives (one DCE, one Planning Officer and one DCD) also observed that most of the WSDB members were disappointed for lack of incentives and suggested that a minimum of €200,000 should be paid as allowance to the WSDB Executive members monthly.

Two DA staff (two DCEs) in Half Asini and Agona Nkwanta confirmed that the WSDBs in these communities submitted regular financial, administrative and technical reports to the DA. In Agona Nkwanta for instance, the WSDB chairman had been co-opted to attend the Heads of Department meetings which provide him the opportunity to brief the Assembly on its activities like any other Department and solicit the support of the DA. The WSDB in Half Asini had its accounts audited annually through the DA by external auditors and the reports on the findings circulated to all stakeholders. The WSDB responded to the audit reports with explanations to the DA.

Contrary to the practice in Half Asini, the WSDB in Agona Nkwanta were audited once by an NGO until 2006 when the DA invited an external auditor to audit their accounts. There were disagreements over the cost of organising the auditing of the accounts particularly by an external auditor. For instance, in three districts, the DAs failed to continue with the auditing of the Boards accounts.

while in another district the Board had signed an MOU with the DA to pay for the cost of organizing the auditing of their accounts.

Four DA officials (three DCD and two DCEs) said the Boards were not transparent in their operations and this has created suspicion in the communities since no accounts are rendered to the community. The respondents said the DA has representation on the Board but they refuse to inform and invite the DAs to their meetings. Two DA staff (one DCE and one DCD) said the approval for increase in tariff has been given but no expansion of the system has been carried out in any of the communities

Generally speaking, the responses suggest that there were inadequate consultations with the DAs in reviewing and approving tariffs, participation in meetings, regular reporting on activities, auditing of accounts, poor representation on the WSDB by interest groups and political party inclinations by some of the WSDBs. The results further suggest non-preparation and submission of budgets and action plans for approval, low level expansions poor performance due to low calibre of the Board members and large numbers on the Boards with few active members.

#### Changes in the WSDB

One of the main issues which the study sought to find out was the changes that had occurred in the membership of the WSDBs and the causes of such changes

From the responses, there existed conflicts within the WSDB membership, the community and the DA resulting in changes on the Board and staff positions. The conflicts have caused resignations of Board members, dissolution of WSDBs by DAs and dismissals of Staff by the WSDBs. In Benso, for instance, the Assemblyman who occupied the position of System Manager had resigned over disagreement on non-payment of allowance by the Chairman. The Technical manager and his assistant reported of nonpayment of their salaries over three months and their dismissal by the Chairman, the chief and his elders. The chief in Benso confirmed the dismissal of the Technical Manager and his assistant for allegedly disconnecting the house of the late chief, whose house was connected and water supplied free of charge. The Chief and the Chairman jointly accused the Technical manager for locking the pump house for three days without pumping water to register their protest over non-payment of salaries. The first Chairman in this same community, who had served on the WSDB for over nine years, had been dismissed by the Chief and his elders on grounds of being stranger who could not lead the community and for his religious inclinations.

In Juabeso, the Chairman was dismissed for alleged embezzlement of funds by the community. In Half Asini, the Chairman was also dismissed for alleged embezzlement and accused by the DA and the community for being a political activist. In Wassa Akropong, the Chairman had been dismissed also for alleged embezzlement and lack of transparency by the community and the Board members. The reconstituted Board in this community had been dissolved by the DA for failing to report on their activities and accumulation of debt in their

operations. Letters had been written by the DAs in Agona Nkwanta, Half Asini and Bibiani to the WSDBs for new elections for similar suspicions of embezzlements based on audit reports. Generally, 90% of the communities surveyed had their Board executives changed before their term of office ended.

#### Motivation among WSDB members and staff

One of the issues the study found out was whether the WSDBs and the staff were adequately motivated and whether this could contribute to the performance of the Boards.

Results from the seven communities studied indicated none of the Boards had established conditions of employment and procedures for negotiating for improved conditions of service. Similarly, there were no effective bye-laws approved by the DAs to protect the operations and the term of office of the WSDBs and the appointment of the Staff. The absence of the employment agreement has resulted in the dismissal of two Technical Staff following their demand for increased salaries and other benefits in addition to their salaries which were in arrears of three months. All the Staff interviewed complained about the low remuneration received and the Boards delays in increasing their salaries for almost three years. In Setwi Wiawso, the Board had refused to pay the medical bills of the Accounts Clerk to the tune of €9,000,000 when he was involved in an accident in the course of discharging his duties. Only one Board had attempted to develop their condition of service for the staff. The sitting allowance of the Board members ranged between €7,000 as the lowest and €50,000 as the highest in the

better performing communities. A monthly fixed amount is paid to WSDB members in addition to a yearly package in three of the EU communities. However, the worst affected were the IDA communities where the lowest and the highest allowances were €7,000 and €10,000 respectively.

Generally it was admitted that the WSDB members had water connected to their houses without the installation of meters to determine the quantity of water consumed. Three WSDB executive members had refused to increase the allowances of their staff by comparing their sitting allowances with that of the staff. Twelve WSDB executive members in four communities also argued that their water operators pump water for only four hours a day and engage in other means of livelihood and so there was no justification for increasing their allowances. This disagreement between the WSDB and the Staff had resulted in the outright dismissal of some staff and resignations of some WSDB members in two communities. The DA in Wassa Akropong had refused to pay the three months arrears of allowances for staff after dissolving the Board in September 2005.

The study also revealed that the staff holding the same positions with similar responsibilities had very sharp difference in their allowances across the EU and the IDA projects. For instance, a Systems Manager on an IDA project had salaries ranging from €140,000 as the highest to €67,000 as the lowest. However on all the EU Projects, this same position attracted a lower salary of €450,000 and as high as €1,600,000.

The study found that all the current 21 WSDBs executive members had exceeded their term of office and had served for seven to nine years since 1997 for IDA and 1998 for EU Project communities. Three WSDBs (Half Asini, Juabeso and Agona Nkwanta) had officially received letters from their DAs requesting for new elections. However, out of the seven DAs executives (two DCEs, three DCDs and two Planning Officers) interviewed, only one DA had an MOU signed between the WSDB and the DA. The findings suggest that the WSDBs and the Staff are poorly motivated due to inadequate protection and low remuneration which has affected their performance with the resultant conflicts between the Board, the DA and the Staff (See Table 11)

**Table 11: Number of years served by the WSDBs**

WSDB	Term of office	No. of years served
Oppong Valley	4	9
Benso	4	9
Agona Nkwanta	4	7
Sefwi Wiawso	4	7
Juabeso	4	7
Half Asini	5	7
Wassa Akropong	3	WSDB dissolved after serving for a year

Source: Field data, 2005

### Evaluation of Financial Administration by the Board

This section examined the financial management, control and monitoring issues of the WSDBs. The main purpose was to find out how the Boards register movements of expenditures and incomes, who administers the funds and what the funds are used for. This was to confirm whether adequate and effective control measures were in place. Specifically, this section sought to find out the involvement of the DA in operating the Bank Accounts of the Board and the management of the finances of the Board

The O&M guidelines require that the funds of the Board should be deposited in three different accounts designated as Capital Account, Operational Account and Sanitation Account with separate signatories to promote accountability and transparency. The Operational Account is used for regular operations and maintenance cost and the signatories to this account are the chairman, treasurer and the secretary. The Capital Account is used for major repairs, extensions and replacements of the water systems and the signatories to this account are the chairman, the treasurer and a representative of the DA. The Sanitation account is used to promote sound sanitation and hygiene practices including household latrines and waste water management and the signatories are the chairman, treasurer and the Sanitation project Coordinator.

However, in practice, only one account is being operated with the same signatories as the Chairman, Treasurer and or the Secretary among all the seven Boards studied. This practice of operating only one account has allowed the Boards to carry out major projects or replacements by withdrawing substantial



### Evaluation of Financial Administration by the Board

This section examined the financial management, control and monitoring issues of the WSDBs. The main purpose was to find out how the Boards register movements of expenditures and incomes, who administers the funds and what the funds are used for. This was to confirm whether adequate and effective control measures were in place. Specifically, this section sought to find out the involvement of the DA in operating the Bank Accounts of the Board and the management of the finances of the Board

The O&M guidelines require that the funds of the Board should be deposited in three different accounts designated as Capital Account, Operational Account and Sanitation Account with separate signatories to promote accountability and transparency. The Operational Account is used for regular operations and maintenance cost and the signatories to this account are the chairman, treasurer and the secretary. The Capital Account is used for major repairs, extensions and replacements of the water systems and the signatories to this account are the chairman, the treasurer and a representative of the DA. The Sanitation account is used to promote sound sanitation and hygiene practices including household latrines and waste water management and the signatories are the chairman, treasurer and the Sanitation project Coordinator.

However, in practice, only one account is being operated with the same signatories as the Chairman, Treasurer and or the Secretary among all the seven Boards studied. This practice of operating only one account has allowed the Boards to carry out major projects or replacements by withdrawing substantial

monies from their accounts for such projects without involving the DAs and this has generated conflicts

The Audit Service had assessed the accounts of three WSDBs and the reports revealed various offences. Table 12 shows examples of the offences and observations of audit reports of the WSDBs accounts

**Table 12: Examples of Audit Reports of WSDB Accounts**

WSDB	Year	Adverse findings/observations
Wiaoso	2006	<ul style="list-style-type: none"> <li>• Failure to invite three quotations before purchases of motor bikes at €49,200,000</li> <li>• Individual consumers indebtedness of €186,326,000</li> <li>• Withdrawal from bank without supporting payment voucher an amount of €11,600,000</li> </ul>
Half Asini	2004/5	<ul style="list-style-type: none"> <li>• Unauthorized payment of feeding cost to the tune of €3,872,52</li> <li>• Unaccounted for revenue collected amounting to €38,500,763</li> <li>• Non-issuance of official receipts to cover staff monthly income paid to IRS</li> <li>• Management failure to substantiate payments with the list of beneficiaries for payment of staff allowances to the tune of €10,200,000</li> </ul>
Juabeso	2005	<ul style="list-style-type: none"> <li>• Payment of staff monthly deductions to SSNII an amount of €4,495,402 not supported by official receipts</li> <li>• Non-deduction of €5,500,000 income tax from payments to suppliers</li> </ul>

Source: Field data, 2005-2006

### **Evaluation of gender representation on the WSDB**

One of the objectives of the study was to examine the gender representation on the WSDBs. Specifically, the study sought to look at the number of women as against men on the Boards and the positions they occupy on the executive committee of the Boards. The main purpose for this section was to ascertain whether the requirement of the NCWSP policy to ensure gender balanced WSDBs and WATSAN Committees with at least 40% representation by women was achieved. Experience generally has shown that gender differences and inequality affects water resource management. The rationale therefore for placing emphasis on women's involvement, is that household responsibilities are shouldered mostly by women more than men, including domestic water supplies. Any inequality in gender will therefore affect the productive use of water. Projects that have adequate representation of women on the management committees for water and sanitation services have proved to be sustainable. Women generally are the main users of water and promote hygiene and sanitation in the communities and homes. Similarly, the principle of good governance and effective participation requires a fair representation by gender as generally women constitute 51% of the population.

From the study, the representation of women on the WSDB among the seven WSDBs was found to be low. The average representation of women was 37% as against 63% by men. The key positions occupied by women were also 33% as against 67% by men on the executive committee of the WSDBs. The

findings therefore defeat one of the key strategies of the programme in promoting good governance (see Tables 13 and 14).

**Table 13: Gender representation on the Board**

Community	Total member	Males		Females	
		No.	%	No	%
Oppong Valley	11	5	45	6	55
Agona Nkwanta	13	7	54	6	46
Sefwi Wiawso	10	7	70	3	30
Juabeso	9	6	67	3	33
Half Asini	13	10	77	3	23
Wassa Akropong	7	5	71	2	29
Benso	5	3	60	2	40
<b>Total</b>	<b>68</b>	<b>43</b>	<b>63</b>	<b>25</b>	<b>37</b>

Source: Field data, 2005

**Table 14: Gender of WSDB Executive Members**

Community	Positions			%	%
	Chairman	Secretary	Treasurer	Male	Female
Oppong Valley					
Agona Nkwanta	Male	Male	Female	67	33
Benso	Male	Male	Female	67	33
Sefwi Wiawso	Male	Male	Female	67	33
Juabeso	Female	Male	Female	33	67

**Table 14 continued**

Half Asini	Male	Male	Female	67	33
Wassa Akropong	Male	Male	Female	67	33
Oppong Valley	Male	Male	Female	67	33

Source: Field data, 2005

### **Evaluation of calibre of WSDB members**

Another objective of the study was to examine the qualifications of the WSDB members and the impact of training received. The reason for this section was to find out how many of the WSDB members meet the minimum qualification and whether they have received further training since the completion of the projects which invariably affect their performance.

#### **Qualifications of WSDBs executives**

The study revealed that 15 (71%) executive members of the WSDBs out of the 21 possessed Middle School Leaving Certificate (MSLC) which is below the minimum qualification required in the O&M Guidelines. Three (20%) executives out of the 15 were chairpersons, six (40%) were Secretaries, and six (40%) were Treasurers. Three (14%) from the total of 21 Chairpersons possessed Diploma, 'O' level, and City and Guild certificates. For the position of Secretary, only two (10%) out of the 21 had a first degree and 'O' level respectively.

Generally, the educational background of the WSDBs was found to be very low as only (24%) possessed the minimum qualification required in the O&M Guidelines. This situation also reflected on their performance in terms of

reporting, planning, budgeting, general record keeping and relationships. The qualifications and the key positions are summarized in the Table 15

**Table 15. Qualifications and occupation of WSDB executive officers**

Community/Position	Highest Qualification	Occupation
<b>Oppong Valley</b>		
Chairman	MSLC	Farmer
Secretary	MSLC	Farmer
Treasurer	MSLC	Farmer
<b>Benso</b>		
Chairman	MSLC	Farmer
Secretary	MSLC	Farmer
Treasurer	MSLC	Farmer
<b>Agona Nkwanta</b>		
Chairman	A IA Inter	School Proprietor
Secretary	MSLC	Trader
Treasurer	MSLC	
<b>Wiawso</b>		
Chairman	GCE 'O' Level	Contractor
Secretary	BA Degree	National Service District
Treasurer	MSLC	Coordinator Farmer
<b>Juaboso</b>		
Chairman	GCE 'O' Level	NCCE Officer
Secretary	MSLC	Trader
Treasurer	MSLC	Caterer
<b>Half Asini</b>		
Chairman	Dip Education	Teacher
Secretary	GCE 'O' Level	Teacher
Treasurer	MSLC	Farmer
<b>Wassa Akropong</b>		
Chairman	MSLC	Farmer
Secretary	MSLC	Farmer
Treasurer	MSLC	Trader

*MSLC = Middle School Leaving Certificate*

*AIA Inter = Association of International Accountants Intermediate*

*GCE 'O' Level = General Certificate Examination Ordinary Level*

*NCCE = National Commission for Civic Education*

Source: Field data, 2005

### Qualifications of key Technical staff

Most of the staff had technical qualification corresponding to the work they were employed to do. There was no degree holder, which has implications on their job performance, especially with the engineering aspect of their work. The highest qualification among the 21 staff was HND. Two managers out of seven possessed HND in Mechanical Engineering and one Diploma in Civil Engineering (Table 16).

**Table 16: Qualification of technical staff**

Staff	Position(s)	Qualification	No of years served
Oppong Valley	System Manager	MSLC	7
	System Operator	NVTI-Plumbing	7
	Accounts Clerk	Not available	4
Benso	System Manager	MSLC	
	System Operator	NVTI Grade 2	9
Agona Nkwanta	Accounts Clerk	'O' Level	6
	Technical Manager	HND Mech Eng	5
	Asst Tech Manager	HND Mech Eng	4
Juabeso	Accounts Clerk	HND Accounting	
	Technical Manager	NVTI-Plumbing	5
	Asst Tech Manager	MSLC	4
Half Asini	Accounts clerk	RSA Stage 2	5
	Technical Manager	NVTI-Plumbing	6
	Asst Tech Manager	MSLC	5
Wassa Akropong	Accounts Clerk	SSCE	5
	Technical Manager	NVTI-Plumbing	4
	Operators (2)	NVTI-Plumbing	4
Wiawso	Accounts officer	RSA Stage 2	4
	Technical Manager	Dip Civil Eng	5
	Asst Tech Manager	Electrical Technician (EET2)	5
	Accounts Officers	RSA stage 2	5

Source: Field data, 2005

NVTI=National Vocational Training Institute (Trade Test) Certificate

### **Evaluation of the sustainability of the water systems**

This section examined the operation and maintenance of the water systems, water pricing, water sales and expenditure and payment or collection of water bills. The specific objective was to assess the effectiveness and efficiency of the WSDBs in running the water systems and the management of the funds generated for servicing and expansion

A system is sustainable when it functions and is being used. It should be able to deliver appropriate level of benefits in terms of quality, quantity, convenience, comfort, continuity, affordability, efficiency, equity, reliability and health. It also means the operation of the service, maintenance, administrative and replacement costs are covered at local level through user fees, or alternative financial mechanism. The study examined the O&M of the water systems, the funding through water sales, expenditure and savings, water pricing and tariff setting. The effectiveness of the payment and collection of bills by private and public consumers were equally assessed as factors for sustaining the water system and the results discussed as follows

#### **Operation and maintenance of the water systems**

The maintenance of the systems was carried out, in most cases, in response to pre-scheduled systematic inspection, repair, and replacement, leading to continuity in service. For instance, Half Asini and Wiawso purchased additional spare pumps as a back up support



The low educational background and the rather few training courses offered to the staff affected their ability and response to major faults. As seen in Table 17, it took an average of 13 days (the lowest was 3 days and the longest was 21 days) to repair major faults in water systems. This situation brings hardships to the people when they have to source water from often polluted sources (See Table 17).

**Table 17: Duration of O&M completion**

Town/Community	Duration of breakdown
Agona	3 days
Benso	16 days
Half Asini	7 days
Juabeso	19 days
Wassa Akropong	21 days

Source: Field data, 2005

#### Funds

The findings showed that though revenues generated from water sales was low, there were several external pressures on the revenues generated. Apart from the fact that government departments owed the WSDBs, chiefs also demanded money from the Boards. For instance, at Oppong Valley the chief and his elders compelled the WSDB to build a clinic at the cost of €12,000,000 and also purchased electricity poles at the cost of €2,500,000. The chiefs generally relied

on the WSDB's accounts for protocol services to dignitaries including political leaders who visited the community. In Benso, the chief and the elders relied on the revenues of the Board for the purchase of a transformer at the cost of ₦5,000,000. In Half Asini, the WSDB paid ₦250,000 to each of the two chiefs in two different communities served by the water facilities as royalties from the sales of water periodically. Also the Board supported annual festivals to the tune of ₦1,000,000 each year. In Agona Nkwanta, the Board paid an amount of ₦20,000,000 for the plot of land being used as the pump house to the chief. Similar demands from the chiefs and elders were found out from Juabeso and Wiawso.

#### Average Monthly Sales, Expenditure and Savings

The study revealed poor performance in terms of revenue generated as against expenditure particularly in the relatively smaller towns. This was prominent in three communities out of the six that readily provided the information. Energy consumption was found to be the highest monthly expenditure often with average monthly expenditure ranging between ₦400,000.00 in the smaller communities to ₦14,000,000.00 in the bigger communities. Three communities (Benso, Wassa Akropong and Agona Nkwanta) owed electricity bills of ₦5,000,000, ₦19,000,000 and ₦27,000,000.00 respectively. The performance shows that only two community out of six made savings over one year and could breakeven with savings of ₦20,000,000 and 25,000,000.

## CHAPTER SIX

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### **Introduction**

This chapter gives account of the summary of the study, the conclusions arrived at and recommendations in line with the tenets of the study. This chapter has four sections. The first section is devoted to the summary of the organization and results of the study, the second gives the conclusions of the study, the third deals with the main recommendations to address the issues raised in the study for action (policy implementation and improved practice), and section four suggests areas for further research.

#### **Summary**

The study was prompted by the fact that since the implementation of the Community Water and Sanitation Programme, few studies had been carried out to evaluate the performance of the WSDBs in the management of the water systems. What made the Study even more important was that the programme's policy to decentralize the management of water services to ensure sustainability through community management was being defeated as revealed in evaluations carried out between 2002 and 2004. The evaluation reports revealed poor performance of the WSDBs, unstable membership of the WSDBs, political interference and conflicts

between the Communities, the DAs, Chiefs and Assembly members on one hand and the WSDBs and their staff on the other hand. This situation, coupled with the huge investment threatened the sustainability of the water systems provided in the region, hence the need for the study.

The study approach was the use of a survey research method which included a structured interview, and official documents which elicited data from a sample of 263 respondents made of WSDBs, DAs (DCEs/DCDs), Chiefs and water users

#### Summary of findings

- Generally, women's representation on the membership of the Boards was low. The highest and the lowest ranged between 25 % and 30% for women as against 45% to 77% for the males respectively. Similarly, women occupied 33% of the executive positions as against 67% for the males. This low representation by women falls below the minimum figure of 40% for a gender balanced Board membership and the executive position required under the policy guidelines of the Programme and effective participation by women to ensure sustainability.
- The calibre of the WSDB members was generally low. About 62.5% of the WSDB members possessed MSLC. Key executive positions of chairman, secretary and treasurer were occupied by 58 % of the members who possessed MSLC. The quality of training received during project implementation was

inadequate and this reflected in the performance of the Boards and audit reports and their relationships with the DAs chiefs and communities. A few Boards members and their Staff had received regular training courses run by the UCC and KNUST due to the cost of the Training and inadequate budget.

- Inadequate protection of the WSDBs due to non-availability of effective byelaws had resulted in dismissals and changes of the Board members due to conflicts, inadequate communication mechanism and reporting to the community and the DAs. Other factors were the poor representation on the Boards by interest groups, political party influences and differences between the DCEs, Unit Committees, and Assembly members.
- The sustainability of the water systems was threatened by the demands from the chiefs and communities, low savings as a result of poor water pricing and inappropriate tariff setting. Other observations were an ineffective tariff collection and non payment of tariffs by some public officials. Other threats were high cost of electricity consumption, accumulated debts of public institutions and non availability of legal sanctions against defaulters. For O&M of the systems, inadequate planning and budgeting and the high cost repairs coupled with inadequate stocking of spare parts and maintenance operators were identified.
- There were weak financial Administration and controls. This was reflected in the operation of one account for the Boards operations, repairs and expansions and the promotion of sanitation operated solely by the Chairman, Secretary and Treasurer of the Boards as the only signatories. This arrangement

excluded the DAs in monitoring the management of funds and this was revealed in the various Audit reports conducted. Similarly, the communities were not informed of the financial positions and the reports of the audits conducted.

### **Conclusions**

Based on the research results, the following conclusions were drawn:

- The programme's policy to promote gender balanced WSDBs to ensure the sustainability of the water systems through increased women involvement in the management of the water facilities was found to be low. These inequalities will invariably affect the management of the water resources,
- The calibre of members in terms of the qualification and capacity of the WSDBs was generally low. This affected the efficiency and effectiveness of the WSDB members in the performance of their task. This has resulted in poor planning, budgeting, poor information management, conflicts, dismissals, resignations and poor management of funds,
- There were inadequate monitoring and controls systems and bye-laws in particular needed to guide and protect the WSDBs operations. This was as a result of DAs inadequate knowledge of their roles under the O&M policy. Similarly, the WSDBs were not adequately informed of their responsibilities to the DAs and the communities. This weakness created the opportunity for political interference in the Board's activities, poor financial management and accounting, poor planning and budgeting,

- Communication between the WSDBs, the DAs and the communities was generally poor. This has resulted to conflicts, dismissals and resignations leading to the instability of the WSDB members, and
- Sustainability of the water facilities is threatened by low savings due to poor water pricing, inappropriate tariff setting, and high cost of power consumption and ineffective mechanism for tariff collection and institutional arrears of government agencies

### **Recommendations**

Based on the findings of the study, the following recommendations were made

- The qualifications of WSDB membership as provided in the O&M guidelines should be reviewed due to the challenges of the Board's task. Opportunities for regular trainings should be provided with full financial support for the cost of the training from the development partners, DAs, and CWSA,
- Adequate orientations on the relationships between the WSDB, the DA, Traditional Authorities and the community should be provided to the Boards and DAs to promote effective participation and communication. Very effective bye-laws that will be owned by the DAs and the Boards should be developed with CWSA facilitation to ensure the protection and the stability of the WSDBs, and
- The DAs should initiate action at the district level to facilitate speedy processing of payments of Bills owned by government institutions. A more

effective sanctions should also be developed and applied through DA byelaws to retrieve arrears from defaulters and government officials in particular



## REFERENCES

- Ajei, M (2001) Indigenous systems and good governance in Ghana. The traditional Akan socio-political example. Accra Institute of Economic Affairs
- Amponsah, N and Bofo-Arthur, K (eds) (2002) Local government in Ghana Accra Livog Ltd
- Aryee, R A (1994) Decentralisation and local governance in Ghana in Local Government in Ghana (eds) Amponsah, N and Bofo-Arthur, K (2002) Accra Livog Ltd
- Black, M (1998) Linking what works UNDP/World Bank water and sanitation programme Washington DC, World Bank
- Brike, F. and Dayal, R (1997) Water supply management by communities: A new challenge for support agencies. The Hague IRC International Water and Sanitation Centre
- BURGEAP Consult (2004) Evaluation Reports on O&M activities in 25 Small Towns Accra
- Chambers, R (1983) Community water supply management History of Community management, accessed from [www2.irc.nl/manage/whatsit/history.html](http://www2.irc.nl/manage/whatsit/history.html). Accessed on 3/6/05
- Chantaphone, F and Lahiri, S (2003) 'Looking backward to see forward' Washington D C World Bank
- CWSA (2004) Policies and strategies guidelines. Accra Ministry of Water Resources Works and Housing

- CWSA (2004). Project operational manual. Accra: CWSA
- Dake, M. (1993) Reflections on party politics and impact on democratic development In Drah, F and Quaye, M (eds) Civil Society in Ghana. 1996, Accra. Friedrich Ebert Foundation
- Decentralising basic infrastructure services. Washington DC. World Bank
- EU (2004). Evaluation mission report, Accra: EU
- Evans, P. and Appleton, B. (1993). Community management today: The role of communities in the management of improved water supply systems The Hague: IRC (International Water and Sanitation Centre)
- Gross, B. and Hopkins, R. (2003) Do project rules promote sustainability Washington DC World Bank
- Gross, B. and Wijk, C. (2001) Decentralizing infrastructure services (10), in Background Papers for East Asia and Pacific Decentralization
- Gyekye, K. (1987) An essay on African philosophical thought. The Akan Conceptual scheme. Cambridge C.U.P
- Harrison, G. (1992) The World Bank and Africa in World Bank Document on Governance Washington DC World Bank.
- Indigenous Knowledge Systems and good governance in Ghana (2001) Accra IEA
- Kendie, S. (1995) Linking Water Supply, Sanitation and Hygiene In Northern Ghana, Cape Coast Catholic Mission Press
- Nordic Freshwater Initiative (1991) Copenhegen Report
- Regional Coordinating Council (2003) Regional profile, WR, Sekondi RCC

Simiyu, V (1987) "The democratic myth in the African traditional societies", in

Indigenous systems and good governance in Ghana: The traditional Akan

socio-political example, Accra: Institute of Economic Affairs

UNDP (1993) PROWESS, New York: UNDP

UNDP (1997) UNDP Document on good governance, New York: UNDP

World Bank (2002a) Vietnam country report, WSP-LAP, Washington DC

World Bank (2003b) Background papers for east Asia and pacific

decentralization, [www.worldbank.org/LAP](http://www.worldbank.org/LAP), Accessed 17/3/06

World Bank (2003d) Philippines decentralisation and service delivery,

[www.worldbank.org/LAP](http://www.worldbank.org/LAP), Accessed 5/7/05

**APPENDICES**

**APPENDIX A**

**QUESTIONNAIRE FOR WSDBs**

**A CASE STUDY OF WSDBs IN WESTERN REGION**

Community of interview .....

Name of Respondent/H/No. ....

Name of Institution .....

Position/Status.....

Date and Time of Interview. ....

Interviewed by.....

**Characteristics of respondents**

1. Age (To the nearest year) .....
2. Sex:        (a) Male .....        (b) Female. ....
3. Marital Status (Tick where applicable)
  - (a) Married
  - (b) Single
  - (c) Widowed
  - (d) Divorced
  - (e) Separated
  - (f) Others specify. ....

4. What is the total number of members?
5. What is the composition of males and females?
6. What are the positions on the Board?
  - (a) Chairman
  - (b) Secretary
  - (c) Treasurer
  - (d) Financial Secretary
  - (e) Hygiene/Sanitation Officer
  - (f) Technical Officer
  - (g) Organiser/PRO
  - (h) Others (specify) .....
7. What is your position on the Board?
8. What is your highest level of education?
  - (a) No formal education
  - (b) Middle
  - (c) Secondary
  - (d) Commercial/Technical/Vocational
  - (e) Teacher Training
  - (f) Post-Secondary (Specify)
  - (g) Diploma
  - (h) University
  - (i) Non formal education
  - (j) Others (Specify)

**8 What is your occupation?**

(a) Farmer

(b) Teacher

(c) Trader

Others (Specify) .....

**9 Do you occupy any position in the community?**

If yes, what is it? .....

**10 How did you become a member of the Board?**

(a) By election

(b) Nomination

(c) Self-appointed

(d) Others (Specify) .....

**11 What group do you represent?**

(a) WATSAN Committees

(b) DA (Assembly persons)

(c) Unit Committee

(d) Water users

(e) Traditional authorities

(f) Community

(g) Women's organisations

(h) Artisans Associations

(i) Trade Associations

(j) Others (Specify) .....

12. How was the selection done?

- (a) At a general community meeting
- (b) At a meeting of community leaders
- (c) By the chief and elders
- (d) Others (Specify) .....

13 How long have you occupied this position or served on the Board?

Are you the first to occupy it? Yes, No

If no, what caused the change?

- (a) Death
- (b) Resignation
- (c) Transfer
- (d) Migration
- (e) Others (Specify).. ..

14. Have there been any misgivings about the composition of the Board's membership? Yes, No.

If yes, what are they? .....

- (a) Size or number
- (b) Interest group represented
- (c) Domination by family
- (d) Political affiliation
- (e) Chiefs domination
- (f) DA domination
- (g) Mode of selection

(h) Others (Specify) .....

15. How long can one serve on the Board?

(a) 1 year

(b) 2 years

(c) 3 years

(d) 4 years

(e) 5 years

(f) Others (Specify).....

16 How is one's term of office determined?

(a) By the Community

(b) Decisions of the DA

(c) Decision of the Board

(d) Constitution

(e) Others (Specify).....

17. Have there been any changes on the Board membership? Yes, No

If yes, who initiated it?

(a) DA

(b) Chiefs

(c) Community

(d) Assembly member

(e) Unit Committee

Others (Specify).....

18. What reasons accounted for the changes? .....



.....  
19 Has anybody resigned from the Board? Yes, No

If yes, what was the reason?

20. Do you hold meetings as a Board? Yes, No.

If yes, how often?

21. Do you hold community Meetings? Yes, No.

If yes, how often?

22 How do you pass on information to the community?

23 Have there been any disagreement with the Community over some of your decisions?

Yes, No

If yes, what was it?

24. Has there been any disagreement with the DA on your decisions? Yes, No

If yes, explain?

25. Has there been any interference in your work? Yes, No

If yes, name them?

26. Do you report on your activities and decisions to the DA? Yes, No

If yes, how is it done?

(a) Through meetings

(b) Monthly reports

(c) Annual reports

(d) Briefings at assembly sessions

(e) Others specify.....

27. Do you have your accounts audited? Yes, No

If yes, who audited the accounts?

28. How often are your accounts audited?

29. Who determines when your accounts should be audited?

30. Are audited reports submitted to the DA and Community? Yes, No

31. Have there been any adverse findings against the Board? Yes, No.

If yes, explain?

32. Do you have bye-laws to guide your operations? Yes, No.

If yes, are they approved and adopted by the DA?

33. What do you think are barriers to your performance?

34. Do you have technical staff for the operation of the system?

If yes, who are they?

(a) Water supply Manager

(b) System Operator

(c) Accounts/administrative clerk

(d) Water vendors

(e) PRO

35. Who appointed the staff?

(a) DA

(b) The Board

(c) The Community

(d) Others (Specify) . . . . .

36. Do the staff report on their activities? Yes, No

37. Is there any disagreement between you and the Operating Staff? For example, salaries negotiations, or conditions of service Yes, No
38. Has there been any disagreement between the Board and the staff? Yes, No  
If yes, what was it?
39. How do you resolve such conflicts when they occur?
40. Has any of the staff vacated his/her post? No, Yes  
If yes, what was the cause?
- 41(a). Do you budget for your staff training? Yes, No  
If yes, how many have been trained?
- 41(b) Name the training received
- 42 What is your average monthly income for the last 12 months (inspect financial Reports)?
43. What is your average monthly expenditure (inspect cash books)?
- 44 Do you have any savings? Yes, No  
If Yes, How much is it? . . . . .
- 45 Are there other demands on the revenue generated? Yes, No  
If yes, what are they?
46. How much is the community paying as tariff?
47. Who determines the tariffs?
- 48 Has the tariff been revised? Yes, No  
If yes, how was it done?
- 49 Was there any protest about the new tariffs? Yes, No  
If yes, what were the reasons?

50. Do you carry out water quality test? Yes, No  
If yes, when was the last time?
51. Do you have guidelines for carrying out water quality test? Yes, No  
If yes, what are they?
52. What institution carries out the water quality test?
53. Have you carried out new connections? Yes, No  
If yes, are there procedures for new connections?
54. Do you carry out disconnections? Yes, No  
If yes, are there procedures for disconnections? Yes, No
55. Has there been any major rehabilitation or expenditure on the water system?  
Yes, No  
If yes, was the DA or community informed? Yes, No
56. How many accounts do you operate?  
a) one b) two c) three  
Name them
57. Who are the signatories to the accounts?

**APPENDIX B**

**QUESTIONNAIRE FOR O&M STAFF**

**A CASE STUDY OF WSDBs IN WESTERN REGION**

Community of interview.....  
Name of Respondent/H/No.....  
Name of Institution.....  
Position/Status.....  
Date and Time of Interview.....  
Interviewed by.....

**Characteristics of respondents**

5. Age (To the nearest year) .....

6 Sex: (a) Male.. (b) Female .....

7. Marital Status (Tick where applicable)

(a) Married

(b) Single

(c) Widowed

(d) Divorced

(e) Separated

(f) Others specify .....

8. How long have you served on the job?

9. Who appointed you to your current position?

10. Have there been any conflicts between you and the Board? Yes, No  
If yes, what was the cause of the conflict?
11. How are conflicts resolved between you and the Board?
- 12 Do you freely receive the information required for your job? Yes, No  
If No, what do you think is the cause?
13. Who determines the tariffs?
14. Do you organize meetings with the community? Yes, No  
If yes, what issues are discussed at the meetings?
15. Has any staff member abandoned his post? Yes, No  
If, Yes, what was the reason?
- 16 Have there been any renegotiations on salaries? Yes, No If yes, how was it resolved?

## APPENDIX C

### QUESTIONNAIRE FOR HOUSEHOLDS

#### A CASE STUDY OF WSDBs IN WESTERN REGION

Community of interview.....  
Name of Respondent/H/No.....  
Name of Institution.....  
Position/Status.....  
Date and Time of Interview.....  
Interviewed by.....

#### Characteristics of respondents

5. Age (To the nearest year).....
6. Sex. (a) Male..... (b) Female.....
7. Marital Status (Tick where applicable)
- (a) Married
  - (b) Single
  - (c) Widowed
  - (d) Divorced
  - (e) Separated
  - (f) Others specify.....
8. How were the WSDB Members selected?
9. Are you happy with the composition? Yes, No  
Explain your response
10. Will you suggest changes in the current membership of the Board? Yes, No

Explain your answer.

- 11 Are you satisfied with the performance of the Board? Yes, No

Explain your response

- 12 Have there been any changes in the membership of the Board? Yes, No

If yes explain the reasons

- 13 How long can one serve on the Board?

14. Are you aware of the rules and procedures for changing the Board members?

Yes, No

If yes what are they?

- 15 How often does the community meet the WSDB?

Do you attend the meetings? Yes, No

If No, why?

16. Are you informed of the WSDBs decisions and activities? Yes, No

If yes, how do you get the information?

- 17 Has there been any changes in the water tariffs? Yes, No

What was your involvement in the changes?

18. Were you satisfied with the explanations for the changes? Yes, No

If No, explain?

- 19 Does the Board provide financial statements to the community? Yes, No

If yes, are you satisfied with the accounts? Explain

20. Does the Board inform you of breakdowns? Yes, No



**APPENDIX D**  
**QUESTIONNAIRE CHIEFS/COMMUNITY LEADERS**  
**A CASE STUDY OF WSDBs IN WESTERN REGION**

Community of interview.. .. .  
Name of Respondent/H/No .. .. .  
Name of Institution.. .. .  
Position/Status..... .. .  
Date and Time of Interview..... .. .  
Interviewed by..... .. .

**Characteristics of respondents**

5. Age (To the nearest year)..... .. .

6. Sex:      (a) Male . . . . .      (b) Female..... .. .

7. Marital Status (Tick where applicable)

(g) Married

(h) Single

(i) Widowed

(j) Divorced

(k) Separated

(l) Others specify..... .. .

8 Who appointed the WSDBs?

9. Are you represented on the Board? Yes, No
10. Are you satisfied with the composition of the Board? Yes, No  
Explain your response
11. Are you happy with the performance of the Board? Yes, No  
Explain your response
12. (a) Have there been any changes on the Board's membership? Yes, No  
If yes, what was the cause for the changes?
13. Does the Board organize meetings with the Community? Yes, No  
If yes, how often?
14. Is the community adequately informed of the Board's decisions and activities?  
Yes, No  
If yes, how is it done?
15. Have there been any changes in the tariffs? Yes, No  
If yes what was your involvement?
16. Does the Board present financial statement to the community? Yes, No  
If Yes, how often?
17. Has there been any conflict between you and the Board? Yes, No  
If yes, what was the cause?

**APPENDIX E**  
**QUESTIONNAIRE FOR DAs**  
**A CASE STUDY OF WSDBs IN WESTERN REGION**

Community of interview . . . . .

Name of Respondent/H/No.....

Name of Institution.. . . . .

Position/Status . . . . .

Date and Time of Interview . . . . .

Interviewed by.. . . . .

**Characteristics of respondents**

5 Age (To the nearest year) . . . . .

6 Sex. (a) Male . . . . . (b) Female . . . . .

7. Marital Status (Tick where applicable)

(a) Married

(b) Single

(c) Widowed

(d) Divorced

(e) Separated

(f) Others specify . . . . .

8 (a) Do you have a District Water and Sanitation Team (DWST) in place?

Yes, No

- (a) Does the Team visit the small towns? Yes, No
9. Do you receive any reports on small towns? Yes, No
10. Does the DA provide support to the Small Towns? Yes, No  
If yes, what are they?
11. Has the DA approved a byelaw for the Board's operations? Yes, No
12. Have any changes been made on the WSDBs? Yes, No  
If yes, who initiated it?
13. Does the Board submit any reports on its activities? Yes, No  
If yes, how often?
14. What is your opinion about the performance of the Board?
15. Are the WSDBs accounts audited? Yes, No  
If yes, who initiates that?
16. Are you satisfied with the audit reports on the Board? Yes, No  
Can you explain?
17. Are you satisfied with the calibre of the WSDB members? Yes, No  
If no, can you explain?
18. Do the WSDBs prepare Annual Budgets? Yes, No  
If yes, who approves them?
19. Who determines the water tariffs?
20. Have there been any changes in the water tariffs? Yes, No  
If yes, what role did the DA play?
21. Are there any political inclinations on the Board membership? Yes, No  
If yes, can you explain?