CHALLENGES FACING WOMEN IN ACCESSING AND CONTROLLING NATURAL RESOURCES IN TUUTI WARD, BUNGOMA COUNTY IN WESTERN PART OF KENYA

BY

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DECLARATION

This project is my own original work and has not been presented to any other institution for award of a degree.

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This project has been submitted in partial fulfilment for the award of Master of Arts in Gender and Development studies with my approval as University of Nairobi.

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LIST OF ABBREVIATIONS

NR	Natural Resources
NRM	Natural resource management
IWRM	Integrated Water Resources Management
NTFP	Non Timber forest products
NRMP	Natural Resource Management Programmes
TI	Traditional Institutions
CNRM	Cultural and Natural Resource Management
GDP	Gross Domestic Product

CHAPTER ONE

1.0 BACKGROUND OF THE STUDY

1.1 Introduction

NR provide a range of goods and services—food, fuel, medicines, fresh water, fisheries, and air and water regulation that support life on earth.

NRM is multi-sectored, encompassing many sectors, including environment, agriculture, irrigation, forestry, livestock, IWRM and energy, to name the most obvious. Over the past 50 years, ecosystems have changed more rapidly than in any comparable period of time in human history largely because of the need to meet rapidly growing demands for food, water, timber, fibre, and fuel (MEA 2005). NR underpin livelihoods for the vast majority of populations worldwide, and are often the driving force behind economic development, industry and gross domestic product (GDP). Kenya's natural resource base includes mainly forests, wetlands, dry land, aquatic and marine resources; globally it has been recognised that natural recourses management is linked to the economy of the land and the livelihood of the people. Actually the Kenyan economy relies heavily on natural resources to support people's livelihoods and to contribute to national income.

The rural poor in developing countries remain the most directly dependent on natural resources for their food and livelihood security. Subsistence farmers, fishers, hunters and gatherers, and agricultural wage workers (more than 1.3 billion people) depend on the availability of usable land, water and plant and animal species for their livelihoods (FAO 2004). Thus, the agricultural livelihoods of poor rural women and men depend on the condition of natural resources, particularly livelihoods of people living on fragile lands (World Bank 2005)

In rural Kenya with such huge populations depending on natural resources for their livelihoods there are major issues and concerns surrounding NRM and this has greatly contributed to poverty. While Kenya is on the path to economic growth, poverty reduction remains a challenge. Nearly half of the country's 43 million people live below the poverty line or are unable to meet their daily nutritional requirements. More than three quarters of the population lives in rural areas, and rural households rely on agriculture for most of their income. The rural economy, in turn, depends mainly on smallholder farming, which produces the majority of Kenya's agricultural output

(IFAD 2013). About 70 per cent of the poor are in the central and western regions, living in areas that have medium to high potential for agriculture. Rural women are amongst the most vulnerable groups, because they do not have equal access to social and economic assets; subsistence farming is the primary source of livelihood for most of these women (IFAD 2013).

Women constitute a large percentage (over half) of the rural population. Women are socially more burdened in rural Kenya. Their activities range from family economic activities to running of homes and rural development projects. They are also a more appropriate group to target for cultural and social changes. Their activities in development and family care put them in the central position regarding impacts to land and other natural resources. To many poor rural farmers, especially women, nature sustains society because they use the natural resources to feed their families. This sustainability is crucial to them if they have to sustain livelihoods off these resources.

There are many challenges especially for rural women surrounding resources management in Kenya that impede equitable NRM for national development. Among these challenges include the tenure security, socio cultural issues and equitable access to land and other natural resources. They strongly influence the extent to which men and women alike are prepared to invest in improvements in production and natural resource management and in new technologies; they shape decisions on whether women will engage in commercial or subsistence farming; determine how benefit streams from agricultural activities are divided amongst men and women in households and communities; impact on people's access to credit which is a are a major factor in shaping social relations and contribute to social stability or, in situations of land tenure insecurity, they contribute to social instability and conflict.
In general, poor people and marginalized groups have less access to land and weaker land rights; typically women do not enjoy the same land rights as men and this can have a major impact on household vulnerability and livelihoods. In recent years, growing populations, declining soil fertility and increasing environmental degradation have all heightened demands and pressures on land and other NR; dynamics such as the HIV/AIDS pandemic and new opportunities for agricultural commercialization

have put new tensions on tenure systems, from which the rural poor(women especially) are the first to suffer.

1.2 Problem Statement

In many developing countries, there are gender disparities when it comes to access and control of NR and women are mostly constrained. Among other valuable resources are forest, freshwater, animals, fuel etc and where land is concerned for instance laws and customs impede women to fully utilise land as an input into production or as collateral for instance for credit. Cultural and social attitudes are often more favourable to men as compared to women which limits access to and control over NR.

Rural women are often financially dependent on men or do not have control over economic resources. When it comes to water for instance often women are main users, providers and managers of water yet men have a greater role than women in public decision making as concerns matters of water supply. Unfortunately in Kenya and especially rural Kenya, women have little access and sometimes no control over NR and this inadequacy hinders women participation in NRM for development. These challenges arise from different gender roles, rights, access and control to natural resources of women and men, access to information and technology related to NRM, with most related initiatives targeted for men and traditional norms become a great cause of women being absent in NRM decision making processes at all levels.

Where women have access to and control over NR, it is largely within circumstances of female headed households, through inheritance for instance with a resource like land or when women have an education or background training that has led to securing a dependable income. Despite this factors influencing rural women access to and control of natural resources, taboos and cultural perceptions look down on women's ability to manage NR especially at communal level. It is against this background that this study sought to identify challenges facing women when it comes to access and control of natural resources.

1.3 Research questions

The study attempted to answer the following questions:-

i. What challenges do women face when accessing natural resources in Tuuti Ward in Bungoma County?
ii. What challenges do rural women face when it comes to gaining control of natural resources in Tuuti Ward in Bungoma County?

1.4 General objectives

To examine challenges facing rural women's access to and control of natural resources

1.5 Specific objectives

i. To identify challenges impeding rural women's access to natural resources in Tuuti Ward in Bungoma County in Western Kenya
ii. To identify challenges that hinder rural women from gaining control over natural resources in Tuuti Ward in Bungoma County in Western Kenya

1.6 Significance and justification of the study

This study is expected to provide information and build on the existing knowledge base as concerns the challenges facing women whilst accessing and gaining control over natural resources in rural Kenya. The findings of this study will be relevant to stakeholders in addressing gender issues in rural Kenya when it comes to NRM, at county level. Lastly, it is expected that the study would be resourceful to other researchers who may venture into a similar study.

1.7 Scope and limitation of the study

This study sought to present information on the challenges facing women in rural Kenya when it comes to access and control of natural resources. The study was conducted in the rural sector in Western Kenya at ward level. The limitations of the research study included the lack of full disclosure by participants for fear of being labelled or discriminated against by the local community. The researcher assured the participants that the study would seek to provide the importance of mainstreaming gender issues and concerns in the natural resource management sector at county level

in Kenya. Further the researcher ensured confidentiality of participants and key informants was maintained.

1.8 Definition of terms

Natural resources: Natural resources are resources that occur in nature without being produced by a human; something such as a forest, freshwater and animals (both wild and domestic) found in nature and necessary or useful to humans.

Natural Resource management: It includes those activities which are designed to govern the use of lands, forests, the atmosphere, waters, and mineral resources in a given environment, taking into account environmental constraints, social, economic, and political implications, technological inventions, national policy, and possible future needs (Clark, 1985).

Rural women: Refers to women in this profile who live outside the 21.7% of the urban area of Bungoma County in western Kenya.

Gender Development Index (GDI) it is a wellbeing indicator developed by UNDP that includes gender inequality in its overall assessment of aggregate well-being in a country.

Gender Discrimination: The systematic, unfavourable treatment of individuals on the basis of their gender, which denies them rights, opportunities or resources. Women's differential access to power and control of resources is central to this discrimination in all institutional spheres, i.e. the household, community, market, and state**.**

Women and division of Labour: The culturally determined ideas and practices which define what roles and activities are deemed appropriate for women when it comes to utilisation of natural resources.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of both print and electronic nature and the theoretical framework of the research study.

2.2 Literature review

Eco-feminists believe that there is a relationship between women, human rights, and the exploitation of nature. They argue that male domination is harmful to both women and the environment. Men desire to control women and the environment in order to have complete power. An attempt to control women and the environment leads to the destruction of the environment.

Women, like nature, are viewed as objects to control, manipulate, and plunder (Momsen, 2004). Complete liberation of humans and recovery of bio diversity is closely linked to the liberation of non-humans. Eco feminists believe that there is a deep connection between, hence the term mother nature or mother earth. Women have special affinity with nature through their reproductive rights (Shiva, 1988).It is against this background that that the notion of care is central to eco-feminists who feel that women can care better for the environment. Merchant (1995) calls this “earth-care”, which is crucial if humans, non-humans, and the earth are to be liberated. Merchant (1995) feels that women have a central role in preserving and understanding nature. Women are called to ‘lead an ecological revolution to save the planet’. However, this can be done if women’s role in the construction of environmental knowledge is recognized (Shiva, 1988). It is unfortunate that patriarchal power has made women to turn against the environment instead of living in harmony with it. Women have little access and control of environmental knowledge and the natural environment, for example, wild vegetation, plantations, wildlife, and resort areas, among others.

Importance of rural women’s accessibility and Control to resources

It is common knowledge in rural Kenya that women (and not men) are indeed the (invisible) managers of natural resources. These resources include land, water, forests

and wildlife. Most rural women are comparatively poor and uneducated. Most of them do not hold a monthly paying job and therefore are commonly referred to as housewives. But these women are great sustainers of rural micro-economic activities. However nowhere is their impact and activities more significant as their indigenous knowledge of, and management of natural resources such as land, water, forests and wildlife. They are crucial because their traditional gender roles bring them in direct contact with these natural resources, and their survival and that of their families depend directly in exploiting and harnessing supplies from these natural resources.

To many poor rural farmers, especially women, nature sustains society because they use the natural resources to feed their families. This sustainability is crucial to them if they have to sustain livelihoods off these resources. Thus when the world environmental protection and conservation policies advocate for protection without any form of use, while ignoring rural women, they become the greatest victims of such a policy.

Women constitute a large percentage (over half) of the rural population. Women are socially more burdened in rural Kenya. Their activities range from family economic activities to running of homes and rural development projects. They are also a more appropriate group to target for cultural and social changes. Their activities in development and family care put them in the central position regarding impacts to land and other natural resources.

Impact on environment is a direct consequence of economic and social factors. Chief of these factors is population size, and growth rate. Destruction of forests, riparian habitats and other sensitive areas arise mostly from increase of population. To be able to control population, improve rural development, and to protect natural resources, the role of women is critical. Rural Kenya is among the areas with the highest population size growth rates, while the natural resources {Wildlife, Forests, Wetlands, Land, Water and fisheries} are decreasing. This paper will discuss the role of women and their impacts on these critical natural resources.

This information is important for decisions on which gender is the relevant target group for education and mobilization concerning rural environmental issues. Such

knowledge is also important for national planning and policy formulations concerning the use of land and natural resources in the country

Gaps in rural women's access to and control of natural resources

In Africa, rights to factors of production are gendered. Gender gaps are widespread in access to and control of resources in economic opportunity, power, and political voice. Women and girls bear the largest and most direct costs of these inequalities (World Bank, 2001). In Botswana, Lesotho Namibia, and Swaziland, women are under the permanent guardianship of their husbands and have no independent right to property. While female-headed households form about one-third of all households in Zambia, they (women) are underrepresented among the larger farms, with only a fourth of farms larger than two hectares owned by women (World Bank, 2001).

In Kenya, female-headed households own less than half the farming equipment than male-headed ones (World Bank, 2001).The significance of this for resource management is that the benefits of land-improving conservation technologies are perceived differently by men and women, and women may, quite rationally, be indifferent to long-term strategies for land improvement since they may feel being used for the benefit of men. It is argued here that women's usufruct ownership should be transformed into real ownership, which will give women power to effect whatever conservation changes they may deem necessary without unnecessary questioning from their male counterparts.

A study of water access during the 1991-1992 drought in Nkayi District, Zimbabwe found that female users of borehole water had to give precedence at water points to (male) cattle watering (Elson and Cleaver, in World Bank,2001). That is to say, when water supply is under stress, gender divisions of labour put women at the sharp end of water shortage.

According to a research done by the world bank in gender and natural resource management, rural women's and men's different tasks and responsibilities in food production and provision result in different needs, priorities, and concerns. Although rural women's and men's roles and responsibilities vary across regions and cultures, they often follow similar gender divisions of labour. In most regions men use natural resources in agriculture, logging, and fishing for commercial purposes more than

women. In crop production in many regions of the developing world, men tend to focus on market-oriented or cash crop production, whereas women often work with subsistence crops, minor crops, and vegetable gardens. Women often grow a wider diversity of crops. In some cases men and women per form complementary roles—for example, men clear land, women plant and tend crops and men harvest and market crops. In many countries, women and children spend much time on water collection, effectively reducing the time for other valued activities (Gordon, et al., 2004). Gathering non-timber forest products (NTFPs), such as edible foods, is predominantly the responsibility of children and women. For example, in the mountain areas of east Africa, women spend most of their time collecting and supplying water to their homes and communities. This further goes to shows gender discrimination in NRM.

In most societies women typically have fewer ownership rights than men (Rocheleau 1996). Women frequently have de facto or land-use rights as compared to men's de jure or ownership rights. Women often have use rights that are mediated by their relationships with men. How men and women use resources reflects gendered access. For example women may collect branches and limbs from trees, whereas men may have rights to harvest trees. Women household heads remain at a particular disadvantage in terms of access to land, water, and other natural resources.

Equal participation in community-based decision making remains a complex and difficult goal to achieve, especially in the contexts of highly unequal gender and class relations. At the local level, more NRMP's emphasize community-level participation. Careful and thoughtful planning in relation to gender must be exercised in the design of participatory projects. Community-level participation often leaves women's voices and concerns unacknowledged. Even when women attend meetings or events, they may not feel free to voice their opinions, or their opinions and needs may not be taken seriously (Agarwal 2003; Prokopy 2004). Community participation often favours local elites, usually men, but sometimes elite women's concerns directly conflict with and override poor women's access to resources such as fuel and water (Singh 2006; Sultana 2006). Despite attempts to mainstream gender at the national and international levels, few women participate.

Men tend to dominate in the newly emerging decision-making and policy arenas of climate change and bio energy. Women's limited participation in decision making processes at international and local levels restricts their capacity to engage in political decisions that can impact their specific needs and vulnerabilities (Denton 2002; Masika 2002). Interestingly, decision- making of intervention measures meant to improve such resources availability is patriarchal as men control both nature and women.

Despite numerous efforts to mainstream gender, development agencies find these efforts particularly difficult in the agriculture and natural resource arenas due to pre-existing TI's. For example, extension personnel in agriculture and natural resources frequently speak only to men, often erroneously expecting that the men will convey information to their wives. Until gender is successfully mainstreamed, women's groups, organizations, and networks can increase women's access to knowledge, information, and technologies (Agarwal 2003; Enarson and Meyreles 2004; Sachs 2007).

Notably, despite the many challenges that women face in gaining access and control over natural resources, women have the potential to make a large contribution to NRM due to their role in management of primary resources. Increasing women's power and sustainability are ecologically tied. Practical relationship between women and the physical environment must be made visible. There is need to set up gender aware policies to mainstream gender in natural resources management. Gender aware policies can be redistributive or gender targeted (specific). Redistributive gender aware policies are transformational and they recognize that women are development actors, just like men. Gender redistributive policies, for example, the Zimbabwe National Gender Policy of 2004 (Government of Zimbabwe, 2004) change existing distribution of power and resources to create a more balanced relationship between men and women, while gender specific policies target a disadvantaged gender, for example, Southern Africa Development Community (SADC)'s quota system in politics, which targets women as a disadvantaged group and calls for a third of women in crucial decision-making positions. The policies should be in line with environmental management policies. The policies and projects should be designed with strong gender sensitive participatory approaches. Women's positions can be

improved by more control over resources, redistribution of roles, and change of gender relations. Women's status in customary law needs to be legally enhanced. Women also need to be empowered on their rights to break patriarchal and cultural barriers that relate to use and ownership of resources. Gender empowerment enables both men and women to accept each other as development partners. Gender analysis models, like the Harvard Model, need to be applied at household and community level the roles of men and women, their needs, resources used, time, and labour invested and how these impact each gender. Planning, implementation, and monitoring of intervention projects should be gender responsive, that is, taking action to correct gender biases through gender aware policies. To ensure this, there should be campaigns that raise the awareness of gender issues among all stakeholders, including communities at grassroots level, civil servants, and community leaders right up to the national level. There should also be representation of women in resource management boards and administrative structures. Environmental policies should, therefore, interface with gender policies for sustainable development to be achieved.

2.3 Theoretical framework

The theoretical underpinning that informed this study traces its roots from ecological feminism.

The primary belief of eco feminism is that the domination of women (as studied in traditional feminism) parallels the domination of nature and that this mutual domination has led to environmental destruction by the controlling patriarchal society. Within feminism, most scholars believe that a historical, symbolic, and theoretical connection exists between the domination of nature and women. This philosophy is based on four principles (Warren 1990): 1) there are vital connections between the oppression of nature and women, 2) understanding these connections are necessary to understanding the two veins of oppression, 3) feminist theory must include an ecological perspective, and 4) ecological problems must include a feminist perspective.

Eco feminism claims that both women and nature are dominated and thus stresses the need for a more interdependent worldview. Eco feminists believe that all living things are essential to the wellbeing of the planet and that humans are not separate or superior

2.4 Relevance of the Theory

The gender division of labour requires a more nurturing and caring role for women, therefore that caring nature places women closer with the environment. The knowledge of nature is shaped by the experiences an individual has. Women have a distinct knowledge of the natural resources, yet are excluded from policy decisions of development on that land. This is prominent in many developing countries where the responsibility of collecting fuel and fodder is placed upon the women. Both the resources and the meanings are taken into consideration with environmental feminism. There is a challenge to not only focus on the gender division of labour but also the actual appropriation methods of the resources. In other words, there is not simply an inherent connection between women and nature; rather there are material realities that exist.

2.5 Assumptions

The study is based on the following assumptions:-

- Women in rural Kenya face challenges when it comes to access of NR.
- Women in rural Kenya face challenges when it comes to gaining control of NR.

CHAPTER THREE

3.0 METHODOLOGY

3.1 Introduction

This chapter contains the research design, the target population, sample size, sampling technique, and data collection methods including the justification of the method used, data analysis and the ethical considerations.

3.2 Study Area

The study was conducted in Tuuti Ward, Kanduyi constituency, Bungoma County in Kenya. The study of the target zone was informed by among others; the high rural population women who rely heavily on natural resources as their means of survival and livelihood.

3.3 Research Design

The study employed descriptive research design. This design involved observing and describing the behaviour of the primary target population that is the female heads and the women leaders. Qualitative data was collected through the use of well-focused group discussions and interviews on key informants (see appendix 1 on guideline for focused group discussions and appendix 2 on interview guidelines).

3.4 Target Population

The primary target population for this study was women heads in the rural households and community women leaders. Other key informants among others were direct custodians of natural resources including chiefs, clan heads, family heads, soothsayers, diviners and rainmakers. The choice of the target population was informed by the study objectives and topic.

3.5 Sample size and Sampling procedure

In research the rationale is to make generalization or to draw inferences based on samples about the parameters of population from which the samples are taken (Yin, 1993). Hence, Miller (1991) concurred that the researcher needs to select only few items from the universe for his study purposes. This study used the non-probability sampling such as the “deliberate sampling”, “purposive sampling” or “judgment sampling” (Bernard, 1990) procedures, although they do not offer any basis for

estimating the probability that each item in the population has being included in the sample (Bernard, 1990).

In qualitative research, the sampling is generally purposeful so that the participants chosen have experience with the central phenomenon being studied. This study followed these guidelines and used purposeful sampling. Creswell (2009) recommended selecting participants that will best help the researcher understand the questions associated with the research study.

The current total population Tuuti ward is 16,385 people in the region, with women being over half of the population. The researcher used cluster sampling to select the sample size for the study which was logically assumed to be representative of the population. Each primary participant in the study was selected because of her role as a community leader and or her status as female head. Through the cluster sampling, the researcher identified and selected 5 groups of (8-12 women in a group) in the sub villages in Tuuti ward. A cross-section of 50 other key informants among others direct custodians of natural resources were selected including chiefs, clan heads, family heads, soothsayers, diviners and rainmakers; a total population of 50 primary participants and 50 other key informants, i.e. 100 total participants were targeted.

3.6 Data collection methods/ Research instruments

The researcher used two main methods of data collection which were focused group discussions and key informant interviews. These enabled rapid assessments of the data or in-depth studies of the participants.

3.6.1 Focused Group Discussions

A focus group discussion in form of group interviewing was employed in which women –8 to 12 people –led by a moderator (interviewer) had discussions around the major areas of the objectives and topic. Among other key areas discussed were the education background of the women, their key occupation and issues and concerns surrounding their access to and control of natural resources.

3.6.2 Key Informant Interviews

Key informant interviews, through face to face interviews with chiefs, clan heads, family heads, soothsayers, diviners and rainmakers helped in-depth interviews to get

to know further the significance of these natural resources to the community as well as get suggestions and recommendations on how local institutions in the community can contribute to resolving the challenges facing women when it comes to access and control of natural resources within Tuuti Ward.

3.7 Data Analysis and Presentation

The data analysis employed qualitative (descriptive) approaches to examine key issues at stake. Qualitative data analysis was made at the same time during the data collection process and after the overall data collected.

In the data collection process, qualitative field notes captured on daily basis on historical events, conversations, interviews and stories on natural resource management issues during group discussions and interactions in the focused groups were analyzed after the day's work. The rationale was to keep track of important events/ issues that crop up in the days work and prepare adequately for the next day. It is also to look for consistencies and inconsistencies between knowledgeable informants and find out why informants agree or disagree on important issues on the subject matter (Bernard, 1990).

Narrative analysis was used as an approach to analyze the data. Embedded in Reissman's (2008) approaches to narrative analysis are two main analytic approaches which were used: thematic analysis and visual analysis. Thematic analysis relied on categorizing accounts or aspects of accounts that were told whilst visual analysis focused on the analysis of all videos recorded.

3.8 Ethical considerations

The research sought the approval of the Ministry responsible for Higher Education through the Institute of Anthropology, Gender and African studies, University of Nairobi. The researcher also requested permission to conduct the study from the Mayor, town clerk, down to the village chief of Kanduyi constituency.

The researcher conducted the focussed group discussions by herself as well as interviewed key informants personally. Information gathered therein was treated with all confidentiality and purposely limited for research study only. Any disclosure shall be consent with all parties. The participants were informed about the objectives of the study, the manner in which the finding shall be disseminated and used.

Anonymity of the participants was protected by using numbers instead of personal names within the focused group discussions. Participants were voluntarily chosen to participate in the study. The researcher ensured that the analysis of the research findings was done objectively, accurately and credibly. No fabrication or plagiarism took place during data analysis. The study was shared with policy makers responsible for NRM in Kenya and all interested stakeholders.

CHAPTER FOUR

4.0 RESULTS AND DISCUSSIONS

4.1: Introduction

This chapter provides the analysis of data arising from the focus group discussion. The purpose of the data analysis was to obtain information that will provide a clear understanding on challenges facing rural women's access to and control of natural resources. Conclusions were drawn in comparison with the information ready available on the subject in the literature.

The data was categorized into demographic information and relevant aspects of the characteristics that hinged on natural resources management issues are discussed. The computer program used for the data analysis was the Statistical Package for the Social Sciences (SPSS) version 17. The descriptive data is presented as frequencies and percentages in tables and bar charts. The total number of respondents who participated in this research was 100 who were sampled, giving a response rate of 100.0%.

4.2: Findings on demographic information

The following presents detail analyses of the characteristics.

4.2.1 Age and Status in the Community

The research revealed that, the aged is a receptor of knowledge, hence, in traditional societies they are often respected and seen as authorities in their various fields of endeavours while the younger ones learn from them, as such, they occupy relevant leadership positions in the community either by succession, inheritance or parents vocation. To either reject or accept this notion, the study cross-tabulated the relationship between Age and Statuses in the district. Table 4.2 gives a picture of the situation.

Table 4. 1: Age and Status in the Community

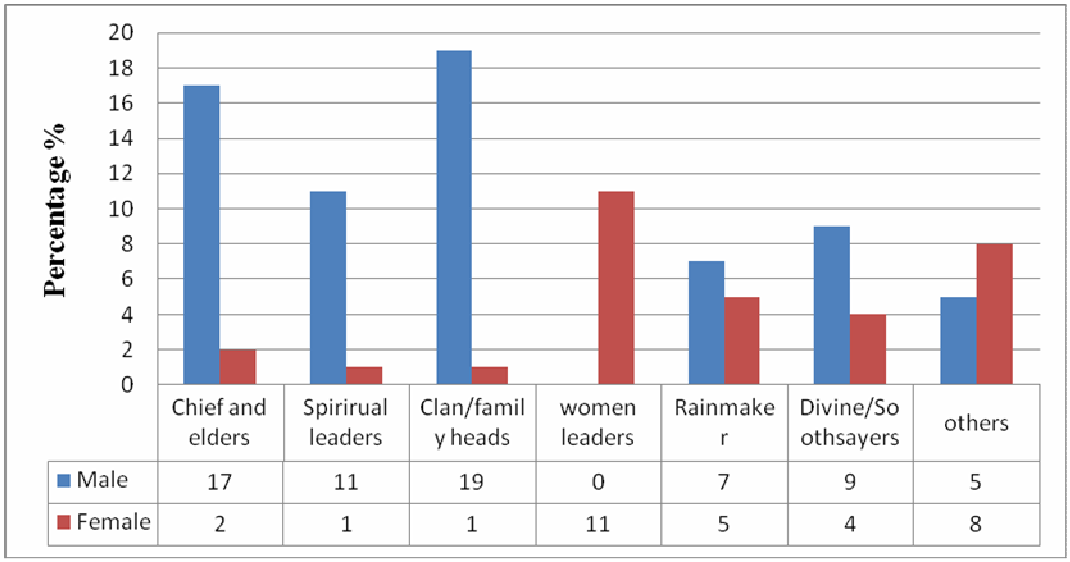
Status in the community	Age						Total
	15-25	26-35	36-45	46-55	56-65	66 +	
Chief and elders	-	-	2	3	8	4	17(100)
Land priests	-	-	1	3	4	4	12(100)
Clan/family heads	-	3	2	4	6	9	24(100)
Women leaders	-	-	2	3	6	5	16(100)
Rainmakers	-	-	-	2	4	-	6(100)
Diviners	-	2	-	3	8	3	16(100)
Others	1	-	-	-	5	3	9(100)
Total	1	5	7	18	41	28	100(100)

Table 4.2 depicts age groups range from 15 to 66+ years and above of respondents of various statuses in the district. From the table 4.2 only 1 respondent (other statuses) representing 11.1% of the responses was recorded for age group 15-25. The modal age group for all the statuses in the district was 56-65 representing 41% of the responses. In this age group the frequencies were8, 4, 6, 6, 4, 8 and 5 representing 47.1%, 33.3%, 25%, 37.5%, 66.7%, 50% and 55.6% for Chief and Elders, land priests, Clan/family heads, women leaders, Diviner/Soothsayers, Rainmakers and other institutions respectively. This was followed by age group 66+ which recorded a total of 28 responses representing 42.5% for Chief and Elders, 33.3% for land priests, 37.5% for Clan/family heads, 31.3% for women leaders, 18.8% for Diviners/ soothsayers and 33.3% for other institutions.

The lowest response for all the statuses in the district was within the age group 15-25. In this age group nothing was recorded for all the statuses in the district except 11.1% representing just 1 respondent for the other institutions. Unfortunately, this age group falls within the younger generation.

4.2.2 Gender Status and Community Institutions

The findings are that men dominate the rural scene in the leadership and decision making structures and generally exclude women (Apusigah, 2004). A great majority of traditional governance structures in the district did not have women occupying positions such as chiefs, spiritual leaders, council of elders, clan heads etc as a result, their direct voices in decision making process is greatly constrained (Millar,2006) but indirectly women have a big influence on the so-called men decision in their own subtle ways. Old women and first wives are considered as “men” and so are parts of decision makers.



	Chief and elders	Spirirual leaders	Clan/family heads	women leaders	Rainmaker	Divine/Soothsayers	others
Male	17	11	19	0	7	9	5
Female	2	1	1	11	5	4	8

Figure 4. 1: Community Institutions and Gender

Fig.4.1 show data on the number of males and females respondents of the traditional institutions in leadership and decision making structures. Out of the 100 respondents, 68% and 32% were males and females respectively. These responses were further disaggregated as follows: The total of 17 respondents for Chief and elders was made up of 88.2%males and 11.8% females while that of land priests (total of 12 respondents) constituted 91.7 % males and 8.3 %females. On the other hand, Clan/Family heads recorded 93.8% for males and 6.2% for females and 0 for males, 16% for females in the case of the women leaders. Rainmakers, Diviners/soothsayers and other institutions attracted values below 11% for males and 5% for females as in Fig 4.3. From the statistics in Fig 4.3 gender and the composition of traditional institutions in leadership and decision making structures remain a challenge in the

ward. The data revealed male dominance at the various levels of the community institutions except for the women leaders' institution which is generally nominated on the basis of their leadership qualities by the women themselves (Bonye and Millar, 2004).

Essentially, the institution of chieftaincy and spiritual leadership in the district is all male affairs as indicated in Fig 4.3. This however, contrasts with recent study (UDS/Care International, 2004) in West Mamprusi District which shows that women in spiritual leadership positions referred to as tindapoa wield the same authority as their male counterparts. Even though lower percentages were recorded for clan/family heads, diviners/soothsayers, rainmakers and other institutions, they were described as a mix of both sexes. In the light of this, the study agree with Apusigah, (2004) argument that important decisions regarding access to critical natural resources management issues such as land, trees, water may be taken by the males.

4.2.3 Level of Education and Status in Community

Education is perceived as the key to development; hence it enables the individual to realize his or her full potential so as to contribute to the overall processes of community and national development. The uneducated is often frowned upon in formal sector leadership and decision making structures. This however, may be insignificant in the informal sector leadership and decision making structures. The veracity of this statement can be ascertained as shown in Table 4.3 to interpret the relationship between level of education and ones status in the community.

Table 4.2: Level of Education and Status in Community

Status in the community	Age							Total
	Chiefs	**Religious leaders**	**Clan/family heads**	**Women leaders**	**Rainmaker**	**Divine/sooth sayer**	**Others**	
Primary	2	1	2	-	-	1	1	4(100)
Middle	1	-	1	3	1	3	1	13(100)
Voc. Tech	-	-	2	-	-	-	-	2(100)
Secondary	1	-	2	1	-	-	1	4(100)
Post sec	-	-	-	1	-	-	1	1(100)
University	-	-	-	-	-	-	1	1(100)
No education	13	11	-	12	5	11	4	75(100)
Total	17	12	7	16	6	16	9	100(100)

Table 4.2 shows that the level of education and one's status in the community range from primary to university education. A total of 17 Chiefs and elders were interviewed representing 17 percent of the respondents. Out of this, 50% had primary education, 7.7% had middle school education, and 25% had secondary education while 17.3% of the respondents recorded no formal education. The indication is that, the highest level of education attained by chief and elders in the district is up to primary education (50%). The religion institution recorded the lowest level of education attained at all the levels of education in the ward.

Table 4.2 revealed that a total of twelve (12) respondents (priests) were interviewed, out of this, only 1 person, representing 7.7% had education up to middle school level while the remaining 14.7% had no formal education. Rainmakers also recorded as low

as 6 respondents, representing 7.1% and 6.7% for middle school education and no formal education respectively.

For the women leaders, an appreciable level of education was attained at the various levels of education. Of the total of 16 respondents, 23.1% had middle school education, 25% for secondary and 50% for post-secondary education, while 16% had no formal education. Other institutions such as the clan/family heads, diviners/soothsayers, rainmakers and others had values as 25.3%, 16%, 14.7 and 5.3% respectively for no formal education. 23.1%, 7.1%, 23.1% and 7.7% for clan/family heads, diviners, rainmakers' and others respectively were recorded for middle school level education.

On the whole it is obvious that, generally, the level of education among the traditional institutions is low (75 respondents out of the 100 traditional institutions interviewed had no formal education). This confirms the high rates of adults who have no formal education in our rural communities. These findings however, support recent call for traditional authorities in our communities to have some level of education so as to effectively champion development actions, hence, do agree with Dankwa (2004) assertion that, contemporary chiefs in Kenya need some level of education for effective community development.

4.2.4 Occupation of the Respondents

The nature of occupation of respondents may affect negatively or positively the natural resource base in the district and therefore, may influence the way natural resources are managed. It is therefore necessary to do analysis of the respondent's occupation in relation to the natural resource base in the ward.

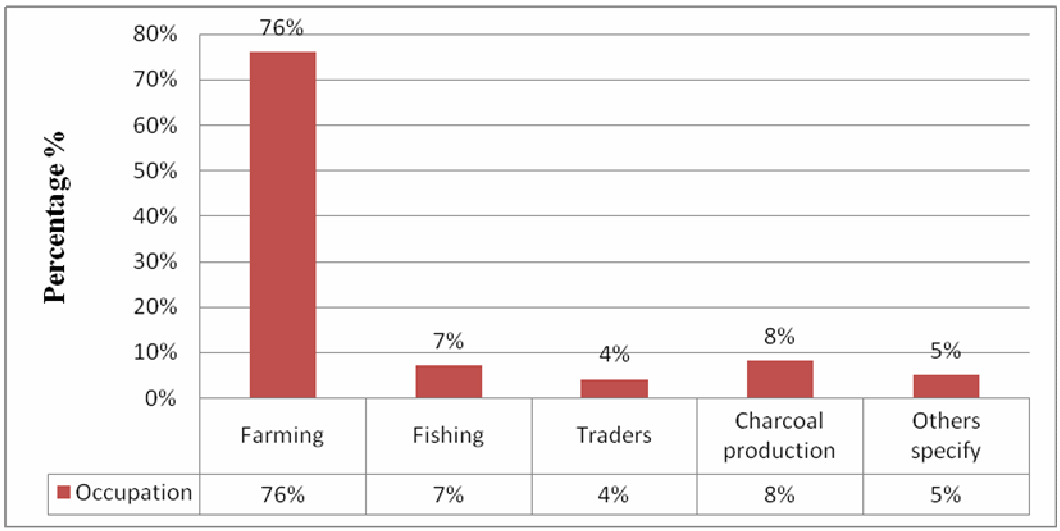


Figure4.2: Occupation of the Respondents

The data in Figure 4.2 shows that 76% of the respondents reported farming as their major occupation. This constitutes the highest percentage of the total respondents. The ward is predominantly subsistence; hence, this figure (76%) did not come as a surprise. Other complementary activities were also reported carried out by the traditional institutions along farming. 8% of the respondents indicated poultry and livestock keeping as next to farming as a way of generating income through sale. This occupation is second to farming in the district. The lowest reported by the respondents was fishing. Only 4% of the respondents do fishing as an activity. 6% of the respondents do charcoal production as their occupation alongside farming, while another 6% are also engaged into other activities including petty trading.

4.3 Issues and Concerns surrounding women's' access to Natural resources

4.3.1 Perception of Natural Resources

This aspect hinges on how the traditional institutions perceive the resources around them. Analyses were made on how issues on ownership, access and control over the natural resources are perceived by the respondents. The perceived spiritual, physical, socio-cultural and economic significance of the natural resources are also analysed. The analysis is presented in figures and tables as follows.

4.3.2 Ownership, Access and Control

Table 4.3 depicts the level of ownership, access and control of forest, water points and wildlife resources in the district. From Table 4.3 , of the total of 3 (100%) respondents for forest, water points and wildlife resources, representing 66.7%,0% and 33.3% respectively indicated that they do not own natural resources in the district. In absolute terms, this represent 2, 0, 1 of the total respondents of 49 for forest resources, 23 for water points and 28 for wildlife resources respectively (see column for totals on Table 4.4). Focus Group Discussions further revealed that ownership of the forest and wildlife are perceived as vested in government and therefore, hunting of wildlife and hewing of trees in the reserve for domestic use is prohibited. This perception is in line with Fairhead and Leach (2004) argument that local resource control is vest in central government institutions in most parts of Africa.

Table 4.3: Level of Ownership, Access and Control

Level of ownership	Natural resources			Total
	Forest	Water Point	Animals	
Don't own	2 (66.7)		28(28)	30 (100)
Don't have access and control	10(34.5)	6(20.7)		16(100)
Have Access but don't control	12(48)	6(24.6)		18(100)
Partial control and access	17(56.6)	8(26.7)		25(100)
Total control and access	8(61.5)	3(23.1)		11(100)
Total	49(49)	23(23)	28(28)	100(100)

The second issue is access and control of the resources. Out of the 29 respondents, 34.5%, 20.7% and 44.8% indicated that they do not have access and control over the resources (forest, water points, wildlife and domestic) while 48%, 24.6% and 28%

constituting 25 of the respondents said they have access to the resources but do not control it. On the other hand, 30 respondents representing 56.6%, 26.6% and 16.7% said they have partial access and control over the resources. A respondent (Chief of Kotintabig, Nangpaana Naba) in Focus Group Discussion said the following concerning partial access and control of the resources in the ward.

> "……. so the forest reserve you see ahead of me is in my family land, we have our gods there and offer sacrifices to them yearly, yet we do not have absolute control over the resources there. We are told by the government people (forestry services division) that cutting life trees and hunting there is not allowed. So you see!, we are limited to the use of the resources in this area (reserve). We are however allowed to fetch herbs, harvest fruits and thatch for roofing as well as dry sticks for cooking".

In a related discussion, Madam Wanjala (Women leader) made a statement in support of non-accessibility and control of the resources in the district. She said: "Our women, our men don't get any benefit from this reserve. I was chased away and my cutlass ceased together with my colleagues when we went to harvest brooms and fetch fuel wood. We are now like strangers in this community".

Whereas communities around the reserves feel they have a legitimate right to resources in the reserves, game and forest policies on the other hand, do not allow them to have access to the resources in the reserve because they cannot guarantee that activities such as fuel wood harvesting, honey tapping, small-scale mining (Galamsey) can be done without causing harm to the ecological integrity of the reserves.

The discussions on the findings draws on Abu and Millar (2003) argument that past forest reservation and wildlife policies were not participatory and proved unpopular since they prevented the forest communities from gaining the traditional livelihoods they were used to from natural resources and farming and that, once the natives could not use the resources freely, they would not see much value in forest and wildlife resources .Finally, Table 4.4 shows that, out of the total of 13 respondents representing 61.5% (forest), 23.1% (water points), 15.4% (animal) of respondents, indicated that they have total control and access of the resources.

4.3.3Significance of the Natural Resources to Livelihoods

Resource access is of great significance for ensuring the sustainable management and use of natural resources. Majority of people heavily rely on their natural resources for their livelihoods and other performances. This could be in the aspects of economic, socio-cultural, spiritual and physical. This section therefore, analyses the significance of the natural resources to the people in the district.

Spiritual Relevance

The spiritual world is the major driving force that regulates the performance of all traditional institutions in their quest to manage natural resources (Millar, 2004). The traditional belief in the spiritual properties and uses of natural resources has effects on the protection and improvement of the environment.

Table 4.4: Spiritual Relevance

	Natural resources			Total
	Forest	Water Point	Animals	
Not applicable	2 (66.7)		28(28)	30 (100)
Irrelevant	10(34.5)	6(20.7)		16(100)
Less relevant	12(48)	6(24.6)		18(100)
Relevant	17(56.6)	8(26.7)		25(100)
Very relevant	8(61.5)	3(23.1)		11(100)
Total	49(49)	23(23)	28(28)	100(100)

Table 4.4 presents the spiritual significance of forest, water points and animals, resources as perceived by the respondents. The Figure 4.3 show a total of 3 respondents representing 2(66.6%) for forest resources, 1(33.3%) for animals and none for water points did not attached any spiritual significance of the resources to their livelihoods. This represents the lowest number of respondents, i.e. 3 out of the total of 100 respondents interviewed. Seven (7) respondents, representing 3 (42.9%) for forest, 1(14.3%) for water points and 3 (42.9%) for animals acknowledge that the spiritual significance of the resources are irrelevant in their livelihoods.

Fairhead and Leach, (2004) in their study on sustainable forest management and rural livelihoods attributed this situation to the belief in Christianity and Islam.

Nevertheless, majority of the respondents (70) indicated that, natural resources are significant for their spiritual performances. The spiritual significance of the resources are further disaggregated as follows: 37 (51.4%) for forest resources, 14 (21.4%) for water points and 19 (27.1%) for animals. Forest resources attracted the highest percentage of 37(51.4%) for the following reasons. Spiritually, the forest is regarded as the home for the ancestors and more importantly a place where special species of trees for carving representing the gods for sacrifices at home are found. Focus group discussions also revealed that ones' soul can be attached to a tree to make you spiritually strong.

These findings are also in line with Lentz, (2003) in his study on "Spirituality and land" among the Lobis in Northern Burkina Faso, the study established that the dead is identify with a particular tree and his/her funeral performed under that tree. It is believed that every creature (plants and animals species have vindictive soul) is endowed with a soul which survives after death. Hence, cutting of trees especially in traditional protected areas is prohibited. Animals as resources were second most relevant spiritual resource as indicated by 27.1% and 21.4% for water points due to the fact that, the amount of animal horns display does not only shows bravery but also demonstrate the spiritual growth of a man (CARE/UDS,2004).

Physical Significance

Table 4.5 presents the spiritual significance of natural resources to the livelihoods of the people.

Table 4.5: Physical Significance

	Natural resources			**Total**
	Forest	**Water Point**	**Animals**	
Not applicable	5 (62.5)	1 (12.5)	2 (25)	8(100)
Irrelevant	1 (33.3)	2 (66.7)		3(100)
Less relevant	11 (78.6)	1 (7.1)	2 (14.3)	14(100)
Relevant	17(56.6)	13(22.4)	17(29.3)	58(100)
Very relevant	28 (48.3)	6 (35.3)	7 (41.2)	17(100)
Total	**49(49)**	**23(23)**	**28(28)**	**100(100)**

Table 4.5 shows the physical significance of natural resources in the district. A total of 49, 23 and 28 of the respondents for forest, water points and animal resources respectively indicated various levels of how natural resources contribute to their physical existence in the district.

Respondents who could not indicate the physical significance of the resources in their livelihoods recorded values of; 5 (62.5%), 1(12.5%) and 2(25%) for forest, water points and animal resources respectively. This was followed by 1(33.3%) and 2(66.6%) for forest and water points indicating that, the resources are irrelevant in their physical existence. 58 of the respondents on the table depicts that the resources are significant for their physical wellbeing.

This is further disaggregated by 28 (48.3%), 13(35.3%) and 7(41.2%) for forest, water points and wildlife respectively indicating that, the resources are physically significant in their daily life.

In-depth discussions on issues pertaining to the physical value of the resources were revealed during Focus Group Discussions with the various community institutions. It was revealed that forest resources are of immense significance to the community's sustenance. In view of this, its physical relevance is enormous. Forest provides fuel, poles for construction, and grasses for thatch for roofing as well as shades. Others include farm implements such as hoe handles and materials for household items, wild fruits and vegetables, and herbal medicines are obtained from the forest. Animals on the other hand provide meat and hides for their cultural performances for example hide is used as garment during the circumcision ritual performed for young boys as a mark of transition to adulthood.

Economic Significance

There is no doubt that the economic value of natural resources would lead to protection and sustainable management of the resource. For many people in the developing world, especially in rural areas, livelihoods are wrested not from a single occupation to which all their energy is devoted, but from a number of economic activities. The diversity of income sources spreads the risks associated with unanticipated misfortunes including bad harvests and low prices. Such is the case with most traditional institutions. It is therefore useful to describe the economic role natural resources play and how it contributes to livelihood security. While it was not

possible to quantify the relative contributions of each of the natural resources (forest, water and animal), it is possible to determine a ranking of the importance of each to the household.

Shackleton (2000) argues that the importance of such resources as a 'safety-net' for the rural poor is often underestimated because their use and exchange is non-monetized and therefore unvalued. In this respect it is important to distinguish the significance of use of a resource on one hand its contribution to users' livelihoods and on the other hand the value of the resource used. According to Arnold and Towns on (1998), the contribution of forest and wildlife use to livelihoods is highest for the poorest users, but the heaviest use of forest is by wealthier users. Hence, natural resource use is significant to livelihoods.

Table 4.6: Economic Significance

	Natural resources			Total
	Forest	**Water Point**	**Animal**	
Not applicable	-	-	-	-
Irrelevant	-	-	-	-
Less relevant	-	-	-	-
Relevant	11 (37.9)	4 (13.8)	14 (48.3)	29 (100)
Very relevant	17 (23.9)	19 (26.8)	35 (49.3)	71 (100)
Total	28(28)	23(23)	49(49)	100(100)

Table 4.6 shows the economic significance of forest, water and animal resources in the ward. The resources are graded in order of significance. From the table, it can be inferred that, the resources contributes highly to the economic sustenance of the traditional institutions in the ward. Due to the value the resources attract, none of the respondents indicated that the resources are less neither relevant nor irrelevant to their livelihoods. Responses however, were heavily concentrated on how relevant or highly relevant the resources are to their livelihoods. It is evident from the table 4.6 that animals (domestic) resources attracted much higher economic value followed by forest and water.

The Table 4.6 show that 11, 4 and 14 respondents representing 37.9%, 13.8% and 48.3%, respectively for forest resources, water points and animal respectively are of economic relevance to their livelihoods. This represents 29 out of the 100 respondents. Seventy –one (71) of the respondents are much more of the view that, the resources are highly relevant. This represents 23.9%, 26.8% and 49.3%, for forest, water points and animal respectively.

The study found out that, Forest, water and animal resources provide the basis of a wide range of uses for both subsistence and economic purposes, including medicines, hats, mats, baskets, poles, fuel wood, fruits, mushrooms, animal husbandry and many others. For the poor, forest and wildlife resources are part of larger body of rural non-

farm economic activities that act as a sponge absorbing those unable to obtain employment (Arnold and Townson, 1998).

4.4 Women's access to and control of resources

4.4.1 Natural Resources and Management Institutions

Table 4.7 depicts natural resources in the ward and the traditional institutions that manage them. The resources range from sacred groves, land, water points and animals. The general perception is that, chief and elders oversee the management of all resources in their traditional areas especially sacred groves and land.

		Natural resources			**Total**
	Sacred Grooves/Trees	**Land**	**Water Point**	**Animals**	
Chiefs &Elders	28 (28)	22 (22)	35 (35)	15 (15)	100(100)
Religious Leaders	35 (35)	40 (40)	5 (5)	20 (20)	100(100)
Clan/Family Heads	40 (40)	50 (50)	4 (4)	6 (6)	100(100)
Rainmakers/Soothsayers	15 (15)	21 (21)	45 (45)	19 (19)	100(100)
Total	**118**	**133**	**89**	**60**	**100(100)**

From Table 4.7, 35% of the respondents indicate that water points are most managed by chief and elders. They also manage sacred groves, land and animals as indicated by 28%, 22% and 15% respectively. It is evident from the Table that chiefs and elders in the district mostly manage water points.

This however, contrasts findings by Kasanga, (1998) which indicates that chief and elders are the main managers of forest/groves and land in their respective communities. Focus group discussions further revealed that, this shift in management role by chiefs and elders is due to the increasing need for portable water and the management of rivers and streams in the district, hence, supporting organizations entrust chiefs to oversee management responsibilities of boreholes and small-scale irrigation schemes in the district.

In another perspective, responses on Table 4.7, indicates that 35% of sacred groves, 40% of land, 5% of water points and 20% of animals are managed by land priests. It is clear from the Table that religious leaders manage more of land in the district followed by sacred groves, animal and water points as indicated in the table. These findings confirms Ditto et. al., (2003) which indicates that the religious leaders were the first person to settle in the area and therefore, considered the spiritual landowner, hence, he manages spiritual lands.

Group Discussions however, revealed that, the religious leaders have no physical ownership of lands belonging to other farmers. He ensures that the land is not destroyed. According to Millar, (2004) the religious leaders also manages communally owned sacred groves on behalf of the whole community in consultation with soothsayers. Clan/Family Headson the other hand recorded 40% for sacred grove, 50% for land, 4% for water points and 6% for animals. Responses further indicate that clan/family hands manage more of land as indicated by 50% in Table 4.7. Hence, they allocate household lands to individuals and families as well as hold land and its resources as in the case of the religious leaders in trust at the household level. The clan and family heads may also manage sacred grove, water points and animals as indicated by the percentages in Table 4.7.

Rainmakers/Soothsayers also constitute one of the management institutions. The Table 4.7 presents responses on the type of natural resources they manage. Out of the 100 respondents 15%, 21%, 45% and 19% indicated that sacred groves, land, water points and animals respectively are managed by rainmakers/diviners. It is however clear from the table that more of the management roles of the rainmakers/soothsayers centre on water points as indicated by 45%, constituting the highest frequency of 45 of the respondents. This phenomenon may be attributed to their symbolic role of making and stopping rains in the district (Haverkort and Millar, 1994).They are however, assisted by the soothsayers.

In Duusi for instance, the rainmaker was entirely dependent on the soothsayer. It was disclosed that, only the soothsayer in consultation with the rainmaker can make rains when there is drought or unmake rains when in excess in the district and could also tell whether to expect a bad or good harvest in a particular year. The ward and for that matter rural western Kenya is predominantly characterized by subsistence agriculture

and therefore, the people depend on rain fed agriculture. Hence the performance of rites to mark occasions like the onset of rains, first planting, fruiting, harvesting and the beginning of hunting wildlife are central to the people's livelihoods. Therefore in natural resource use and management the significance of rainmakers cannot be underestimated. Their spiritual role in stopping and making rains can impact negatively or positively on the available natural resources. In Focus Group Discussion, it was indicated that, an impending calamity in the district (the failure of a particular plant/crop in a particular season) could be foreseen by a soothsayer/diviner and the necessary action taken by the rainmaker.

4.4.2 Women Role in Natural Resources Management

Women's roles and responsibilities are pivotal to the management of natural resources. Through their activities and management practices over the years, they have developed different expertise regarding the management and use of natural resources.

Table 4.7: Women Role in Natural Resources Management

Roles in Natural Resources Management	Frequency	Percent
Selective harvest of Natural Resources	20	20
Compose songs that regulate the overexploitation of NR	30	30
Education on NR degradation	50	50
Total	100	100

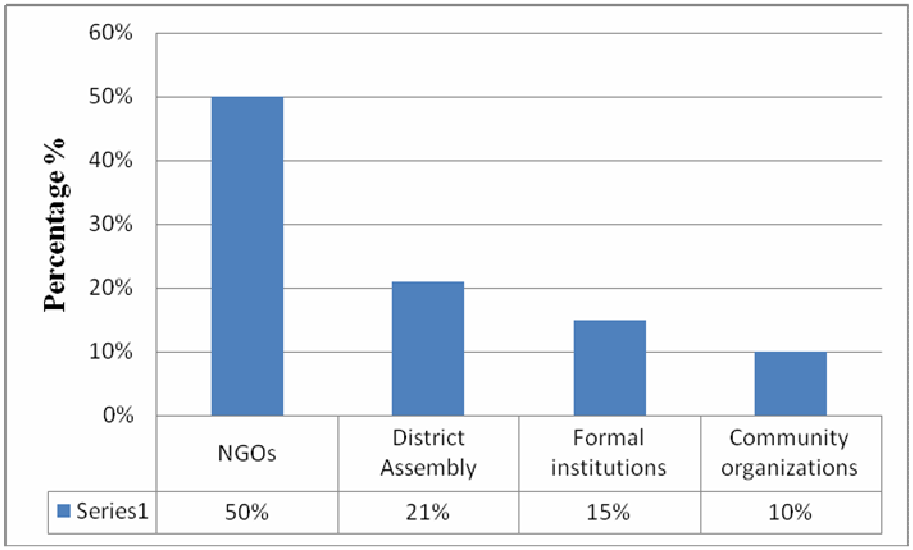
Table 4.7 show the roles women play in natural resources management in the district. Out of 100 respondents, 50% indicated education as the main role they play in the district with regards to conservation and management of natural resources, followed by 30% and 20% who are of the view that their role in the management of natural resources are by the composition of songs that regulate the over exploitation of natural resources and the selective harvesting of forest resources respectively. It is evident from the above table that education on natural resources conservation is the main role women play in the district. To overcome the crisis of natural resource degradation and restore biodiversity, awareness, knowledge and skill in natural resource management is seen as essential to natural resources management. Hence, it is important to recognize the fact that sustainable development would be illusory without empowering interventions such as education for the enhancement of women's status in natural resources management. Songs as a tool for natural resource

management may be seen as trivial for the management of natural resources, in the district songs are used as powerful tools for natural resources management. Moral songs that relate to natural resource conservation are sung at festivals and important for and as part of the daily life of the people in the district. This serve as reminder to people who engage in activities that, are destructive to the environment. Also, though, women are branded destructive to natural resources through the activities they engage in for example, the collect of fire wood for cooking, wild fruits for human consumption, honey tapping, broom sticks and herbs in the forest for as a source of income, they are done in a selective manner that are less deleterious to the environment.

4.4.3 Organizational Supports for Women in Natural Resources Management

World Bank (1997) report revealed that in developing countries women provide 70 per cent of agricultural labour, 60–80 per cent labour for household food production, 100 per cent labour for processing the basic food stuffs, 80 per cent for food storage and transport from farm to village, 90 per cent for water and fuel wood collection for households. This therefore suggests that, their role in natural resource exploitation and management cannot be undermined. Yet women capacity in natural resource management remains largely low and insignificant in both the formal and informal institutions in natural resources management (Sen and Grown, 1987). In this direction, some efforts have been made in the district under study to enhance women capacity in natural resources management.

Figure 4.3: Sources of Support for Women in Natural Resources Management



From Figure 4.3 respondent indicated non-governmental institutions as the main organizations supporting them in natural resources management as indicated by 54% out of the total respondents of 100. This is followed by 21% of the respondents who are of the view that their main source of capacity support is obtained from the district assembly and 15% of capacity from formal institutions. Others are 10% support from community organizations.

4.4.4 Challenges Women Face in Natural Resources Management

Table 4.14: presents challenges of respondents in natural resources management in the district.

Table 4. 8: Problems/Challenges Women face in Natural Resources Management

	Frequency	**Per cent**
Male dominance in natural resources ownership and control	13	13
How to strengthen women leadership structure for effective NR management	10	10
How to access resources for NR	47	47
Low representation of women in NRM decisions	30	30
Total	**100**	**100**

Respondents indicated the major challenge in their efforts to manage natural resources as access to resources as represented by 47% of the respondents in the district. This was followed by 30% of the respondents indicated low recognition and representation in natural resources management decisions. Other challenges faced by respondents are strengthening of women leadership structures for effective natural resource management and male dominance in natural resource ownership and control as indicated by 13% and 10% respectively.

The lack of recognition and representation at technical and institutional levels means that women interests and demands in natural resource management are given inadequate attention. Moreover, women's involvement in formalized efforts to conserve natural resources remains low because of their poor representation at policy- and decision-making levels as a result women have lost substantial influence and control over production, management and access to resources to men. Centralized

institutions have ignored and undermined the capacities of women in natural resources management.

The study revealed that male dominance in natural resources ownership and use is as a result of women as non-heirs due to cultural factors, whether as wives or daughters, do not inherit their family resources especially land. Natural resources which are family owned and controlled are passed down through the family line. As non-heirs, women in the marital home have no means of owning family land and trees. Women in the study district are also challenged in the use of natural resources. The gendered nature of their cultural rights limits the extent to which they can use land. They can use lands for cultivating female crops or rear some domestic animals. Their use rights are limited by cultural perceptions and taboos on what women can own or do. Women cannot grow yam or rear cattle and sheep. These crops were classified male crops. They can only grow groundnuts and vegetables as well as rear fowls.

CHAPTER FIVE

5.0 FINDINGS CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

From the analysis of data collected, the following summary, conclusions and recommendations were made.

5.2 Summary of the Findings

The findings which were obtained from the data analysis in chapter four are presented under the main sections of the questions (see Appendix 2).

5.2.1 Biographical Information

First, the study showed that the modal age group within the traditional authority system are the elderly within age group 56-66 and above. Two reasons were attributed to this: the first is attributed to gerontocracy in the traditional leadership system which allows for the elderly in succession as a result of their experiential knowledge in various fields of authority. The second is the apathy among the youth to succeed parents' vocation due to western education and religion.

Aside, the findings also revealed male dominance at the various levels of the composition of the traditional institutions except for the women leaders' institution which is generally considered "modern" and nominated by women themselves on the basis of their leadership qualities. Majority of traditional governance structures in the district did not have women occupying positions such as chiefs, land priests, council of elders, clan heads etc as a result, their voices in decision making process is greatly constrained Hence, the clarion for gender composition in our traditional leadership structures in the decision making processes still remains a challenge in the district.

In regard to the respondents' level of education and one's status in the community, the study showed that 50% had primary education, 7.7% had middle school education, and 25% had secondary education while 17.3% of the respondents recorded no formal education. The indication is that, the highest level of education attained by chief and elders in the district is up to primary education (50%). The religion institution recorded the lowest level of education attained at all the levels of education in the district.

5.2.2 Perception of Natural resources

In regard to the various perceptions and definitions of natural resources, the findings revealed that ownership and control of forest and wildlife resources are perceived as vested in government, therefore, communities in there serve have limited use over the resources because of government policies that restrain them. Hence, the traditional livelihoods they were used to from natural resources and farming are reported to have been taken away from them.

Traditional resource uses are also found to be central for ensuring the sustainable management of natural resources because they are heavily relied on for their economic, physical, spiritual and socio-cultural wellbeing and other performances. The forest/sacred groves/trees are regarded as the spiritual home for the ancestors and more importantly a place where special species of trees for carving representing the gods for sacrifices at home are found. Hence, through taboos, totems and other management practices, sacred trees/groves and plants are protected from exploitation.

Economically, the forest, water and wildlife resources also provided the basis of a wide range of uses for both subsistence and income purposes. Medicines plants, straws for hats, mats, baskets, poles, fuel wood, mushrooms, 'bush meat' and many others are harvested and sold for income. Aside economic benefits from natural resources, traditional the communities derived their socio-cultural identity from the resources.

In regards to the nature and specific role of traditional institutions in natural resources management, the findings show that, the traditional institutions performed roles that are interrelated in the district in natural resources management. It was established that, the spiritual world is the driving force that regulates the performance of other institutions in the management of natural resources in the district. The chief and land priests have limited powers over natural resources especially land outside their own family holding in the district. However, an agreed upon dual system exist, whereby the land priests/ religious leaders representing the first settlers functioned as the custodian of land and the related natural resources and therefore perform religious functions whereas the invading group with their circular ruler (chief) assume responsibility for the day- to- day governance in relation to natural resource utilization and management. Women leaders however, do not allocate or hold land in trust for

the family but may hold land allocated to the elders son in the case of female headed households or widows. Woman who comes from their family has right to land ownership and can do claim land when they are still in their father's home but have toconsult the circular chief and the earth priest (Tindana) on issues they cannot handle at the household levels in relation to natural resource issues. Government and non-government organizations also collaborate with the informal institutions in natural resource management issues. This is evident by (70%) of the respondents in fig.3.3 who indicated very good working relationship with the formal institutions in natural resources management.

The findings also revealed a shift in management role by chiefs and elders. This shift was identified in the area of water resources management. Hitherto, chiefs and elders managed more of sacred groves, sacred land and trees among others. Reasons for this shift was attributed to changing trends in development where the increasing need for portable water and the management of rivers and streams for enhanced livelihoods through irrigation projects is seen as central to the wellbeing of the people in the district, hence, chiefs and elders have suddenly assumed management of water resources in the district through the support of the district assembly and non-governmental organizations.

5.2.3 Challenges faced by women in NRM

In regard to gender and natural resources management, the study revealed males dominance in natural resources management issues and decisions in the district. Women in the district do not manage sacred grove/trees/plants because their husbands' homes are not considered their original home as such they cannot perform sacrifices in sacred areas. However, daughters and sisters in some instance manage and perform sacrifice at sacred areas. Women, however, were identified as key stakeholders in the management of natural resources. Their role in natural resource conservation and management ranged from sensitizations and the composition of songs that regulate the over exploitation of natural resources. Yet their capacity in natural resource management remains largely low and marginalized in both the formal and informal institutions in natural resources management. They lack recognition and representation at institutional levels on NRM decisions. Hence, their interests and demands in natural resource management are given inadequate attention. Other challenges faced by women in the district are strengthening of women leadership

structures for effective natural resource management and male dominance in natural resource ownership and control. The gendered nature of their cultural rights limits the extent to which they can use land and other resources. Their use rights are limited by cultural perceptions and taboos on what women can own or do.

5.3 Conclusions

Drawing from the findings, the study concludes that traditional institutions are inadequately involved in natural resources management conservation decisions and legislations by the modern institutions through policies, yet, they possess a framework of ideas, guiding principles and institutional foundation that can serve as entry points in the search for local options and broad- based resource management initiatives in the distinct in particular and the region at large.

5.4 Recommendations

Drawing from the study conclusions and also re-visiting research questions, objectives and problem, the study makes the following recommendations:

A great majority of the traditional governance structures in the district did not have women occupying positions such as chiefs, spiritual leaders, council of elders, clan heads etc as a result, their voices in decision making process is greatly constrained. The district assembly may consider negotiating with traditional authorities (TAs) on ways of expanding women's economic roles for increased productivity by exploring non-traditional spaces for generating interest in and invoking discussions on the socio-economic benefits of women's expanded access to natural resources to the family and community. Such activities may include meetings and informal interactions, during which time the TAs can be lobbied and involved in designing strategies to support women's activities in the district. The interactions will need to occur at individual, role and collective levels and include both male and female authorities in separate and mixed sessions. Chiefs, spiritual leaders, elders, clan/family heads and head women could be involved in such negotiations.

The capacity of all institutions (but especially traditional institutions) needs to be strengthened and/or developed by means of short-term and long-term programmes. Formal institutional structures for natural resources management are inadequate and more so, do not adequately reflect the aspirations of the local people. Building communities' confidence in their own indigenous knowledge in NRM through

capacity strengthening will enable them understand and engage with local governance structures and institutions and service providers on how to access information, resources and services they require as such, actions will be based on indigenous knowledge systems. This would also bring about joint responsibilities in the management of natural resources, joint benefit sharing as well as joint visits and exchanges to erode mistrust and build confidence in both formal and informal institutions in natural resources management.

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APPENDIX 1: Guideline for conducting a focused group discussion

The discussion topics are as below:-

- Background, education and occupation of the women
- Issues and concerns surrounding women's access to and control of natural resources
- Access to natural resources
- Control of natural resources

Name of moderator:

Name of assistant:

Location:

Date:

Discussion topic: Back ground, Education and Occupation

Objective of the focus group: To ascertain relationship between background, education and occupation with ability of the women to access and control natural resources

Number of participants: 8-12

Question 1: What role do you play as a woman leader/female head that is key in NRM?

Question 2: What level of education have you attained? Has your level of education affected the ability to utilize and manage natural resources? Explain

Question 3: Are there avenues for women particularly to participate and gain knowledge on natural resource management at ward/county level?

Discussion topic: Issues and Concerns surrounding women's access to and control of resources

Objective of the focus group: To identify the issues and concerns surrounding women's access to and control of resources

Number of participants: 8-12

Question 1: In your view what is the significance of natural resources spiritually, physically and economically?

Question 2: Who generally between men and women is in charge of the following natural resources in the community? (Forests, water and animals)

Question 3: What is the role of men and women in natural resource management?

Question 4: Which organizations or institutions support women in Natural resource management?

General comments:

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Discussion topic: Accessibility and utilization of NR

Objective of the focus group: To assess rural women accessibility and utilization of NR

Number of participants: 8-12

Question 1: Which of the NR (Forest, water and animals) do you mostly rely on and use on a daily basis?

Question 2: For what purpose do you use the above natural resources?

Question 3: What are the main constraints and opportunities for getting access to natural resources?

General comments:

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Discussion topic: Control of NR

Objective of the focus group: To assess who has control of the NR

Number of participants: 8-12

Question 1: Who owns the forest, water points and animas around your community?

Question 2: Of the natural resources named above, which of them are used for commercial activities?

Question 3: Amongst the natural resources you have access to, who makes decisions regarding how the resources will be utilised?

General comments:

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The moderator will conduct the group as follows;

- At arrival in each village, talk to the village leader to present the work being carried out and ask for permission to interview village members.

- You can conduct one or more focus group discussions in each village, but try not to discuss different topics with the same group.

- Select participants for each focus group discussion. The selection of participants is extremely important. Focus group participants should be able to provide relevant information on the particular topic, and the group should be heterogeneous enough so that various and diverse opinions can be shared. It may be a good idea to consult the village leader(s) and field workers for identification of adequate focus groups participants.

- Ideally, the focus group discussion should be led by a moderator and the assistant should take notes.

- Before starting the discussion, introduce the topic, explaining the objectives of the focus group.

- Explain that every participant is expected to contribute to the discussion. Example: “Before we start, I would like to remind you that there is no right or wrong answer in this discussion. It is very important that we hear all your opinions.”

- The discussion should take no more than one hour. 45 minutes is ideal; if it is longer there is a risk of fatigue from the group participants.

- The focus group moderator has a responsibility to adequately cover all prepared questions within the time allotted. S/he also has a responsibility to get all participants to talk and fully explain their answers.

- Take detailed notes during the discussion. This will facilitate the analysis. Ideally, the note taker should pre-analyze the results during the discussion, so that only the most important points are recorded.

APPENDIX 2: Key Informants Interview Schedule

Researcher records the following information

Date of
Interview……

Category of the
interviewee……

The following information shall be obtained:

- Role in NR management
- Natural resources significance
- Challenges in Natural resources access and control for women particularly
- Relevance of institutions in mitigating the challenges

1. Tell me about yourself and your role in managing natural resources

Probe

(Mission? How long in the area?)

(Key role in NRM)

2. What are Natural resources you see frequently used in your community amongst forestry, animal and water points?

(Significance of the resource highlighted)

(Which gender utilizes which natural resource more?)

(Which gender has more control of the three highlighted NR)

3. What, in your perspective, are the major challenges for women when it comes to access and control of resources?

CHALLENGES	YES	NO
Traditional perception and attitudes on ownership of Natural resources		
Lack or little education		
Gender based roles and rights		
Cultural traditions defining NR access and control		

4. What do you think could encourage and support more community involvement/advocacy around women's access to and control of natural resources?

(What are barriers to involvement – ways to mitigate them?)

5. Are the current institutions both governmental and non-governmental helping in tackling the challenges?

Close: Thank you very much for your time. Your knowledge and insights will be very helpful to us. We expect to complete this phase of our work in two [2] months. At that time we will [hold a community meeting/issue a report]. Would you like to [become involved/receive a copy of the report]?

Thank you again.