

THE ROLE OF TRADITIONAL PROPERTY RIGHTS IN THE SUSTAINABLE USE OF
RURAL LANDS IN THE TECHIMAN MUNICIPALITY

DEPARTMENT OF PLANNING

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BY

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DECLARATION

I hereby declare that this submission is my own work towards the Master of Science and that, to the best of my knowledge it contains no materials previously published by another person nor material which has been presented for the award of any degree of the University, except where due acknowledgement has been made in the text.

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ABSTRACT

Land is an invaluable resource that serves the socio-economic needs of various communities in the country. Ghana has several ethnic groups with diverse cultural systems which have influence on the way land resources are used in the different communities. Techiman is an agrarian municipality with the largest food crops market in Ghana. Over the years, tenure practices have led to land fragmentation, insecurity of tenure, boundary disputes and decreases in agricultural production. This study therefore employed preliminary investigations, interviews, focus group discussions to unravel the extent to which traditional land tenure has influenced the sustainable use of lands. The study has suggested among others that, there should be land mapping of customary lands to define clear boundaries, mainstreaming of customs and norms into municipal bye-laws and introduction of common rules to govern the use of common properties.



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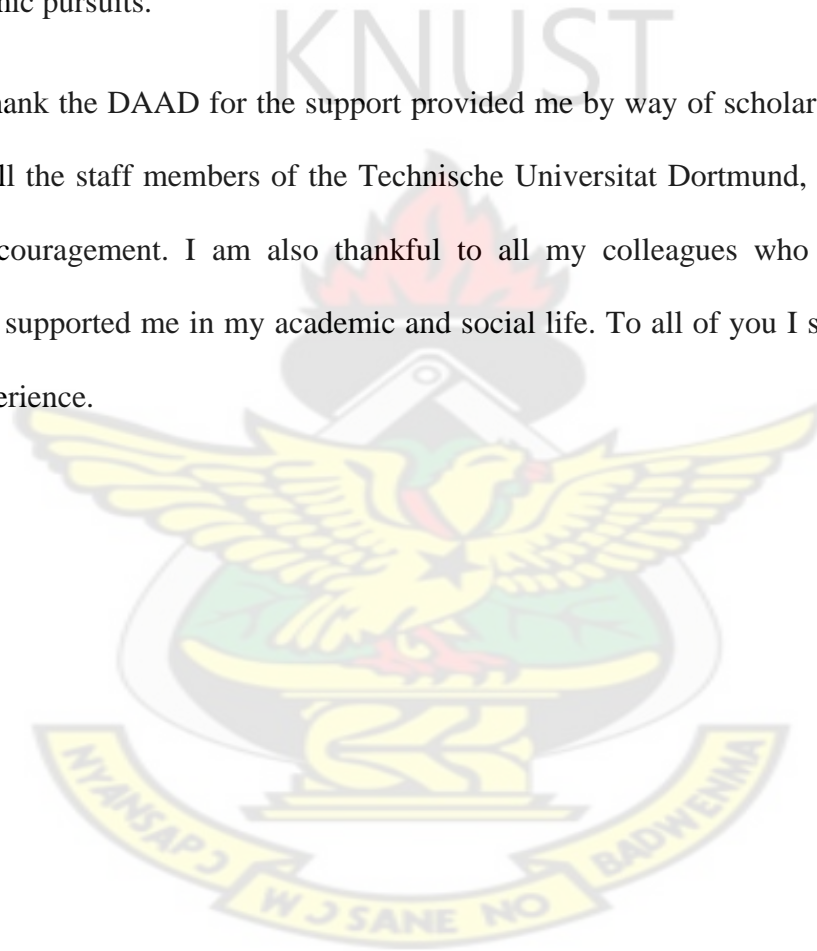


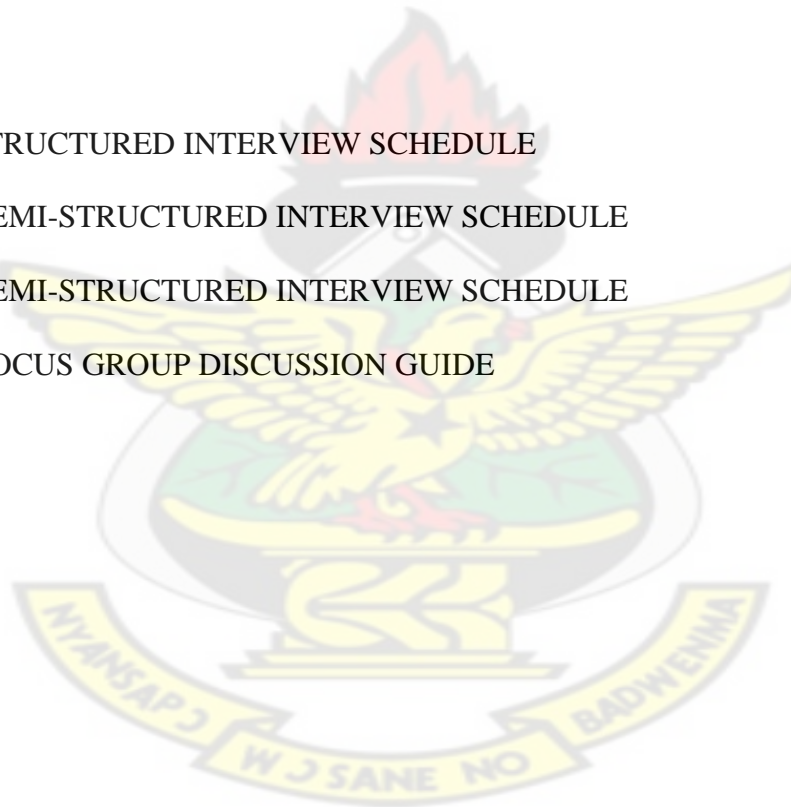
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ACRONYMS

CERSGIS	Centre for Remote Sensing and Geographic Information Systems
CLS	Customary Lands Secretariat
DA	District Assembly
EPA	Environmental Protection Agency
FAO	Food and Agriculture Organization
FGD	Focus Group Discussion
GTZ	German Technical Cooperation
LAP	Land Administration Project
MLF	Ministry of Lands and Forestry
MoFA	Ministry of Food and Agriculture
MTDP	Medium Term Development Plan
NGOs	Non-Governmental Organizations
NRCD	National Redemption Council Decree
PNDCL	Provisional National Defense Council Law
T&CPD	Town and Country Planning Department
TMA	Techiman Municipal Assembly
TMTDP	Techiman Medium Term Development Plan
UN	United Nations
MDA	Municipal Directorate of Agriculture
UNEP	United Nations Environment Programme

CHAPTER ONE: GENERAL BACKGROUND

1.1: INTRODUCTION

Sub-Saharan African Countries have formal structures, systems and frameworks for managing socio-economic development within plural setups. These plural setups range from the very nature of communities and entities within which the systems are to operate, to legal frameworks, customs and traditions, and institutional structures. As a result, established institutions and communities in an attempt to protect their unique and specific identities, customs and traditions tend to cling to their systems rather than allow themselves to be subsumed within the broader systems (Plateau, 1996).

Ghana, like many sub-Saharan African Countries, has several independent traditional states. These states are unique and distinct from one another. Ghana currently has over one hundred linguistic and cultural groups, clans and states each with its own social identity (Theodora and Johan, 2006). They contend that in these ethnic and tribal systems, property regimes are closely linked with the nature of the traditional systems. The 1992 Constitution of the Republic of Ghana divides land into public and customary forms. Public lands are vested in the president of the republic and managed by a central lands commission under provisions made under the State Lands Act and the Administration of Lands Act of 1962. Customary lands are as well divided into two – stool or skin lands and family lands. Customary lands form about seventy eight (78) percent of the total land area of Ghana of which family lands together with individual lands form about thirty-five (35) percent of the total lands in customary ownership (MLF, 2003). The differences between these two is that the rights governing the acquisition and transmission of ownership rights usually reside in the head of a family under family ownership arrangements while such rights reside in the individual land owner with respect to individual lands.

These systems within which land ownership revolve have important implications for the use of land. Quite critical, however, is how rural land is used within the broader range of complex systems in the country. This is important because rural land use is intricately related to livelihoods and access to the basic needs of life. Food, Shelter and the daily livelihood requirements of rural folks come directly from their environment and the land available to them for use. As a result the need to continue to preserve land for present and future generations is as pressing now as ever. It is in this vain that land in Ghana is viewed as a triad belonging to our ancestors, the living and the yet unborn. Rural land use must therefore be capable of addressing the various interests, aspirations, power relations and livelihood concerns associated with access to land for its productive purpose. This is the basis why Mill (1987) contends that no one should be deprived of access to land for survival.

No man made the land. It is the original inheritance of the whole species. Its appropriation is wholly a question of expediency. When private property in land is not expedient, it is unjust. It is no hardship to anyone to be excluded from what others have produced ... But it is some hardship to be born into the world and to find that all nature's gifts previously engrossed, and no place left for the new-comer (Mill, 1987 cited in Davy, 2009)

In this regard, therefore, land use must be such that it is generationally beneficial addressing present livelihood concerns while making provisions for the sustenance of future generations. The thrust of the matter is that the ways in which land resources are used differ with respect to the tenure arrangements. State lands and family lands are more prone to poor management practices than individual lands. This is because individuals attach economic benefits and or costs

to that which belongs to them than they do to that which belongs to the whole family, a group of people or a community.

1.2: PROBLEM STATEMENT

The Techiman Municipality has been experiencing decreases in agricultural production over the years. The Municipal Directorate of Agriculture has it in its 2010 annual progress report that although average hectares under cultivation is increasing for all crop categories, yield per hectare has been dwindling. This is depicted in Table 1.1.

Table 1.1: Yield per Hectare for Selected Crops

Crop	Yield per Hectare (tons)	
	2005	2009
Maize	2.4	2.2
Cassava	34.6	30.6
Plantain	3.8	3.8
Yam	11.5	11.5

Source: MADU, Techiman, 2010

These decreases, they attributed to dwindling soil quality requiring increased investment, over dependence on rain and poor technology adoption rates. The implication is that, more and more land is required to either increase food production or even maintain it at a given level at a time when the population of the municipality is increasing at an average annual rate of 3.0%.

Also, the Medium Term Development Plan (MTDP) of Techiman Municipality for the period 2006-2009 identified among others the following as some of its development problems:

- Low agricultural productivity
- Insecurity of land tenure
- Weak linkage between agriculture and industry

- Chieftaincy and boundary disputes in Tuobodom, Offuman, Aworowa and Krobo
- Environmental mismanagement in areas such as sanitation, bush burning, illegal chain saw operations and improper applications of agro-chemicals; and
- Small farm sizes due land fragmentation

These obviously point to a situation of unsustainable utilization of land resources and require urgent interventions to reverse the situation. This study would therefore seek to understand the traditional arrangements in place for managing rural lands and land uses to respond to generational equity in the Techiman municipality. The traditional land tenure system of Techiman must address the concerns, interests and expectations of the indigenous farmers, migrant farmers, private investors, corporate bodies and the general population. This is particularly important because when land fails to support the poor, hunger and poverty levels would most likely widen in rural communities.

According to the World Commission on Environment and Development (1987) the world must be increasingly concerned about accelerating deterioration of the human environment and natural resources and the implications of that deterioration for socio-economic development. It argues that sustainable development means “meeting the needs of the present without compromising the ability of future generations to meet their own needs” and that should be the underpinning principle of the UN, governments and private institutions, organizations and enterprises.

Since 1987, when the Brundtland Commission Report (Our Common Future, 1987) came to the fore, the issues of sustainable development have assumed importance in development practice. The concept which is anchored around the need to integrate three core issues of environment, economic and social parameters into national development are very relevant for any efforts to

propel progress and ensure generational equity in Nature's endowment to humanity. The question however, is to what extent are traditional property rights supportive of this notion?

From the perspectives established, it is important for rural land uses of all forms to conform to the principles of sustainable development. Land uses should be so undertaken that they address the needs of present and future generations. For this to be attained however, there must be economic, social and environmental gains or losses attached to the use of land resources. These would then serve as incentives or disincentives to how individuals, groups and societies in general use land resources. Gains and losses manifest themselves in the Ghanaian context in the form of dwindling harvests, depleting forest cover, drying up of water bodies, increases in investment in land, land conflicts or vice versa and many others.

1.3: RESEARCH QUESTIONS

The study would seek to find answers to the following questions:

1. What are the different forms of traditional land rights in the Techiman Municipality?
2. What forms of rural land uses exist in the municipality?
3. How do traditional property rights influence the rural land use types in the municipality?
4. What can be done to ensure that rural land uses systems are sustainable?
5. What are the effects of the various traditional property rights on land use sustainability?

1.4: OBJECTIVES OF THE STUDY

The study broadly seeks to ascertain the extent to which traditional property rights influence the sustainable utilization of rural lands. Specifically the following objectives are expected to be achieved:

- To identify the different forms of traditional property rights in the Techiman Municipality
- To find out the rural land use forms in the Techiman Municipality
- To establish the influence that traditional property rights have on the sustainable utilization of rural land
 - The influence of traditional property rights on economic sustainability in land use
 - The influence of traditional property rights on social sustainability in land use
 - The influence of traditional property rights on environmental sustainability in land use
- To suggest appropriate recommendations to promote sustainable land use in the rural areas

1.5: SCOPE OF THE STUDY

This is a case study that sought to understand the different ways by which rural land use can be made sustainable. The Techiman Municipality is one of the twenty-two (22) districts in the Brong Ahafo Region. The municipality has a total of 510 settlements out of which 506 are rural settlements with various complex land tenure systems. It also has a large migrant population (35.6%) further complicating the tenure regimes in the municipality. Techiman is an agrarian district and one of the most important market centers of Ghana and is also experiencing massive growth in the service and industrial sectors. Services such as telecommunication, security and banking and industrial activities such as oil extraction, lumbering and wood milling and processing of perishable foods such as tomatoes and fruits have grown in recent times. These present competing interests in land and further complicate the property rights systems and the land use rights of people. Figure 1.1 depicts the Techiman Municipality in the national context.

The figure also shows the location of Techiman in the Middle Western corner and to some extent its geographical size in relation to other districts. It portrays the physical and political boundaries of the Techiman Municipality and also gives an indication of the location of the district within the geographic boundaries of Ghana.

Conceptually, the study seeks to establish the role that traditional property rights systems in the municipality play in the sustainable utilization of rural land resources. Land here would be related to the compact landform that supports productive activities. As a result the resources under and above the compact form would not be thoroughly investigated. However, in discussing sustainability in land use, reference would be made to other forms of land such as water bodies, forest resources, air and the many other aspects of land.



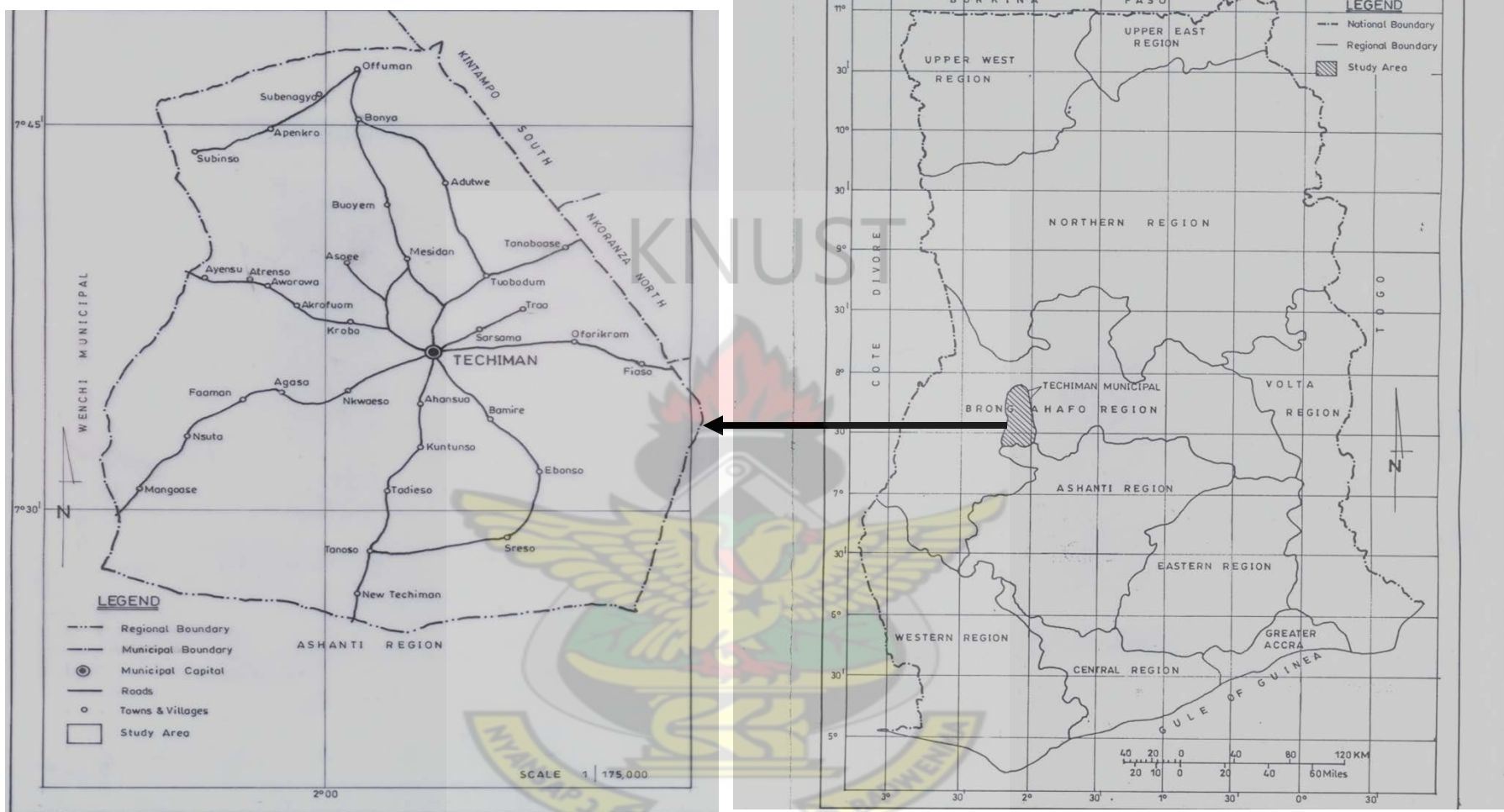


FIG 1.1: District Map of Techiman in the National Context

Source: Techiman Municipal Assembly, 2011

1.6: RELEVANCE OF THE STUDY

Land is an important economic, social and cultural resource. Due to the fact that it has relevance even for social identity, ownership is most often contested and conflicts have arisen as a result. How it is used must therefore be of extreme importance to governments, communities and academics. Indeed, the international community, development partners, and many national governments are constantly seeking for appropriate mix of options for dealing with land problems. Development activities take place on some form of land. This study is thus expected to contribute to the already existing body of knowledge in the area of traditional property rights in land and rural land use.

Again, it would be very relevant for the many public and non-governmental institutions engaged in land reform initiatives of one kind or the other. Institutions such as the Lands Commission, Land Valuation Board, the Land Administration Project (LAP), the Techiman Municipal Assembly (TMA), the traditional authorities, the Stool Lands Department and NGOs would all benefit from the findings of the research. The findings can help shape their courses of action and enhance productivity and sustainability in the rural land economy.

Finally, having an effective land ownership and tenancy arrangements as a means for physical and social accessibility to land is a tool for promoting development. The recommendations of the study would be relevant to the development of clear ownership and tenancy arrangements for rural communities. Rural communities and land users would therefore greatly benefit from the outcomes of the research.

1.7: ORGANISATION OF THE STUDY

The study is organized into five (5) chapters. The first chapter introduces the topic and states the problem, the objectives to be achieved and the theoretical underpinnings of the research. It gives a background to the study and its relevance in academic and developmental discourse.

The second chapter discusses the literature in relation to the issue under investigation. It analyses the key concepts of the research and concludes with a conceptual framework for the study. This chapter draws on the debates on the subject matter and triangulates them to adopt an informed position.

The third chapter seeks to establish a clear methodology for conducting the study. Issues of sampling, data collection, data processing and analysis, data validity and reliability and research variables and how they affect the overall study are discussed under this chapter. The fourth chapter deals with the analysis and discussion of the data collected from the study area with the final chapter discussing the findings, conclusions and recommendations of the research work.

1.8: CONCLUSION

It has been established so far that land in Ghana is divided into public and customary lands and these are associated with some practices. Tenure rights and tenancy arrangements have extreme relevance for sustainable land use. This is particularly the case in rural areas because livelihoods in rural areas are related to land and land resources available and as well the access rights that people have to these resources. It is therefore necessary that in an attempt to establish a sustainable land use system within our customary land practices, remedies are put in place in the form of incentives or disincentives. This would ensure proper use of land resources and promote generational equity. The background to the study so far requires further interrogation of the

traditional property systems in relation to land use to allow a deeper understanding of the issues at stake. The next chapter would seek to do a cursory review of theories and discourses that surround the subject matter and their relevance for this research work. This is necessary for situating the whole research within the international discourse on traditional property rights and sustainable development.

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CHAPTER TWO: LAND TENURE AND MANAGEMENT SYSTEMS

2.1: INTRODUCTION

There are key issues that relate to the study and have theoretical relevance. This Chapter seeks to raise and debate these issues and to situate the study within the intellectual discourse on sustainable property. Issues on property, land, land use and sustainable development in the context of land use are thoroughly discussed under this chapter.

2.2: PROPERTY

Property depends on various factors, including legal systems and property cultures. According to Davy (2009), the term “property” is often used to denote “land tenure and land rights”. He further states that there are varied legal interpretations depending on the country one is dealing with i.e. ‘*fee simple absolute in possession*’ (Common Law), *Eigentum* (Germany, Austria and Switzerland), *Miri and Mulk* (private property in the Islamic tradition) and native title (the land rights of indigenous people). Property is not only a legal concept but is also seen as the most powerful tool for the distribution of goods (Davy, 2009).

In a country like Ghana, all welfare measures are not created by the state. Social norms and customs which are part of broader informal property institutions can perform economizing functions as statutory law and are often used to address market failures. Plateau (1996) argues that “property is viewed as a relationship and not an object or a written rule”. It is seen to be a quantum of socially permissible power exercised in respect of a socially valued resource. Impliedly, the relationship between a person or group of persons and the rights they have to use land is very crucial. Given this background, property is seen not to refer to a physical object, but the rights of people to use it. It is therefore argued on this premise that one does not own land but

rather the rights in land and these rights are not in competition with other pieces of land but as against other people. For the purpose of this study therefore property would refer to the bundle of rights that communities, clans, families and individuals have in land in rural communities (Cox, 2002).

2.3: LAND

The term land has two basic meanings in the Ghanaian context. These are the English common law meaning of land and the customary law definition of land. While the English common law definition entails the corporeal and incorporeal aspects of land, the customary law definition of land limits land to its physical properties and embodies spiritual elements and ancestral heritage (Agbosu, 2003). While the term corporeal basically refers to the physical and tangible aspects of land, incorporeal on the other hand denotes the non-physical and intangible aspects of land.

Beyond these two major conceptions of land there are several other legal definitions of land in the various Acts and Statutes of the country. Each definition is grounded on a certain philosophical understanding of land in relation to the issue under consideration. According to Ellen *et al* (2007) there are over twenty-one (21) statutes and judgments in the Ghana Law Reports that contain the definition of land. These are the Conveyancing Decree, 1973 (NRCD 175), the Interpretation Act, 1960 (CA 4), the Concessions (Ordinance) (Ashanti), 1951 (Cap 136), the Town and Country Planning Ordinance, 1951 (Cap 84), the Building Societies Ordinance, 1955 (No. 30 of 1955), the Mining Regulations, 1970 (LI 665), the Forest Protection Decree, 1974 (NRCD 243), Timber Resources Management Act, 1997 (Act 547), the Local Government Ordinance Cap. 64 (1951 Rev.), the Office of the Administrator of Stool Lands Act, 1994 (Act 481), the Land Title Registration Law, 1986 (PNDCL 152), the Administration of

Lands Act, 1962, (Act 123), the Chieftaincy Act, 1961 (Act 81), the Provisional National Defence Council (Establishment) Proclamation (Supplementary and Consequential Provisions) Law, 1982 (PNDCL 42), the Administration of Lands Act, 1962 (Act 123) and the Land Title Registration Law, 1986 (PNDCL 152). For the purpose of this study some of these definitions have been reproduced here:

- Concessions (Ordinance) (Ashanti), 1951 (Cap 136) s. 2

Land includes land which forms the bed of any river, stream, lake or lagoon.

- Town and Country Planning Ordinance, 1951 (Cap 84) s. 2 (1)

Land includes land covered with water and also includes incorporeal as well as corporeal hereditaments of every tenor or description, and any interest therein, and also an undivided share of land.

- Ghana Civil Aviation Authority Law, 1986 (PNDCL 151) s. 50 (1)

Land includes any estate or other interest in land or any easement.

- Office of the Administrator of Stool Lands Act, 1994 (Act 481) s. 18

“Stool land” includes any land or interest in, or right over, any land controlled by a stool or skin, the head of a particular community or the captain of a company, for the benefit of the subjects of that stool or the members of that community or company.

- Land Title Registration Law, 1986 (PNDCL 152) s. 139

“Stool” includes a skin as well as any person or body of persons having control over skin or community land including family land, as a representative of a particular community.

Critical in the definitions of land is the need to appreciate the socio-cultural and anthropological meanings also associated with it. The different definitions and conceptions of land have implications for the common understanding of land. It also poses challenges for the harmonization of transactions on land among different parties thereby influencing access rights and sustainable utilization in the long run. Conclusively it can be argued that there are varied interpretations of the term land ranging from legal views to socio-cultural dimensions. To be able to appreciate the relevance of land in the socio-economic processes of the country it is important to understand these different viewpoints and how they help shape the use of land.

2.4: LAND USE

FAO-UNEP (1997) discusses land use as “characterized by arrangements, activities and inputs people undertake in a certain land cover type to produce, change or maintain it”. She argues that land use defined in this way establishes a direct link between land cover and the actions of people in their environment. From this definition it is evident that every land use activity is underlain by some form of planning processes.

The GTZ (1999) defined land use planning as an iterative process based on the dialogue amongst all stakeholders aiming at the negotiating and decision for a sustainable form of land use in rural areas as well as initiating and monitoring its implementation. The Canadian Institute of Planners on the other hand, defines land use as the “scientific, aesthetic, and orderly disposition of land, resources, facilities and services with a view to securing the physical, environmental, economic and social efficiency, as well as the health and well-being of urban and rural communities”. However, the definition that best addresses the concerns of this study is that of FAO (1991) which defined land use planning as a systematic and iterative procedure carried out in order to

create an enabling environment for sustainable development of land resources which meets people's needs and demands. This definition is preferred because it assesses the physical, socio-economic, institutional and legal potentials and constraints with respect to an optimal and sustainable use of land resources, and empowers people to make decisions about how to allocate those resources. It raises the sustainability concerns of land use and argues that people must be empowered to make the right decisions regarding the utilization of land resources.

2.5: TYPES OF PROPERTY IN GHANA

The different types of property that are known globally also exist in Ghana in their various forms. These are state property, private property, common property and non-property. This study is basically concerned with rural property which has all the types of property co-existing in different forms.

2.5.1: Customary Land Tenure

The customary land tenure system in Ghana typifies the West African perspective whereby indigenous tenure systems govern land transactions. The customary law of Ghana is a very important piece of legislation and for that matter customary land tenure is recognized as an institution on its own. Simply put the customary tenure system of Ghana is one which views land as the original inheritance of the population. In this regard, customary land is inalienable and the living must use it in such a way that would safeguard the interests of generations yet unborn. Every member of the community therefore has the right to land for their livelihood and no one can alienate these rights to another (Kasanga and Kotey, 2001).

2.5.2: Allodial Title

Allodial title basically has to do with holding land in trust for a community, family, clan or group of people. The holders of such a title in Ghana are simply that of trust holders. Ultimately, the allodial beyond which there is no greater interest in land is vested in the communities as represented by stools, sub-stools and skins. Stools and skins perform judicial, governance and land management functions. Allodial title varies from place to place across the country. In the Upper West and Upper East regions, the allodial title holders are the *tendamba* (first settlers) whilst in some of the Adangme (Greater Accra Region), the Anlo (Volta Region) and Ajumaku (Central Region), the allodial title holders are families, clans or village communities and in the Ashanti and Brong Ahafo regions, allodial title holders are the stools or chiefs (Blocher 2006).

2.5.3: Family Interest and Allodial Title

Individuals and families from the landholding group hold the ‘customary freehold’. Customary freehold denotes the “near maximal interest in land for landholding groups” (Bentsi-Enchill, 1964). In Ghana where the allodial interest is vested in the wider community, this principle is valid for the entire nation. The custodians of land – chiefs and Tendambas belong to families and therefore have interests in family lands. The norm generally in Ghana is such that inheritance and succession to property are determined by patrilineal and matrilineal systems. While the matrilineal system is dominant in Akan speaking areas, patrilineal inheritance is dominant in the northern regions, Volta and other parts of Greater Accra. With the coming into force of the Intestate Succession Law, 1985 (PNDCL 111), these have been modified to a large extent. This Law introduced a uniform system of succession in the country although customary inheritance practices still persist in many parts of Ghana (Kansanga and Kotey, 2001).

2.5.4: Property and the Position of Aliens

Ghana is a country with several multi-ethnic and linguistic groups. An alien, stranger or migrant is therefore used to refer to a non-subject of a clan, skin, stool or tribe. But as a unitary state with different levels of resource endowments in the regions there is a high level of migration particularly from northern to southern Ghana. The Techiman area is one such net recipient of migrants in the country. Migrants can acquire property in land by first seeking the permission of a chief to settle in his area. Once permission is granted, the migrant may then contact any landholder, or most frequently the family he may be residing with for land on a contractual basis. These usually involve arrangements which are not mutually exclusive and may range from a gift, to others including sharecropping or outright purchase (Kasanga and Kotey, 2001).

2.5.5: Customary Land Tenure and Management in the Brong Ahafo Region

It is estimated that the customary sector holds about 80 to 90 percent of all the undeveloped land in Ghana (MLF, 2003). These landholdings are however under varied tenure and management systems. The landholders in the country are individuals and families, communities represented by stools, skins and clans and tendamba (first settlers). The differences in tenure and management systems are along the northern-southern dichotomy. There are significant differences between inheritance regimes of Northern and Southern Ghana. While Northern Ghana is aligned to the patrilineal system, Southern Ghana with some exceptions practices matrilineal inheritance. As a result becoming an heir to land in these two systems must necessarily follow the inheritance regime at play.

The Brong Ahafo Region practices the matrilineal system of inheritance and as such people inherit their uncles. The major sources of land tenure in the region are family or owned land for

which family members can inherit as well as land lease and share contracts in the form of abunu and abusa. The regime governing a particular land tenure system influences to some extent the management of the land. Ownership of tenure is fast changing to the extent that Amanor and Diderutuah (2001) have argued that family members who wait to own land through gifts and inheritance may find at the end of the day that others have come to own through sharecropping tenure what they hoped to own.

2.6: CHANGING LAND TENURE IN THE BRONG AHAFO REGION

The Techiman area which constitutes the focus of this study abounds in resources relative to its population. Kasanga and Avis (1988) are of the view that despite much in-migration to the Techiman area, there is no danger or sign of stress on rural resources. They further state that this observation applies to the whole of the Brong Ahafo Region which has a spatially homogeneous development among its districts.

The Brong Ahafo Region has state and vested lands as well as customary lands existing alongside each other. Trends in customary tenure however, reflect alterations in access and land rights for migrants. Reporting on a statement made by Nsiah-Gyabaah, Kasanga and Kotey (2001) contend that in the 1970s migrants gained access to farmlands for virtually free and in exchange of which they were supposed to provide farm labour for their landlords every one week. These informal arrangements between migrants and landlords disappeared with the passing into law of the Aliens Compliance Order of 1970 which prevailed on all unregistered aliens to leave the country under the Second Republic. It is argued that although abunu and abusa tenancies existed before the 1970s, the practice was basically limited to cocoa and other cash crops. After the introduction of the Alien Compliance Order, food crops also became

commercialized. This resulted in the extension of abunu and abusa tenancies to the food crops sub-sector. Current dominant practices take the form of short term hiring, renting and leasing of land largely based on verbal, unwritten agreements with close relatives acting as witnesses (Kasanga and Kotey, 2001).

2.7: THE CONCEPT OF SUSTAINABLE DEVELOPMENT

The concept of sustainable development came to the fore in 1987. It was contained in a report christened our “common future”. It simply argued that human ways of existence in the short run are unsustainable and that sustainable development entails meeting the needs of the present without compromising the ability of future generations to meet their own needs. The report suggests the need for environmental, social and economic factors to be fairly balanced in our quest for development. The thrust of the concept is that there should be remedies for existing environmental problems and also sharing of environmental costs and benefits of economic development within and between countries and between present and future generations (World Commission on Environment and Development, 1987).

As a concept that has received global endorsement and continues to shape the way things should be done, sustainable development has its place in the rural land use discourse. It is generally accepted that sustainable development is about the interlinked inevitability of economic, social and environmental factors for which trade-offs are impossible. Imperative and non-negotiable for the attainment of sustainable development in the land sector is the needed institutional and political backing.

2.7.1: Sustainable Development in the Context of Rural Land Use

According to Milliar (undated) the rural areas of Ghana have limited or no formal institutions, however, there are strong informal institutions that govern socio-economic and as well environmental conduct. The traditional understanding of land in Ghana has often viewed land as a triad belonging to the past, present and the future. By this principle, the basic traditional property right in land belongs to the ancestors. This therefore makes the living temporary possessors of a heritage which is fortunated to pass on to unborn generations (Milliar, undated). It can be deduced therefore that sustainable property in land has been with the traditional system of Ghana since creation and continuous to shape and influence how land is used.

2.7.2: Modern Land Tenure Options in the Context of Sustainable Development

The Food and Agriculture Organization (FAO) of the United Nations (UN) has for a very long time now been spearheading initiatives to implement modern and more adapted approaches that better address contemporary land use needs. This results from the fact that the body has been charged with the responsibility of ensuring the worldwide implementation of Agenda 21. The change in conceptual approaches are contained in publications such as Guidelines for Land Use Planning (FAO, 1993), Planning for Sustainable Use of Land Resources (FAO, 1995) and Negotiating a Sustainable Future for Land (FAO-UNEP, 1997). These are a direct response to the practical implementation of the sustainable development paradigm with regards to land management, and efforts to reassess agricultural policies in the developing world. De Wit and Verheye (2002) outline the following as new approaches for sustainable land management that can be adopted in the developing world:

- The need to adopt food security strategies in line with the livelihood strategies of rural households, require the application of more options than just crop production. New approaches would require the diversification of income sources and includes activities that do not constitute traditional occupations of rural dwellers (like eco-tourism). For this to be effectively undertaken there should be strengthened dialogue and continuing negotiations among interest groups so as to mitigate the potential of conflict.
- There is increasing recognition of the private sector, including the smallholder, as the paramount engine for growth and economic development. This therefore requires the encouragement of private investment in land development within the framework of a negotiation process that involves all stakeholders.
- Decentralization and devolution as governance concepts are widely seen as ways of bringing governance closer to the people. This is seen to have relevance for land management as it facilitates local participation in the planning and implementation of sustainable land use and resource management options. Empowerment and participation are foundations for rights-based approaches, including the right of access to land and other resources.
- Finally, there is the need to restructure the public support system at all levels of government to propel the processes outlined. This may require the establishment of the right institutions with the requisite competencies to facilitate the regulation and registration of rights in land and as well provide an efficient framework that encourages private sector participation.

2.8: CONCEPTUAL LINKAGES

This aspect of the work seeks to establish some linkages between rural land use and sustainable development with emphasis on the economic, social and environmental dynamics. This has been diagrammatically shown in Figure 2.1. It suggests that land is a gift of nature which when combined with any social system results in some patterns of land use. The environmental, social and economic decisions that would accompany such land uses are critical for ensuring that sustainability and the livelihoods of future generations are not hampered.

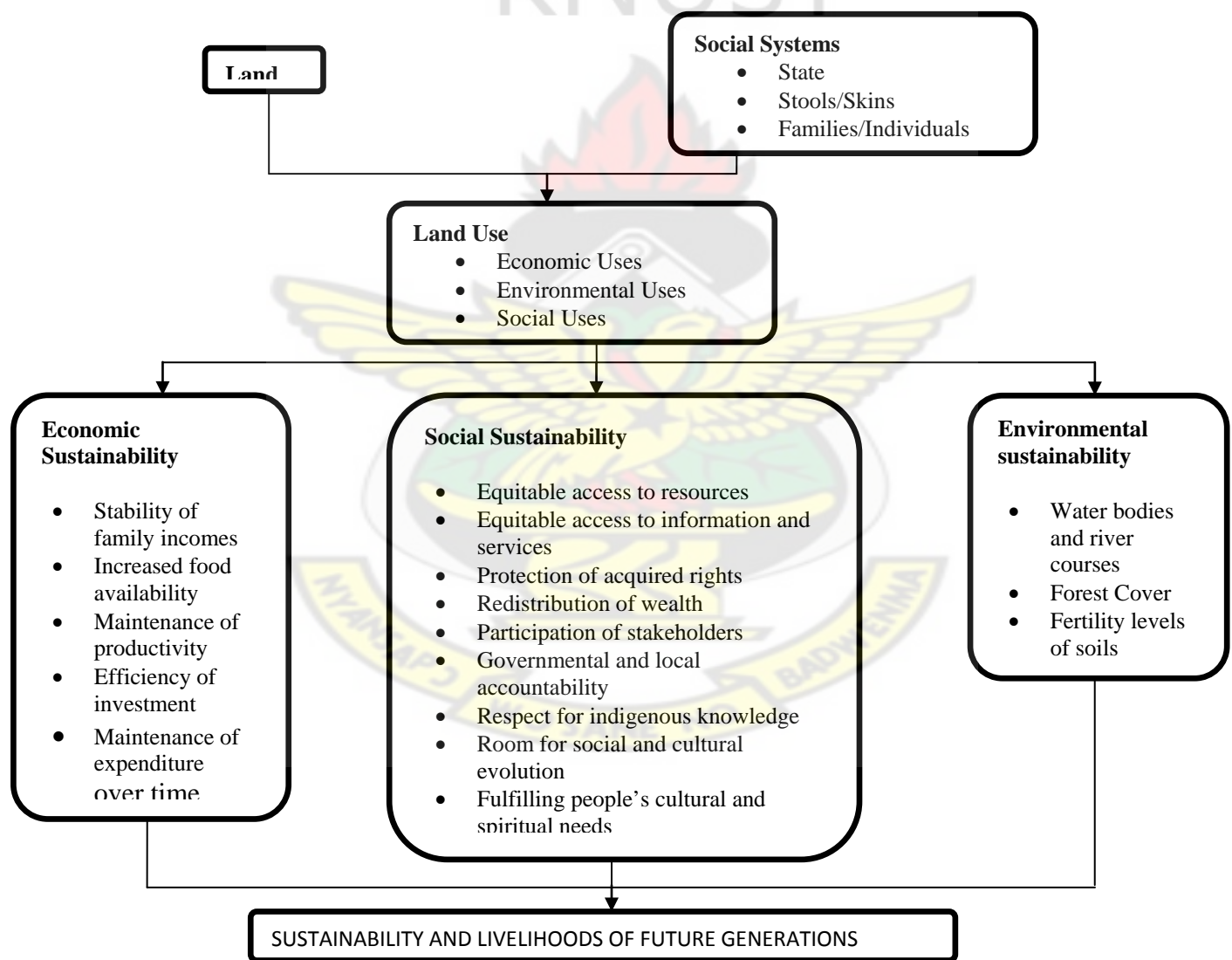


FIG 2.1: Conceptual Linkages between Land Use and Sustainable Development

Source: Author's Conceptualization, 2011

2.8.1: Traditional Property Rights and Economic Sustainability

The economic dimension of sustainable development seeks to measure the monetary benefits that accrue to the outlay of resources. In this context it would be interesting to establish the role traditional property rights play in ensuring that economic benefits associated with rural land use will not be jeopardized in the future. De Wit and Verheye (2002) outline the under listed as key areas of concern on economic sustainability:

- *Steady, continuous stream of income at different levels: individual households, communities, countries*
- *Increased food availability, real income and cash*
- *Maintenance of productivity in the face of stress or shocks like human health, natural disasters, economic conjuncture, social conflicts*
- *Real benefits derived from land management*
- *Efficiency of investment through cost/benefit analysis; and*
- *Maintenance of a given level of expenditure over time.*

2.8.2: Traditional Property and Social Sustainability

Although it is generally accepted that the social dimensions of sustainability have not been adequately addressed, they play useful role in the national development process. On the issue of property rights, the social acceptability of the mechanisms in place to address equity concerns is very critical. Regarding Social Sustainability, De Wit and Verheye (2002) again indicate that the following indicators must be taken into account:

- *Equitable access to resources*
- *Equitable access to information and services*

- *Protection of acquired rights*
- *Redistribution of wealth derived from land use and management*
- *Active participation of all stakeholders in policy and law development*
- *Governmental and local accountability for resource use and good management*
- *Respect for and valuing indigenous knowledge, local diversity and rural populations' livelihood strategies*
- *Room for social and cultural evolution without abrupt disruption; and*
- *Fulfilling people's cultural and spiritual needs*

2.8.3: Traditional Property and Environmental Sustainability

The environmental dimension generally deals with maintaining a certain stock of natural resources above a certain quality threshold. Traditional property regimes in the rural areas must therefore seek to maintain some ecological balance. To assess these, De Wit and Verheye (2002) suggest the use of the following indicators to track success:

- *Biodiversity preservation measured against species richness, abundance, diversity, high number of endemic species, and high number of important gene pools*
- *Rate of irreversible resource depletion*
- *Degree and reversibility of degradation of renewable resources*
- *Use rate of non-renewable resources against the potential use by future generations and/or the orderly transition to renewable energy sources; and*
- *Reduction of adverse global impacts*

Trade-offs between the different dimensions of sustainable development can only be made when there is an appropriate institutional capacity to negotiate and implement the different options.

This institutional dimension is often neglected or assumed to be in place. It includes formal and informal institutions that affect the use and the transfer of assets to future generations to assure the quality of life in the long run. It is indeed the case that in many Ghanaian systems including that of the Brong Ahafo region, there are both formal and informal institutions for managing land resources. The challenge however lies in the capacity of such institutions to promote sustainable land utilization given their mandates. De Wit and Verheye (2002) have argued that when institutions are not empowered to execute their mandate or when they lack the capacity to continue to perform their functions over the long term without being dependent upon external support, it is highly questionable that sustainable development can be achieved.

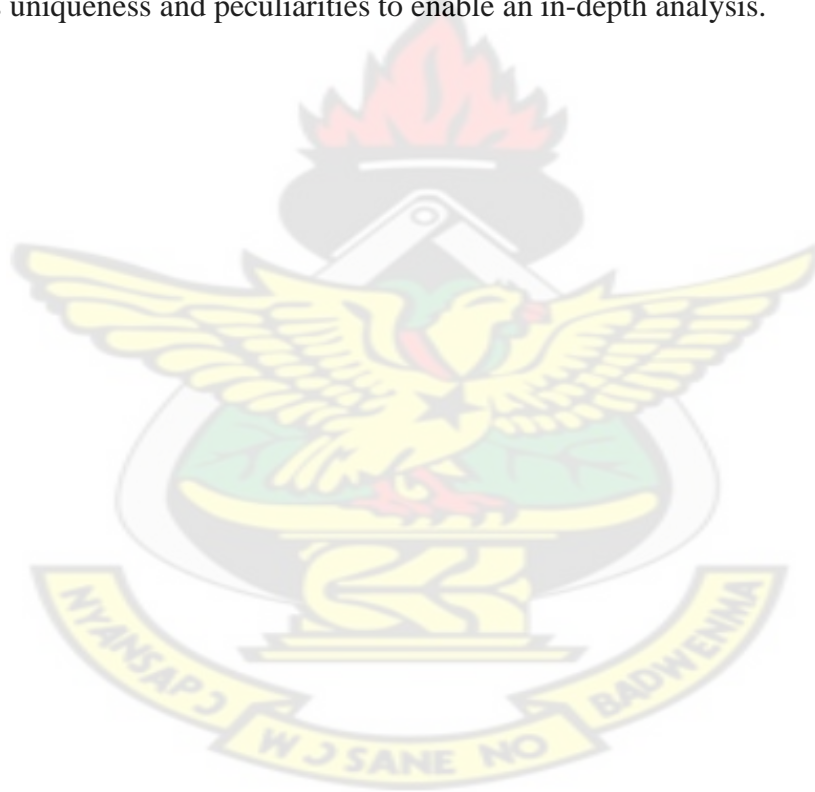
It can be deduced therefore that sustainable development approaches may only be put into practice if there is a political will to do so. Promoting sustainable development requires the redistribution of political and consequently economic power. Empowerment of ordinary land users, participation of civil society in policy and law development, sharing of resources and redistribution of wealth are all issues that may reduce control of elite groups, and as such may be politically sensitive issues.

2.6: CONCLUSION

It has been established that land is variously viewed depending on the context in which it is used. There are different cultures and systems governing land use and access to land depends on some socially permissible bundle of rights. The Ghanaian traditional property rights systems, it is understood has always had elements of sustainability imbedded in it by making ancestors the original owners of land. A concern that must be addressed is the need to continue to negotiate

access to land through formal and informal arrangements so that land use continues to benefit the society.

This theoretical framework together with the research objectives provide some options for the development of a research methodology that can help respond to the objectives sought in the context of the Techiman Municipality. The following chapter would then address the methodological approaches employed to collect and analyse data given the variables and indicators to be measured. It is also important to provide more details of the Techiman Municipality, its uniqueness and peculiarities to enable an in-depth analysis.



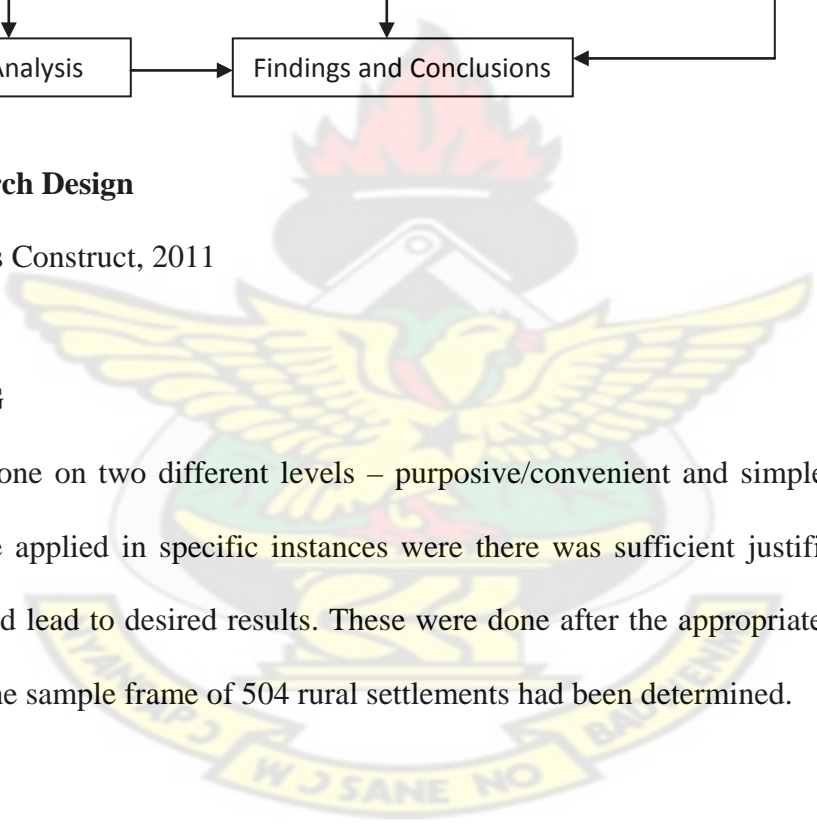
CHAPTER THREE: RESEARCH METHODOLOGY

3.1: INTRODUCTION

This research focused on two key issues – traditional property rights on the one hand and sustainable land use on the other hand. A case study approach was adopted by which Techiman Municipality; a strategically located municipality in the context of the geography of Ghana was studied. Techiman lies in the transitional belt of Ghana and experiences varying degrees of influence from both northern and southern Ghana. This sub-section built on all the issues that have been raised in the previous chapters and sub-chapters to come up with a framework that guided the research process. Given the research questions, the approach focused on land tenure systems, access to land for productive purpose, land governance and sustainability mechanisms in the land use context.

3.1.1: Research Design

The research was carried out in multiple and carefully sequenced phases. It began by exploring the magnitude of the problem and this served as a basis for the formulation of objectives and research questions. The geographical and conceptual contexts of the research were also defined. This then led to a review of theories underpinning the subject matter. This enabled the development of data collection instruments, the conduct of fieldwork and the analysis and discussion of the results. Ultimately, findings and recommendations were made and conclusions drawn. Figure 3.1 outlines the processes that were used to get the study conducted.



Source: Author's Construct, 2011

Sampling was done on two different levels – purposive/convenient and simple random. These approaches were applied in specific instances where there was sufficient justification that their application would lead to desired results. These were done after the appropriate sample size for the study from the sample frame of 504 rural settlements had been determined.

The selected number of rural communities within which the study was conducted was determined mathematically. With a sample frame of 504 rural communities, the following mathematical formula was used to arrive at 20 communities as the appropriate sample size at 80% confidence level.

$$n = \frac{N}{1 + N (\alpha)^2} \quad \text{Therefore, } n = \frac{504}{1 + 504 (0.2)^2} = 20 \text{ communities}$$

Where

n = Sample Size

N = Sample Frame

1 = Constant; and

α = Confidence Level.

3.2.2: Purposive/Convenient Sampling

The purposive sampling approach was used to determine the case study district. The Brong Ahafo Region as a whole is a transitional zone between the northern savanna and the forest belt of southern Ghana. As a result there are interlocking socio-cultural practices of the Northern and Southern Ghana operating in the region. Techiman Municipal is one of the influential areas of the Brong Ahafo Region. It has a unique culture, a large migrant population and is endowed with enormous natural resources of which fertile land is one. There is therefore resource use of varying levels with varying implications for sustainability. The internal dynamics of the study area therefore informed its selection.

Again, purposive sampling was applied in the selection of respondents for the structured and semi-structured interviews and as well the Focused Group Discussions (FGDs). Chiefs, farmers and the land use institutions that formed the source of data for the study were all purposively or conveniently selected. Chiefs were chosen because they are the custodians of land in the Techiman Municipality. Also, chiefs in the rural areas of Techiman are active land users who own farms and so have invaluable experience of the daily problems the average farmer faces.

The institutions that were chosen was due to the influence they have on land use in the municipality. The farmers were also purposively chosen because farming practices in the Techiman Municipality are virtually similar. The need therefore to get the perspectives of food crop farmers, commercial crops farmers and vegetable farmers from communities where such activities are predominant was deemed to offer better possibilities for triangulation of data.

3.2.3: Sample Distribution

Having mathematically established that 20 communities should serve as the basis for the study, there was the need to ensure a fair distribution or spread of the communities within the district scope. In other words there was the need to determine how the 20 communities should be picked from the 504 rural communities to ensure fairness. A preliminary investigation was conducted in the municipality to ascertain the uniqueness of different communities and the willingness and acceptability levels of the research. This then led to the identification of the following communities: Fiaso, Ayeasu, Aboabo, Mesedan, Bredi, Tanoboase, Anomatoa, Atrenso, Asoee, Subenagya, Buoyem, Traa, Benkae, Tadeeso, Faaman, Kokroko, Boanko, Ofuman, Oforikrom and Apenkro. Figure 3.2 is a map of Techiman Municipality showing the studied communities.

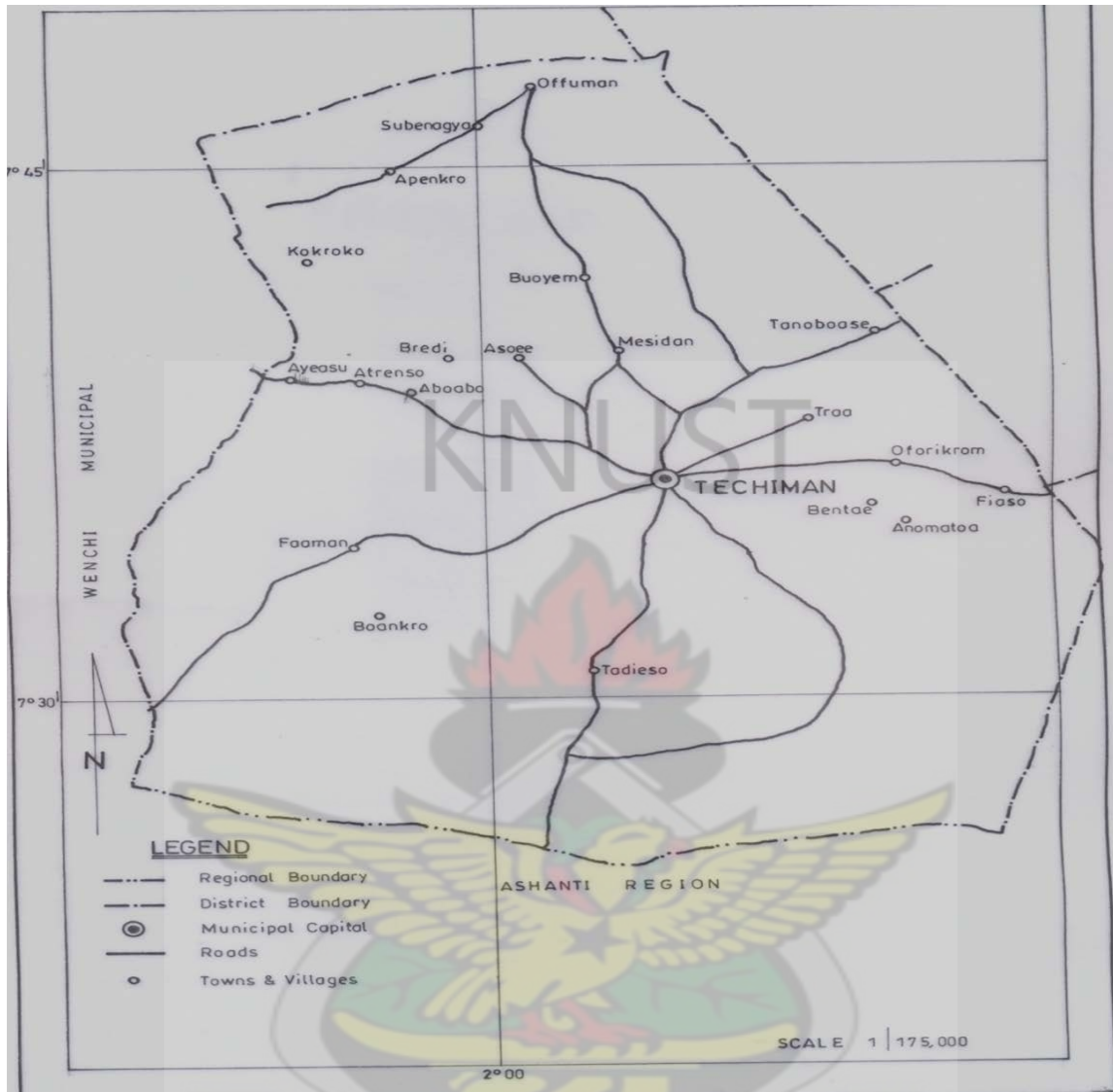


FIG. 3.2: Map of Techiman Showing Study Communities

Source: Techiman Municipal Assembly, 2011

3.3: RESEARCH VARIABLES

There were key variables that this research sought to analyse. While some are dependent, a number of them are independent. The independent variables are the lands, socio-cultural systems and the institutions of land management. These are independent because they influence, to a large extent, the ways in which lands are used. They therefore served as the basis for analyzing

and coming to terms with the existing land use practices of the study area. On the other hand, the dependent variables are sustainable land use, traditional property rights and sustainable livelihood concerns of the rural folk. These are termed as dependent variables because they were explained by the independent variables. Diagrammatically, the relationship between the dependent and independent variables are established in Figure 3.3.

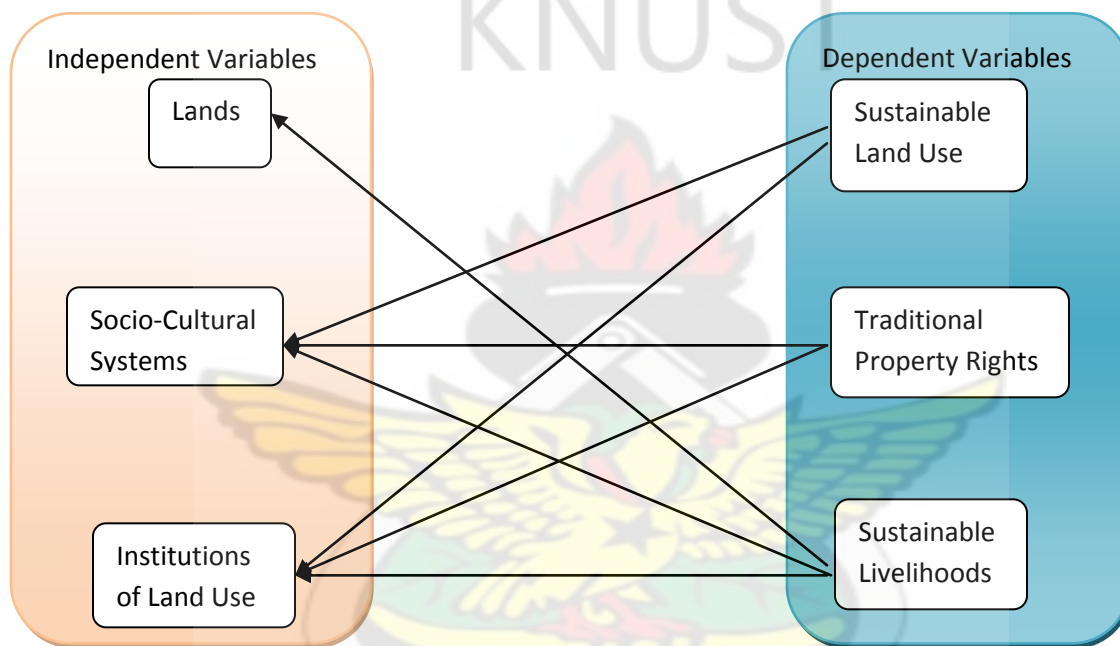


FIG 3.3: The Relationship between Independent and Dependent Variables

Key

← Dependency Relationship

Source: Author's Construct, 2011

From Figure 3.3, sustainable land use and traditional property rights depend on the socio-cultural systems of the community in question and the institutions in place to regulate land use. Sustainable livelihoods on the other hand depend on the quality of land, the socio-cultural systems and the institutions in place to regulate access to land for productive purposes.

Again, it is important to establish the data categories for both the independent and dependent variables. Table 3.1 shows the data categories, data types and sources for the variables of the study.

Table 3.1: Research Variables and Data Categories

Variables	Data Categories	Date Type	Source of Data
Lands	<ul style="list-style-type: none"> Land ownership Types of land 	<ul style="list-style-type: none"> Primary and Secondary data and Observation 	Chiefs, Clan Heads, DA and Stool Lands
Socio-cultural Systems	<ul style="list-style-type: none"> Socio-cultural setups Land tenure systems Socio-cultural practices 	<ul style="list-style-type: none"> Primary and Secondary data and Observation 	Chiefs, Clan Heads, DA, Survey Department and Stool Lands, Land Users, Customary Land Secretariat
Institutions of Land use	<ul style="list-style-type: none"> Public institutions Communal institutions Civil society groups Traditional institutions Informal institutions 	<ul style="list-style-type: none"> Primary and Secondary data and Observation 	Chiefs, Clan Heads, DA, Survey Department and Stool Lands, Land Users, Customary Lands Secretariat
Sustainable Land Use	<ul style="list-style-type: none"> Land use categories Land use management systems Controls over land use Interventions in land sector 	<ul style="list-style-type: none"> Primary and Secondary data and Observation 	Chiefs, Clan Heads, DA, Survey Department and Stool Lands, Land Users and Customary Lands Secretariat
Traditional Property Rights	<ul style="list-style-type: none"> Ownership rights Access rights Other rights 	<ul style="list-style-type: none"> Primary and Secondary data and Observation 	Chiefs, Clan Heads, DA, Survey Department and Stool Lands, Land Users, Customary Lands Secretariat
Sustainable Livelihoods	<ul style="list-style-type: none"> Management institutions and systems Measures to improve land quality Inheritance systems 	<ul style="list-style-type: none"> Primary and Secondary data and Observation 	Chiefs, Clan Heads, DA, Survey Department and Stool Lands, Land Users, Customary Lands Secretariat

Source: Author's construct, 2011

3.4: METHODS OF DATA COLLECTION

Data was collected using semi-structured and structured interview schedules, Focus Group Discussions and desk studies (refer to appendices 1, 2, 3 and 4 for data collection instruments).

Secondary data was gathered from desk studies of publications of authorities on property, district

development plans, quarterly and annual reports of the departments and agencies engaged in land management. The primary data was collected from primary informants and people engaged in the use and management of land such as traditional rulers, clan heads and farmers. Primary data was also collected from institutions and governmental agencies such as the Stool Lands Secretariat, the Techiman Municipal Assembly, the Techiman Customary Lands Secretariat, the Municipal Directorate of Agriculture and the Survey Department. Focus Groups Discussions were held in Fiaso, Kaniago and Boanko. Table 3.2 gives further details of the respondents.

Table 3.2: Respondents and their Characteristics

No.	Respondent	Location/Community	Characteristics
1.	Community Chiefs/Elders	All 20 communities	<ul style="list-style-type: none"> • Custodians of land • Administer lands • Administer sanctions on behalf of communities
2.	Vegetable Farmers	Fiaso	<ul style="list-style-type: none"> • Cross section of the people • 26 participants, 9 women, 17 men • Cultivate different types of vegetables and as well food crops • Apply more agro-chemicals • Produce are more perishable
3.	Food crops farmers	Kaniago	<ul style="list-style-type: none"> • Cross section of the people • 39 participants, 6 women and 33 men • Purely migrants • Cultivate different food crops such as yam, plantain, maize and in some instances vegetables • Use limited amounts of fertilizer
4.	Commercial crops Farmers	Boanko	<ul style="list-style-type: none"> • A cross section of the people • 19 participants, all men • Mostly cultivate cashew, cocoa, oranges and also food crops • Limited chemical application
5.	Public Officials <ul style="list-style-type: none"> • District Planning Officer • Town and Country Planning Officer • Administrator of Stool Lands • Land Valuation Officer • Crops Officer of the MDA • Customary Lands Coordinator • Municipal Circuit Court Registrar • Forestry Officer 	All stationed in Techiman except Forestry Officer who is stationed in Sunyani but oversees the municipality.	<ul style="list-style-type: none"> • 7 males and 1 female • Offer support services to the public and the stools • Educate the public • Land users themselves

Source: Field survey, 2011

3.4.1: Data Processing and Analysis

Data analysis was done at two levels – quantitative and qualitative. Both processes were however, preceded by editing which was done to ensure that the data collected were free of errors. Quantitative data were analyzed using tabulations, frequencies and percentages while perceptions on sustainable land use indicators were measured on the Likert scale. On a five level scale of strongly agree to strongly disagree the Likert scale helped measure the perceptions of the chiefs on sustainable land use in their communities. Qualitative analysis was done for data generated during the Focus Group Discussions. Descriptions and narrations of people's views on sustainable land use practices are conveyed.

3.5: LIMITATIONS OF THE STUDY

The main limitation of the study was the scattered nature of the communities studied. All the 20 communities were widely scattered from each other and this made travelling from one community to the other difficult. This problem was dealt with by a resort to the use of a motorbike to travel to the communities. Again, in some of the communities, the respondents sought were not readily available. On some occasions they had travelled, in other occasions they had gone to their farms and yet still others they were not even living in the communities. For instance, the chief of Oforikrom was said to be living and working in Tema while that of Ofuman lives and works in Techiman. In these instances, telephone numbers of respondents were taken and calls made to them to reschedule the exercise while for those chiefs who were absent, their elders responded to the questionnaire on their behalf.

3.6: CONCLUSION

A research must be carefully planned and effectively carried in order to address the objectives it has set for itself. This chapter has spelt out the parameters within which sampling was carried out and as well how the data was collected and analyzed. The next phase of the study would seek to situate the study within geographical boundaries. The profile of the Techiman Municipality is thoroughly discussed to enable an understanding of the characteristics of the area under investigation.



CHAPTER FOUR: DISTRICT PROFILE

4.1: INTRODUCTION

The Techiman Municipality is the focus of the research and there is the need also to provide more background information on the Municipality particularly in relation to its population dynamics and land tenure and use systems. These are relevant because the socio-cultural and as well economic and demographic characteristics of an area determine the land use behaviours.

4.2: THE TECHIMAN MUNICIPALITY

Prior to the attainment of a district status, Techiman was part of the then Wenchi District, later the Nkoranza District and more recently the Kintampo District. The Techiman District Assembly was created in 1989 by Legislative Instrument (L. I. 1472) and later upgraded to a Municipality by Legislative Instrument (L. I. 1799) of 2004. The Techiman Municipal Assembly is one of the twenty-two (22) municipal and district assemblies in the Brong Ahafo Region (TMA, 2006). Attaining a district status provides an improved institutional framework for the management of resources, including land resources.

4.2.1: Location and Size of the Techiman Municipality

The Techiman Municipality lies in the northern part of the Brong Ahafo Region between longitudes $1^{\circ}49'$ East and $2^{\circ}30'$ West and latitude $8^{\circ}00'$ North and $7^{\circ}35'$ South. It shares borders with the Wenchi Municipal to the orth-west, Kintampo South District to the north-east, Nkoranza District to the south-east all in the Brong Ahafo Region and Offinso North District in the Ashanti Region to the south.

The Municipality covers a total land area of 669.7km² which represents about 1.69% of the total surface area of the Brong Ahafo Region making it the smallest district in the region. The Municipal capital is Techiman, which is an important market centre and a nodal town where trunk roads from Bolgatanga, Tamale, Wa and Sunyani all converge (TMA, 2006). Figure 4.1 is a map of Techiman in the context of the Brong Ahafo Region. The map shows the location of Techiman Municipality relative to other districts in the region. The location is relevant because it determines the land characteristics and the in terms of vegetation and drainage and the movement of people into and out of the district and for that matter migrant activity on land.

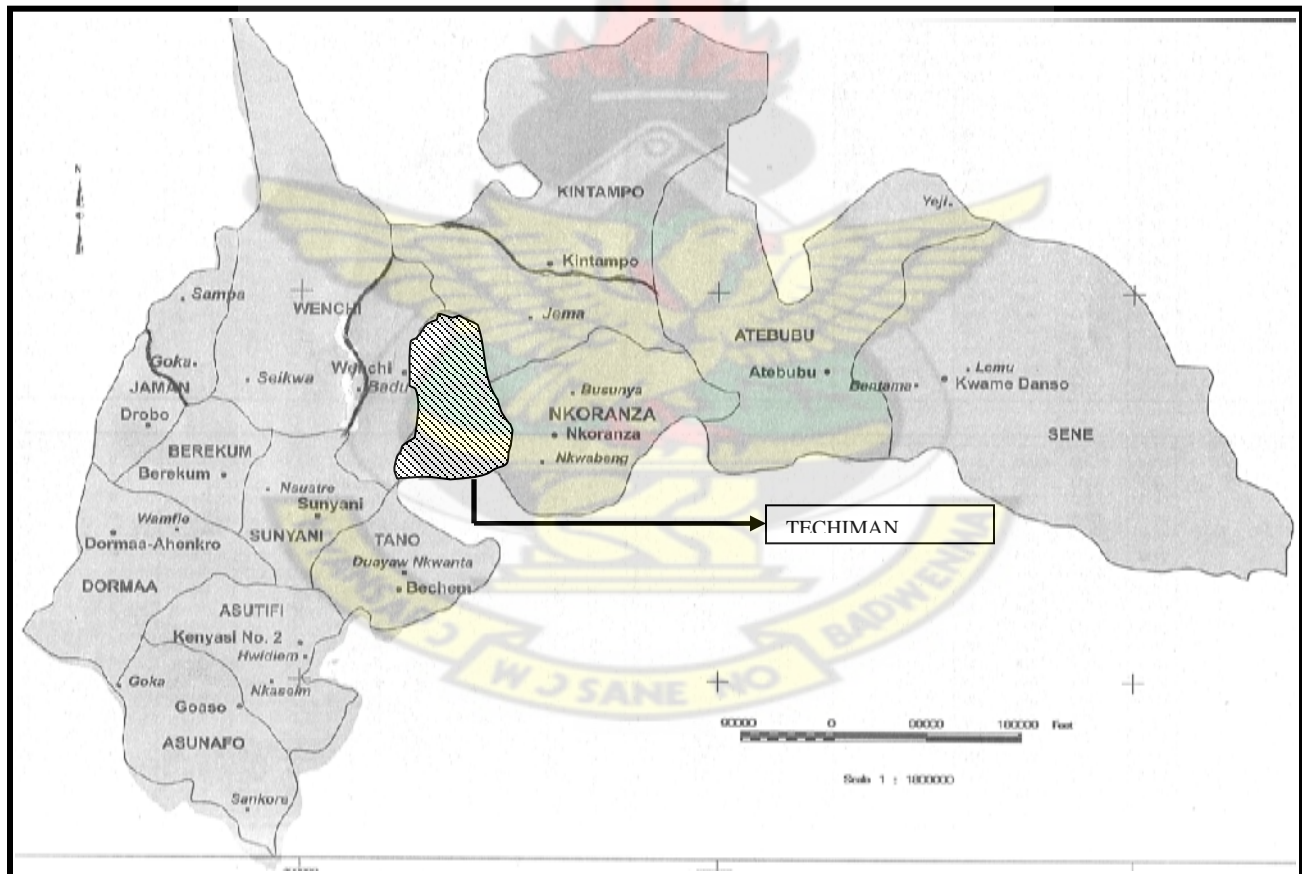


FIG 4.1: Map of Brong Ahafo Region Showing Techiman

Source: TMA, 2006

4.2.2: Relief and Drainage

The Techiman Municipality has a generally low-lying topography. The highest point in the Municipality is found around Bouyem which reaches a height of 579m above sea level and the lowest point of about 305m above sea level is around Nsuta in the south-western part. The Municipality is drained by three main rivers – River Tano to the south and Rivers Subin and Kar to the north. Other minor rivers in the Municipality include Rivers Brewa, Traifi, Kyini and Fia (TMA, 2006).

4.2.3: Climate and Vegetation

The Municipality is characterized by semi-equatorial and tropical conventional climates marked by moderate to heavy rainfall. There are two major seasons in a year within which farming activities take place. The major season starts from April to July and the minor season from September to October with mean annual rainfall ranging between 1250mm and 1650mm. The average highest monthly temperature is about 30°C (80°F) and occurs mostly between March and April and the lowest of about 20°C (79°F) occurs in August. Relative humidity is generally high through out the year (TMA, 2006).

The Municipality has three main vegetation zones - the guinea-savanna woodland, located in the north-west, the semi-deciduous zone in the south and the transitional zone, which stretches from the south-east and west up to the north of the Municipality. The semi-deciduous forest, like the other vegetation zones, has largely been disturbed by man's activities depriving the Municipality of its valuable tree species and other forest products (TMA, 2006).

4.2.4: Soils and Agricultural Land Use

Three major soil associations are found in the Techiman Municipality. They are the Damongo-Murugu-Tanoso Association, the Bediesi-Bejua Association and the Kumasi-Offin Association.

The Damongo series are developed from voltaian sandstone under savanna vegetation and are red, deep (over 200cm), well drained and permeable. Crops such as yam, cassava, maize, tobacco, vegetables, legumes, and cotton among others are usually cultivated on this soil. They can be found in the middle part of the district around Tuobodom, Traa, Tanoboase, Offuman and Mesedan. The Murugu series are similar to that of the Damongo series and support crops such as maize, cassava, cotton and tobacco. They can be found in the transitional zone stretching to the north eastern part of the district. The Tanoso series are located in low slopes and valley bottoms in the savanna zone at the north-west around Aworowa, Offuman, where River Subin drains. They are deep, poorly drained and subject to seasonal water logging.

The Bediesi-Bejua association are developed from voltaian sandstone under forest vegetation and comprises Bediesi, Sutawa and Bejua series. They are very deep, red, porous and well drained. They can support crops like cocoa, coffee, oil palm, plantain among others. They can be found around Tanoso, New Techiman, Bamire, Ahensua and Asubima.

The Kumasi-Offin association comprises Kumasi and Offin series and is developed from Cape Coast granite complex. They are suitable for both tree and arable crops. They are found around Kofoso, Nsuta and Mangoase in the south-west (TMA, 2006).

4.3: DEMOGRAPHIC CHARACTERISTICS

The total population of the Techiman Municipality as of the year 2000 stood at 174, 600 with average growth rate of 3.0%. The population density is estimated at 260persons/km² against a

regional figure of 45.9persons/ km² and a national figure of 79.3persons/ km². The total population is currently projected to be 234,647 with 55.7% representing 131,402 being urban dwellers and 44.3% representing 103,244 rural (TMA, 2006). The demographic characteristics

4.3.1: Population by Settlements

The Techiman Municipality has a total of 510 settlements most of which are located along main roads in the municipality. As of 1960, Techiman the capital was the only urban settlement. Currently, however, there are six urban settlement and 504 rural settlements in the municipality. Table 4.1 shows the population figures for the top ten settlements for the periods 1960, 1984, 2000 and 2005.

Table 4.1: Population by Top Ten Settlements

YEAR SETTLEMENT	TOTAL POPULATION			
	1960	1984	2000	2005
Techiman	8755	25264	56187	65137
Tuobodom	4375	6071	10409	12067
Tanoso	1894	4972	7757	8993
Aworowa	1957	3646	6557	7601
Offuman	2002	3471	5657	6558
Bouyem	1085	2083	3102	3596
Krobo	1326	2081	3588	4159
Oforikrom	884	1953	2982	3457
Akrofrom	1460	1770	3045	3530
Nsuta	677	1053	2029	2352
Nkwaeso	755	1373	2110	2446

Source: TMA, 2006

4.3.2: Ethnicity

The predominant ethnic group in the Municipality is the Akan (64.4 %) this is followed by the Mole Dagbon (23.3%), Grusi (4.9%), Guan (1.9%), Ewe (1.4%), Mende (1.4%) with Gurma and other tribes constituting (2.1%). The natives, Brong's constitute about 75% of the Akan group (TMA, 2006).

4.4: THE ECONOMY OF THE TECHIMAN MUNICIPALITY

The Techiman Municipality is home of the famous Techiman Market, the largest food crops market in Ghana and a major commercial centre in the region. The Techiman Market which takes place weekly between Wednesdays and Fridays is the hub of economic activity as well as the life blood of the Assembly's revenue. The strategic location of the Municipality also makes it a transit point for most vehicles from the southern sector to the northern parts of Ghana and other land locked countries of West Africa (TMA, 2006).

The service sector has witnessed expansion over the past three years particularly in the areas of trading, telecommunication and food and beverages retail. The establishment of the Ghana Nuts Company, the only major establishment in Techiman has provided regular employment to over 250 people. The rural communities, however, do not appear to have experienced much improvement in job opportunities. The rehabilitation and development of irrigation facilities at Tanoso, Kokroko and Dwena will greatly benefit farmers and create job opportunities for rural dwellers (TMA, 2006)

The Techiman Municipality has an unemployment rate of 2.2%. A large majority of the employed are self employed. They constitute 78.6% of the employed people of the labour force

of the municipality. A large proportion of the self employed (57%) are engaged in the agricultural sector with the rest engaged in retail and transport operation (TMA, 2006).

4.5: TRADITIONAL AUTHORITY OF TECHIMAN

Traditional authority within the municipality wields enormous power. The Techiman Paramount Chief is the highest traditional authority in the municipality and has allodial title over all customary lands although they are managed on his behalf by his sub-chiefs. Allegiance of the people to traditional authority is much stronger, than to formal political authorities. Traditional authorities therefore have a crucial role to play in facilitating the smooth implementation of government policies by mobilizing their people for development. Another key role of traditional authority has to do with the issue of support for land administration reform. With a large migrant farmer population (35.6%) in the municipality, the issue of security of land tenure and protection of the acquired rights is very crucial (TMA, 2006).

4.4: CONCLUSION

The socio-economic, environmental and political characteristics of Teciman Municipality as discussed in this chapter are important for understanding the context within which the study was conducted. It also helps to appreciate the various influences likely to play out with regards to land use. These together with the defined methodology lead to the discussion of results from the study area. The next chapter seeks to analyse and discuss the results from the field work conducted.

CHAPTER FIVE: RESULTS AND DISCUSSION

5.1: INTRODUCTION

The concept of sustainable development has traditionally revolved around the web of interaction between economic, social and environmental factors. This research focused on rural land use, traditional property rights and how to engender sustainable land use. This section discusses the results of the study along sustainability indicators such as the protection of water bodies and river courses, preservation of forest resources, maintenance of soil fertility, equitable access to resources, protection of acquired rights, governmental and local accountability for resource use, food availability and cost of cultivation over time.

This analysis is necessary because there is the need for communities seeking to ensure a fair balance between environmental, economic and social resource use to clearly have in mind what it is that they need to sustain, the quantity that should be sustained and the period over which the resource should be sustained. Given the importance of land in the lives of rural communities making such decisions are non-negotiable because the land and the access rights they have to it is the principal source of their livelihoods.

5.2: YEARS OF CHIEFS ON STOOL

The chiefs who are the allodial title owners of land were an important source of information for this study. The chiefs of all the twenty (20) communities responded to a well designed questionnaire on land tenure and sustainable land use issues in their communities and at Oforikrom and Ofuman where the chiefs were said to be residing elsewhere, other elders of the stools responded to the issues on their behalf. It is necessary to know the number of years over

which the chiefs had been on the stools so as understand the depth of knowledge they had on the subject. Table 5.1 details the years served by the chiefs of the various communities on the stool.

Table 5.1: Relative Number of Years on Stool by Chiefs

Number of Years	Number of Respondents	Percentage (%)
5-9	4	20
10-14	8	40
15-19	7	35
20+	1	5
Total	20	100

Source: Field Survey, 2011

From Table 5.1, it is obvious that all the chiefs have had considerable number of years of experience on their stools. The longest serving chief has had 20+ years of experience on the stool. This is necessary for the study because land use practices have experienced some changes over the years and the chiefs having served this long should be capable of cataloguing the changes that have occurred over the period. It was however, found out that despite the long number of years of the chiefs on their stools, they had no knowledge of the total acreage of customary land under their control and there are still problems of boundary demarcations between communities.

5.3: TRADITIONAL VIEWS OF LAND IN THE TECHIMAN MUNICIPALITY

Land is viewed in the Techiman Municipality as a gift of nature bestowed on the people to support their livelihoods. It is seen as both a source of survival and a god in its own right. Information gathered from twenty (20) chiefs indicates that land is assigned titles such as “Asaase Yaa” which means earth god. Indeed different land forms are seen as deities and land is not supposed to be tilled on certain days of the week because it is believed that those days must

be set aside for the “god” to rest. Table 5.2 gives further details of land, how it is perceived and non-working days in the week of the communities studied.

Table 5.2: Non-Working Days and Deities by Communities

No.	Community	Non-working Days	Deities
1.	Ayeasu	Wednesdays	Sacred grove
2.	Aboabo	Wednesdays	Sacred grove
3.	Anomatoa	Wednesdays	River Kyini
4.	Atrenso	Wednesdays	Sacred grove
5.	Asoee	Tuesdays	Sacred grove
6.	Fiaso	Wednesdays	Sacred grove and River Fia
7.	Mesedan	Wednesdays	-
8.	Bredi	Wednesdays	-
9.	Tanoboase	Fridays	Sacred grove
10.	Buoyem	Tuesdays	Sacred stones
11.	Tadeeso	Wednesdays	-
12.	Faaman	Wednesdays	Sacred grove and River Kar
13.	Kokroko	Wednesdays and Fridays	Sacred grove
14.	Ofuman	Wednesdays	-
15.	Oforikrom	Wednesdays	Sacred grove and River Brewa
16.	Apenkro	Wednesdays	-
17.	Benkae	Tuesdays and Fridays	-
18.	Boanko	Wednesdays	-
19.	Subenagya	Wednesdays and Fridays	River Subin
20.	Traa	Wednesdays	-

Source: Fieldwork, 2011

From Table 5.2 it is clear that Wednesday is predominantly a non-working day in rural communities in the Techiman Municipality while a few others are Tuesdays and Fridays. The areas designated as sacred groves are used for special activities during festivals. A common festival celebrated by the Paramount Chief of Techiman and his sub-chiefs in the rural communities is the “Apoo” Festival. Every community celebrates it at their level and it is climaxed by the Techiman Paramount Chief. It is celebrated to thank the “gods” for a good

harvest and during such celebrations the sacred groves are used by the chiefs and elders to purify their lands. Places designated as deities are restricted to some members of the communities and are also associated with some taboos. For instance, it is not allowed that a black pot be washed in the River Fia, the fish stock of River Tano are not to be eaten and menstruating women are not supposed to cross Rivers Fia and Subin. It was established that these traditional believes and practices have long been a way of ensuring that resources bestowed on a community by their ancestors are protected, preserved and sustained for future generations.

The study also sought the views of the chiefs on their understanding of that which is called land. They generally perceived land to include the compact surface, rivers and water bodies, forests cover, mineral resources and others. Table 5.3 depicts the local notions of land in the Techiman municipality.

Table 5.3: Traditional Views of Land

No.	Categories of Land	Number of respondents	Percentage
1.	Compact Surface	19	24.4
2.	Water Bodies	19	24.4
3.	Forest Cover	20	25.6
4.	Mineral Resources	15	19.2
5.	Others	5	6.4
TOTAL		78	100.0

Source: Field Survey, 2011 (Note: Multiple responses)

Others as specified by some respondents include air, fish stock, game and wildlife. It can be deduced that gifts of nature are largely understood by the people to be land. It can be found from the discussions so far that the traditional view of land is richer than the theoretical notion which limits land to the compact surface and anything beneath and above it.

5.4: LAND OWNERSHIP

Lands in the Techiman Municipality are owned by the Paramount Chief of Techiman. The paramountcy has allodial title over all customary lands but has decentralized the management of lands under his jurisdiction to his sub-chiefs while the subjects to the throne have usufructual rights. The sub-chiefs ensure that clans, families, and individuals who are subjects of the stool have a fair share of their inheritance. Under the current system chiefs virtually have power over the allocation of land for all land use activities. They allocate land for residential, commercial, and cultural activities and as well public activities such as schools and hospitals. The only area where chiefs have limited power of allocation is that for agricultural purposes as individual subjects of the stool can inherit land from their lineage for cultivation. In all allocation processes the sub-stools do so in close collaboration with the Techiman Paramountcy and the statutory bodies that exist to supervise spatial development such as the Municipal Assembly, the Survey Department, the Town and Country Planning Department, the Stool Lands Secretariat and the Lands Commission. It was found that there is weak collaboration among the institutions that supervise land use planning and the chiefs who have power to dispose off lands. This has resulted in poor and uncoordinated town and country planning. Issues of urban agriculture, open spaces, and forests and green belts are not well harmonized in the development planning efforts. Also, the traditional practices in place are such that different families own small fragments of land and this makes it difficult to acquire large tracts of unencumbered land for farming.

5.5: ACCESS TO LAND FOR PRODUCTIVE USES

Different rights systems define the use rights of people with regards to land. This is because the Techiman Municipality is a cosmopolitan environment that has about 36% of its inhabitants

being migrants competing for resources with the indigenes. There are therefore different modes by which one can have access to land for productive purposes. The study revealed that there are about six ways by which a person can access land for use in the Techiman Municipality.

- **Indigenous Rights:** people who are subjects to the stool have rights of inheritance from their lineage when land is required for agricultural purposes. However, when it comes to acquiring land for residential purposes many prefer to buy in order to prevent future litigations with other family members.
- **Abunu/Abusa (Sharecropping):** farmers in the Techiman Municipality can also access land through sharecropping arrangements popularly known as abunu/abusa. Abunu refers to dividing a farm yield into two equal parts while abusa entails dividing it into three parts with one part going to the land owner and two parts going to the farmer. These arrangements differ with respect to the crop under consideration and the kind of agreements reached between the parties from the on-set. In the Techiman Municipality abunu often goes for tree crops such as cashew and cocoa while abusa is often associated with food crops such as yam, maize and cassava.
- **Informal Relations:** people also access land particularly for farming based on some informal relations. These relations may range from friendships to lovers, business associates, school mates or friends of relatives. This practice is as well dominant when it comes to agricultural land uses.
- **Common Property:** some land resources are termed common property and all residents of the community have access to such resources. These are usually streams, grazing lands and game and wildlife. It was found out that common property has come under severe stress due to lack of rules, and roles assignment to govern their utilization over

the years. Although in the past such common property was governed by taboos, people have sought in recent times to overlook such important practices. A common case is the River Fia which in the past was not supposed to be visited by menstruating women. This is said to be dying out as people are now unwilling to submit to such practices. Nana Fiasohene, Agyewodin Kwarteng Ameyaw I told me that the chief priest has had to perform some sacrifices to avert some calamities due to the changing recalcitrance of some people.

- **Outright Purchase:** another way by which people can access land for productive uses is through purchase or lease. This is however, very predominant when it has to do with residential properties. In the case of agricultural uses, outright purchase is not very well patronized. People are of the view that, only marginal lands are leased out for agricultural purposes while fertile lands are maintained by family members or given out on sharecropping basis so that the benefits can accrue to both. This practice works against the acquisition of land on large scale for farming and for that matter adversely affects investment in land on large scale basis.
- **Rent:** finally people can access land for use through rent agreements. These are usually governed by informal arrangements with witnesses on both sides. Rent suffers from the same problems as outright purchase/lease as only marginal lands are rented out for agricultural uses.

Discussions held with land users involving twenty-six (26) vegetable farmers, thirty-nine (39) crop farmers and nineteen (19) commercial farmers revealed that indigenous rights and sharecropping arrangements are the commonest land use arrangements in the municipality. While the indigenes acquired land basically through indigenous rights, migrants acquired land

variedly. It was found out that outright purchase is not a preferred access option as people believe that only marginal lands are sold out while prime lands are given out under sharecropping tenancies. Table 5.4 below shows the outcome of the discussions.

Table 5.4: Access to Land for Productive Uses

No.	Access types	Number of respondents	Percentage
1.	Indigenous Rights	20	23.8
2.	Abunu/Abusa	17	20.2
3.	Informal Relations	14	16.7
4.	Common Property	9	10.7
5.	Outright Purchase	11	13.1
6.	Rent	13	15.5
TOTAL		84	100.0

Source: Field Survey, 2011

5.6: LAND USE SYSTEMS IN RURAL TECHIMAN

Land use entails arrangements people undertake on a given land cover type to change or maintain it. It involves planning and implementing a series of interventions to keep the land in its original state or improve upon it. Rural livelihoods depend entirely on the fertility of the available land and some natural conditions such as rainfall, climate and even the productiveness of the people. The Techiman Municipality abounds in vast fertile lands for all forms of agricultural production, logging and communal use. Data collected from the Techiman Municipal Assembly and the District Directorate of Food and Agriculture indicated that the characteristic land uses in the Communities and to some extent the district in general can be categorized into agriculture, Residential, Socio-cultural, Recreational and Commercial. The results are presented in Table 5.5.

Table 5.5: Identified Rural Land Uses

Agriculture	Residential	Socio-Cultural	Recreational	Commercial
Crop Farming	Housing	Cemeteries	Football fields	Mini markets
Fishing	Pens	Refuse dumps		Lotto kiosks
Livestock rearing	Palaces	Places of Worship		Lorry parks
Tree crops (Cashew, Cocoa, Mangoes, Oranges)	Farm Huts	Sacred groves		
Vegetable farming (Tomatoes, Okro, Pepper, Garden eggs)		Schools		
Logging		Health centres		
		Community centres		

Source: Field Survey, 2011

From Table 5.5, it is obvious that agriculture and socio-cultural land uses are the predominant land use forms in the rural parts of Techiman Municipality. Corroborating the data through observation of communities visited and also informal discussions the commercial uses basically existed in all the communities studied while recreational uses were found in communities that had schools. Fish farming was found in only the seven communities of Tanoboase, Anomatoa, Subenagya, Kokroko, Boanko, Ofuman, and Apenkro. Commercial tree crops are a common phenomenon in all the communities and basically have to do with cashew plantations. Vegetable farming is carried out mostly in communities such as Subenagya, Aboabo, Fiaso, Anomatoa, Boanko, Kokroko and Asoee which have some water bodies and it is usually done along river banks. All the communities also had some form of palaces for the chiefs although these are usually the private residences of the chiefs themselves. Farm huts were found in communities that had some form of commercial tree farms including Buoyem, Ofuman, Faaman, Atrenso, Boanko and Traa. The dominance of socio-cultural and agricultural land uses in the rural sphere

is due to the fact that the people's choice of place of residence is tied to their livelihood concerns.

5.7: THE ROLE OF TRADITIONAL PROPERTY RIGHTS IN RURAL LAND USE

Traditional property rights play crucial roles in the use of lands. This is because such rights determine the extent to which a given piece of land can be used by a person or group of persons. Once tenure rights are transparent, equitable and free of litigation, people are able to invest in land for production over a long period of time and vice versa. Investing in land to make it productive and to continue to ensure its regeneration is an expensive endeavour and people can only take such risks when there is an efficient system in place to negotiate transactions in land. This aspect of the work deals with some of the delicate sustainability issues pertaining to rural land use as established in the Techiman Municipality.

5.7.1: Role in Sustainable Economic Land Use

Land Use is said to be economically sustainable when it is able to support key issues such as steady, continuous stream of incomes to individual households and communities, increased food availability, maintenance of land productivity levels over time and maintenance of production cost over a certain time period. Once land use is unable to support these over a given time period then it is no longer supportive of livelihoods and cannot be said to be sustainable. Twenty (20) Chiefs were asked on a five level scale of strongly agree to strongly disagree to determine the extent to which land use in their communities addresses the sustainability indicators. The results are as shown in Table 5.6.

Table 5.6: Land Tenure Rights and Economic Sustainability

Sustainability Indicators	Agree	Undecided	Disagree	Strongly Disagree	Total
Increase in family incomes	1 (5%)	1 (5%)	5 (25%)	13 (65%)	20 (100%)
Increase in food availability	3 (15%)	2 (10%)	5 (25%)	10 (50%)	20 (100%)
Maintenance of land productivity levels	0 (0%)	2 (10%)	4 (20%)	14 (70%)	20 (100%)
Maintenance of production costs	1 (5%)	0 (0%)	5 (25%)	14 (70%)	20 (100%)

Source: Field Survey, 2011

On the whole no chief agreed that the current use of land resources promotes economic sustainability. Indeed ninety percent (90%) of the chiefs were convinced that the land use practices are leading to decreases in family incomes. Only one chief was of the view that with time people are able to diversify their land use practices for which reason their dependence on land reduces while they still maintain steady family incomes. Seventy-five percent (75%) of the chiefs saw land use practices to be detrimental to food availability especially in the long-term, ninety percent (90%) agreed that land productivity levels are on the decline and ninety-five percent (95%) were convinced that production costs are on the rise.

The situation was corroborated during FGDs using six (6) open ended questions that had been carefully designed and sequenced with 84 land users made up of vegetable farmers, food crop farmers and commercial farmers. During the discussions, arguments were put forth to support the claims that land is continuously being fragmented due to increasing family sizes, and access to large parcels of land for cultivation is increasingly becoming difficult under the tenure regimes of the communities. Fertile land is also now scarce and people who manage to secure such lands have to travel longer distances to their farms daily. Again, it is not easy under the current tenure systems to secure vast land for cultivation because different fragments belong to different families and all families must come to a consensus for one to be able to acquire certain acreage of land.

5.7.2: Role in Sustainable Environmental Land use

The issue of environmental sustainability is equally as important as economic and social sustainability. The basic tenet of the argument is that the three sustainability measures are complementary of each other. In an attempt to understand the extent to which land use in the rural parts of Techiman Municipality respond to environmental sustainability, the following indicators were set for which sustainable land use must address;

- Protection of water bodies and river courses
- Preservation of forest resources; and
- Maintenance of soil fertility

Again, twenty (20) chiefs were interviewed and 84 people engaged in a FGD on the issue. Key staffs of departments and agencies such as MoFA and Forestry Department were also spoken to. The chiefs were virtually unanimous in their thinking that land use practices over the years have led to declines in soil fertility, destruction of forest resources and pollution of water bodies. The extent to which River Fia, River Tano and River Adeasu have been polluted and even risk drying up in the near future were cited as examples. On all the three indicators assessed ninety-five percent (95%) of the chiefs agreed that land use practices have endangered the environment. Also, factors raised to buttress this had to do with growing population for which reason people are cultivating along river banks, declining fertility for which excessive chemicals applications have become necessary and weak capacity of the chieftaincy institution to enforce bans on timber exploitation. Again, use rights of people on common property are not governed by any rules and regulations. Water bodies, game and wildlife and for that matter fishing and hunting are used without any control systems. Families also have the rights to allow people to log trees that have grown naturally on their family lands without having to seek proper approval. These

were identified by the chiefs as hampering efforts to promote environmental sustainability in land use. The culture of the people was also raised as an issue. It found that local cultural land use practices do not compel anybody to regenerate lands that have been depleted. They only usually allow such lands to go through a fallow period for natural regeneration which in any case is not a compelling demand on any land user. Table 5.7 below depicts the opinions of the chiefs with regards to the environmental sustainability indicators.

Table 5.7: Land Tenure Rights and Environmental Sustainability

Sustainability Indicators	Agree	Undecided	Disagree	Strongly Disagree	Total
Protection of water bodies and river courses	1 (5%)	0 (0%)	2 (10%)	17 (85%)	20 (100%)
Preservation of forest resources	0 (0%)	1 (5%)	5 (25%)	14 (70%)	20 (100%)
Maintenance of soil fertility	0 (0%)	1 (5%)	4 (20%)	15 (75%)	20 (100%)

Source: Field Survey, 2011

Discussion with land users and other stakeholders also revealed similar concerns. People claimed that the once forested district is fast giving way to savanna eco-systems and that has altered agricultural practices over the years. The secretary to the Vegetable Farmers Association, Mr. Abdulai lamented that if nothing is done about the situation now the unborn generation would soon have no fertile land whatsoever to cultivate their food crops.

The Municipal Forestry Officer, Mr. Ackom stated that the forest cover of the country has declined from 8.2 million hectares at the turn of the century to 1.6 million hectares now and the Techiman Municipality has played a key part of it. He argued that this has led to extreme weather conditions such as heavy storms with great winds that destroy property, longer dry seasons and more disastrous bushfires.

5.7.3: Role in Sustainable Social Land Use

Social sustainability has to do with equity concerns and how well they must be addressed. Land has economic and environmental importance but is also a source of social roots for which much is required to ensure that equity concerns are catered for. When the issue of equity is not properly addressed, litigations and sometimes conflicts over land rights may arise. The rural land uses of Techiman Municipal area were analyzed along the social dimension considering indicators such as equitable access to resources, protection of acquired rights, ensuring governmental and local accountability for resource use and offering opportunities for fulfilling people's cultural and spiritual needs. Based on these indicators, twenty (20) chiefs who are the allodial title holders of land responded to the sustainability issues and the results are as presented in Table 5.8.

Table 5.8: Land Tenure Rights and Social Sustainability

Sustainability Indicators	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Total
Equitable access to land resources	2 (10%)	6 (30%)	5 (25%)	4 (20%)	3 (15%)	20 (100%)
Equitable access to information and service	0 (0%)	3 (15%)	15 (75%)	2 (10%)	0 (0%)	20 (100%)
Protection of acquired rights	0 (0%)	8 (40%)	8 (40%)	4 (20%)	0 (0%)	20 (100%)
Promotes redistribution of wealth from land use & management	0 (0%)	1 (5%)	7 (35%)	9 (45%)	3 (15%)	20 (100%)
Enhances active participation of stakeholders in policy development	0 (0%)	1 (5%)	15 (75%)	2 (10%)	2 (10%)	20 (100%)
Ensures governmental and local accountability for resource use	0 (0%)	5 (25%)	6 (30%)	8 (40%)	1 (5%)	20 (100%)
Promotes respect for and valuing of indigenous knowledge	0 (0%)	8 (40%)	11 (55%)	1 (5%)	0 (0%)	20 (100%)
Creates room for social and cultural evolution	0 (0%)	2 (10%)	13 (65%)	5 (25%)	0 (0%)	20 (100%)
Offers opportunity for fulfilling people's cultural and spiritual needs	0 (0%)	0 (0%)	18 (90%)	2 (10%)	0 (0%)	20 (100%)

Source: Field Survey, 2011

From Table 5.8, it is obvious that the chiefs are undecided on many of the social issues raised. The chiefs agree that equitable access to land is a critical concern due to the excessive commercialization of land resources. So obviously those who have the financial muscle have much more access than the poor. Even in some instances, poor land owners have lost their interest in land to the rich. Protection of acquired rights is also of major concern when it comes to the social dimensions of traditional land tenure rights. The situation is such that in the rural areas, chiefs indicated that there is security of tenure for property owners but as ones moves towards the small towns and urban centres in the municipality protection of acquired rights gets excessively difficult. This is of concern to rural folks because they are also active participants of the urban sphere in the municipality.

A major finding was that there is minimal governmental accountability for land use. The chiefs argued that lands used for public developments have not been compensated for and that the communities are not usually very much engaged by the relevant public sector agencies in determining development activities. On all the issues relating to indigenous knowledge, cultural evolution and fulfilling spiritual needs, chiefs seemed undecided. They argued that while some people abided by local customs and traditions with regards to land use, there are yet still some “groups” who due to religious affiliations flout local norms with some impunity. The chiefs complained that in recent times, they have been inundated with the need to make sacrifices to pacify the gods on behalf of people whose conducts have contravened local norms. Menstruating women blatantly crossed rivers they should not, people go to farms on days they should not have, people wash black pots in rivers they should not and many others.

It is worth stating here that once equity in land use is not met, litigations and conflicts also increase. It was found that litigations over land in the Techiman municipality had increased.

Records from the circuit court indicate that land litigations increased from 3 in 2009 to 9 in 2010. Again, there are instances of family and communal conflicts which disturb the general peace of the district. It is obvious therefore that the issues affecting social sustainability have not been adequately addressed.

5.8: THE RELATIONSHIPS BETWEEN TRADITIONAL PROPERTY RIGHTS AND RURAL LAND USE

The analysis carried out so far has indicated that the rural land use practices are rarely sustainable. In this light the relationships between traditional property rights and rural land use have been analyzed here using the input-output matrix. The analysis sees the compact surface, water bodies and rivers, forest resources, man and game and wildlife as land and gifts of nature. Technology is the other input component which is not natural. These when well mixed through processes such as effective resource allocation, clear rules and regulations, farming/fishing/logging, resource exploitation and capacity building among others, food, incomes and cultural fulfillment can be attained at different dimensions. When there are increases in incomes, sufficient food availability and sufficient returns on investment in land then land use can be said to be sustainable and vice versa. Figure 4.1 depicts the input-output relationship.

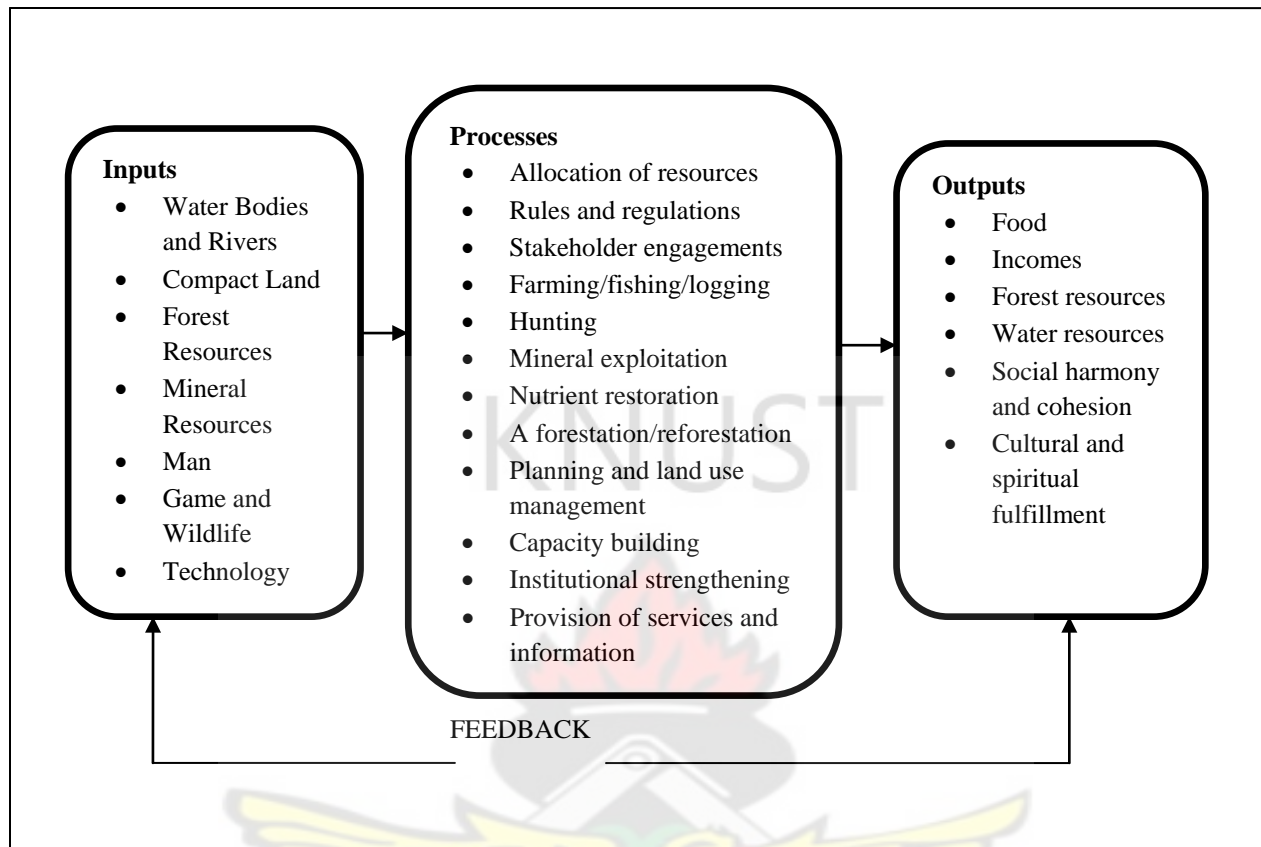


FIG 5.1: Input-Output Matrix of Land Use and Sustainable Development

Source: Author's construct, 2011

5.9: PUBLIC INSTITUTIONS OF LAND MANAGEMENT

The issue of sustainable use of land resources cannot be discussed without recourse to the institutional arrangements in place to negotiate interests and transactions in land resources. There are seven (7) public sector institutions involved in the management of land resources in the Techiman Municipality. They are the Techiman Municipal Assembly (TMA), the Land Valuation Board, the Town and Country Planning Department, the Survey Department, the Forestry Department, the Stool Lands Secretariat and the Municipal Circuit Court. Another public sector creation that does not purely depend on the public purse is the Techiman Customary Lands Secretariat. These departments play complementary roles but in some instances “turf wars” emanate due to overlap of responsibilities. These departments are further elaborated on below. It was found out that these institutions are severely under-resourced in terms of personnel and logistics to undertake their responsibilities. There is also weak coordination among them leading to duplication of efforts and waste of resources. Also, it was found that the Environmental Protection Agency and the Lands Commission operate from the regional capital and oversee twenty other districts.

The Techiman Municipal Assembly (TMA)

The Techiman District Assembly was created in 1989 by LI 1472 and modified to a Municipal Assembly in 2004 by LI 1799. The Assembly currently has eleven (11) decentralized departments with the Physical Planning Department and the Environmental Health Unit directly engaged in land use issues. Specifically the following functions pertaining to land use are performed by the TMA;

- Keeping track of land acquisitions and ownerships

- The TMA also grants ownership and use purpose of lands
- Technical staff testify in courts on litigation issues
- Collect taxes on landed properties; and
- Approval and implementation of planning schemes and layouts

The TMA also does resolve disputes relating to land use through its statutory planning committee made up of representatives of Town and Country Planning Department (T&CPD), Stool Land Secretariat and Land Valuation Board. This function is however, limited to individuals and to some extent family level disputes. Community level issues are said to be beyond the mandate of the TMA as they border on the rightful occupant of a stool.

The Customary Lands Secretariat (CLS)

The Techiman Customary Lands Secretariat was established on 9th September, 2008 to oversee the administration of stool lands under Techiman Paramount Stool and the Divisional and Sub-Divisional Stools. This secretariat was a creation of the Land Administration Project which is ongoing throughout the country. The following key functions among others are performed by the CLS;

- Facilitation of lease processing
- Dispute resolution; and
- Facilitation of land acquisition

A critical challenge to the CLS is that it lacks information on the total area under customary ownership in the municipality.

The Stool Lands Secretariat

The Stool Lands Secretariat was established in the Techiman Municipality in 1995 and performs the following functions;

- Collect crown/stool land rents
- Educate the public on the need to pay stool land rent; and
- Undertake disbursements

The secretariat has only one officer, one room office space and a single computer to oversee the stool land issues in the district.

The Land Valuation Board

The Land Valuation Boards was for a very long time part of the Lands Commission until 1986 when section 43 of PNDCL 42 split their functions. The Techiman Land Valuation Board was setup in the municipality to perform the following statutory functions;

- Resolving all issues relating to compensation of any land acquired by government in the interest of the public
- Determining values of public rented premises; and
- Advising the regional Lands Commission and Forestry Department on royalty payments on forestry holdings

The Survey Department

The Survey Department was created in 1901 as part of the Mines Department. It was a part of the colonial civil service with the mandate to survey lands prior to the granting of mine concessions. It was established in the Techiman Municipality to provide the following services in the land sector;

- Develop large scale cadastral maps of the Techiman Municipality which are in turn essential for:
 - Registration of rights in land
 - The description of natural resources; and
 - Spatial development planning

The Forestry Department

The Forestry Department is an essential unit responsible for managing the use of forest resources in the country. The following functions among others are performed by the department;

- Protect the permanent forest estates and protected areas
- Regulate the harvesting of timber, wildlife and other non-timber forest products
- Track the movement of timber, wood and wildlife products; and
- Monitor the harvesting and marketing of forest and wildlife products

The Municipal Circuit Court

The Techiman Municipal Circuit Court is one of the important institutions of land management in the municipality. When all other conflict management procedures regarding land transactions fail, the court offers alternatives for redress. The court plays an essential role in ensuring certainty with regards to land transactions and titles and by so doing helps in resolving conflicts of all kinds in the land arena.

5.10: SANCTIONS/REMEDIES FOR UNSUSTAINABLE LAND USE

Rural communities in the Techiman Municipality have their own defined sanctions based on their tenure systems and traditional practices for people whose land use behaviours are deemed unsustainable. These sanctions are usually administered by the chiefs on behalf of the communities. In a few instances, the communities have reported people to state institutions such as the Police, Fire Service and the Forestry Department. Table 5.9 depicts the sanctions that are applied in various communities in the Municipality.

Table 5.9: Remedies for Poor Land Use

No.	Remedies/Sanctions	Number of respondents	Percentage
1.	Fines	19	57.6
3.	Prosecution	5	15.2
4.	Offering of Sacrifices	1	3.0
5.	Others	8	24.2
TOTAL		33	100

Source: Field Survey, 2011 (Note: Multiple responses)

From Table 5.9, fines constitute the commonest form of punishment in the communities. Over 50% of the communities apply one form of sanction or the other on people whose land use behaviours contradict socially acceptable practices. In no instance are people prohibited from using land. This is because land is the basis of existence in the rural communities and to deprive someone of land is seen as depriving the person of survival. Prosecutions are also usually applied while in some instances other sanctions such as reporting to the relevant governmental agencies have been applied.

5.11: CONCLUSION

The analysis carried out so far establishes that there are critical challenges in the land use sector of the Techiman Municipality. The existing land use practices are rarely sustainable and it is incumbent on the chieftaincy institution, the Techiman Municipal Assembly and all other

stakeholders in the Municipality to commit considerable efforts to the issue of land use. Indeed measures to promote orderly administration of land use are a crucial foundation of the lives of the people of the municipality. As land administration gets increasingly complex, the traditional systems must be harmonized and formalized to address the challenges. A number of findings were made from the discussions and recommendations to address these findings proffered. The final phase of the study examines these findings and recommendations.



CHAPTER SIX: FINDINGS, RECOMMENDATIONS AND CONCLUSIONS

6.1: FINDINGS

The analysis and discussions of the results led to findings that are deemed important if land use practices in the Techiman Municipality are to be made sustainable. The findings have been categorized into institutional related, legal related, customary related and general land use related. Based on these findings, recommendations to improve the system have also been suggested.

Institutional

- Two key institutions that have extreme relevance for land management do not exist in the Techiman Municipality. The Lands Commission and the Environmental Protection Agency (EPA) all operate from the regional capital of Sunyani. The Lands Commission by its mandate is the institution that is responsible for coordinating the activities of the various agencies that are involved in land management activities. Operating from the regional capital and having to coordinate the activities of agencies in twenty-two (22) district is quite a difficult task. Getting these two institutions to operate in the municipality can help shape local land use behaviours and as well the design and implementation of context specific interventions for the various communities.
- Again the sector agencies in the land management sector in the Techiman Municipality do not have adequate capacities in terms of logistics, office space and staff to adequately carry out their responsibilities. The Lands Secretariat has just one room as its office, the Circuit Court operates from the Chiefs Palace, Land Valuation works from a two room rented office and the District Assembly is still struggling to complete its office complex. In terms of Human Resources, there is only one (1) Town and Country Planning Officer

without an assistant, one (1) Stool Lands Administrator without an assistant, one (1) Customary Lands Coordinator, one (1) Forestry Officer and one (1) Land Surveyor. During this study the Stool Lands Administrator had just delivered and was not at post. It took some time to locate her house to conduct an interview with her.

- Town and Country Planning efforts in the Municipality are uncoordinated and unplanned. Critical issues such as forestry belts, agricultural belts are not duly considered. The implementation of layouts is also not well coordinated and enforced as a number of institutions and reserves have been encroached upon. Indeed the Sacred Grove of the Techiman Traditional Council has had to be fenced to prevent people from further encroaching on the land.

Legal

- It has been established that the country suffers from numerous laws, regulations and policies in the management of land resources. The National Land Policy (1999) had it that the country has twenty-six (26) laws relating to land and land management and administration, eighteen (18) laws on land related institutions and agencies and twenty-six (26) laws relating to natural resources such as forestry and wildlife. Again there are fifty-six (56) instruments and regulations dealing with land.
- This finding is also corroborated by the World Bank's Appraisal Document on land administration. It stipulates that there are over one hundred and sixty-six (166) state laws that regulated land governance and establish mandates for different agencies. It further states that many of these laws and regulations conflicts with one another and some are

outdated or irrelevant and their existence is often used to confuse issues, delay implementation of programs and prolong land litigation in Court.

Customary

- The whole tenure regime is very relevant for promoting indigenous culture. It is a system that acknowledges the chief and his authority through the payment of drink money and signing of indentures. Again, people who acquire land exist and work within the traditional practices of the local people. At any point in time the occupant of a stool land can be summoned to participate in any activity of traditional importance such as communal labour and participation in local festivals such as the “Apoo”. These are ways by which the indigenous culture and knowledge of the people are enhanced through traditional land use practices.
- The traditional understanding of land is richer than the academic understanding which limits land to the compact surface, water bodies, forest resources and minerals. The local understanding encompasses game, wildlife, air and fish stock that live in the forests and water bodies and for which man has no hand in creating. This to some extent makes it look like all natural creations are traditionally viewed as land by the people of the Techiman Area.
- The Lands in the Techiman Municipality belong to the Techiman Paramountcy but is managed on his behalf by the sub-chiefs of the various communities. Neither the Techiman Traditional Council nor the Customary Lands Secretariat has any idea of the total acreage of land under customary ownership in the Municipality. It would be extremely difficult to manage a resource for which its total quantity is not known. Some

of the problems with boundary demarcations that sometimes results in disputes between communities are related to this issue.

- The concept of sustainable development as espoused in 1987 is not an entirely new concept given the traditional norms and practices of the people of the Techiman Municipality. Indeed local customs and practices such as not washing a black pot in certain rivers, menstruating women not crossing some water bodies, not eating fishes from the Tano River, not going to farm on some weekdays and the maintenance of sacred grooves for which the local people lack any explanation are ways by which traditionally people have sought in the past to promote sustainable land use practices.
- The traditional land tenure practices do not promote equity with regards to access that individual members of a family has to land. The family heads have much control over family lands than other members. Indeed they have the ability to rent out family lands and in some instances family members waiting to own family lands have later realized that such lands have been given out on sharecropping arrangements or rented out. Indeed the commercialization of land resources has also worked to ensure that the rich in society have much more access than the poor. In some instances poor families have lost their interests in land and for that matter their livelihoods to wealthier people.

General Land Use

- The need to adopt alternative livelihood strategies has dawned on the people although they lack the skills and capacities to initiate and manage such processes. In instances where help has been forthcoming, communities have initiated such alternative livelihood strategies as snail rearing, bee-keeping and the cultivation of non-traditional commercial crops such as oranges, mangoes and pineapples.

- A major land resource in the municipality is the Tano River which crosses the various parts of the municipality over three times. Unsustainable practices such as farming along the banks of the river has exposed it to massive silting leading to major changes in the course of the river.
- Long term food security is threatened due to the fact that families own fragments of the stool lands. However, investing in land to make it productive and ensure its nutrient regeneration require huge financial outlays. The levels of fragmentation do not support such productive enterprises and therefore limits land use to subsistence and smallholder cultivation. The average farm size in the municipality is 2.5 acres (MoFA, 2009). It is therefore difficult to get large scale unencumbered land for investment.
- Related to this are the redistributive abilities of land. Depending on the case in hand, land has redistributive abilities or otherwise. If property theory is anything to go by, the fact that the poor are sitting on some piece of land implies that they are sitting on some wealth. What is required is the institutional frame that would ensure that such land is movable in the market. On the other hand, the poor in this case mostly have access only to marginal land whose level of productivity is usually so low that it does not support the idea of redistribution of wealth. For instance, it is only marginal lands that are put out for sale or rented to farmers while fertile lands are only given out on abunu/abusa tenancies.

6.2: RECOMMENDATIONS

Based on the findings of the study, the following recommendations are made to help improve land use practices and promote sustainable development in the Techiman Municipality.

- **Decentralization:** the efforts to deepen decentralization in the country should be hastened. It is generally accepted that decentralized management of resources including land resources can promote pro-poor benefits and enhance local development. The Key institutions that have responsibility over land use and management such as the Lands Commission and the Environmental Protection Agency (EPA) should therefore be further decentralized to the Municipal level and empowered to deliver on their mandate.
- **Coordination of Municipal Development:** the development processes of the municipality should be effectively coordinated and enhanced. Planning layouts should be readily available for communities of the municipality. The Statutory Planning Committee of the TMA should therefore enhance Town and Country Planning practices by designing layouts that address sustainable development concerns. They should address issues of open spaces, urban agriculture and forest and green belts which play useful roles in the lives of communities.
- **Laws, Regulations and Policies:** the laws, regulations and policies governing land use and management in the country have been said to be conflicting and some intended to confuse and delay issues or prolong litigations in court. Within the framework of the land administration project currently on-going in the country, it would be very important for stakeholders to explore the available opportunities by which the issues can be addressed. Laws should be so done that they address equity and sustainable utilization concerns while dealing with litigations.

- **Land Mapping:** chiefs are said to be managing resources for which they have no idea of its total quantity. This has often led to boundary conflicts, litigations and sometimes communal violence. The Customary Lands Secretariat should in collaboration with the Techiman Traditional Council and the divisional and sub-divisional chiefs embark on an exercise to map and demarcate the exact acreage of customary lands under the jurisdiction of chiefs of various communities.
- **Local Norms and Customs:** it is important to state that some of the very smart things done in our social settings are guided by norms and social values and customs. The review undertaken has shown that norms, values and customs have played useful roles in sustaining land resources up till now. As norms, values and customs seem to be loosing out, it is important for the stakeholders in our traditional settings to explore ways of strengthening socio-cultural practices regarding land use and management. One way by which this can be done is to seek ways of documenting socially acceptable norms and customs and soliciting the TMA to make them bye-laws so that they can have some legal backing and be enforceable by laws of the system. Sanctions for violations should also be made stricter and deterrent enough. A fine of say GHC50.00 is not enough deterrent for wantonly destroying a tree specie that has taken thirty years to grow.
- **Common Property:** the current practice whereby common property seems not to be owned and used anyhow should be stopped. The use of resources such as rivers and water resources and grazing lands should be accompanied with some socially acceptable rules. As well there should be roles assignments and some level of supervision over the use of common property. In the past people who used a common footpath to their farms had

come together to weed around the paths. These are rich practices that can be enhanced to include common properties such as rivers and pasture lands.

- **Capacity Building:** as population grows and the communities expand, there must be provisions for livelihoods outside the traditional land use sector. Capacities should be built in the areas of alternative livelihood systems that do not use so much land. These could include bee-keeping, snail rearing, grasscutter rearing and the rearing of poultry and other farm animals. Formal education should also be improved both in access and quality to enable more rural folks to be educated.
- **Water Resources:** the Tano River is an important resource in the Techiman Municipality and crosses the municipality three times. Over the years poor use practices have led to excessive silting of the River and as well other water bodies in the Municipality such as the Rivers Fia, Adeasu, Subini, Asutia, Dona, Aprukusum, Traamu and Aboma. The Assembly should institute measures to de-silt all such rivers. It is also important for mechanisms to be put in place to ensure that people do not farm along such water bodies and even if they do they must have certain responsibilities to fulfill.

6.3: CONCLUSIONS

Basic to human existence is land for which reason its efficient utilization is necessary to ensure that it remains beneficial to generations. The Techiman Municipal area is relatively well endowed with fertile lands, water resources and tree species that support productive economic activities. Poor resource governance and management practices have combined to create conditions of unsustainable use of land resources.

The Techiman area has strong socio-cultural institutions and as well public institutions that can help transform the current land management practices and reverse the trend of depletion of natural resources. The need for effective collaboration among all stakeholders to achieve this laudable idea cannot be over emphasized.

This study has come up with interesting revelations to the effect that long term food security of the Municipality can be threatened if nothing is done to salvage land. It is recommended among others that there should be strengthening of the institutions of land governance, building capacities in the land use sector and strengthening local rules and regulations in land use. The recommendations of this study when implemented effectively would help transform the district situation and strengthen the basis of human survival now and for future generations.



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APPENDICES

APPENDIX I: STRUCTURED INTERVIEW SCHEDULE

DEPARTMENT OF PLANNING

SPRING PROGRAMME

KNUST, Kumasi

Data Collection Instrument on the Topic: The Role of Traditional Property Rights in the Sustainable Use of Rural Lands in the Techiman Municipality (Chiefs and Clan Heads)

1. For how long have you been a chief/clan head?
A) 1 year, B) 2 years C) 3 years D) 4 years E) 5 years F) 6+years
2. Do you have sub-chiefs/sub-heads? A) Yes B) No
3. If yes how many? A) 1 B) 2 C) 3 D) 4 E) 5 F) 6+
4. Which areas fall under your jurisdiction? Please List Names of Places
5. Who owns land in these areas? A) Chiefs B) State C) Clan Heads C) Individuals D) Others (Specify.....)
6. What is the extent of land ownership rights by chiefs? A) Land for Settlements B) Farming C) Commercial purposes D) Others (Specify.....)
7. What constitute land in this community? A) Compact Surface B) Water Bodies C) Forest Cover D) Mineral Resources E) Others (Specify.....)
8. What are the socio-cultural settings within which land is accessed in this community? A) Matrilineal Inheritance B) Patrilineal Inheritance C) Abunu/Abusa D) Informal Relations E) Common Property F) Others (Specify
9. What are the predominant land tenure systems of this community? A) Allodial title B) Clan C) Family D) Individual E) Others (Specify.....)
10. Are there any socio-cultural practices that are inimical to the sustainable use of land resources? A) Yes B) No
11. If yes, what are they and how are they inimical to sustainable use of land? A) Restrictions on animals/crops to farm B) Women can't go to the farm during menstruation C) Women have no tenure rights D) Others (Specify.....)

12. Are there any public institutions of land management in this district? A) Yes B) No

13. Is there any collaboration between you and such institutions? A) Yes B) No

14. If yes, on what issues and activities?

.....
.....

15. Has there been any capacity building programme on land use issues in the community before? A) Yes B) No

16. If yes what was it about?

.....
.....

17. Which institution organized it?

18. Are there any civil society and informal institutions in the land management in this district? A) Yes B) No

19. If yes, mention them and their functions.

.....
.....
.....

20. What are the competing interests in land in your jurisdiction/family? A) Family Members
B) State Interest C) Private Entrepreneurs D) Migrant Farmers E) Herders and Pastoralists
F) Smallholders G) Others (Specify).....

21. How does these interests impact the following using a scale of 1-5:

MEASUREMENT SCALE	1	2	3	4	5
SUSTAINABILITY INDICATORS					
Environmental Sustainability of Land Use					
Water bodies and river courses					
Forest cover					
Soil fertility					

Economic Sustainability of Land Use					
Family incomes					
Food availability					
Land productivity levels					
Cost of cultivation					
Social Sustainability of Land Use					
Equitable access to resources					
Equitable access to information and services					
Protection of acquired rights					
Redistribution of wealth derived from land use and management					
Active participation of stakeholders in policy development					
Governmental and local accountability for resource use					
Respect for and valuing indigenous knowledge					
Room for social and cultural evolution					
Fulfilling people's cultural and spiritual needs					

Scale: 1 = Strongly Agree, 2 = Agree, 3 = Undecided, 4 = Disagree, 5 = Strongly Disagree

22. Which ways of land acquisition do you advocate and why? A) Abunu/Abusa B) Outright Purchase/Lease C) Rent D) Informal Relations E) Others
(Specify.....)

23. Are there sanctions or remedies in place for people whose land use practices conflict communal norms? A) Yes B) No

24. If yes, what sanctions or remedies are they? A) Fines B) Prohibition from land use C) prosecution D) Offering of sacrifices E) Others (Specify

25. What land tenure management systems would you recommend for the district as a whole?
.....
.....
.....

26. Why do you recommend the above systems?
.....
.....
.....

APPENDIX 2: SEMI-STRUCTURED INTERVIEW SCHEDULE

DEPARTMENT OF PLANNING

SPRING PROGRAMME

KNUST, Kumasi

Data Collection Instrument on the Topic: The Role of Traditional Property Rights in the Sustainable Use of Rural Lands in the Techiman Municipality (District Assembly)

1. When was this District created?
.....
2. How many decentralized departments are operating in the district?
.....
3. Which of them have relevance for land use?
.....
.....
.....
.....
4. Who owns land in this district?
.....
.....
5. What are the different types of land in this district? A) Compact Surface B) Water Bodies
C) Forest Cover D) Mineral Resources E) Others (Specify
.....
6. What is the socio-cultural set-up of the communities of this district?
.....
.....
.....
7. What are the different land tenure systems in this district?
.....
.....
.....

8. What are the socio-cultural practices of the communities in the district in relation to land use?.....
.....
9. How supportive or inimical are these practices to sustainable land use?
.....
.....
.....
10. What are the public institutions in place for land management and what are their functions?
.....
.....
.....
11. What are the civil societies and traditional institutions for land management in the District and what are their functions?
.....
.....
.....
12. What are the informal sector institutions for land management in the district and what are their functions?
.....
.....
.....
13. What are the different and predominant land use types in the District?
.....
.....
.....
14. What systems are in place for managing land and land resources?
.....
.....
.....
15. How do public sector agencies access land for developmental purposes?
.....

.....

 16. What roles do the district assembly play in the overall management of land and land resources in the district?

17. Are there any land use conflicts in the district? A) Yes B) No

18. If yes, how are they being managed?

19. Are there any land use systems that are detrimental to future livelihoods? A) Yes B) No

20. If yes, please mention them.

21. How do people acquire land in the rural parts of this district?

22. Using the table below, to what extent does tenure rights influence the issues under consideration?

Issues	Highly influential	influential	Neutral	Not influential	Highly not influential
Crop type to be cultivated					
Type of farming system practiced					
Adoption of alternative livelihood activities					
Type of farm animals raised					
Equitable access to resources					
Redistribution of wealth					

Valuing of indigenous culture					
Food availability					
Efficiency of investment					

1. What is the district doing to promote and ensure sustainable land utilization?

.....
.....
.....

2. What interventions are on-going in the land sector in the district?

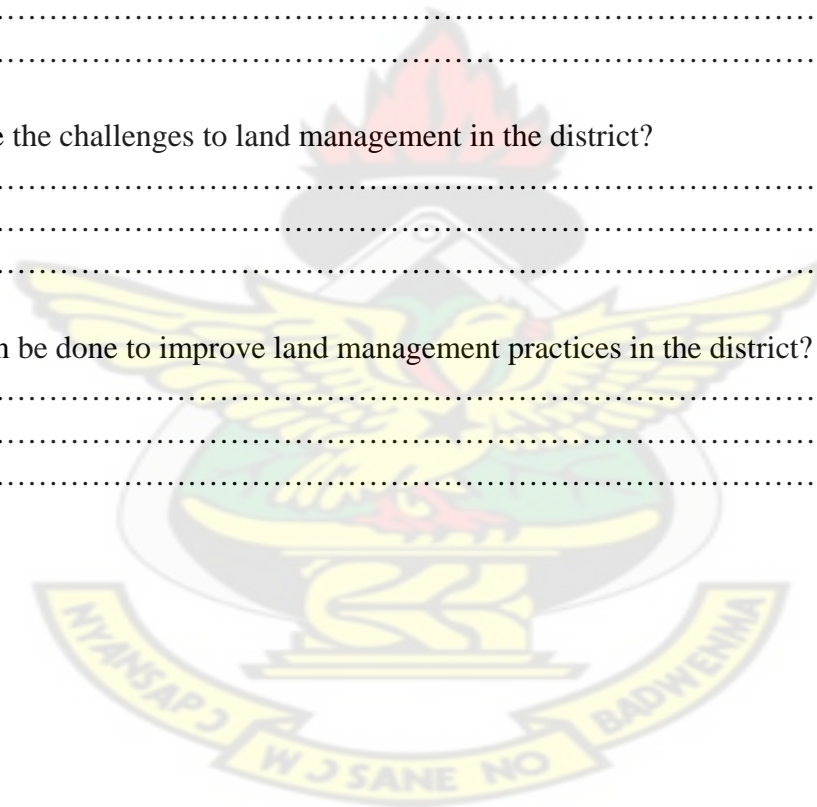
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.....
.....

3. What are the challenges to land management in the district?

.....
.....
.....

4. What can be done to improve land management practices in the district?

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.....
.....



APPENDIX 3: SEMI-STRUCTURED INTERVIEW SCHEDULE

DEPARTMENT OF PLANNING

SPRING PROGRAMME

KNUST, Kumasi

Data Collection Instrument on the Topic: The Role of Traditional Property Rights in the Use of Rural Lands in the Techiman Municipality (Other Land Related Agencies)

1. Department
2. Name of Respondent
3. Position of respondent
4. For how long have you been working in this district?
.....
5. What are the responsibilities of this outfit in land management?
.....
.....
6. What constitutes land in this district?
.....
7. Who owns land in this district?
.....
8. Who has access to land in this district?
.....
9. How do people acquire land in the rural parts of this district?
.....
10. Using the table below, to what extent does tenure rights influence the issues under consideration?

Issues	Highly influential	influential	Neutral	Not influential	Highly not influential
Crop type to be cultivated					
Type of farming					

system practiced					
Adoption of alternative livelihood activities					
Type of farm animals raised					
Equitable access to resources					
Redistribution of wealth					
Valuing of indigenous culture					
Food availability					
Efficiency of investment					

11. Who are the key actors in the land sector of the district?

.....

12. What are their roles and responsibilities?

.....

.....

13. What are the socio-cultural practices within which land management is situated in this District?

.....

.....

14. What are the competing interests in land in this district?

.....

.....

15. How are the diverse interests in land balanced out?

.....

.....

16. Are there any land use conflicts in the district? A) Yes B) No

17. If yes, how are these being handled?

.....

.....

18. How sustainable are the land use practices in the district?

.....
.....

19. What interventions are on-going in the land sector of the district?

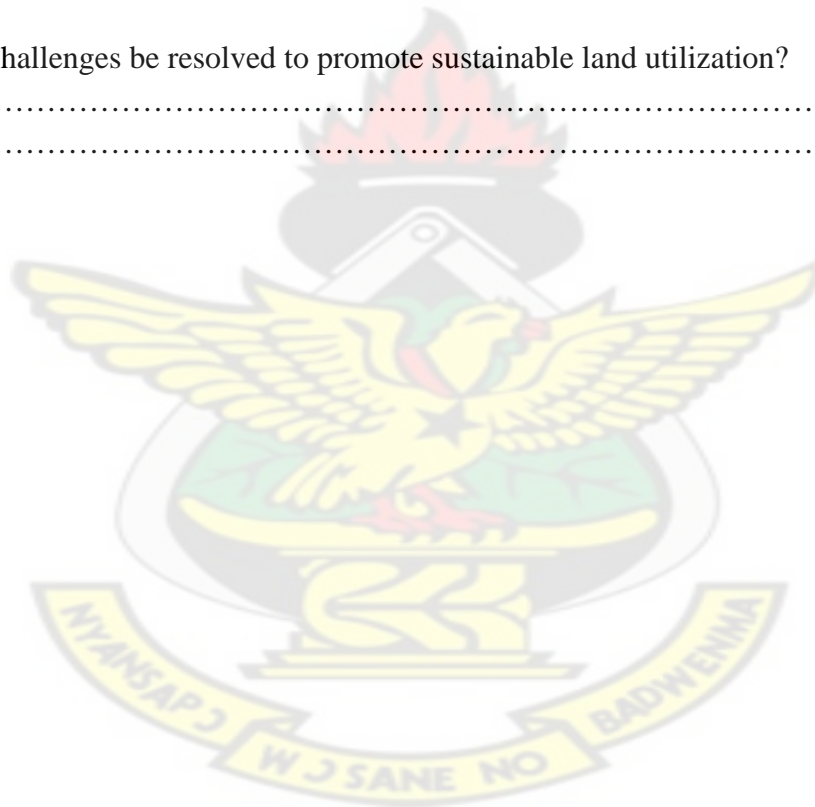
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20. What are the challenges to sustainable land utilization in the district?

.....
.....
.....

How can these challenges be resolved to promote sustainable land utilization?

.....
.....



APPENDIX 4: FOCUS GROUP DISCUSSION GUIDE

DEPARTMENT OF PLANNING

SPRING PROGRAMME

KNUST, Kumasi

Data Collection Instrument on the Topic: The Role of Traditional Property Rights in the Sustainable Use of Rural Lands in the Techiman Municipality (FGD Guide for Land Users)

KNUST

1. Who owns land in this area?
2. How can one access land for productive purposes?
3. How sustainable are the land use practices of this area?
4. What accounts for the existing land use practices?
5. What are the challenges to sustainable land use?
6. What can be done to make land use sustainable in the long-term?