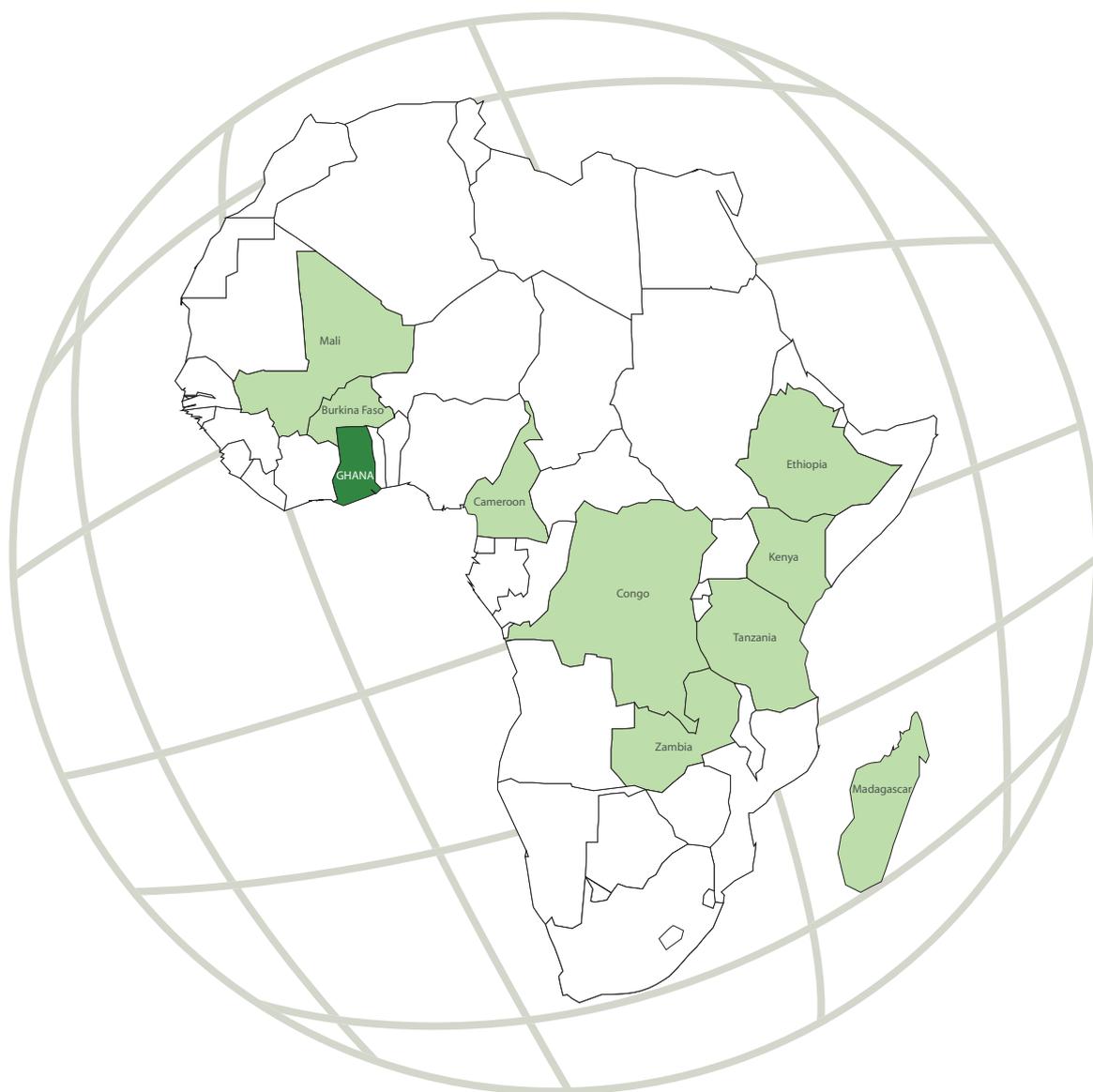


GENDER MAINSTREAMING IN FORESTRY IN AFRICA

GHANA



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AFRICA**

GHANA

Elizabeth Ardayfio-Schandorf

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
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FOREWORD

This project report is one of a series of 10 reports produced by the FAO Forestry Department for the project “Gender Mainstreaming in Forestry in Africa.” The purpose of the project is to assess the gender balance and responsibilities in the management and use of forest resources and to provide a framework for the creation of women in forestry networks in Africa. The project received generous funding from the FAO Netherlands Partnership Programme (FNPP).

For further information, please contact:

Simmons Rose
Forestry Officer
Forest Products and Industries Division, Forestry Department
FAO
Viale delle Terme di Caracalla
00153 Rome, Italy
email: Simmons.Rose@fao.org

EXECUTIVE SUMMARY

It has been recognized worldwide that the need to eliminate hunger, reduce poverty and promote peaceful and equitable development, calls attention to promoting and eradicating gender inequality (MDGs, 2000, Beijing 1995) which is so pervasive across different groups within societies and between societies. Africa women constitute more than half of the population, and any development strategy that is adopted to promote equitable, effective and sustainable development cannot ignore the critical role of gender. This should be based on well-informed and gender disaggregated data systematically collected and maintained.

The study made use of existing data on policies, legislation, reports from governmental institutions and review of published and unpublished data on gender and forestry as well as forestry related data. International conventions connected with environment and gender mainstreaming and the internet were also utilized. Personal communications and interviews were held with staff of the Forestry Commission and the Forestry Services Division. Primary source data were collected through the administration of structured questionnaires to formal forestry organization. Focus group discussions were also held with communities and households to determine gender structures, roles and responsibilities and access to forestry.

The Government of Ghana has been committed to the improvement of the conditions and status of women since achievement of independence. Ghana established the National Council on Women and Development (NCWD) in 1975 as the national institutional machinery for the advancement of women. In 1998 an affirmative action policy was developed. In 2001 the Ministry of Women and Children's Affairs (MOWAC) was established to initiate policy and promote gender mainstreaming in order to achieve gender equality and empowerment of women. The MOWAC developed the National Gender and Children Policy and currently, operates a three year Strategic Implementation Plan (2005-2008) to reach all women. It promotes women into decision-making positions and reaches out to the Forestry Commission through Desk Officers of the MDAs. It is constrained in its gender mainstreaming process by inadequate budget, resources and technical logistics.

Forestry policies and institutions have been gender blind since the 1948 Forestry Policy making forestry professions male-dominated. The revised Forestry Commission Act, 1999, Act 571, has not changed the practice and culture of the Forestry Commission even as it adopted a Gender Policy in 2004.

The roles, responsibilities and working conditions of employees in the forestry sector follow the general pattern of gender imbalance in management. At the staff employment level women constitute 11% of all women employed in the Forestry Commission with a 2% increase over the past five years. At the management level women make up only 7% of the management staff which is far below the 10% national average of women in power and decision-making.

Women are segregated at the lower echelons of the service and among casuals. For the past five years the average percentage intake of female students enrolled in forestry institutes is rising dramatically in the university, where also female teaching assistants (58%) far outnumber the males. The female forestry professionals are concentrated in academia, institutions and offices. This has a positive implication for gender mainstreaming now and in the future.

The work culture and environment not particularly gender friendly. Socio-cultural perceptions characterize the work environment in the forestry sector as both male and female staff (66.7%) stated that "there is not enough confidence placed in women" and that "men are perceived to be more capable". Lack of promotion opportunities and career progression are some of the challenges, which could be improved through training, motivation, promotion, and social attitudinal change towards women to attract and retain females.

Women in Ghana are estimated to constitute 52% of the agricultural workforce. They produce 70% of the subsistence crops and constitute 85% and 95% of the actors in food distribution and agricultural processing industries. Owing to the gender structures and socio-cultural environment, women in rural areas lack access to and control of economic assets like land and credit. Both men and women have access to forest resources, but the types of product they collect from the forest reserve are different. Most women use their forest produce to support household needs, whilst the men perceive them as personal resources of finance. Women have less access to social capital like education, health and legal rights and the ability to participate in decision-making.

In collaborative resource management, women have the opportunity to participate in forest management in their communities and households. Gender structures and limited access to land, lack of mobility and time, information, training, education, credit, labour and marketing information generally limit their access. In all respects, gender disparities are more debilitating to female-headed farm households. The imbalance in the ownership and control over resources places them in a subordinate and disempowered position relative to men. This results in women and men having contrasting perceptions, priorities, goals and development interventions that affect them differently. Particularly, collaborative forest management should take into consideration gender differences in needs and priorities as well as ensuring that women have independent access and entitlement to land and other common forest resources.

In order to bridge the gap, collection of gender disaggregated data in the short, medium and long term is needed for the entire forestry sector covering all aspects of the work, opportunities, trends and the challenges. Gender mainstreaming holds some promise for the advancement of women in the forestry sector in Africa. The Forestry Commission should therefore implement its Gender Policy in the short term. Political will and commitment on the part of government by allocating adequate resources and implementing affirmative action in all the sectors, especially MOWAC will go a long way in promoting equitable and sustainable development in forestry. Creation of a critical mass of women in decision-making in forestry is needed. Such women will act as role models and help push ahead women's concerns in rural areas.

There should be a continental Africa conference to kick-off the network establishment using the enclosed database as the starting point to set the agenda. The conference should also be used as a platform to sensitize policy makers, forestry institutions, NGOs and other stakeholders about women's status in forestry, and to integrate them in their programmes.

Establishment of networks of women in forestry at the community, national and inter-regional levels will strengthen women professionals and give them a voice to empower women and to influence and implement gender sensitive policies. This should be based on previous and existing networks.

ACKNOWLEDGEMENTS

This study has benefited from the assistance of many institutions, communities, households and individuals, whom we would want to acknowledge here. The study has been undertaken by the University of Ghana, in collaboration with the Forestry Commission and the Collaborative Resource Management Unit, Resource Management Services Centre (RMSC), Kumasi with the support of the Food and Agricultural Organization (FAO).

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We also thank all the staff of the forestry institutions that participated in the survey and for providing us the requisite data. Our gratitude also goes to the team in Kumasi who gathered the field data, to RUDEYA and the community groups in all the communities visited. Finally, our thanks go to our research assistant who assisted with the computer work and all others who helped in diverse ways to make this work a success.

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ACRONYMS

AGTI	Association of Ghana Timber Industries
AWF	Association of Women Foresters
CBAGS	Community Biodiversity Advisory Groups
CBOs	Community Based Organizations
CEDAW	Convention on Elimination of all forms of Discrimination Against Women
CFCs	Community Forest Committee
CFM	Collaborative Forest Management
CFMP	Collaborative Forest Management Programme
CGIAR	Consultative Group on International Agricultural Research
CIFOR	Center for International Forestry Research
CRM	Collaborative Resource Management
CRMU	Collaborative Resources Management Unit
CRNR	College of Renewable and Natural Resources
CSIR	Council for Scientific and Industrial Research
DFID	Department for International Development
ENOWID	Enhancing Opportunity for Women in Development
FAO	Food and Agricultural Organization
FAWAG	Furniture and Wood Products Association of Ghana
FC	Forestry Commission
FGDs	Focus Group Discussions
FORIG	Forestry Research Institute of Ghana
FSD	Forest Services Division
GATEX	Ghana Association of Forest Plantation Wood Millers and Exporters
GIF	Ghana Institute of Foresters
GPRS	Ghana Poverty Reduction Strategy
GTMO	Ghana Timber Millers Organisation
HRD	Human Resource Development
IMF	International Monetary Fund
IRNR	Institute of Renewable Natural Resources
ITTO	International Tropical Timber Organization
IUFRO	International Union for Forestry Research Organizations
KNUST	Kwame Nkrumah University of Science and Technology
MDAs	Ministries Departments and Agencies
MDG	Millennium Development Goals
MLFM	Ministry of Lands, Forestry and Mines
MOWAC	Ministry of Women and Children's Affairs
MTS	Modified Taungya Systems
NCWD	National Commission on Women and Development
NGO	Non-governmental Organization
NRM	Natural Resources Management
NWFP	Non Wood Forest Product
ODA	Overseas Development Agency
PAMSCAD	Programme of Action to Mitigate Social Cost of Adjustment
PFM	Participatory Forest Management
RMSC	Resource Management Support Centre
RUDEYA	Rural Development Youth Association
SAP	Structural Adjustment Programme
SFM	Sustainable Forest Management
SRA	Social Responsibility Agreement
TIDD	Timber Industry Development Division
UG	University of Ghana
UNEP	United Nations Environment Programme
WD	Wildlife Division

WEDNET Women, Environment and Development Network
WOCAN Women for Change in Agriculture and Natural Resources

1. INTRODUCTION

The need to eliminate hunger, reduce poverty and promote peaceful and equitable development calls attention to promoting and eradicating gender inequality which is so pervasive across different groups within societies and between societies (MDGs, 2000, Beijing 1995). Africa women constitute more than half of the population, and any development strategy that is adopted to promote equitable, effective and sustainable development cannot ignore the critical role of gender. Gender relations normally affect the way communities, households and institutions are organized, how decisions are made; and an integral part of any development strategy should embody the gender perspective.

Since 2002, FAO has adopted a five year Gender and Development Plan of Action (2002-2007) as the kin pin in its environmental development plan. Appropriately the plan, which is considered the key to sustainability and food security, is based on a paradigm consensus achieved at various international conferences and fora as the approach to gender and development. Notable among these conferences are the Environment and Development, (1992), Human Rights (1993), Population and Development (1994) and Social Development (1995). All development plans, have therefore to adopt the gender mainstreaming approach to promote gender equality.

Gender mainstreaming is a concept, whose meaning has generated many reactions and debate. In considering the various aspects of the discourse; The United Nations has defined gender mainstreaming as

“a strategy for making women’s as well as men’s concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and societal spheres so that women and men benefit equally and inequality is not perpetuated. The ultimate goal is to achieve gender equality” (FAO, 2005).

Gender mainstreaming involves ensuring that gender perspectives and attention to the goal of gender equality are central to all activities including policy development, research, advocacy, legislation, resource allocation and planning, implementation, monitoring of programmes and projects. The ongoing study on ‘mainstreaming Gender and Forestry in Africa’ is a part of FAO’s goal to make gender considerations a key factor in forestry as it is in all its planned activities.

Justification of the study

As part of the strategy to mainstream gender in the Forestry Sector, the Food and Agriculture Organization (FAO), Center for International Forestry Research (CIFOR), International Union of Forest Research Organizations (IUFRO) and the University of Ghana (UG) have commissioned a study to address gender mainstreaming in the forestry sector in Africa. This is because it has been recognized that women contribute to both the formal and informal forestry sectors in many significant ways. Women play key roles in agro-forestry, watershed management, tree improvement and forest protection and conservation. Forests also oftentimes represent an important source of employment for women. From nurseries to plantations and from logging to wood processing, women make up a significant proportion of the labour force in the forest industries throughout the world. However, although women contribute substantially to the forestry sector, their roles are not fully recognized and documented, their wages are not equal to those of men, and their working conditions tend to be poor.

One outstanding problem is the near absence of women in policymaking roles and processes concerning forestry. The effects on men and women can be better understood far enough

upstream for policy and decision-makers to clearly target vulnerable groups for assistance and support, and to design the policies and decisions towards the goal of gender equality that benefits men, women and children of a society.

The sustainable use of forests clearly requires the participation of all, especially women. Although women's needs often differ from those of men, many programmes tend to overlook women's specific needs regarding forestry, mainly because policy-makers and planners lack relevant and adequate data disaggregated by gender information and methodologies to address them.

By virtue of women's assigned roles by society, they require special needs to effectively deliver their expectations. If those needs are not satisfied the entire society suffers. It is in the interest of society to ensure that women's needs are satisfied.

Ghana: The Socio-economic Background

Ghana, located along the coast of West Africa, covers 23.4 million hectares and is bounded by Cote D'Ivoire to the west, Burkina Faso to the north, the Republic of Togo to the east and the Gulf of Guinea to the south (Fig. 1). The estimated population in 2000 was estimated at 18 million and this is expected to rise to 27 million in 2010. Females constitute 51% of the population which has a high dependency rate of 48.2% being predominantly minors under 15 years.

Ghana is endowed with natural resources like considerable forest and freshwater resources, agricultural land and many varied mineral deposits including gold and diamond. The economy is highly dependent on primary production and exports of its natural resources most of which are in the southern sector of the country.

In the early 1980s Ghana experienced a decline in the economy leading to the adoption of the Economic Recovery Programme and the Structural Adjustment Programme supported by the World Bank and the International Monetary Fund, which helped to improve the economy. Nevertheless, the economic reforms introduced, brought untold hardship to the population, but the worse hit were women, children and vulnerable groups. Programmes such as the PAMSCAD were introduced to alleviate the burden.

Ghana developed the GPRS (2003-5) as a response to the MDGs in 2003 to eradicate poverty by 2015. Food crop farmers were identified as the worst hit by poverty, of which 55%-60% were women. In addition, more women are becoming poorer as demonstrated by trends in feminization of poverty. The government, MOWAC and NGOs have adopted many interventions and strategies like the ENOWID and the Women's Development Fund to alleviate the plight of these women.

Women in Ghana play formidable and pivotal roles in the nation's development. They perform multiple tasks such as home keepers, community leaders and household income earners. Their work is mostly in the informal sector, but they are expanding their domains into the formal sector professions and public roles in political, civil and religious organizations, due to increased access and opportunities for formal education.

Affirmative Action Policy was adopted to accelerate equity between men and women. In 1998 a Member of State was appointed to be in charge of implementation of the affirmative policy and to ensure appropriate representation of women on all advisory boards, in parliament and at district and sub-district levels. Quotas of a minimum of 40% representation were established in the medium and long term. For government appointees to District Assemblies it was 30% and 50% for Unit Committees.

In 2003, the enrolment of women in the public universities rose to 27%. More girls were enrolled in medical and other science related fields due to their exposure to the Science and Mathematics Clinics for girls.

The changes have not been consistent, and so women still lag behind in national development. Women's participation has been at low levels. Their limited participation in politics and public service does not allow their full integration into national decision-making. Gender inequality and gap in sharing of power and decision-making is still very wide. Their participation in the power and decision making structure is only 10% in the legislature. This can be attributed to lack of formal education and cultural perceptions of women's roles in society as being subordinate and reinforced by the entrenched patriarchal system.

Ghana and the Forestry Environment

Forests and other natural resources form the backbone of the economy of Ghana and therefore play a critical role in the lives of its people. They fulfil national, economic, ecological and environmental goals, hence, the need for policy attention to promote sound and sustainable development for the reduction of poverty. Two main ecological zones may be recognized; namely the closed or high forest zone in the south, covering about 34% of the country, and the savannah grassland zone cover the remaining 66% (Dickson and Benneh, 1989). Most of Ghana's export crops are produced from the closed forest which is very rich and diverse in flora, containing over 70% of the floral diversity of the country. This zone also constitutes the major economic hearth of the country, the major cocoa and cash crop areas and provides competition among the three main economic sectors of agriculture, mining and logging (Hens and Boon, 1999). As a conservation of biodiversity strategy, the forests are protected in more than 200 reserves and managed by the Forestry Commission and the Department of Wildlife.

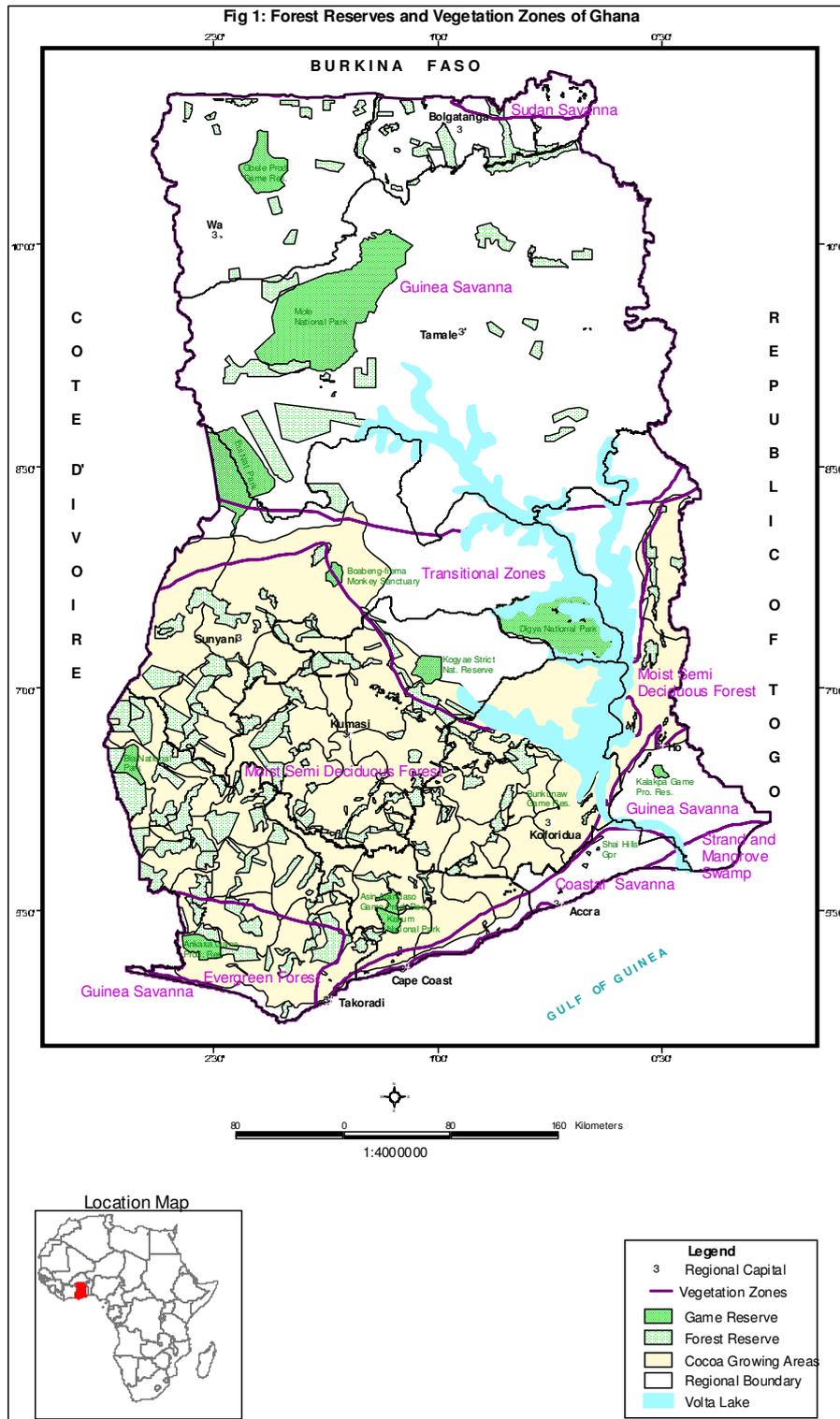
In spite of protective measures, the country's deforestation continues to accelerate towards ecological destruction. This is largely because farming communities, the stakeholder groups with the greatest capacity for, and structural interest in, sustainable forest use remain marginalized in forest policy-making and management. Women constitute a high proportion of the farming communities and continue to sink into poverty and despair. The continuing shrinkage of the virgin forest raises issues on sustainable forest management involving women and men and other relevant stakeholders.

Objectives

The study sought to

- Compile information on existing national and intergovernmental policies, legislation and the institutional framework related to gender mainstreaming in Forestry.
- Review gender structures, local initiatives and responsibilities in rural forest communities and households.
- Prepare a database of women working in forestry within the country and
- Identify issues related to the establishment of networks for women in forestry.

Figure 1: Forest Reserves and Vegetation Zones of Ghana



Methodology

In the process of the study, both qualitative and quantitative research methods were utilized. In the implementation, the following steps were used.

- Review of literature was undertaken by conducting a desk search. There was a review of policies and laws of the following relevant forestry and gender institutions:
 - Forestry Commission laws (forest and wildlife laws)
 - Forest and Wildlife Policy
 - HR Documents
 - Conditions of Service for Senior and Management Staff
 - Collaborative Bargaining Agreement for Junior Staff
 - HR Manuals
 - Gender Policy
 - Ministry of Women and Children's Affairs (MOWAC) Strategic Implementation Plan (2005 – 2008)

These provided data on existing national and intergovernmental policies and institutions related to gender, forestry programmes and institutions, gender structures in rural forestry communities and households.

- In order to solicit the views of staff of the Forestry Commission who form the majority of the formal forestry sector a questionnaire was developed made up of 2 categories, the executive or senior management and the junior management and support staff. The questionnaires were distributed among staff of the following divisions and units; Forestry Commission Headquarters, Wildlife Division, Resource Management Support Centre / Forest Services Division, Wood Industry Training Centre and Timber Industry Development Division. Forty-one sample questionnaires were received out of about fifty administered. The aim of the questionnaire and/or discussions was on gender mainstreaming and how to address the issue of empowering women in the formal forestry sector” by considering why gender representation as it is, key drivers for change and identifying actions and means of empowering women in the formal forestry sector. For the gender roles and representation in the formal forestry sector, selected forest sector institutions were contacted to provide information on staffing level in terms of name, gender, category and job description, and the trends in female student intake / female staff employment over the past 5 years where applicable. The sector institutions contacted were the College of Renewable Natural Resources (CRNR), Sunyani, Institute of Renewable Natural Resources (IRNR) of the Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, Forestry Research Institute of Ghana (FORIG), Ejisu, Kumasi and the Ghana Association of Teak Wood Millers and Exporters (GATEX).
- Focus group discussions (FGDs) were also held in the communities and targeted different interest groups (men, women and children) in households. This provided in-depth knowledge in gender structures, roles and responsibilities in collaborative forest management and forest rehabilitation.

Organization of Study

The report is divided into five chapters. The first one is the introduction, which includes the objectives and the methodology. The second chapter considers the institutional framework for gender mainstreaming and employment trends in the Forestry Commission and other institutions. Chapter 3 discusses the gender structures, local initiatives and responsibilities, while chapter 4 focuses on the potential for the establishment of a network of Women in Forestry. Chapter 5 offers the conclusions, followed by the recommendations.

2. INSTITUTIONAL FRAMEWORK FOR GENDER MAINSTREAMING

Institutional Framework and Gender Policies in Ghana

From all indications the Government of Ghana has been committed to the improvement of the conditions and status of women since the country achieved its independence in 1957. This commitment was re-confirmed with the women's movement that swept nation states worldwide. In 1975, the government of Ghana established the National Council on Women and Development (NCWD) under the office of the President. This made Ghana one of the leading countries that established an institutional mechanism for the advancement of women. The NCWD has since then been responsible for coordinating, monitoring and ensuring integration of women into policy. In 1998 an affirmative action policy was developed for the advancement of women.

In 2001, the national machinery was elevated to a cabinet status when the Ministry of Women and Children's Affairs (MOWAC) was established by an Executive Instrument (EI 8). Its main mandate is to *inter alia*, initiate, formulate policies and promote gender mainstreaming in order to achieve gender equality and empowerment of women. The NCWD now operates as one of the two decentralized departments under the MOWAC; the other being the Ghana National Commission on Children. The mandate of MOWAC is in line with international, regional and sub-regional conventions, documents and programmes that inform and help direct activities of the Ministry in relation to the Ghana government national goals.

Some of the gender instruments, conventions that Ghana has ratified and international conferences it has attended include:

- The United Nations Convention on Elimination of all Forms of Discrimination Against Women (CEDAW)
- The First World Conference on Women in Mexico – 1975
- The United Nations Conference on Environment and Development – 1992
- The United Nations Conference on Women and Development, Nairobi – 1995
- The Social Summit, Copenhagen – 1995
- The Fourth World Conference on Women and Development -Beijing 2000

In line with national and international goals and commitment, therefore, Ghana is committed to the Beijing Declaration and the Platform for Action as well as the Millennium Development Goals (MDGs). The government has committed itself to all the Millennium Development Goals which are also guiding principles to MOWAC. All the MDGs are interlinked, and should be understood as such though in this case we emphasize the goals for promoting gender equality and empowerment of women, and ensuring environmental sustainability, the third and ninth goals respectively.

For practical implementation of the policies and programmes, MOWAC has developed a three year Strategic Implementation Plan (2005-2008). It has adopted the National Gender and Children policy as an instrument for mainstreaming gender into the national development process. MOWAC has consequently designed a detailed implementation of four identified programmes including policy, legislation and institutional development, capacity building and human resources development, social development and economic empowerment programmes and advocacy for women in family, community and public life. These programmes are meant to support the Ministry's four strategic objectives through the national, regional and district institutions like the Ministries, Departments and Agencies (MDAs). It has created Gender Focal Points in all MDAs to ensure incorporation of gender concerns in sector policies. Affirmative action was also applied to government appointment to policy making bodies and government official delegates. At district level, it was 30% representation, but now increased to 50%. MOWAC strategic plan may not have a specific programme on environment or

forestry, but through its coordination process, activities of MDAs, the Ministry of Lands, Forestry and Mines and its related institutions and departments benefit from MOWAC's focal points and desk officers in human resource development.

Like many national women machineries in Africa, MOWAC is constrained in its gender mainstreaming process by inadequate budget, resource and technical logistics. This is a serious hindrance in the implementation of the goals set in the three year strategic plan. A strong government commitment is needed by way of goodwill, adjustment of budgets for allocation of adequate and reasonable financial and other related resources for effective advancement of women.

Institutional Framework and Forestry Policies in Ghana

Ghana's formal forestry sector is made up of certain key institutions such as the sector Ministry, the Ministry of Lands, Forestry and Mines (MLFM), the forestry, research institutions such as the Forestry Research Institute of Ghana (FORIG), and educational institutions such as the College of Renewable Natural Resources and the Institute of Renewable Natural Resources (IRNR) of the Kwame Nkrumah University of Science and Technology (KNUST), Kumasi.

The first Forestry Policy was promulgated in 1948 to maintain the protective purposes of the forest reserves (Fig. 1) and apply the concept of productive potential and value on the basis of sustained yield. The Forestry Commission Act, 1999, Act 571 restructured the Forestry Commission. Forests, their management and related issues are very essential to the survival of the nation hence the laws to regulate its management and use. Table 1 indicates policies, laws and their summary in relation to gender. Generally, the policies and laws have not been formulated without recourse to gender.

Forestry Institutions and Gender Mainstreaming

“Forestry has traditionally been one of the professions in which men have been most firmly and exclusively entrenched. It is not since forestry schools – and hence the profession itself – were there places open only to men. Arguments that the nature of the work make it unsuitable for a woman persisted in forestry long after they had disappeared in other ‘manly profession’” (Unasyuva, 1984).

The Ministry of Lands, Forestry and Mines is the sector ministry entrusted with the management of Ghana's land, forest, wildlife and mineral resources. It ensures the sustainable management and utilization of Ghana's resources for socio-economic growth and development. It is responsible for policy co-ordination, monitoring and evaluation, validation of policies, programmes and projects, supervision of sector departments and agencies and negotiations with development partners.

The Forestry Commission (FC)

The Forestry Commission is a public body responsible for the regulation of utilization of forest and wildlife resources, the conservation and management of those resources and the coordination of policies related to them. The Commission embodies the various public institutions and agencies that were individually implementing the functions of protection, management and regulation of forest and wildlife resources. These agencies currently form the three (3) Divisions of the Commission, namely, the Forest Services Division (FSD), the Wildlife Division (WD) and the Timber Industry Development Division (TIDD). All these public institutions and agencies have their specific mandate and vision.

The Forestry Commission has as a clear vision to be the corporate body of excellence in the sustainable development and management of Ghana's forest and wildlife resources. In this respect, it seeks *“to provide services that guarantee the sustainable management of the forest and wildlife resources and optimize their contribution to national socio-economic*

development". The roles, responsibilities and working conditions of people in the forestry sector of Ghana follows the general pattern of gender imbalance in forest management worldwide.

Table 1: Laws on Forestry, Wildlife and Management

Title	Summary
Ghana Forest and Wildlife Policy, 1994	
Forestry Commission Act, 1999, Act 571	This is the act that establishes the Forestry Commission, bringing together all public agencies that were previously individually responsible for the management and regulation of utilization of the forest and wildlife resources in Ghana.
Timber Resources Management Regulations, 1998, LI 1649	Legislative Instrument 1649 of 1998, Timber Resources Management Regulations is of two parts. The first part dwells on the areas of the measurement of timber, conveyance certificate and payment of stumpage fees, payment for management services and payment of rent contract areas. The second part covers the regulation of the use of chainsaw in the Timber Industry.
Timber Resources Management (Amendment) Regulations, 2003, LI 1721	Timber Resources Management Regulations of 1998 LI 1649 was amended by Timber Resources Management Regulations, 2003 LI 1721. The law is divided into nineteen sections and it explicitly spells out the procedure in operating in the Timber Industry.
The Trees and Timber (Amendment) Act 1994, Act 493	The Trees and Timber (NRCD 273) was amended by ACT 493 in 1994 by Parliament. The Act serves as a framework for the regulation of the identification of trees for harvesting and the exportation of timber.
The Forest Plantation Development Fund Act, 2000, Act 583	Act 583, 2000 established The Forest Plantation Development Fund which was amended by Act 623 2002. The aim of the fund was to provide financial assistance for the development of private commercial forest plantations. It also made provision for the management of the Fund and to provide for related matters.
The Forest Plantation Development Fund (Amendment) Act, 2002, Act 623	
Timber Resources Management Act, 1997, Act 547	The Timber Resources Management Act, 1997 assented to March 17, 1998 seeks to provide for the granting of timber rights in a manner that secures the sustainable management and utilization of the timber resources of Ghana and to provide for related purposes.
Wildlife Laws	Wild Animals Preservation Act, 1961, Act 43 Wildlife Reserves Regulations, 1971, LI 710 Wildlife Reserves (Amendment) Regulations, 1974, LI 881 Wildlife Reserves (Amendment) Regulations, 1975, LI 1022 Wildlife Reserves (Amendment) (Declaration of Game Reserves) Regulation, 1976, LI 1085 Wildlife Reserves (Amendment) Regulations 1977, LI 1105 Wildlife Reserves (Declaration of Game Reserves) (Amendment) Regulations, 1991 LI 1525 Wildlife Reserves (Amendment) Regulations, 1983, LI 1283 Wildlife Conservation Regulations, 1971 LI 685 Wildlife Conservation (Amendment) Regulations 1983, LI 1284 Wildlife Conservation (Amendment) Regulations 1988, LI 1357 Wildlife Conservation (Amendment) Regulations 1989, LI 1452 Wetland Management (RAMSAR Sites) Regulations 1999.

The forestry sector was set up as a male institution by the colonial government. Over the years, the management remained exclusively male and there has been paucity of gender disaggregated data since its establishment. This continued until 2002 when the Wildlife Division carried out a gender audit in the forestry sector. The result of the audit shows that in 2002 only 9% females were represented in the Forestry Commission. Women were generally found in the junior staff grades working as clerks and sub-technical officers. At the managerial level women constituted about 7% of the management staff. The study conducted in 2006 has shown a slight increase of females from 9% to 11%. The increase in percentage of women over the period has been in the non-managerial level.

This shows that the situation of employees in the Forestry Commission has not changed much as at 2006 when the survey was conducted for this study. The percentage of female staff now stands at 11%, a slight increase over the past five years (Table 3.1). According to staff that there are not enough women in management positions so more needed to be trained or employed to take up such positions. In some divisions like the Wildlife Division, a conscious effort was made to employ more women during the past 5 years, but the female turn out rate was rather dramatic, because 95% of the women employed abandoned the job due to the nature of the work, while the few that remained requested transfer to the city for various personal reasons. This is attributed to their family responsibilities which they have to carry out as women. Their aspirations in many instances tend to be influenced by such choices. This is a clear situation where their aspirations are limited by their gendered role.

Table 2: Employees of the Forestry Commission by Gender (January 2006)

	Female	Male	%	Junior	Senior	Total
Corporate Headquarters	12	69	15.0	21	60	81
Forest Services Division	293	2,036	13.0	2,027	302	2,329
Wildlife Division	52	891	6.0	875	68	943
Timber Industry Training Centre	31	142	18.0	106	67	173
Resources Management Support	10	89	10.0	62	37	99
Wood Industry Training Centre	5	34	13.0	26	13	39
College for Renewable Natural	7	38	16	37	8	45
Total	410	3,299	11.0	3,154	555	3,709

Forestry Commission (January 2006)

Gender Policy and Challenges in the Forestry Commission

It is the mandate of the government to design policies in forestry institutions, research, teaching and programmes. However, there is no explicit gender policy on recruitment, postings, promotions, or training of men and women into the various sub-professional and professional grades even though some gender sensitivity is practiced by individual Heads of Units on an ad hoc basis. As a result, the FC's structures, processes and organizational culture are in general gender neutral and do not take into consideration, the specific needs and interests of women.

The Human Resource Development (HRD) policy and procedure manual also appears to be mainly “gender neutral”. There is therefore the need to formulate gender sensitive policies. For example, a separate sexual harassment policy, which should define clearly what constitutes sexual harassment, as well as clear guidelines and procedures for reporting and handling such cases, will be useful. On a positive note, the Board and the Executive of the FC have in principle accepted the Gender Policy of the Forestry Commission in 2002. A Gender Action Plan has also been adopted (Forestry Policy, 2002). Due to financial constraints and other competing needs, the policy is yet to be effectively operationalized. A conscious effort is now being made to draw up and implement a programme that would furnish all Heads of

Divisions, units and departments with copies, while a gender desk is established, where all heads would be required to appoint gender representatives. Gender awareness programmes for all staff should also be organized.

Gender and Working Conditions in Forestry

Work culture and atmosphere or environment is an important issue for women professionals in the Forest Service. Women tend to be more secure in positions in academic institutions especially in the university and related research institutions as FORIG (see Tables 4 and 7). Some women tend to desire to experience growth related postings associated with moving up the professional ladder. Otherwise, women's work is segregated and women seem to be marginalized to some extent.

Table 3: Working Conditions of Women and Men in the Formal Forestry Institutions

	Junior		Executive		Total		Total	% Female
	F	M	F	M	F	M		
Working Conditions								
Good	2	1	0	2	3	3	5	40
Satisfactory	3	6	3	18	2	2	30	20
Poor	2	0	0	6	6	6	8	25
Working conditions of women								
Improved a little	2	7	1	10	3	17	20	15
Improved a lot	0	0	0	6	0	6	6	0
Not improved	4	0	1	7	5	1	12	41.7
Value placed on women and men's work								
More value placed on men's work	1	2	0	0	1	2	3	33.3
Not enough confidence placed in women	4	2	0	0	4	2	6	66.7
Recognition of contribution								
Yes	3	3	0	0	3	4	7	42.9
No	4	4	0	0	4	2	6	66.7
How can your working conditions be improved?								
Through Training	5	5	0	0	5	5	10	50
Through Motivation	6	4	0	0	6	4	10	60
Through promotion	3	2	0	0	3	2	5	60

Though the sample for the survey was not big, the responses give us a fair picture of the working conditions of female and males working in the formal sector. About 40% of women stated their working conditions as good, while 25% said they are poor. However, unlike the males, none of the female executives considered the conditions as good (Table3). It is further shown that the working conditions of women professionals have not improved over the last five years. With regards to whether women are favoured at work or not, there does not seem to be consensus between female and male staff. Fifty percent agreed, and the rest disagreed, which implies that sometimes there could be bias.

In the performance of work, men are perceived to be more capable as reflected in the 40% who replied in the affirmative. The remainder did not comment. In probing further, two thirds (66%) of

the respondents, mostly the Junior Staff, stated that more value is placed on men's work, and not enough confidence is placed in women (Table 3). Thus, it appears that the contribution of women towards improvement of the forestry sector, is not fully recognized (Table 3). The staff, both male and female, stated that the negative perception of women in the sector can be improved through education, motivation and promotion. There is a general consensus from the answers that both men and women do not want to take up work that is deemed strenuous, though the majority (over 54%) believes the situation can be changed. Over 80% stated that it could be changed through attitudinal change of both male and female staff.

Training opportunities exist for both male and female staff. However, the trend indicates that more males than females have the opportunity, with about 29% females with no opportunities for training (Table 4). Among the females, 25% and 21% benefited from on the job training and management development programmes respectively. To about 33% of the females, career progression does not seem to exist, though 26% said promotion and career progression could be at acceptable levels.

Table 4: Access to Staff Training Opportunities for Women

	Junior		Executive		Total		Grand Total	% Female
	F	M	F	M	F	M		
Access to training opportunities								
Yes	5	6	3	20	8	26	34	23.5
No	2	2	0	3	2	5	7	28.6
Type of training?								
Degree programmes	1	0	0	13	1	13	14	7.1
Management development	2	3	2	12	4	15	19	21.1
On the job training	2	2	3	13	5	15	20	25.0
Others	1	0	0	0	1	0	1	100.0
How useful has this training been to your work?								
Useful/Yes	4	5	2	14	6	19	25	24.0
Made no difference	1	0	0	3	1	3	4	25.0
Not useful/No	0	0	0	0	0	0	0	0.0

Table 5: Job Mobility in the Formal Forestry Institution

	Junior		Executive		Total		Grand Total	% Female
	F	M	F	M	F	M		
Is promotion an issue in the sector?								
Yes	4	6	0	8	4	14	18	22.2
No	2	1	2	11	4	12	16	25.0
Promotion opportunities								
Are available	2	3	2	9	4	12	16	25.0
Not available	2	3	0	2	2	5	7	28.6
Are not discriminatory	0	1	1	7	1	8	9	11.1
Are discriminatory	2	0	1	1	3	1	4	75.0
Promotion and career progression								
Is acceptable	3	1	2	13	5	14	19	26.3
Is not acceptable	0	3	1	6	1	9	10	10.3
Does not exist	3	0	0	6	3	6	9	33.3
Others	2	0	0	0	2	0	2	100.0

One other barrier related to the mobility of women professionals in forestry is the duality of their roles as women and work. The multiplicity of women's roles cannot be compared to that of men, who in African society are perceived to be solely bread winners. Women's roles as mothers, wives, care givers, home makers and community agents could sometimes be a force to reckon with. Managing these roles together with work in the formal sector is difficult for females with families because of societal perception and expectations of what is expected of the African woman. The situation tends to be more difficult for female senior level officers who need to concentrate fully on their work. Besides, they also have to prove their efficiency at work, and role as mother among others.

Some challenges are faced particularly by women professionals. Among these are gender discrimination as stated by both male and female. Sixty-six percent (66%) indicated that there is discrimination whilst about 38% stated the need for empowerment and training. For sexual harassment, most women were silent on the question whilst some answered in the affirmative. Informally outside the survey, some male staff confirmed that sometimes there are sexual harassments but nobody wants to break the silence (Table 6).

Table 6: Challenges Faced as Professionals

	Junior		Executive		Total		Grand Total	% Female
	F	M	F	M	F	M		
Challenges faced as professional								
Gender discrimination	1	0	1	1	2	1	3	66.7
Empowerment	2	0	1	5	3	5	8	37.5
Training and Development	4	5	1	14	5	19	24	20.8
Access to new technology	1	2	0	4	1	6	7	14.3
Compensation	1	1	1	10	2	11	13	15.4
Instances of compromising position								
Yes	0	0	0	2	0	2	2	0.0
No	6	7	3	19	9	26	35	25.7

Perceptions on Issues of Gender Equality

Perceptions on gender equality were assessed in terms of access to resources, opportunities, recruitment, promotions & transfers within FC and organizational culture and environment of FC. The general perception among female FC staff interviewed was that access to training and career development opportunities was limited and characterized by unequal training and development opportunities in favour of men. This perceived inequality in training and development opportunity was attributed by women mainly to the higher value placed on men's work in the Commission. Masculinity is associated with the organizational culture. Both male and female staff and across staff categories perceive the FC as not being family friendly, as the working conditions and environment tended to break up families. These perceptions are due to work conditions. In general women are encouraged to apply to vacant positions but as indicated in the aforementioned instances this is mainly in the non-managerial grade. Wages in the formal forestry sector is not an issue in the sense that everybody, whether male or female, receives equal pay according to position held, qualification and job description.

Gender Composition of Staff and Students in Forestry Institutions

College of Renewable Natural Resources

The College of Renewable Natural Resources (CRNR) runs courses in Renewable Resources Management for all the Forestry Sector Institutions in Ghana. Its objectives are, to develop an effective institutional framework; to enhance training of middle level personnel for the natural

resources sector; to improve revenue generation at CRNR; and to establish a mechanism for responding to the in-service training needs of the Renewable natural Resources Sector.

The college is affiliated to the Institute of Renewable Natural Resources of the Kwame Nkrumah University of Science and Technology in Kumasi. The College harbours three faculties including the Faculty of Renewable Natural Resources. Only 12% lecturers are female and these can be found in the Silviculture and Forest Management Departments (Table 7).

Table 7: Staffing and Student Composition at the College of Renewable Natural Resources

	Male	Female	Total	% Female
Lecturers	22	3	25	12.0
Students				
2002/2003	30	8	38	21.1
2003/2004	30	5	35	14.3
2004/2005	28	8	36	22.2
2005/2006	28	6	34	17.6
2006/2007	37	4	41	9.8
Total	175	34	209	16.2

Institute of Renewable Natural Resources

The Institute of Renewable Natural Resources has since 2004 been changed to the Faculty of Renewable Natural Resources. It is one of three faculties which constitute the College of Agriculture and Natural Resources. It offers courses in agroforestry, silviculture and forest management, wood science and technology, wildlife and range management and fisheries and watershed management. The Faculty runs undergraduate programmes in B.Sc. Natural Resources Management and three postgraduate programmes in M.Sc., M. Phil and PhD programmes in Forestry, Timber Technology and Agroforestry. It trains professionals in the sustainable management of the forests, wildlife, freshwater fisheries, wood technology and agroforestry. The current student population is about 700 with 35% females.

At the academic level, only 11.5% of lecturers are female with a similar situation found at the CRNR. Ironically, many of the visiting lecturers at CRNR are from IRNR and professionals from FSD. The highest proportion of females is registered at Teaching Assistant level where 59% of these assistants are female. This is a promising trend. If these levels are sustained it is likely to translate into a situation where more females may graduate into higher levels in academia or enter the forestry sector at managerial levels. The rest of the female population of staff (44.9%) can be found in the casual worker and non-academic staff category which is made up of the receptionist, cleaners, field workers, secretaries as well as administrative and accounts assistants. (Table 8)

Table 8: Employees of the Institute of Renewable Natural Resources (2006)

	Junior		Senior		Total	% Female
	Male	Female	Male	Female		
Lecturers			23	3	26	11.5
Teaching Assistants			7	10	17	58.8
Non-Academic Staff	28	11			39	28.2
Casual Workers	15	3			18	16.7

When it comes to student enrolment (Table 9), the female student intake over the past 5 years stands at an average of 38%. Majority of the female students opt to specialize in the areas of Forestry and Agroforestry (see Table 10). This shows that the intellectual front as far as female forestry professionals are concerned is growing at a significant rate. The phenomenon has also

been encouraged by policies of tertiary institutions to apply affirmative action in admission. Of particular interest is the dramatic increase in female intake in the 2004/2005 academic year where female percentage intake in forestry and wildlife shot up to 83% (Table 9).

Table 9: Student Intake at the Institute of Renewable Natural Resources, by Gender

Student Intake	Male	Female	Total	% Female
2002/2003	90	58	148	39.2
2003/2004	114	66	180	36.7
2004/2005	59	38	97	39.2
2005/2006	82	48	130	36.9
Total	345	210	565	38.0

Table 10: Female Enrolment at the Institute of Renewable Natural Resources

Year	Gender	Fisheries	Forestry	Wildlife	Wood Science	Agroforestry	Total
2002/3	Male	14	53	9	14		90
	Female	14	24	18	2		58
	% Female	50	31.2	66.6	12.5		
2003/4	Male	14	64	10	36		114
	Female	17	34	10	5		66
	% Female	54.8	34.7	50	16.1		
2004/5	Male	1	23	1	6	28	59
	Female	5	13	5	2	13	38
	% Female	83.3	36.1	83.3	25	31.7	
2005/6	Male	14	39	8	3	18	82
	Female	6	21	5	4	12	48
	% Female	30	35	38.5	57	40	

Forestry Research Institute of Ghana (FORIG)

The Forestry Research Institute of Ghana is one of the 13 institutes of the Council for Scientific and Industrial Research (CSIR). It is located at Fumesua near Kumasi in the Ashanti Region of Ghana. It started as a research unit within the Forestry Department in 1962. It was fully established as a research institute and named Forest Products Research Institute (FPRI) under the then Ghana Academy of Sciences in 1964. In 1968 it was placed under the Council for Scientific and Industrial Research (CSIR). By Act of Parliament (Act 405) the Institute was transferred from the CSIR to the Forestry Commission in 1980. In 1991, the name of the Institute was changed to the Forestry Research Institute of Ghana to reflect the widening scope of its research activities. In 1993, by another Act of Parliament (Act 453) the Institute was reverted to the CSIR. Its goals are to:

- Conduct high quality user-focused forestry research that generates scientific knowledge and appropriate technologies.
- Disseminate forestry related information for the improvement of the social, economic and environmental well-being of the Ghanaian people.
- To enhance the sustainable development, conservation and efficient utilization of Ghana's forest resources.
- To foster stronger linkages through collaborative research across disciplines among its scientists, stakeholders and external Institutions.

By January 2007, FORIG had more females in the senior research grade than females employed as support staff with (Table 11). It employed more senior female (6) than junior female staff (2) within the past 5 years. Thus 25% of senior members/staff and 16% of staff of the junior grade are female.

Table 11: Employees of the Forestry Research Institute of Ghana by Gender

Junior Staff		Senior Members		Senior Staff	
M	F	M	F	M	F
125	24	42	12	46	18

Forestry and Non-governmental Organizations

There are certain NGOs operating in the forestry Sector, particularly in the timber industry. Some examples were studied to determine the status of women in such organizations. The timber industry makes up a vibrant sector of the economy of Ghana. Timber export is currently the fourth largest foreign exchange earner for the country after gold, cocoa and tourism. There are various players in the industry and these may be grouped under the following associations or groupings:

- The Ghana Timber Millers Organisation (GTMO)
- The Association of Ghana Timber Industries (AGTI)
- The Ghana Association of Forest Plantation Wood Millers and Exporters (GATEX)
- Furniture and Wood Products Association of Ghana (FAWAG)

Owners of Timber companies or furniture works are invariably men. Women directors or owners are very few. In the case of GATEX the total number of registered members is 51 out of which 4 are companies managed by female directors. The female membership therefore makes up only 7% of the total. The founding members as of February 2002 consisted of 40 companies which had only 1 female director in the person of Mad. Linda Asare Boakye of Original Asaboakye Ltd. As at 2005 10 companies joined the association out of which there were 3 female directors thus accounting for the present number of 4. Nana Kontoh Boakye II, of N. K. B. Trading is a member of the Interim Management Committee.

3. GENDER STRUCTURES, LOCAL INITIATIVES AND RESPONSIBILITIES

Gender Policy Provisions in Sustainable Forest Management

The new Forest and Wildlife Policy (1994) aims at involving all stakeholders in sustainable forest management. It has its guiding principle as

“the conservation and sustainable development of the nation’s forest and wildlife resources for maintenance of environmental quality and perpetual flow of optimum benefits to all segments of society.”

In addition the policy proposes a number of strategies that will help achieve its objectives of stakeholder involvement which include:

- promotion of public awareness;
- development of consultative and participatory mechanisms;
- enhancement of land and tree tenure;
- addressing unemployment and supporting the role of women in development.

To give effect to the Policy, the various agencies of the FC have been pursuing CRM in one form or the other. The FSD initiated a CFM programme in 1993 with the assistance of the ODA/DFID. The basic tenets of the FSD programme have therefore been geared towards ensuring the rights of access to forests for domestic use such as NWFPs, Sacred Sites, water bodies and passage, and the rights to equitable share of revenue (royalties) and benefits in kind (provision of social infrastructure under SRA). It is also to ensure the rights of consultation in policy decision, legislation, management planning, project and programme formulation and execution, and the development and implementation of sustainable forest management systems that are mutually beneficial to the FSD and community partners (forest fringe communities and land owners).

Without the support of landowning and fringe communities it would not be possible to sustainably manage the forest resources (CRMU, 1990, ITTO, 2005). Increasing recognition of the interaction of poverty, resources and environmental degradation has led to interventions that put more emphasis on working with local communities to improve the management of the environment and natural resources.

Within the forestry sector, stakeholders could be categorised into two namely those in the formal sector (forest managers, policy makers, local developers etc) and those in the informal sector. The informal sector stakeholders include NWFPs collectors, cultivators and sellers; firewood operators; charcoal producers, hunters and community-based organisations (CFCs, CBAGS). For the purpose of this study, emphasis will be laid on men and women in forest management in both the formal and the informal forestry sectors. Men and women in rural areas often relate to and use natural resources in different ways, both in their everyday lives and according to the cultural notions. Yet, these differences are often neglected in the design and practical implementation of interventions – whether being interventions aimed at development, natural resource management and conservation or research. Moreover, it seems that more is known about indigenous men’s relation to and use of natural resources than that of indigenous women, and that men rather than women are involved in the planning and implementation of supported forestry interventions.

Identifying and overcoming the barriers to women, and men’s full participation in the management of resources is a necessary first step towards the ultimate goals of poverty alleviation and sustainable development as emphasized by the Millennium Development Goals (MDG, 2000). Understanding the environmental roles and responsibilities of women and men is critical to sustainable resource management practices.

To ensure gender equity in forest management there is the need to consult and gather information to ensure that relevant socio-economic and gender-related issues are being considered in the design and implementation of forest management initiatives. This study has been designed in this respect.

Gender Structures in Forest Management

In the Ghanaian society which is male-dominated, and where women are often excluded from important investment decisions and rather tied to reproductive tasks and household chores, the rights of women to have secured titles to land, trees and other natural resources have to be carefully negotiated for. Women's claim to land within customary systems is generally obtained through their husbands or male kinsfolk and hence may be considered secondary rights. The reality of family structure in many ethnic groups is that husband and wife share the fieldwork on the family fields and a certain level of joint decision-making is common. The socio-cultural environment in Ghana always places the woman at a disadvantage position in decision-making and other important issues though it affects them greatly. In a typical Ghanaian society, men are the leaders and for that matter the first to be contacted on many issues even those that affect women. They are responsible for organizing the women in the community on all socio-economic issues.

Gender inequality is constructed through the formal laws and statutes that make up the official ideologies of a society and its institutions, and the unwritten norms and shared understandings that help shape everyday behaviour in the real world. In Ghana, men and women do not have equal access to land even where legislation has removed gender barriers to land ownership. In most situations women's access to land and other property generally takes place through a male relative in local areas.

Like the- gender division of labour, the gender division of private property is also regarded as natural and, therefore, not to be questioned. Women's effective exclusion from the possession and control of land is largely the basis of their subordination and dependence on men in local communities, where most men work.

In most of "patrilineal" Africa, the usufruct right to land prevails and customary land use practices often determine access to land in terms of use rights or ownership. Women are essentially temporary custodians of land passing from father to male heir, even though they may be *de facto* heads of household. As unpaid labourers on their husbands' land, while also cultivating separate plots in their own right, Ghanaian women usually lose the rights to land following the death of their spouse. Widows and divorced women have virtually no tenure or inheritance rights with which to ensure food security for themselves or their children. In certain cases women may have access to land as gifts from husbands and fathers.

In the forestry sector the role and responsibilities of men and women in forest management are best manifested in sustainable forest management where formal and informal forestry intersect to some extent.

Collaborative Forest Management

As part of the strategy to give effect to the government's sectoral policies, the Collaborative Forest Management Programme (CFMP) was initiated to promote involvement of land owning communities and key stakeholders in forest management. Using the learning process approach, potential for local communities to be involved in forest management has been explored and is currently ongoing. Section 3.2.16 of the Forest and Wildlife policy indicates 'the urgent need for addressing unemployment and supporting the role of women in development' as a guiding principle. It is therefore a law that the role of women and the unemployed be explored and incorporated appropriately in forest management initiatives. As indicated earlier the forest and wildlife policy of Ghana promotes the involvement of local

communities and stakeholders in the management of forest resources. Section 3.3 of the policy emphasizes the importance of local people in pursuing these principles, and proposes that government, hence the Forestry Commission should place '*particular emphasis on the concept of participatory management and protection of forest and wildlife resources and will seek to develop appropriate strategies, modalities and programmes in consultation with relevant agencies, rural communities and individual*' (Forest and Wildlife Policy, 1994).

Collaborative resource management (CRM) is therefore very important and at the core of sustainable forest management in Ghana. For this reason, CRM and other initiatives particularly the Forest Rehabilitation will be used to illustrate gender structures, local initiatives and responsibilities. CRM seeks to ensure that because forest resources by regulation are owned by the people they should participate in management and benefit from it equitably. This is because for a long period, communities were not party to decision-making on forestry issues and were often negatively affected by such decisions. Communities should be involved from the planning stage to implementation stage of all natural resource initiatives.

In trying to explore the potential for community involvement, series of studies and initiatives have been undertaken to improve the relationship between foresters and local communities /stakeholders and to identify roles and responsibilities for each forest stakeholder. Most CRM initiatives that have been successful and acceptable to all stakeholders have incorporated strengths of the stakeholders and employed gender equity as a major rule. Both males and females have been involved in the piloting and implementation of collaborative resource management initiatives.

Collaborative Resource Management Initiatives by the Forestry Commission

Since 1992, the concept of CRM has found its root in the nation's forestry sector. Using the learning process approaches, both men and women have been actively involved in forest management ranging from forest protection to plantation establishment and are currently ongoing. Lessons learned from all initiatives are incorporated into guidelines and made available to the Forestry Commission operational division, NGOs and other stakeholders for replication. Table 12 indicates some success stories of CRM initiatives in Ghana.

In the activities (Table 12), women have played key roles towards their success. A typical example is the women at Kwapanin in Offinso District of the Ashanti Region who have been actively involved in the cultivation of the *Marantheceae* species (wrapping leaves) for more than a decade within the degraded portion of the Afram Headwaters Forest Reserve. With the current modified taungya, most women are actively involved compared to the past taungya system. Among the thirty-two people present during the meeting, only two out of the fifteen women present were actively involved in the past taungya system. Two key reasons for improved women participation in natural resource management cited were the 40% share in the final harvestable timber trees as well as access to free and fertile forestland.

Interestingly, it was ascertained in the Oda, Offinso and Sunyani Districts that under the MTS, seedling production that in the past was mainly done by the women, now currently involve equal number of men and women. However, the Begoro District is exceptional because the women still play a lead role in seedling production.

Table 12: CRM Initiatives in Ghana by the Forestry Commission

Initiatives	Brief description
Forest Management Planning	Communities participate in preparation of integrated management plans for the reserves
Community Forest Committees (CFCs) & Community Biodiversity Advisory Groups. (CBAGs)	Representatives of forest stakeholder groups in the communities are nominated, voted for and trained by the FC to be mouthpiece of the communities on forest management issues at the district and regional levels and to improve the capacity for community collaboration.
Boundary Maintenance Contracts	Communities hired to clear and maintain boundaries on contract
Dedicated forests	Patches of forests off-reserve managed by communities with their own management plans. Examples are Asin Akropong Community Forest.
Establishment of NWFPs plantations	NWFPs are of importance to communities and women groups identified and technical support provided for their planting within degraded portions of forest reserves.
Modified Taungya Systems (MTS) Plantations	Communities are allocated portions of degraded forest reserves to plant trees in reserves and get a 40% share of the final harvestable timber trees in addition to the food crops.
Forestry Forum	Capacities of Civil society (CFCs, Farmer Representatives, Traditional Authorities, governmental officials, etc) built to enable them have a say in the management strategies of national resources at the district, regional and national levels.
Participatory Forest Management (PFM) mentoring scheme	Selected officers trained in the use of varied PFM tools to facilitate the involvement of communities in natural resource management (NRM)

Gender and Sustainable Management

Growing evidence points to the fact that members of rural communities do not have the same sets of shared concerns. Men, women and other social groups may have conflicting and complimentary interest in relation to natural resources. In many developing countries, the subordinate position of women is worsened not only by patriarchal attitudes but also by economic crisis. However, new socio-economic demands and individual motivation have created new opportunities for women's involvement in natural resource management.

Knowledge and Perception of Forests from Gender Perspective

Knowledge and perception of forest by men and women are varied (Ardayfio-Schandorf et al, 2007) and amongst both gender. It is shaped by access to forests and forest resources, uses of forest and forest resource, benefits from forests and forest resources, access to information about forestry issues and involvement in decision on forestry issues at the local level. Men and women relate differently to each of these factors. Both men and women have access to the forest and for that matter to forest resource. However, the type of product they gather or collect from the reserve are different as established earlier. Usually, products collected by women end up in the household either directly or indirectly while the men usually end up using their earnings privately. Thus women perceive the forest as sources of goods and services to support the household and the men perceive it as sources of finance. Most women use their forest produce to support household needs and this is also true for many men. The income gained from the sale of the forest products are put back into the household earning.

Benefits from forest and forest resources depend very much on all the above factors. Since men outnumber women, when it comes to economic gains one may conclude that men benefit more from forest and forest resources than their women counterparts.

Access to information about forestry issues is perhaps the most significant way by which knowledge is gained about forest. For most local communities this is gained through training and awareness creation. Women hardly participate in forestry training of any kind except when it is targeting them or conscious efforts are made to get them to participate. Because they lack education, they are always relegated to the background when it comes to education and awareness creation. In spite of this intimate knowledge, most women are not involved in decision-making at the local level and this is also true in forestry related issues.

Gender and Access to training and knowledge

Power is the ability to negotiate and influence outcomes in a particular environment and empowerment is gaining this ability through informed choices and decisions. First of all, people must have the knowledge and skills to make their own informed choices and decisions. Projects can facilitate empowerment by making available information and skills that people want, and by helping communities to break through traditional stereotypes that prevent women from enjoying equity.

Women have limited access to natural resource training. Even when the training is targeted towards activities performed by women, experiences in the field indicate that the men end up dominating (Plate 1). Lessons throughout the developing world have shown that the major concerns of women in developing their own participation in natural resource management focus on their access to, and control over, resources. Two major types of resources at stake are land, trees, and other natural resources; and information and knowledge.



Plate 1: Women at a Training Session on Community Nursery Management

However, when it comes to general knowledge in use of forest resources women tend to be more knowledgeable than men (see Ardayfio-Schandorf et al, 2007, Ardayfio-Schandorf, 1995). In our study in the Ghana High Forest, where women's, men's and youth groups were engaged in focus group discussions, the women's groups emerged as more knowledgeable about forest tree species than the men's and youth groups. The two major types of resources are critical if women are to become truly involved in sustainably managing forests Boafo (2000). Incentive schemes for participatory forest management in Ghana revealed some key

constraints that hinder the involvement of women in forestry training being it formal or informal sectors as:

- Restricted access — particularly tenurial rights to land and trees
- Lack of mobility (household responsibilities, social customs)
- Lack of time (so many other responsibilities)
- Limited access to information, training, education, credit, marketing channels among others.
- Low educational level of the women
- Men, who are always leaders of the institutions, tend to be responsible for selecting training participants.
- Some women refuse to attend when selected
- Some women need permission from their husbands to attend training programmes
- Some women underplay the importance of such training programmes.

Added to this is the fact that the people’s understanding of the concept of gender is very limited. Although everyone assumes they have a good knowledge on the differences between men and women, in practice very few leaders are trained in gender roles analysis, and stereotypes tend to prevail.

Gender, Access and Use of Forest Resources in Households

Both men and women collect, and process forest products for household and commercial uses. Of the men who participated in the incentives study, 56% said they have access to the forest for the collecting and gathering of NWFPs. Usually, they enter the forest when they help the forest guard (staff in the FS responsible for boundary cleaning and patrol) to clean the reserve boundary. Otherwise they need a permit from the Forest Service or get arrested when found entering without a permit. Amongst the women, 58% said they use the forest for collecting and gathering NWFPs for household uses and for income generation purposes. Whereas men concentrate on the commercial potential of forest products such as timber, bush meat, canes for baskets and raffia matting for roofing, women view the forest as multi-functional providing both household needs and economic benefits. Both men and women use forest resources that are of importance to the sustenance of livelihood (Table 13). The rationale for selecting particular resources according to gender is outlined below.

Table 13: Uses of Forest and NWFPs by Men and Women in Ghana

NWFP Type	Men	Women
Forest Food	Bush meat, snails, wild yam, mushrooms	Snails, mushroom, fruits, wild yam, bush meat
Medicines/ Spices	Tree barks, roots, leaves,	Leaves, roots, spices (wedeaba, black and white pepper)
House Construction	Trees saplings for building, Raffia palm branches for roofing, lumber for roofing, leaves for roofing	N/a
Household Equipment	Pestles, cane for basket, chew stick, lumber for furniture	Pestles, Sponges,
Environmental	Protection of watershed and rivers, influence rainfall, protection against strong winds	Protection of rivers
Income generation activities	Bush meat, wild yam, Raffia palm branches, and cane for basket, honey.	Snails, mushroom, spices (wedeaba, black and white pepper), wrapping leaves

Forest Foods

For women, forests and forestry activities affect household security and maintain environmental stability. Forest food which includes seeds, leaves, roots, tubers, snails and mushrooms contributes to the diet of many households. They are very important especially during January to April when stored food supplies are reduced and new crops are being planted. Women, whose role it is to provide food for the family, value forests highly as a supply source of food. Therefore, during the drought periods they use the forest more often than men as sources of food and fuel for household consumption. During this season, women gather, process and trade in forest products especially when they collect more than they need for the household. The common forest products sold by women are snails, wrapping leaves, sponges and spices.

For men, the most important forest food is bush meat. Bush meat is obtained in the forest by setting traps or hunting. The purpose is to kill big game animals for sale rather than for household consumption. When small animals are killed, they are cooked separately from the household meals, cooked and shared with other men or sold to them during group drinking when they return from their farms to their homes. Sometimes, during the season of snails and mushrooms, from March to May, hunters compete with women in gathering snails especially when they are not successful in hunting. Depending on the quantity gathered, snails are sold or added to household meals. As some women commented: *'during the snail and mushroom season some men and especially children compete with us in the gathering process though they usually call it women's work. Some of the men even collect more than us and make more money than we do. This is not usually the case though'* (Women in Offinso District).

Wild yam locally known as *ahabayere*, a seasonal food is the next most important forest product for men. It regenerates naturally in the forest. Because of the difficulty in the harvesting process men are more accustomed to harvesting *ahabayere* than women. Some men actually devote time to harvesting and selling them. Generally for men, wild animals (bush meat) are the most valued products from the forest. The men said: *'we have guns and we know how to set traps. Although it is not a main activity, once in a while we go to the forest for hunting or trapping animals. If we are lucky and we get some game we kill it, but if not we try another time. However, there are some people who go to the forest for hunting everyday and some of them spend many nights until they get something'* (Men in Offinso District).

Forest Medicines and Spices

Forests medicines and spices are highly valued by local communities. The most common and important forest medicines are for self-administered first aid. The study revealed that women, who are always at home, play an important role in first aid treatment, as they are usually the first to diagnose and treat problems of their children. Forest medicine plays a vital role in the livelihood of most rural women, not only for treatment of their illness, but also as sources of income. However, forest medicines are not traded among people in the same community. They are administered freely to each other when the need arises, and sold to outsiders. Usually, forest medicines are administered together with spices collected from the forest by women.

For curative treatment of serious illness using forest medicines, men are consulted since they know more about which leaves, barks, roots, or seeds of a tree, plant or shrub to use. It is commonly known in Southern Ghana that, some forest medicines cannot be collected, prepared or administered by women because of the superstitious beliefs attached to these species or vice versa. Forest medicines include both plant and animal products. In the local communities, the majority of the people believe that some illnesses are best-treated using plants or animals' cures.

Construction Materials

Forests are sources of construction materials for most rural households especially in admitted settlements and migrant communities. Although alternative building materials may be available, many rural households cannot afford them and rely on products from the forests. Men ranked construction materials as very important because they are responsible for building and maintaining structures. Construction materials consist of saplings of different tree species, branches of oil palm and raffia palm, bamboo, and sometimes wrapping leaves. Some tree species whose saplings are used for construction also serve as commercial timber. This often results in a conflict of interest between timber contractors who want these species to grow into timber and local communities who want to use them for construction and maintenance of their houses. Men weave raffia branches into mats for roofing. During the dry season, when there is less work on the farms, most of the young men weave raffia and palm branches for sale. The demand for construction materials is very high during the dry season and shortly after the rainy seasons as they are usually accompanied by strong winds destroying the whole building or part of it, especially the roofs.

Household Goods

Almost all the households use items made from forest products in their day-to-day activities. The most valued item mentioned is the pestle. It can be made from different tree species but the most preferred is the sapling of *Celtis*, which is a timber species. The most common meal in both rural and urban households in Southern Ghana is fufu and pestles are used for pounding. Women sell pestles although they are harvested and re-manufactured into appropriate shapes by men.

Gender Structures and Access to Land

Gender Disparities in Land Tenure

Land tenure is a way of regulating rights, access and control of land for the mutual benefit of the land user and the government (FAO/UNEP, 1999). The rights of women under customary systems vary from place to place. However, it is recognized that no customary law in the country distinguishes between men and woman in their rights to own and use land or trees. However in reality studies on women's access to land tend to suggest that they are extremely disfavoured by the land allocation process (Mikell, 1983). Access to land also refers to the institutional mechanisms (public and private) through which people can acquire the right to own, use and transfer land. Different households demand different land arrangements. Land arrangements can be divided up between physical and rights based characteristics. The former concern the size and degree of fragmentation, location and quality of a landholding while the latter refer to the rights, security, conditionality and legal status that are conferred on an individual (or collective) piece of land. One of the most important factors determining the relationship between households and land is a household's ability to access land.

Sustainability of Land Holdings and Gender

An important factor determining the relationship between rural households and land is sustainability. This refers to the capacity of a farm household to utilize and manage land in a rationale manner that sustains and enhances the land's productive potential, according to short-, medium- or long-term economic, social, cultural and environmental requirements. Similarly, it refers to the ability of the land or tenure condition to support any changes in land use and in agricultural practices that may arise owing to demographic adjustments. Sustainability, therefore, refers to the ability of a household to enjoy the benefits of production without jeopardizing future use of the land by those or other households (Environment and Development 1992). Constraints inhibiting sustainability include a wide range of factors from size of landholding and quality of land-to-land management, water management and other factors.

A study on improving the productivity of women farmers in sub-Saharan Africa revealed that over the past thirty years, efforts to improve women's rights to land have been neutralized as a result of growing population pressure on increasingly depleted land and the fact that as the quality of the land deteriorates, women are managing smaller plots (World Bank, 1994). Depleted land, small, unsustainable plots and lack of tenure security often mean that women farmers have little incentive to invest in their land and to adopt new technologies and environmentally-sound agricultural practices. As women are largely responsible for household food security, the question of sustainability largely falls upon them rather than the family. However, because of their limited rights and voice, women are often also the ones most ill-equipped to respond to changes in land or tenure conditions. Their limited access to agricultural extension workers also constrain their productivity and income.

Gender Access to Rights of Land through Inheritance

Considerable differences in gender specific rights to land can occur due to distinct inheritance laws. In some patrilineal societies in Northern Ghana, women are not allowed to inherit land. The specific issues which affect women relate to the fact that their rights to land are determined by their marital status, by the laws of inheritance and divorce and by institutions that are themselves deeply embedded within a local perception of the role that women should play in society. In most traditional societies a married woman could gain access to land but could also lose it in the event of a breakdown in relations, divorce or widowhood. Without a clear legal status as regards land rights, widows or divorced women could face expulsion from their former husband's family under customary law. Women's rights of access therefore tend to be highly dependent on the social ties which link them to those with primary rights.

The disadvantaged position of women in access to land was quite apparent in most of the communities visited. Even though many of the 'Taungya' groups had as many women (or even more) as men, further probing revealed that most of the women farmers were cultivating the land with their husbands. Even in situations where they were stand-alone farmers, differential access to labour virtually disfavoured them.

In most places visited, the rights of women to inherit the family head, especially men were weak, but once they have acquired land their use is not restricted. For example, in some communities in the patrilineal societies¹ of Ghana, if a man dies intestate and his land is divided among his children, the portion received by the daughters is much smaller than the sons (Nukunya, 1974). In most cases, the daughters claim to land is regarded as a privilege and not a right to be enforced in a court of law. Increasing scarcity of land is forcing sons and family heads to assert the male claims and lineage principle more strongly in the patrilineal societies (Nukunya, 1974). However, in matrilineal societies the tenurial rights of women were stronger and women have greater recognition than in patrilineal societies. In spite of these constraints to women's access to land, gender issues have widely been neglected in most programmes that have been initiated in the past to shape land tenure systems and land allocation processes in the country.

Although land inheritance of women is not common, there are a few exceptions giving women in some communities fully individual use rights including rights to plant trees. While conceding the fact that conditions are changing and that in some customary situations women are achieving firmer rights and recognition of their major contributions to household incomes

ⁱ There are basically two types of inheritance systems in Ghana namely: the patrilineal and matrilineal. The individual who succeeds in patrilineal societies is traced from the male ancestor in the direct male line. Land is passed by patrilineal succession from father to sons. The succession to property among the Akans and for that matter throughout matrilineal societies is through the matrilineal line according to primogeniture in the following order of preference, brothers, eldest sister's sons, next elder sister's sons, sisters and sister's daughters.

and livelihoods, the fact still remains that gender inequalities in relation to access to and control over land still remains a major problem. Substantive shifts in social and power relations as well as wider changes in socio-cultural attitudes and the strengthening of women's rights under family and inheritance laws are required to help create an enabling environment and framework within which women could effectively participate in the project. If women's social security is jeopardized, their engagement in long term investment such as tree planting and tree protection will be limited.

Gender and Security of Tenure

Even when women have access to land, their security of tenure is often precarious. Under customary law, men and women usually have clearly defined rights to land, trees and water as well as usufruct rights, bestowed on them by the community elders. Women thus retain control over the land they use and its products. Traditional communal rights are in many regions being replaced by land tenure systems based on exclusive use, ownership and title deed which tend to erode the rights of vulnerable groups, including women and minority, ethnic or nomadic groups. For instance, in Jamaica, in 1954, men owned 56% of farms, but by 1961 the figure had increased to 76%. Women's inequality of access to land was a result of the increase in purchase of legal titles, in line with the British legal tradition, that linked the use of the land with individual property. It also stemmed from the fact that land settlement schemes granted resources mainly to male heads of household, who were perceived to be the ones responsible for the sustenance of their family. This ignored the fact that in many parts of the world it is in fact the women farmers who are largely responsible for food production and security. When security of tenure is interfered with, women tend to be among the first groups to lose use rights. However, it should be noted that this often takes place at the expense of sustainability and of future generations.

Demographers have focused primarily on one aspect of security of tenure – land ownership – that includes all legal and institutional arrangements that specify how land is to be used and how produce from the land is to be distributed. According to the FAO Land Tenure and Agrarian Settlement Service, ownership refers to the collection of rights held over land. Institutions, legal and otherwise, are concerned with how rights are owned, accessed and transferred (FAO, 1995). However, ownership of land per se is only one element of security of tenure and does not necessarily guarantee use rights.

Female-headed Farm Households

Gender disparities in land access, tenure security and sustainability impact most on female-headed farm households. These tend to make them poorer and more disadvantaged than households headed by men. Many of the farms managed by women are less than a half hectare, have access to less farm equipment, and own fewer cattle and small stock than male-headed households.

Women own less land than men in all developed and developing regions and data on land disaggregated by gender are rare. In a 1995 FAO report on Women, Agriculture and Rural Development covering nine countries in sub-Saharan Africa, five were not able to provide gender-disaggregated data on land ownership and use. Female land ownership ranged between a low of 3% in Zimbabwe in the small-scale commercial sector to a high of 25% in the Congo and Tanzania. Women's holdings ranged from one-half the size of male holdings in Morocco to approximately 72% of the size of male holdings in Tanzania. In the Congo, nearly 60% of women cultivate less than 1 hectare of land and in Zimbabwe 86% of the women-headed households have less than the sample mean arable land holding.

Ownership of cultivated land by women farmers are acquired through one or more of the following, personally owned, husband's land, gift from husband, family land, government land, communal land, squatted land and rented land. Given the fact that gender disparities in land access, tenure security and sustainability affect female-headed households more severely

than other households, special attention needs to be directed at the experiences, constraints and needs of these households in agricultural and population policies and programmes.

Constraints Inhibiting Women's Access to Land in Households

Legal conditions

Every household decision to acquire land is governed by a set of rules and regulations. These may consist of national and/or local laws, customs or policy conditions. Each of these, however, imposes a distinct conditionality on the capacity of a household to gain access to land. It is essential, therefore, that the full range of legal, customary and policy conditions that affect access to land is analyzed in order to determine the differential levels of access afforded to different types of rural households, also broken down by gender. It is important to bear in mind that both modern and traditional laws tend to be interpreted in favour of male ownership and control and that in some cases, laws may bar women from acquiring or disposing of land without their husbands' consent. The impact on female-headed households can be severe, for example, widows may be forced to abandon the land altogether and return to their parents' village.

Land Prices and Transaction costs

The price of land is often prohibitively expensive for many rural households, and particularly for female-headed households, which are often also denied credit. The response of resource-poor families may well be to opt for a large family in the hope that this may increase family income and therefore improved the ability of the household to acquire land. Usually, institutional procedures of acquiring land often involve transaction costs, which may be prohibitively high for resource-poor farm households. Moreover, as women tend to have lower incomes than men, they are less likely to afford the cost of transaction fees.

Credit savings and Income

Many women do not have access to credit, as they do not have the collateral -- usually land title or cattle -- required for agricultural loans. Socio-cultural constraints and stereotypes of non-creditworthiness tend to preclude women from obtaining access to many formal sources of credit, like banks, cooperatives and credit unions. An analysis of credit schemes in Kenya, Malawi, Sierra Leone, Zambia and Zimbabwe found that, by and large, women had received less than 10% of the credit directed to smallholders and 1% of the total credit to agriculture. The situation may be similar or worse in Ghana.

A household's ability to acquire land is largely dependent on the combined income of its members (on- and off-farm income and remittances). Many farm households often do not have the income required to purchase land without credit. A large number of children is often perceived as one means with which to increase source of income within a family and thus be in a better position to acquire land. While the women are pregnant and immobile, the men are free to continue to pursue economic interests. Women therefore tend to have substantially lower incomes than men, as they engage in unpaid on-farm and domestic labour or informal sector activities, which yield meagre earnings.

Location

Poor farmers and for that matter women often have fragmented plots of dispersed or remote land (Bukh, 1979). As a result, their labour productivity is reduced while their workload is increased (they often require more time to transport tools, inputs and harvested produce from one plot to another and may spend more time commuting). Women tend to have even more marginal and remote land than men, and in many cases, their land is less fertile. Each of these constraints assumes a particular form and relevance according to specific conditions in different regions, socio-cultural and socio-economic contexts in Ghana. It is, therefore, not possible to make generalizations regarding the precise content and impact of these constraints.

Furthermore, high levels of gender inequality characterize land access issues throughout Ghana.

Gender and Participation in Sustainable Forest Management

Gender Participation in the Modified Taungya System (MTS)

Different social groups in local communities have different conflicting interests with respect to degraded forestlands. In conducting the field survey of this study it was realized that for migrants, who have limited and only sharecropping access to stool lands outside forest reserves, participation in the Modified Taungya System (MTS) has enormous benefits. Similarly, the landless indigenes in local communities, especially young people who are yet to inherit any family land see participation in the MTS as a means of establishing themselves and escaping sharecropping arrangements with older farmers. Traditional authorities and older more established indigenes may claim priority access to degraded forest reserves and have an interest in marginalizing migrants and young indigenes, as these groups are a source of labour.

Women farmers are often allocated smaller areas of degraded lands within forest reserves, in some cases by as much as 50%, because they are viewed as less capable. This is probably because women have to combine household chores with farming and also because women are financially less sound as men and therefore command fewer labour resources.

It was observed in the Akumadan area in the Offinso District that monopoly of some Taungya areas by migrants had provoked resentment and conflicts with indigenes, which claim ownership rights of the reserves and see migrants as a source of labour on their MTS plots. In some cases, Taungya Headmen allocate degraded forestland for plantation development to indigenes to the detriment of migrants, usually allocating larger and better plots to themselves and family members.

It was, however, observed that in areas where land was in abundance, there was equal access for both migrants and indigenes. In such cases, women as well as the youth were also granted equal access to participate. The normal procedure is for a group of persons to come together and form a Taungya Group (Plate 2). Those who are not normally encouraged to be part of such groups are those deemed to be unreliable in group-work. Tendency is that where land is scarce women are denied equitable access.

Prevention and Control of Wildfires

The most significant way by which men have participated in forest management is the protection and prevention of fire outbreak. In communities where there is a volunteer fire-squad most of the members are males. Occasionally, one or two women volunteer as members. Fighting fire is considered by both men and women to be a very difficult activity. There is an Akan proverb that says that 'the man is the one to face the shot from the gun. Within the local community this means every difficult task has to be performed by the men. This may explain why for this study it was revealed that more men than women participated in the prevention and protection of fire. However, some women said that they have participated in fire protection. They attributed fetching water from the nearby rivers for the men as participation.

Involvement in planning and decision-making

Regarding the involvement of gender in the planning and decision making process, it was ascertained from this study that more men do participate than women. The low participation of women in such gatherings is attributed by the women to the programme process:

'Often, only the men are invited by the staff of FSD to participate in the planning process. They do not call us. When they come to the village they talk to only the men except when they need some information from us that the men do not know or where

they think we can help. But some of us know the forest better than the men and we see a lot of the things happening there most of the time. But when it is about NWFPs they call some of the women. However, with timber and money they call the men. But you know, we also have a lot of knowledge about the forest' (Women Farmers).



Plate 2: Nursery operators clearing weeds from the nursery

'As for fire fighting it is a man's job. We cannot do much so we leave everything for them but the young women sometimes fetch water for them so we also help in a way.'
(A female farmer)

In a related scenario, in the Asunafo District, RUDEYA, a non-governmental organization, has been able to form and train 175 men and 175 women in fifty forest fringe communities as CFC members, who are actively involved in planning and in decision-making regarding the protection and management of forest resources as well as in negotiating for social responsibility agreement (SRA) and other issues relating to benefit sharing from forest resources on behalf of their communities. (RUDEYA, 2005).

Involvement in forest boundary maintenance

It was also revealed that men do participate in forest boundary cleaning and maintenance whilst weeding in the farm is considered a woman's job. This is because the women perceived that the weeds in the forest are too thick and difficult to cut. Sometimes the boundaries are too weedy because the forestry people leave it for a long time before weeding. Women usually perceived preparation of food for men who actually do the field work as a key role as well as providing housing accommodations to forest guards who may be transferred to the community as also a way in participating in forest management. The analyses so far underscores the overwhelming and yet subordinate roles of women in the forestry sector in rural areas where women's roles outpace that of men. Gender mainstreaming offers a strong opportunity for advancement of the status of women in forestry. To begin with the establishment of the networks of women professionals in forestry and related disciplines could be a starting point.

4. DEVELOPING A NETWORK OF WOMEN IN FORESTRY

Women in Forestry Associations

The prominent forestry related association in the country is the Ghana Institute of Foresters (GIF). This association is male-dominated as reflected in especially the staffing situation in the Forestry Commission. Out of a membership of almost 200 there were only 10 female members in 1999 making women's representation a mere 5 %. In times past an Association of Women Foresters (AWF) was formed but which could not survive the test of time. Membership was made up of only the handful of women that had reached professional levels in the then Forestry Department. It would be useful if the network of women foresters / researchers, lecturers, could be revived. This would serve as a forum of, first of all, bringing women in this profession together to help encourage other women and address their issues in the formal sector because already, there is a reasonable number of females to act as a nucleus for the networking. For this reason a preliminary database of women in forestry and related fields has been developed as a starting point (See Appendix 1) for Database.

The network could also find ways of reaching out to the women in the forest fringe communities in the areas of conservation and sustainable use and development of the forest and wildlife resource. In the communities a number of forestry projects has organized women from households to undertake various activities from the 1990s, which proved to be very successful. Women are represented in all forestry related community based organizations (CBOs). This is an indication of the potential for creation of a network of women in forestry even at the informal forestry sector level. Enormous benefit will be gained from such a network.

A wider network that would include women in forestry in the Africa Region and the global arena would broaden the horizon for exchange of information, experiences, level of support and the voice of women. In this regard, previous and existing networks on women in Africa and elsewhere could be used as basis for regional and worldwide networking.

Potential for the Establishment of Networks of Women in Forestry

In the forestry sector in Africa, the potential of establishing networks of women in forestry is enormous. There have been a lot of initiatives in attempting to establish networks at the international, regional and national levels. In the early 1990s, the Women, Environment and Development Network (WEDNET) was established to develop conceptual frameworks and methodologies for studying women and the environment in Africa (See, for example, Ardayfio-Schandorf, 1995). Another existing regional African network is Women in Science established after an Africa wide conference in Nairobi, Kenya at CGIAR. The network is still functional, operating through exchange of information and update of issues including those on gender and natural resources and the environment.

At the beginning of 1998, the United Nations Institute of Natural Resources in Africa UNU/INRA focused on women in natural resources as a cross-cutting theme to all their programmes. In addition, there was a focus on two studies – a study on “Success Stories of Women in Natural Resources” and a “Directory of Women Scientists in Natural Resources Conservation and Management”. The project has ended, but application for inclusion into the directory is available on the UNU/INRA website.

In recent times, a global network, Women for Change in Agriculture and Natural Resources (WOCAN), was established in 2004 with regional affiliations in Africa, Asia and Pacific, Latin America, Middle East and Europe. The regional affiliations in Africa are West and Central Africa and Southern Africa. The initial meeting for the Region was held in Cameroon in December 2006. It comprises professional women, who are involved in agricultural and natural resources management. These are women committed to organizational change for

gender equality and environmentally sustainable development. Apart from women professionals and NGOs, organizations working throughout the world on agriculture and natural resources management are also member. WOCAN is aware of the role of women in the sector as well as policy gaps that need to be addressed. Some of the identified actions include awareness raising and taking appropriate action for redress. In collaboration with WOCAN and other relevant national and international organizations African women professionals can mobilize by drawing on their own and international expertise for mutual support. They could adopt actions to promote gender equality and women in decision-making positions. They could also act as role models and above all assist to implement policies that would empower rural women in local communities.

5. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

In the forestry profession, women are beginning to make a substantial component of the forestry student body in the country. There are also some female practising foresters though their numbers are not substantially rising. The proportion of females in teaching, research and extension is steadily rising as indicated by intake of students in higher institutions over the past five years. The constitution of female enrolment which stands between 10% and 40% is quite encouraging but not enough. As a means of policy planning and promoting gender equality, the paucity of data on gender trends in forestry should be improved. Gender – disaggregated data should be collected by FC and MOWAC at all levels in forestry sector as a basis for gender mainstreaming. Gender should be made a core of development policies, including the GPRS. Adequate budget should be allocated to MOWAC for policy planning, coordination and monitoring.

Currently, women's issues of career and job opportunities in the forestry profession and related decision-making arena may not have the same significance because of the issues facing rural women in Africa, but still they are an important aspect of finding solutions to Africa's forest crisis. Thus, there is need to develop a critical mass of women at the decision-making and managerial levels that can propel policy change at all levels. This is where the gender policy of the Forestry Commission, as the only gender mainstreaming policy in the forestry sector, is so significant. With this policy, the Forestry Commission affirms its commitment to promoting gender equality in all its structures, processes, programmes and activities and recognizes that gender inequalities exist in the Commission which work to the disadvantage of women. Already the affirmative action policy in admissions of the Kwame Nkrumah University of Science and Technology is making positive impact through the intake of a certain percentage of female students. Well qualified female role models with high managerial positions in forestry professions are needed to whip up more interest in girls and women. They will also assist in implementing policy in collaborative forest management to promote gender equity.

If the Forestry Commission's vision is accepted as an organization where equal access, rights and opportunities are provided for men and women, where gender relations reflect their equal worth, dignity and rights, and where gender diversity is appreciated in all aspects of the Commission's work, then what is needed is the commitment on the part of FC to implement the policy. Within the re-structured Forestry Commission, identified areas where women can make a significant contribution include the marketing, tourism, and business development units, the education and customer services units and the collaborative resource management units. There are processes in the pipeline to promote gender mainstreaming.

Performance-based promotions and awards are being instituted by the Human Resource Department of the Forestry Commission. Infrastructural development is being carried out in the operational areas of the Wildlife and Forestry Divisions. The appropriate actions have to be taken to make these moves a reality. Coupled with these, change in attitude by both male and female, training and upgrading more women, employing more women in managerial positions and improving basic infrastructure of the organization will contribute to advance the status of women in forestry.

The affirmative action in the tertiary institutions should continue. Education of females should also be equally promoted at all levels. Government's goodwill is needed to increase the proportion of females in the legislature and public life to generally promote women in decision-making roles.

Recommendations

Evidently, gender equality needs to be integrated into forestry policy and participatory forest management from the stage of conceptualizing policy through to detailed planning, design of institutional mechanisms, to implementation, monitoring and evaluation. There has been a lot of moves on engendering women in forestry. Still not much has changed. What is needed is action now. The following from relevant information gathered and synthesized in this study, have been identified for making women's roles and concerns more sensitive to facilitate gender issues:

Development of Women in Forestry Network

- As the WOCAN network is more specific and more focused on agriculture and natural resources a caucus in Africa, I believe it has a potential for liaising with the current FAO initiative on mainstreaming gender and forestry. It is the recommendation that a link should be established with WOCAN in establishing a network for women in forestry (professional foresters, forestry lecturers, forestry researchers, extensionists and natural resources professionals).

Collection of Gender Disaggregated Data

- Collection of gender disaggregated data on women in forestry. More studies are needed to develop gender-disaggregated data on women in forestry, in the formal sector and in collaborative forest management.

Policy and Organizational Change

- Organizational change and improvement of the gender balance within forest public agencies needs to be pursued through policy to make their functioning conducive to gender sensitive, participatory forest management.

Role Models

- Develop a critical mass of women through higher education to serve as role models to women in the forestry sector.

Training

- Training more women in addition to the men in the forestry sector to support the implementation of collaborative resource management initiatives in the informal forestry sector would generate more role models for women in local communities to participate in forestry programmes at all levels.
- Gender training programmes in the local communities should target both men and women, to ensure that they understand and can support their women, wives, sisters and daughters.
- Develop the skills of women so they can be independent in carrying out their own activities.

Gender Sensitive Community Institutions

- Making membership of village institutions open to all male and female adults of the village instead of using the household as the unit. This would ensure that women representation is fair to participate in decision-making *on* their own behalf but also entitle them to equal rights and benefits.
- Provisions should be made to ensure the representation of forest-dependent women (and men) in the management committees of the village institutions.
- A proportionate presence of women must be made mandatory for completing the quorum of any valid meeting of the village institution.
- Encouraging women to form smaller groups within their community during the project design and implementation phase

Women Involvement in Planning and Formulation of Strategies

- Measures to encourage disaggregation of forest-based needs and usage by gender and socio-economic status must be incorporated in the participatory planning and implementation processes of participatory forest management.
- Carrying out separate participatory rural appraisals with women and men and then facilitating negotiations between them to finalize plans.

Empowerment

- Strategies for increasing self-confidence and empowerment of women and marginalized groups need to be developed.
- Identifying innovative women within the society and beginning a project or programme with them. This will encourage the shy ones to join once they realize the benefits from the project or programme.
- Consulting with women to identify and understand their roles and responsibilities rather than telling them what to do.
- Allowing women to drive the project in the right direction with supervision
- Motivate progressive local leaders to advocate women's equal rights and participation through emerging federations of grassroots groups.

Communication/Information Dissemination

- Holding separate meetings with groups of women to understand better their needs and priorities.
- Ensuring that there is adequate communication, information flow and education to all the women about the intended projects or programme and the expected benefits.

Management Option

- Silviculture and management options responsive to meeting diverse livelihood needs, instead of maximizing timber production, need to be developed.

Establishing Women in Forestry Network

- This is the time to develop a Women Forestry Network in Ghana and Africa.
- Attached to the study is a database on women and forestry, which could act as a preliminary basis for developing the database on women in forestry in Africa for the exercise (Appendix 1). The action should begin with an African Conference to include professionals in forestry and forestry-related institutions, gender experts, organizations among others to kick-start the process.

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ANNEX

DATABASE ON WOMEN IN FORESTRY

Forestry Commission of Ghana,

P. O. Box MB434;

Tel: 233-21-221315 / 675736; Fax: 233-21-220818;

Email: info@hq.fcghana.com

Name	Designation	Email	Contact Number
Afua Adu-Boahene	Web Content Manager	afua@hq.fcghana.com	As above
Anne Brown	Assistant Manager, HR	anne@hq.fcghana.com	
Hilda A Serwah	Marketing Officer, TIDD	haseiwah@hq.fcghana.com	
Stella Sankah	Permit Officer	ssankah@tidd.fcghana.com	
Faustina Osei	Project Assistant	fausty@rmsc.fcghana.com	
Mercy Owusu Ansah (Mrs.)	Asst. Manager	mercy@rmsc.fcghana.com	
Valerie Fumey Nassah	Asst. Manager	valfn@rmsc.fcghana.com	
Mary M. Owusu Agyeman	Forester	mmowusu@rmsc.fcghana.com	
Jenipher Seanedzu	Assistant Wildlife Officer	Jseanedzu@wd.fcghana.com	
Joana Attuah	Wildlife Ranger(Library)	JAttuah@wd.fcghana.com	
Vivian Nuhu	Public Relation Officer WD (Education)	VNuhu@wd.fcghana.com	
Edith Abruquah (Mrs.)	Regional Forest Manager		
Lydia Opoku (Mrs.)	Asst. Regional Forest Manager		
Edith Edem Ansah	Asst. Regional Forest Manager		
Diana Fati (Mrs.)	District Forest Manager		
Irene Ewusie Wilson	District Forest Manager		
Ruth Azu Vivian	Asst. District Manager		
Catherine Amankwah	Asst. District Manager		
Emelia Ackah	Asst. District Manager		
Cecilia Effah	Asst. District Manager		
Lucy Amoh	Asst. District Manager		

Forestry Research Institute of Ghana (FORIG),

Telephone: 233-51-60123

Email: director@forig.org

Name	Designation	Email	Contact Number
Augustina Gyimah (Mrs.)	Principal Research Scientist		as above
Beatrice Darko Obiri (Dr. Mrs)	Research Scientist		
Comfort Konto	Asst. Administrative Officer		
Evelyn Ahulu	Research Scientist		
Gloria D. Djangbletey (Mrs)	Research Scientist		
Lucy Amissah (Mrs)	Research Scientist		
Mary Mamle Apetorgbor (Dr. Mrs)	Research Scientist		
Margaret Sraku Lartey (Mrs)	Senior Asst. Librarian		
Naomi Owusu Appiah (Mrs)	Asst. Information Officer		
Theresa Peprah (Mrs)	Research Scientist		
Agnes Leticia Asamoah	Principal Technical Officer		
Augustina Addai	Chief Technical Officer		
Bridgette Brentuo	Chief Technical Officer		
Elizabeth Ampah	Senior Technical Officer		
Ruth Ampofowa Amole	Technical Officer		
Georgina Afriyie	Technical Officer		
Magdalene A. Prempeh (Mrs)	Technical Officer		
Sandra Owusu	Technical Officer		
Jacqueline Joyce Twintoh	Technical Officer		
Esther Amponsah	Technical Officer		
Jemima Lartey	Technical Officer		
Akua Serwah	Supervisor Gd. 1		
Comfort Oppong	Supervisor Gd. 1		
Gladys Opoku	Supervisor Gd. 1		
Helina Osei Bonsu	Supervisor Gd. 1		
Janet Mensah	Supervisor Gd. 1		
Juliana Bruce Appiah	Overseer		
Margaret Luu	Overseer		
Mary Nyarkoah	Assistant Overseer 1		
Patience Nimo	Technical Assistant Gd. 1		
Ruth Esi Awunyo	Assistant Overseer 1		
Stella Asare	Assistant Overseer 1		
Theresa Konadu	Supervisor Gd. 1		
Yaa Amoatema	Supervisor Gd. 1		

College of Renewable Natural Resources (CRNR);

P. O. Box 214, Sunyani;

Tel: 233-61-23461 / 27125; Fax: 233-61-27125;

Email: lbantwi@yahoo.co.uk

Name	Designation	Email	Contact Number
Mrs. Gyele Lucy	Full-time Lecturer		As Above
Mrs. Silvia Adu	Full-time Lecturer		
Miss C. Ocampo	Part-time Lecturer		

Faculty of Renewable Natural Resources of the College of Agriculture and Natural Resources of the Kwame Nkrumah University of Science and Technology

Kumasi; Tel.233-51-60381; Fax. 233-51- 60375

Name	Designation	Email	Contact Number
Ms. V. Nana Ama Asare	Full-time Lecturer		As above
Dr. Philomena Kumapley	Full-time Lecturer		
Mrs Joana Twum	Full-time Lecturer		
Angela Diyuoh	Teaching Assistant		
Ethel Tettey	Teaching Assistant		
Eunice Eshun	Teaching Assistant		
Solace Sam-Brew	Teaching Assistant		
Evelyn Nana Ama Fosuah	Teaching Assistant		
Matilda Akua Afriyie	Teaching Assistant		
Yaa Yamoah Anane	Teaching Assistant		
Peggy Dorcas Somuah	Teaching Assistant		
Paula Edze	Teaching Assistant		
Mary-Anne Akoto	Teaching Assistant		

Ghana Association of Forest Plantation Wood Millers and Exporters (GATEX),

P. O. Box 4913, Accra;

Cell: 233-20-8121705;

Email: gateaks@yahoo.com

Name	Name of Company	Email	Contact Number
Madam Linda Asare Boakye	Original Asaboakye Co. Ltd.		233-20-8159655 / 51-28632
Miss Linda Nsiah Ababio	Linnap 2000 Enterprise		233-24-4791976
Nana Kontoh Boakye II	N. K. B. Trading Co.		233-24-3512489
Madam A. Frances Baidoe	Forest Business Consultancy Ltd.		233-24-4465697

University Of Ghana

Name	Designation	Email	Contact Number
Elizabeth Ardayfio-Schandorf	Professor/Researcher	ardayfel@ug.edu.gh	021-500394/500786
Elizabeth Acheampong	Senior Lecturer/Researcher	elizabethacheampong@yahoo.com	0244211829
Ramatu Alhassan	Senior Lecturer/Researcher		0208154570 0242677152