GENDER AND AGRICULTURE IN SIAYA DISTRICT:
ISSUES AND STRATEGIES FOR
POLICY ANALYSIS AND REFORMS

BY: HELEN ACHIENG'AMINA

A PROJECT PAPER SUBMITTED TO THE INSTITUTE OF AFRICAN
STUDIES IN PARTIAL FULFILMENT OF THE REQUIREMENTS
FOR THE DEGREE OF MASTER OF ARTS IN GENDER AND
DEVELOPMENT STUDIES OF THE UNIVERSITY OF
NAIROBI

AUGUST 2006
DECLARATION

This project is my original work has not been submitted for examination to any other institution, college or university.

Helen Achieng' Amina

Signature.................................................................

Date.................................................................

10/11/06

This project paper has been presented for examination with my approval as the University supervisor.

Professor Simiyu Wandibba
Institute of African Studies
University of Nairobi

Signature.................................................................

Date.................................................................

10/11/06
This project paper is dedicated to my late sister Penina Auma Amina and to Noah Zonband for his encouragement, support and unflattering belief in me.
TABLE OF CONTENTS

List of Abbreviations vi
List of Tables and Figures vii
Acknowledgements viii
Abstract ix-x

CHAPTER 1: BACKGROUND TO THE STUDY
1.1 Introduction 1
1.2 Problem Statement 4
1.3 Study Objectives 6
1.3.1 Specific objectives 6
1.4 Justification 6
1.5 Scope and Limitations 7
1.6 Ethical considerations 7

CHAPTER 2: LITERATURE REVIEW
2.1 Introduction 8
2.2 Literature Review 8
2.2.1 A Review of Regional Trends 8
2.2.1.1 The impact of Structural Adjustment Programmes on Rural Women 9
2.2.1.2 Population pressure and environmental degradation 10
2.2.1.3 Male rural to urban migration 11
2.2.1.4 Recognition of women's role in agriculture 11
2.2.2 Review and Appraisal at the National Level 12
2.2.2.1 The situation in the early 1980s 12
2.2.2.2 Changes since the early 1980s 14
2.2.2.3 Inequality in the sharing of power and decision-making at all levels 14
2.2.2.4 Women in decision-making positions in ministries and government bodies 15
2.2.2.5 Women's representation in local power structures 17
2.2.2.6 Gender relations in decision-making in farming activities 18
2.2.3 Poverty 19
2.2.3.1 Factors contributing to poverty in rural areas
2.2.3.2 Economic crises, reforms and structural adjustment programmes
2.2.3.3 Environmental degradation
2.2.3.4 Changes in the number of women-headed households
2.2.4 Inequality in women’s access to and participation in the definition of economic structures and the productive process itself
   2.2.4.1 Rural land ownership
   2.2.4.2 Women’s access to credit
   2.2.4.3 Extension services and agricultural training
   2.2.4.4 Agricultural training and education
   2.2.4.5 Gender composition of extension departments
   2.2.4.6 Gender composition of extension service recipients
2.2.5 Data gaps in assessing women’s access to land, credit and agricultural extension services
2.2.6 Division of labour by gender
2.2.7 What is the situation in Kenya?
   2.2.7.1 Decision-making at household and community levels
   2.2.7.2 Access to capital and credit and other productive resources
   2.2.7.3 Gender division of labour
   2.2.7.4 Extension services
   2.2.7.5 Organisation, leadership, community management and co-operatives
   2.2.7.6 Policies and planning
2.3 Theoretical Framework
   2.3.1 The Equity Approach
   2.3.2 Relevance of the theory to the study
2.4 Hypotheses
2.5 Definition of key terms
CHAPTER 3: STUDY METHODOLOGY

3.1 Research Site
   3.1.1 Physiographic and natural conditions
   3.1.2 Settlement patterns
   3.1.3 Agriculture

3.2 Research Design
   3.2.1 Participatory Learning and Action
   3.2.2 The Harvard Analytical Framework

3.3 Study population
   3.3.1 Respondent sampling

3.4 Data collection methods
   3.4.1 Library research
   3.4.2 Focus Group Discussions
   3.4.3 Semi-structured interviews
   3.4.4 Informal interviews

3.5 Data Analysis

3.6 Problems encountered in the field and their solutions

CHAPTER 4: GENDER AND AGRICULTURE IN SIAYA DISTRICT

4.1 Introduction

4.2 Seasonal Cropping Calendar
   4.2.1 Land preparation
   4.2.2 Sowing
   4.2.3 Weeding
   4.3.4 Harvesting
   4.3.5 Threshing/processing and storage

4.2.6 Household water supply
4.2.7 Household fuel and wood supply
4.2.8 Labour availability

4.3 The Daily Activity Schedule
   4.3.1 Workload
4.4 Activity Profile
4.4.1 Agriculture
4.4.2 House building
4.4.3 Income Generating
4.4.4 Household maintenance activities
4.5 Access and Control Profile
4.5.1 Land
4.5.2 Agricultural inputs
4.5.3 Labour
4.5.4 Education and training
4.5.5 Benefits

CHAPTER 5: DISCUSSION AND CONCLUSIONS
5.1 The case for policy review and reforms
5.1.1 Women’s workload
5.1.2 Low access by women to agricultural resources including land, livestock implements and labour
5.1.3 Credit/Cash
5.1.4 Invisibility of women in decision-making at household and community level
5.1.5 Low access to technology, information and extension services
5.2 Gender and agriculture — a summary of the situation
5.2.1 Land rights
5.2.2 Research
5.2.3 Extension
5.2.4 Modern technology
5.2.5 Financial resources
5.2.6 Policy and programme cost of neglecting gender
5.3 A strategy for policy analysis and reforms
5.3.1 Background
5.3.2 The issue
5.3.3 Gender and participation in agricultural planning
### LIST OF ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABS</td>
<td>Agricultural Bank of Sudan</td>
</tr>
<tr>
<td>AIDS</td>
<td>Acquired Immune Deficiency Virus</td>
</tr>
<tr>
<td>AGRITEX</td>
<td>Department of Agricultural Technical and Extension Services (Zimbabwe)</td>
</tr>
<tr>
<td>CEDAW</td>
<td>Convention on the Elimination of Discrimination Against Women</td>
</tr>
<tr>
<td>CETA</td>
<td>Collèges d'enseignement technique agricole (agricultural technical secondary schools - Congo)</td>
</tr>
<tr>
<td>CMA</td>
<td>Centres des métiers agricoles (agricultural training centres - Congo)</td>
</tr>
<tr>
<td>ECA</td>
<td>Economic Commission for Africa</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agriculture Organisation of the United Nations</td>
</tr>
<tr>
<td>FOS</td>
<td>Federal Office of Statistics</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GVF</td>
<td>Groupe de travail féminin (women's working group - Burkina Faso)</td>
</tr>
<tr>
<td>GVM</td>
<td>Groupe de travail homme (men's working group - Burkina Faso)</td>
</tr>
<tr>
<td>GVM</td>
<td>Groupe de travail mixte (mixed working group - Burkina Faso)</td>
</tr>
<tr>
<td>IFAD</td>
<td>International Fund for Agricultural Development</td>
</tr>
<tr>
<td>MARA</td>
<td>Ministère de l'Agriculture et des Ressources Animales (Burkina Faso)</td>
</tr>
<tr>
<td>MAWRD</td>
<td>Ministry of Agriculture, Water and Rural Development (Namibia)</td>
</tr>
<tr>
<td>MDR</td>
<td>Ministère du Développement Rural (Ministry of Rural Development - Benin)</td>
</tr>
<tr>
<td>MDRE</td>
<td>Ministère du Développement Rural et de l'Environnement (Ministry of Rural Development and the Environment - Mauritania)</td>
</tr>
<tr>
<td>MET</td>
<td>Ministère de l'Environnement et du Tourisme (Ministry of the Environment and Tourism - Burkina Faso)</td>
</tr>
<tr>
<td>MLAWD</td>
<td>Ministry of Lands, Agricultural and Water Development (Zimbabwe)</td>
</tr>
<tr>
<td>MLGURD</td>
<td>Ministry of Local Government, Urban and Rural Development (Zimbabwe)</td>
</tr>
<tr>
<td>NASCUZ</td>
<td>National Association of Cooperative Savings and Credit Unions (Zimbabwe)</td>
</tr>
<tr>
<td>NNFU</td>
<td>Namibia National Farmers Union</td>
</tr>
<tr>
<td>NGOs</td>
<td>Non-governmental organizations</td>
</tr>
<tr>
<td>PLA</td>
<td>Participatory Learning and Action</td>
</tr>
<tr>
<td>PRA</td>
<td>Participatory Rural Appraisal</td>
</tr>
<tr>
<td>RRA</td>
<td>Rapid Rural Appraisal</td>
</tr>
<tr>
<td>RPAWANE</td>
<td>Regional Programme of Action for Women in Agriculture in the Near East</td>
</tr>
<tr>
<td>SEAGA</td>
<td>Socio-Economic and Gender Analysis Programme</td>
</tr>
<tr>
<td>SPAFR</td>
<td>Service de Promotion des Activités Féminines Rurales (Service for the Promotion of Women's Rural Activities - Benin)</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
<tr>
<td>WID</td>
<td>Women in development</td>
</tr>
</tbody>
</table>
LIST OF TABLES AND FIGURES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1.1: Importance of Agriculture to the National Economies</td>
<td>1</td>
</tr>
<tr>
<td>Table 1.2: Role of Women in Agriculture</td>
<td>2</td>
</tr>
<tr>
<td>Table 2.1: Women's Participation in Rural Organizations (percent)</td>
<td>14</td>
</tr>
<tr>
<td>Table 2.2: Female Decision-makers in Ministries and/or Technical Staff (%)</td>
<td>16</td>
</tr>
<tr>
<td>Table 2.3: Female headed Households in Rural Areas (%)</td>
<td>20</td>
</tr>
<tr>
<td>Table 2.4: Women and Land Ownership</td>
<td>23</td>
</tr>
<tr>
<td>Table 2.5: Percentage of Credit Going to Rural Women</td>
<td>24</td>
</tr>
<tr>
<td>Table 2.6: Percentage of Female Extension Staff by Year</td>
<td>29</td>
</tr>
<tr>
<td>Table 3.1: Sectoral contribution to household income</td>
<td>47</td>
</tr>
<tr>
<td>Table 3.2: Study sites</td>
<td>48</td>
</tr>
<tr>
<td>Table 3.3 Respondents per site</td>
<td>50</td>
</tr>
<tr>
<td>Table 4.1: Use of additional labour by type of household in sample villages</td>
<td>53</td>
</tr>
<tr>
<td>Table 4.2: Seasonal Cropping Calendar – men &amp; women</td>
<td>55</td>
</tr>
<tr>
<td>Table 4.3: Daily Activity Schedule – men</td>
<td>56</td>
</tr>
<tr>
<td>Table 4.4: Daily Activity Schedule – women</td>
<td>56</td>
</tr>
<tr>
<td>Table 4.5: Activity Profile</td>
<td>59</td>
</tr>
<tr>
<td>Table 4.6: Access and Control Profile</td>
<td>63</td>
</tr>
<tr>
<td>Figure 5.1: Work done in one hectare farm in one year in the Indian Himalayan</td>
<td>68</td>
</tr>
</tbody>
</table>
ACKNOWLEDGEMENTS

I would like to thank the University of Nairobi’s Institute of African Studies (IAS) for its support and co-operation. My special thanks go to Professor Simiyu Wandibba for his invaluable guidance, support and supervision during the preparation of this study. My sincere thanks go to Peter Ochieng’ and Mary Awino for their role in data collection and facilitation of my field work, and to my parents George and Risper Amina for their very useful insights and general assistance in the field. Last but not least, I cannot forget to thank the men and women of Ramunde sub-location who took part in this study for their trust and openness. I sincerely hope that the issues raised and the suggestions made in this document will contribute towards advancing the case for a gender-responsive policy review of the agricultural sector in Kenya.
ABSTRACT

This study describes the significant and critical contribution made by rural women in Africa to the food security and economies of their countries through their work in the agricultural sector. The main concern of this study was to analyse and document the gender division of labour in agriculture, the male and female differentials in access to and control of key productive resources, and the specific strategies that can be employed to develop gender-responsive agricultural policies.

The study is based on qualitative data which was collected through focused group discussions and in-depth interviews with key informants, heads of households and respondents selected through purposive sampling. Respondents included female and male members of farming households in Ramunde sub-location of Siaya District in Nyanza province of Kenya. Library research was also used to collect data.

Findings confirm the fact that as in many other parts of the world today, in Ramunde sub-location, there is an increasing trend towards what has been termed the 'feminization of agriculture'. As men's participation in agriculture declines, the role of women in agricultural production becomes ever more dominant. Sickness and death from HIV/AIDS have reduced rural male populations. Another major cause of this phenomenon is the migration of men from rural areas to towns and cities, in their own countries or abroad, in search of paid employment.

Further, data obtained illustrates that despite their contribution to global food security, women farmers are frequently underestimated and overlooked in development strategies. A lack of available gender disaggregated data means that women's contribution to agriculture in particular is poorly understood and their specific needs ignored in development planning. This is because much of women's work in crop production consists of unpaid labour in fields that produce for the household rather than the market. As a result, women's work goes unrecorded in statistics. Because of this scarcity or - in most cases - sheer lack of available information, there has been little effective recognition of women's labour in agriculture. Gender-disaggregated data is needed to help
telephones, planners and policy makers identify the role differences in food and cash crop production as well as men's and women's different managerial and financial control over the production, storage and marketing of agricultural products. Only by the collection and analysis of such gender disaggregated data will development strategies target women as active and equal partners in agricultural development.

Women's full potential in agriculture must be realized if the goal of the 1996 World Food Summit - to halve the number of hungry people in the world by 2015 - is to be achieved. The empowerment of women is key to raising levels of nutrition, improving the production and distribution of food and agricultural products and enhancing the living conditions of rural populations.

Therefore, this study recommends that: Legislative, administrative, socio-economic and attitudinal barriers to rural women's access to the factors of production should be eliminated through changes in legislation and proactive economic and social policy; the level of skills and productivity of rural women workers should be raised through public and private investment in basic education, literacy as well as special skills programmes and vocational training; Women's organisations should be empowered to enhance their participation in mainstream policy- and decision-making bodies; and strategies should be developed to change the mind-sets and operational procedures of rural institutions, both public and private, to increase their responsiveness to rural women's needs.
CHAPTER ONE

BACKGROUND TO THE STUDY

1 INTRODUCTION

A wide variety of literature is available on the importance of agriculture to economic development in Africa and on the critical role that rural women play within this sector. Increasing attention is now being given to the role of smallholder subsistence agriculture in ensuring the food security of the continent, as 73% of the rural population consists of smallholder farmers (IFAD, 1993:6). In sub-Saharan Africa, agriculture accounts for approximately 21% of the continent’s GDP and women contribute 60-80% of the labour used to produce food both for household consumption and for sale.

The importance of agriculture to the national economies in Africa and as a source of employment, emerged from the data provided in several IFAD sectoral reports, as shown in Table 1.1.

Table 1.1: Importance of Agriculture to the National Economies.

<table>
<thead>
<tr>
<th>Country</th>
<th>Contribution of Agriculture to GDP</th>
<th>Population employed/involved in agriculture (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benin</td>
<td>40</td>
<td>70</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>45</td>
<td>85</td>
</tr>
<tr>
<td>Congo</td>
<td>8</td>
<td>52</td>
</tr>
<tr>
<td>Mauritania</td>
<td>22</td>
<td>Data not available</td>
</tr>
<tr>
<td>Morocco</td>
<td>15-20</td>
<td>40</td>
</tr>
<tr>
<td>Namibia</td>
<td>11</td>
<td>79</td>
</tr>
<tr>
<td>Sudan</td>
<td>40</td>
<td>80</td>
</tr>
<tr>
<td>Tanzania</td>
<td>50</td>
<td>85</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>11</td>
<td>71(^1)</td>
</tr>
</tbody>
</table>


From the data provided in table 1.1, the agricultural sector contributes from a low of 8% of GDP in the Congo to a high of 50% in Tanzania, and employs from 40% of the population in Morocco to 85% in Burkina Faso and Tanzania. In other countries such as the Congo, Namibia and Zimbabwe, where the contribution of the agricultural sector to GDP is small, the sector still plays an extremely important role as a source of employment.

\(^1\) The definition of the population employed/involved in agriculture varied among the reports. While some countries cited official national figures of the economically active population, which in some cases excluded subsistence farmers, others gave estimates of the proportion 'involved' or 'dependent upon' agriculture which may include subsistence farmers.
The important role of smallholder subsistence farmers in Africa, of which the majority are women, has been highlighted in many countries. For example in Benin, 95% of the agricultural economy is run by small farmers using subsistence techniques. In Morocco, smallholder farmers account for 69% of all farmers (FAO, 1993:17). On the other hand, in Namibia, 90% of the population in communal farming areas (which covers approximately 41% of the country’s land area and is comprised of smallholder subsistence farmers) are directly dependent on subsistence agriculture for living. In Tanzania, smallholders contribute approximately 80% of the value of marketed surplus and 75% of export earnings (IFAD, 1993:6). Finally, in Zimbabwe, the communal land sector (in which smallholder farming is practised) occupies 42% of all land and accounts for 80% of the female population.

Women’s critical role in agricultural production, and especially in subsistence agriculture, as well as in livestock raising and food processing, was also emphasized in the reports and is shown in Table 1.2.

**Table 1.2: Role of Women in Agriculture**

<table>
<thead>
<tr>
<th>Country</th>
<th>Women’s contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benin</td>
<td>70% of the female population live in rural areas, where they carry out 60-80% of the agricultural work and furnish up to 44% of the work necessary for household subsistence.</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>Women constitute 48% of the labourers in the agricultural sector.</td>
</tr>
<tr>
<td>Congo</td>
<td>Women account for 73% of those economically active in agriculture and produce more than 80% of the food crops.</td>
</tr>
<tr>
<td>Mauritania</td>
<td>Despite data gaps, it is estimated that women cover 45% of the needs in rural areas (further details not specified)</td>
</tr>
<tr>
<td>Morocco</td>
<td>Approximately 57% of the female population participates in agricultural activities, with greater involvement in animal (68%) as opposed to vegetable production (46%). Studies have indicated that the proportion of agricultural work carried out by men, women and children is 42%, 45% and 14% respectively.</td>
</tr>
<tr>
<td>Namibia</td>
<td>Data from the 1991 census reveals that women account for 59% of those engaged in skilled and subsistence agriculture work, and that women continue to shoulder the primary responsibility for food production and preparation.</td>
</tr>
<tr>
<td>Sudan</td>
<td>In the traditional sector, women constitute 80% of the farmers. Women farmers represent approximately 49% of the farmers in the irrigated sector and 57% in the traditional sector. 30% of the food in the country is produced by women.</td>
</tr>
<tr>
<td>Tanzania</td>
<td>98% of the rural women defined as economically active are engaged in agriculture and produce a substantial share of the food crops for both household consumption and for export.</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>Women constitute 61% of the farmers in the Communal areas and comprise at least 70% of the labour force in these areas.</td>
</tr>
</tbody>
</table>


---

2 It was noted that this estimate is considered low as the 1991 census included the subsistence farming sector for the first time.
Estimates of women's contribution to the production of food crops range from 30% in the Sudan to 80% in the Congo, while their proportion of the economically active labour force in agriculture ranges from 48% in Burkina Faso to 73% in the Congo and 80% in the traditional sector in Sudan.

The data provided for the nine countries supports a common trend throughout Africa - smallholder subsistence farmers, and especially women farmers, substantially contribute to national agricultural production and food security, and women farmers are primarily responsible for food crops.

Given the critical importance of the agricultural sector to the national economies, and in view of the important productive role of women within this sector, economic development and food security are affected by the degree of commitment shown by governments to the agricultural sector and to rural women. Gender disaggregated statistics that accurately illustrate the nature and role of women's involvement in agriculture are indispensable in gaining this commitment and for the formulation of successful policies, programmes and projects in the agricultural sector.
The roles women play in agricultural production and natural resource management are critical to the economies of developing countries, yet the value of these roles has often been ignored or dismissed. Among the factors leading to the invisibility of women's contributions are:

Women commonly work in family enterprises or are self-employed rather than work as wage earners; their work is seasonal rather than year round; they tend to be informally rather than formally employed; and women engage in diverse and shifting economic activities. In addition, there is rarely a clear-cut distinction between domestic production for household consumption and for economic agricultural activities; between economically active and inactive persons; and between agricultural and non-agricultural tasks.

Recent United Nations estimates indicate that women provide 60 to 80% of the agricultural labour in Africa and Asia and 40% in Latin America. National statistics on women's roles in agricultural production vary widely, yet analyses by several agencies indicate that women participate in the entire food system to a much greater degree than is routinely reported. Women contribute as producers, distributors, processors, storers, and marketers. They are involved in every type of agricultural activity, putting in as many or more hours than men, and participating in crop production activities ranging from land clearing and preparation through harvesting and processing. They tend to all types of livestock; process foods for home consumption and for the market; manage natural resources through their use of fuel and water and their crop and animal activities; and market their products at the local, regional and national level.

Despite women's significant contributions to agricultural production and to rural households, generally they have less access to land, capital, credit, technology, and training than men in that same system. The constraints women face in gaining access to these resources significantly reduce the productivity of both the rural sector and the entire national economy.

Where there is recognition of the significant contribution by women to agricultural production in terms of labour and indigenous ecological knowledge, this is often not reflected in national agricultural policies. The Kenya Human Development Report of 1999:5) states:

"Recent data show that women manage at least 40% of Kenyan agricultural smallholdings and provide 75% of the required labour."
Despite this realisation, Kenya's agricultural sector is governed by over 130 pieces of legislation, many of which are out of date with the current economic and development thinking. The country does not have an agricultural policy that comprehensively recognises, incorporates and promotes women's contributions in its strategies, by for instance, addressing critical issues such as women's lack of access to credit, land, and other critical resources of production; systemic bottlenecks to processing, storage and marketing; and the lack of research and successful transfer of technology and new practices to enhance women's agricultural productivity.

This study explored the following interrelated questions:

i. What is the nature of the gender-linked division of labour (e.g. division of labour by crop) in agricultural production?

ii. What are the male and female differentials in access to and control to key productive resources including land, capital, labour, credit information, seeds, tools, fertilisers, water and fuel?

iii. What are the specific farming responsibilities ("e.g. women's animals," "women's crops," weeding, transporting, marketing, preserving, processing and storage e.t.c) which are uniquely and particularly assigned to female members of the household or society?

iv. What explicit strategies can be employed in building gender-role aspects of farming into all policy, programme and project aspects? In particular, integrated services to address females' multiple responsibilities in farm households? These responsibilities would include human nutrition/health, animal nutrition/health, farm management, family resource management, and time/labour-saving technologies.
1.3 STUDY OBJECTIVES

The overall objective of this study is to highlight Women's critical role in agricultural production as well as critical gender concerns in agriculture and to demonstrate the importance of addressing these issues and gaps in policy-making at national, programme and project level.

1.3.1 Specific Objectives

These revolve around detailing the specific concerns in gender and agriculture that must be fully comprehended as a basis for policy, programme and project planning. These concerns have been encapsulated within the following four objectives:

i. To establish the nature of the gender-linked division of labour in agricultural production.

ii. To document the male and female differentials in access to and control to key productive resources including land, capital, labour, credit information, seeds and tools.

iii. To establish the specific farming responsibilities ("e.g. women's animals," "women's crops," weeding, transporting, marketing, preserving, processing and storage e.t.c) which are uniquely and particularly assigned to female members of the household or society.

iv. To demonstrate the explicit strategies that can be employed in building gender-role aspects of farming into all policy, programme and project aspects.

1.4 JUSTIFICATION

Despite the fact that in the last fifteen years many researchers have referred to the gendered nature of ecological and agricultural science and practice in most cultures, it must be said that development efforts in general, and Biodiversity conservation strategies in particular, have typically not been gender-sensitive. The general misconception and marginalisation of women's role in agriculture and conservation strategies, which is directly related to their lack of power and their low status within society, have often caused researchers and policy makers (mainly males) to ignore women's skills and needs as a focal issue in mainstream sustainable development. When
velopiflent efforts are discussed, women are usually depicted (if at all they are depicted) as peripheral contributors to the social and economic transformation of their society. An important implication of this is that half or more of indigenous ecological science has been obscured by the prevailing invisibility of women, their work, their interests and especially their knowledge. This lack of support has led to the ominous situation of a shaky food security at household and national levels and stagnant economies in countries whose mainstay is agricultural production.

1.5 SCOPE AND LIMITATIONS

The study sought to focus on the roles and responsibilities of women and men in agricultural production and the male-female differentials in accessing and controlling productive resources.

Due to time and financial limitations, the field research limited itself to the most cost-effective data collection methodologies by using a small sample with tools that allowed for in-depth discussions and analyses with respondents. In addition, for the purposes of this study, more emphasis was laid on female rather than on male respondents.

It must therefore be pointed out that owing to the size of the sample, the study findings by themselves, though having internal validity, will exercise limited external validity.

1.6 ETHICAL CONSIDERATIONS

Utmost care will be taken not to harm the study respondents in any way by informing them of the purpose of the research and eliciting their permission to be interviewed. Due consideration will be given to local norms/culture with regard to the types of questions asked, the mode of interview and male-female interaction in the community. Respondent confidentiality will be duly protected for those not wishing to participate publicly. Finally, during data analysis, research findings will be revealed fully and truthfully and presented within the context in which they occurred.
CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This literature review is adapted from nine national sectoral reports prepared within the context of FAO's Programme of Assistance in Support of Rural Women, in Preparation for the Fourth World Conference on Women. The reports represent an important step forward in increasing the amount of information on, and thus attention paid to, the concerns of rural women. The reports emphasize the importance of women to the agricultural sector as well as the relationship between the achievement of national economic development and food security and the degree of Government commitment to the needs of women farmers.

The methodology employed in this review is a comparative analysis of the quantitative and qualitative data provided in the nine sectoral reports. The data is supported, when available, by additional documentation on the African region, for which the sources are indicated.

2.2 LITERATURE REVIEW

2.2.1 A Review of Regional Trends

In Africa, several regional trends have had an impact on women's productive role in agriculture, forestry and fisheries, including:

1. structural adjustment policies adopted by many governments over the last ten years, in the face of global recession, decreased commodity prices and growing foreign debt;
2. Population pressure and environmental degradation;
3. High rates of male rural-to-urban migration in search of income earning employment opportunities; and,
4. Increased attention to the importance of women in national agricultural plans and policies.

---

3 (Benin, Burkina Faso, the Congo, Mauritania, Morocco, Namibia, Sudan, Tanzania and Zimbabwe.)
Increasing attention has been paid to the impact of structural adjustment policies on rural women in Africa, and empirical evidence is emerging which indicates that the impact has largely been negative. In the sectoral reports in which explicit attention was paid to economic reforms and structural adjustment policies (Burkina Faso, Congo, Morocco, Tanzania, Zimbabwe), the negative impacts on rural women were emphasized.

Under structural adjustment programmes, large-scale farming and commercial crop production are promoted, based on the assumption that productivity improvements are easier to obtain in the export as opposed to subsistence or locally-traded crops sector, and that the increase in income stemming from export production will ensure national food security (Joekes, 1991). As a consequence, resources (land, labour, and inputs, including research) have been reallocated from subsistence production to the production of export crops. The implications of this shift are many, especially for women who are concentrated in the subsistence sector and whose ability to move into export crops is limited by various constraints, including:

- Time (double burden of productive and reproductive tasks);
- Systemic (low access to credit, technological packages and marketing information); and,
- Socio-cultural (traditional responsibility for feeding and care of the household).

Women's already limited access to resources is further constrained given the low priority afforded to the subsistence farming sector. Rising prices for basic food products, commodities and agricultural inputs often encourage women to remain at the subsistence level to cover more of the household's food needs.

At the same time, reduced government involvement in such areas as marketing and pricing for subsistence agriculture leaves farmers responsible for areas in which they have no previous experience or training. For example, in Zimbabwe, the parastatal marketing boards no longer enjoy government financial support and subsidies have been removed. Thus marketing facilities,
collection depots and assured producer controlled prices are no longer in place and women now have to develop marketing skills, source their own markets and meet all costs. 4

In addition, structural adjustment policies generally involve reduced government expenditures on social services such as education, health and rural infrastructure (water and energy supplies) which means further demands are made on women's time and energy to make up for shortfalls in these areas.

2.2.1.2 Population pressure and environmental degradation

A second trend with implications for rural women is the high population growth experienced in Africa, coupled with unequal allocation of resources and inheritance laws which result in land parcelling and contribute to environmental degradation as the growing pressure on the land pushes farmers (and especially rural women) to overexploit wood, water and other resources in order to meet household requirements. Such over-exploitation may result in serious and irreversible environmental degradation including deforestation, long-term erosion, decreased soil fertility, and desertification, which limits the development of agriculture in most areas of sub-Saharan Africa. In Burkina Faso, Sudan, Morocco, Tanzania and Benin, the rural population faces increased incidence of soil degradation and/or desertification.

In Zimbabwe and Namibia, environmental degradation (deforestation, water deficiencies, soil erosion and loss of biodiversity) has been hastened by the policies introduced under colonial and white rule which allocated the poorest land to black farmers. As the population pressure on the fragile land base increases, land units per household have decreased and, to compensate, unsuitable land is cleared for agriculture, causing soil erosion, decreased fertility and productivity. Wetlands have also been lost, resulting in food and water shortages during periods of droughts, when these areas would have previously served as a source of water.

The implications of environmental damage in rural areas are particularly serious for women who are generally found on the most marginal land and have the primary responsibility for providing household subsistence. These women rarely have alternative income-generating employment

---

4 A similar phenomenon occurred in the Congo and Benin, with the disengagement of the State from production and marketing activities in the late 1980s.
opportunities. In Zimbabwe, for example, the highest percentage of women farmers is found in the semi-arid lands with marginal agricultural potential. Surveys suggest that the percentage of women with their own land allotment, as opposed to those providing agricultural labour on a male relative's land, increases as the agricultural potential of the land decreases.

2.2.1.3 Male rural-to-urban migration

Pressure on the countryside from the rapidly growing population and low returns from agriculture have contributed to an Africa-wide phenomenon of growing male rural-to-urban denigration. While such migration can increase remittances to rural areas and strengthen market linkages between urban and rural areas, it leaves rural women increasingly responsible for farming and for meeting their households' immediate needs. In Burkina Faso, Morocco, Mauritania, the Congo and Zimbabwe, women have taken over the tasks formerly carried out by men in addition to those for which they are traditionally responsible. In the Congo and Sudan, the number of women headed-households has increased dramatically. In other countries such as Namibia and Zimbabwe, male migration, coupled with the almost complete female domination of the traditional farming sector, is a legacy of colonialism which encouraged rural men to provide cheap labour for mines, large white-run commercial farms, fishing enterprises and urban businesses.

2.2.1.4 Recognition of women's role in agriculture

More encouragingly, throughout Africa many countries have introduced new legislation and programmes to assist small farmers in the traditional sector and pay special attention to women's needs. In Burkina Faso, a national action plan has been prepared to increase women's access to agricultural services, to end discrimination in land allocation, and to create a fund for women's income generating activities. In the Sudan, the ten-year strategy targeting the agricultural sector emphasizes food production and food security and explicitly recognizes the critical role of women within this sector. In addition, the Three Year Women in Development Programme, 1993-96 aimed to establish legislation and institutions that would increase women's access to productive resources including land, irrigation, credit, technology, extension services and training. Zimbabwe has implemented similar programmes designed to address women's and farmer's needs, especially in terms of lessening the negative effects of the policy reform programme and drought, and addressing environmental and land tenure concerns.
2.2.2  Review and Appraisal at the National Level

2.2.2.1  The situation in the early 1980s

In the early 1980s, while the population grew rapidly, food production and agricultural incomes decreased in many African countries. Government allocations to agriculture declined in many countries as the global recession resulted in a renewed preoccupation with growth as opposed to equity concerns. Against this background, the situation of rural women was characterized by overwork, low productivity, little access to credit, land, training, and the use of rudimentary technology. In many countries (Tanzania, Benin, Mauritania, Namibia, Zimbabwe) the diminishing capacity of agriculture to provide for household subsistence increased the workload shouldered by women as men withdrew their labour from agriculture. Women had to increasingly make up for the family's food deficit by working as casual hired labour on larger farms, or by starting up income generating activities in addition to continuing their farming activities.

At the same time, government interventions did little to address the plight of rural women as, in most countries, the agricultural sector continued to be neglected. Women's low participation in national and regional policy-making, their invisibility in national statistics and their low participation in extension services (with the exception of home economics programmes) has meant that those issues of most concern to women have been neglected in the design and implementation of many development policies and programmes. When women were targeted as beneficiaries, it was generally in their reproductive capacity or as targets of welfare interventions. Small, dispersed "women-specific" projects, or project components focusing on their productive role in agriculture, remained isolated from national agricultural planning and policies. In some countries such as Benin, while the government paid increasing attention to the economic role of women, the programmes developed were far from addressing the main concerns of women as they were neither involved in policy making decisions nor were they directly consulted to articulate their needs.

In some countries, despite legislative and tenure changes in favour of smallholders, women continued to be placed in a disadvantaged position in terms of access to land. As the amount of land cultivated per person declined in the face of increased population pressure and decreased areas of growth for arable and permanent crops, women's access to land was only rarely addressed and thus their benefits from land reforms were few (FAO, 1988:3). Without land, women were generally excluded from agricultural cooperatives as membership was often based on land ownership.
Emphasis on commercial agriculture and export crops also restricted access to credit and other services for the traditional farming sector, where most of the farmers are women. Extension research and services focused on export or cash crops and sophisticated farm mechanization; issues which were not relevant to women's subsistence needs. In Namibia, where black women are the majority of producers in the subsistence sector (communal areas), government institutions and resources focused on the commercial sector, and in those cases in which government interventions did reach the communal areas, they targeted elite farmers and were of little benefit to women.

In those countries in which traditional models of production co-existed with state run farms and/or cooperatives, women were responsible for a variety of tasks. For example, in Benin, rural women provided labour to the families commercial plots, were responsible for household food production and processing, and also had to work in the cooperative structures set up by the State in addition to their household tasks. In countries following a capitalist model, women worked just as hard, contributing labour to the household commercial plot, farming their own plots for subsistence, processing and preparing food for the family, and covering a variety of household and community needs, including health and child care.

It was during this period, however, due in part to the recommendations coming out of the first two world conferences on women (Mexico City in 1975 and Copenhagen in 1980) and the UN Decade for Women, that issues concerning women were put on the international agenda and governments, including those in Africa, began to establish bodies responsible for the promotion of women's interests. These bodies promoted an awareness of women's issues, including those of rural women, and encouraged research on their agricultural and other roles. They also served as advocates for changes in national policies and legislation affecting women's rights to land and inheritance, employment conditions, and wage rates.

In Africa, the creation of national women's machineries was a critically important step in ensuring that women's needs and constraints were put on the national policy agenda. However, their technical weaknesses, frequent location in the Ministries of Social Affairs (or in the women's branch of the revolutionary party in the countries following a socialist development model), urban bias, and their lack of influence in the technical ministries meant that their direct impact on rural women was negligible, and that interventions designed by them often focused on smaller income generating projects which did not adequately address women's needs for assistance concomitant with their agricultural production responsibilities (FAO, 1990b:5). The general isolation of the
machineries from the planning ministries also meant that women's needs and potentials were not
given adequate attention in the development of national strategies and plans.

2.2.2.2 Changes since the early 1980s

2.2.2.3 Inequality in the sharing of power and decision-making at all levels.

In the nine countries examined, as throughout Africa in general, while women are present in greater
and lesser degrees in agricultural/rural organizations, they tend to comprise a low proportion of the
membership and are often not represented in the higher levels of leadership. In addition to the
socio-cultural factors which often limit women's participation in these organizations, other
constraints include women's limited time and energy, limited formal land ownership and rights to
land resources (which is often used as a criteria for membership), and the commercial bias of many
of the organizations and subsequent neglect of those issues of concern to women farmers. In some
countries, women's groups and cooperatives have been set up to balance their lack of representation
in existing rural organizations (Congo, Mauritania, Morocco, Namibia and Zimbabwe) while, in
others, NGOs have played an increasingly important role in seeing that rural women's needs are
addressed (Morocco).

Table 2.1 summarizes information regarding female membership in agricultural and rural
organizations including cooperatives, credit and farming which remains quite low. Their
membership in pre-cooperatives and cooperatives ranges from 6% in Morocco to 44% in Tanzania.
Women's membership in credit institutions ranges from a low of 15% in Tanzania to a high of 63%
in Zimbabwe, and their membership in farmers' organizations ranges from 2% in the Sudan to 75%
in Zimbabwe.

Table 2.1: Women's Participation in Rural Organizations (percent)

<table>
<thead>
<tr>
<th>Country</th>
<th>Pre-cooperatives and Cooperatives</th>
<th>Credit Associations</th>
<th>Farmers Associations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Members</td>
<td>Officers</td>
<td>Members</td>
</tr>
<tr>
<td>Benin</td>
<td>11</td>
<td>0</td>
<td>25</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>20</td>
<td>0</td>
<td>No data</td>
</tr>
<tr>
<td>Mauritania</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>Morocco</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>Namibia</td>
<td>No data</td>
<td>No data</td>
<td>0</td>
</tr>
<tr>
<td>Sudan</td>
<td>15</td>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td>Tanzania</td>
<td>44</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>No data</td>
<td>No data</td>
<td>63</td>
</tr>
</tbody>
</table>

While women's membership is most often limited by their lack of formal land ownership, many rural organizations emphasize the interests of male members and do not sufficiently concern themselves with the needs of rural women. For instance, the Namibia National Farmers Union was established in 1992 to provide a voice and organizational base for communal farmers, and women comprise 30-60% of affiliate associations. However, its activities stress marketing and surplus production for the commercial farming sector rather than subsistence production and food processing.

Women's participation as office holders in these organizations tends to be even more limited. The most striking example is in Zimbabwe, where despite the fact that women constitute 75% of the members in the Zimbabwe Farmers Unions, only 5% of the officers are women. The largest number of women decision makers are found in the Sudan, where 14% of the office holders in agricultural graduates' cooperatives are women.

Statistics on women's participation in the different types of organizations are unavailable in many countries. As the work of these institutions is important for rural development, more information needs to be collected on women's participation in such institutions in order to identify and address the constraints women face in accessing these resources. Research should also be conducted in countries where women's participation is increasing to identify the factors behind such growth and to evaluate their replicability elsewhere.

2.2.2.4 Women in decision-making positions in ministries and government bodies

In Africa, few women hold policy making positions at the national level, and those that do tend to be concentrated in social ministries such as education and health. Only rarely do women hold such positions in technical ministries such as agriculture, which has many implications for the policies generated there. While one's biological sex does not necessarily determine one's sensitivity to gender, it has been shown that increased female participation has an impact on policies in regard to the importance given to women's issues and concerns.

Overall, as illustrated in Table 2.2, women hold an extremely low number of decision-making positions in ministries dealing with agriculture and rural development. Women's representation is highest in Namibia in the Ministry of Lands, Resettlement and Rehabilitation, and in the Ministry
of Regional and Local Government and Housing, with 22% and 25% women decision-makers, respectively. Women hold the fewest decision-making positions in Zimbabwe’s Ministry of Lands, Agricultural and Water Development (0.1% and 0.3%, respectively for the Departments of Tsetse Control and Water Development).

Women’s representation is also low in governmental or parastatal committees which address complex legal and political issues. In Namibia, the two commissions of relevance for rural women include the Technical Committee on Commercial Farmland and the Commission of Inquiry into Traditional Leadership. The former has only one woman while the latter has none. In addition, of the seven members of the National Task Force on Agricultural Policy, only one is a woman. In Zimbabwe, in the parastatal Agricultural Development Authority, women account for only 6% of the policy-makers.

<table>
<thead>
<tr>
<th>Country and Ministry</th>
<th>% of Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>BENIN</td>
<td></td>
</tr>
<tr>
<td>Ministry of Rural Development</td>
<td>7.3</td>
</tr>
<tr>
<td>BURKINA FASO</td>
<td>0</td>
</tr>
<tr>
<td>CONGO</td>
<td>0</td>
</tr>
<tr>
<td>MAURITANIA</td>
<td>0</td>
</tr>
<tr>
<td>Ministry of Fishing and the Maritime Economy</td>
<td>1.9</td>
</tr>
<tr>
<td>Ministry of Rural Development and the Environment</td>
<td>1.5</td>
</tr>
<tr>
<td>MOROCCO</td>
<td>0</td>
</tr>
<tr>
<td>Ministry of Agriculture</td>
<td>1</td>
</tr>
<tr>
<td>NAMIBIA</td>
<td>0</td>
</tr>
<tr>
<td>Ministry of Agriculture, Water and Rural Development</td>
<td>5</td>
</tr>
<tr>
<td>Ministry of Lands, Resettlement and Rehabilitation</td>
<td>22</td>
</tr>
<tr>
<td>Ministry of Regional and Local Government and Housing</td>
<td>25</td>
</tr>
<tr>
<td>SUDAN</td>
<td>0</td>
</tr>
<tr>
<td>Ministry of Agriculture</td>
<td>2</td>
</tr>
<tr>
<td>Ministry of Animal Resources</td>
<td>2</td>
</tr>
<tr>
<td>TANZANIA</td>
<td>0</td>
</tr>
<tr>
<td>ZIMBABWE</td>
<td>0</td>
</tr>
<tr>
<td>Ministry of Lands, Agriculture and Water Development</td>
<td>0</td>
</tr>
<tr>
<td>- Head Office and Education Branch</td>
<td>4.7</td>
</tr>
<tr>
<td>- Department of Research and Specialist Services</td>
<td>3.3</td>
</tr>
<tr>
<td>- Department of Veterinary Services</td>
<td>0.7</td>
</tr>
<tr>
<td>- Department of Tsetse Control</td>
<td>0.1</td>
</tr>
<tr>
<td>- Department of Water Development</td>
<td>0.3</td>
</tr>
<tr>
<td>- Department of the Surveyor General</td>
<td>2.1</td>
</tr>
<tr>
<td>- Agricultural Development Authority</td>
<td>6</td>
</tr>
</tbody>
</table>

Women's representation is also negligible in the local power structures and traditional bodies in Africa, where decisions concerning land allocation and resource development have important implications for rural women. Data contained in the sectoral reports confirmed the low participation of women in these structures.

In terms of participation in local governing authorities, women are rarely represented in the municipal councils of Mauritania and Morocco. In Mauritania, of the 208 municipalities created in 1986, only one mayor was a woman, while in Morocco women occupied only 0.3% of municipality seats in 1993, up slightly from 0.2% in 1983. In Namibia, women's participation is higher due to an affirmative action provision for the first elections of local authorities, which stipulated that party lists must include a minimum number of women candidates; 31.5% of the seats in the local authority councils are held by women. In Tanzania, out of 4,850 village committee members in seven regions, as of 1989 only 10.3% were women. A positive development was the 1992 local government legislative reform which called for 25% of the members of the Village Assembly to be women. However, in many locations women constituted less than 1% of the candidates in the 1993 local government elections. In Zimbabwe, women represent only 10% of the Village Development Committees, which consist of democratically elected members from the village, and control the development and use of land resources in their villages.

Women's representation at the district and provincial levels is similarly low. In Zimbabwe, women comprise only 10% of the District Councils, the body which allocates resources for development in their districts. In Namibia, only 3 of the 95 elected to the regional councils, which represent rural constituencies outside of small towns, were women. In Tanzania, at the provincial and district levels, women's participation remains low with the highest number of women (20%) serving as regional administration officers. There are no female land officers nor regional agricultural or livestock officers and only one regional community development officer.

In both Namibia and Zimbabwe, women's representation in traditional authorities is minimal. In Namibia, where traditional authorities hold responsibility for allocating land and adjudicating disputes, women's lack of representation in such authorities has serious implications.

---

5 (Given that future elections will be contested on the basis of individual candidates rather than on party lists, this provision will no longer apply.)
Women's participation in village and municipal authorities and district and provincial councils is low in all of the countries examined, which in turn inhibits their ability to influence resource allocation. By far the highest female participation (31.5%) is found in Namibia, where an affirmative action provision ensured that a minimum number of women candidates ran in the local elections. Tanzania instituted a similar provision in 1992, setting a minimum number of seats in the Village Assembly which must be held by women. While the results of such policies have been mixed, they deserve further exploration throughout Africa.

2.2.2.6 Gender relations in decision-making in farming activities.

In Africa, while it appears that decision-making rests with the male household head when present, the sharing of decision-making between genders varies substantially from country to country, and among different cultural and ethnic groups within the same country.

In most African countries, women tend to have decision-making power over their own fields while males dominate decision-making for household plots. In Morocco, with the exception of those fields managed exclusively by women, men generally have almost all the decision-making power as they are the owners of the means of production and, consequently, of the products produced. In Zimbabwe, in male-headed households, men dominate all decision making.

Women's decision-making power tends to increase in many countries when the husband is not present; however, men may remain involved in many of the most important decisions. In Namibia, as the participation of men in farming activities decreases, the authority of women over the agricultural processes may well be increasing. In Zimbabwe, women whose husbands are away have substantially more decision-making power than those with husbands on the farm, and women dominate farm management decisions and activities such as planting, ploughing, weeding and harvesting, among others. Even in these cases, however, the absentee husband still generally decides on how much crop to sell and on the use of the money from crop sales.

In other countries such as the Sudan, data for irrigated areas indicates that at the micro level, women are responsible for a wide range of decision making in farming activities even when the husband is present. In Tanzania, decision making in farming activities appears to be shared, with men dominating slightly in those cases when it is not.
Additional research is required to accurately assess the division of decision-making, and especially decision-making on the use of income within the household. Several studies have indicated that the improvement of household food security and nutritional levels is associated with women's role in household decisions on expenditures (FAO, 1990a). Others point out that women's reactions to economic incentives are different depending upon their ability to make decisions regarding income allocation. For example, women may not be disposed to invest time and energy into the production of cash crops if the income accrues to a male spouse or relative who may not spend it on household food consumption.

2.2.3 Poverty

In Africa, rural areas are generally poorer than urban areas and rural women, especially women heads of households, are poorer than men in terms of food security, income, size of land cultivated and technology. These findings are particularly alarming in the face of increasing numbers of rural female-headed households across the continent, where in several countries women headed households account for almost 50% of the total rural households.

2.2.3.1 Factors contributing to poverty in rural areas

2.2.3.2 Economic crises, reforms and structural adjustment programmes

In many of the countries (Burkina Faso, Congo, Mauritania, Sudan, Tanzania and Zimbabwe), structural adjustment programmes implemented in the face of economic crises have had negative impacts on households, and especially rural households. This is due to a variety of reasons, including decreased purchasing power of rural households due to the removal of government subsidies and price controls on food products and essential commodities, decreased government provision of agricultural and social services, and an increased emphasis on commercial crops, among others.

2.2.3.3 Environmental degradation

The negative effects of desertification, deforestation and soil erosion, stemming largely from over-cultivation as well as recurring drought, have limited the ability of small farmers to provide food for their families and for sale. In a mutually reinforcing manner, environmental degradation increases poverty, which in turn threatens the environment, as farmers have no alternative to overexploiting the land or access to alternative sources of energy.
2.2.3.4 Changes in the number of women-headed households

As shown in Table 2.3, the percentage of women headed households ranges from 5% in Burkina Faso to 46% in the communal areas of Zimbabwe. The percentage of women headed households is increasing in all of the countries for which data was provided.

The main factor explaining this trend is the ongoing migration of men to other areas in search of employment due to decreasing returns from agriculture (Burkina Faso, Namibia, Mauritania, Morocco, Tanzania, Zimbabwe) and, in the case of Southern Sudan, to war. The implications are largely negative for the rural population left behind, and especially for the members of female-headed households, which are typically associated with increased labour constraints, simpler farming systems, inadequate services and meagre incomes.

Table 2.3: Female headed Households in Rural Areas (%)

<table>
<thead>
<tr>
<th>Country</th>
<th>Early-mid 1980s</th>
<th>1990s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benin</td>
<td>No data</td>
<td>19 (1992)</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>No data</td>
<td>5</td>
</tr>
<tr>
<td>Congo</td>
<td>No data</td>
<td>22</td>
</tr>
<tr>
<td>Mauritania</td>
<td>20 (mid-1980s)</td>
<td></td>
</tr>
<tr>
<td>Morocco</td>
<td>15 (1982)</td>
<td>16</td>
</tr>
<tr>
<td>Namibia</td>
<td>No data</td>
<td>43</td>
</tr>
<tr>
<td>Sudan</td>
<td>No data</td>
<td>24</td>
</tr>
<tr>
<td>Tanzania</td>
<td>No data</td>
<td></td>
</tr>
<tr>
<td>- Mainland</td>
<td>15</td>
<td>18 (1991)</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>No data</td>
<td>46</td>
</tr>
</tbody>
</table>


Women-headed households are frequently faced with shortages of adult labour, which often results in declining food productivity, especially when coupled with the low level of agricultural inputs received by women farmers. In Morocco, the rural households headed by women are generally small, with 69% having less than four persons. In Namibia, recent data from the Owambo region suggests that, although the size of land holdings between male and female-headed households is comparable, the amount cultivated is often lower for the latter due to labour shortages. Labour shortages may also lead women to turn to alternative crops that require less labour inputs, even though they may be less nutritious.

Women-headed households tend to earn lower incomes than male headed households. Only in Mauritania do women-headed households appear to be better-off. This could be explained by the existence of a certain number of transfers and subsidies towards these households, especially in rural areas. In Benin, male headed rural households have an average revenue of 49.407 CFA (US$
In consumption units and save 21%; those headed by women have an average revenue of only 43,529 CFA (US$ 85) and save 16%. In the Congo, 75% of the women interviewed in three districts received less than 200, 000 CFA (US$ 390) per year, which is insufficient to cover subsistence expenses. In Tanzania, surveys indicate that rural women headed households have the lowest cash income. In 1985, female-headed households earned 10% of female urban household earnings and 25% of male-headed households in communal areas. In 1990, significant improvements were noted with female-headed households earning 61% of male headed households. In Zimbabwe, statistical indicators show that in terms of household income, rural women headed households were 40% poorer than male headed households and 90% poorer than women headed households in urban areas.

Women-headed households tend to have access to smaller and less fertile plots of land, and more limited access to the means of production than male-headed households. In Zimbabwe, in the communal sector female-headed households are likely to be allocated smaller parcels of land than male-headed households. Survey findings suggest that de jure female-headed households had the smallest farm sizes, varying from 40 to 80% of the land parcels belonging to male-headed households.

When women are involved as agricultural labourers they appear to be remunerated less than men, which has negative implications for women headed households in particular. According to data collected by IFAD in the late 1980s, women tend to receive only 50% of men’s wages in Mauritania, Sudan and Zimbabwe, while they receive 90% of men’s wages in the Congo.

In Morocco, there are large variations in agricultural wages depending on the season, the region, the nature of the work, and gender. Women and girls are generally paid less than men and boys, despite a minimum wage guaranteed by the government. In Sudan, wages are lower for women than for men, which is also due to the fact that they are assigned work in the lower paying traditional sector.

In Namibia, to meet basic food needs, households are obliged to augment production from subsistence agriculture with cash or in-kind income from other sources. The main contributor to subsistence across households is direct cash income from formal employment. Female-headed households have fewer members employed formally or informally than male headed households.
addition, rising unemployment and social breakdown of the family have shrunk the amount and frequency of remittances.

2.2.4 Inequality in women's access to, and participation in, the definition of economic structures and the productive process itself.

2.2.4.1 Rural land ownership

The lack of access to land remains a major constraint for women farmers in Africa, and land reform programmes, as well as the tendency towards the break up and privatization of communal land holdings - especially in areas of tribal and customary tenures, have led almost exclusively to the transfer of land rights to male heads of households (FAO, 1990a: 12).

Even in countries where ownership and inheritance laws have been reformed in favour of women, in practice women do not necessarily have more rights to land, as local customs and lack of information act as barriers.

Customary land use practices can determine women's access to land in terms of land use rights or ownership. In Mauritania, under customary law black African women do not have land property rights. In Namibia, rural women continue to gain access to land through men, and in Zimbabwe, women have no direct access to primary land use rights in the communal areas. While women do have legal rights of access in the freehold land sectors, they generally lack the economic resources to acquire such land. In the Sudan, the majority of subsistence farmers operate under customary tenure in which women are accorded usufruct rights to land.

In Africa, women tend to be unpaid labourers on their husbands' land and cultivate separate plots in their own right at the same time. However, while women may work their own plots, they may not necessarily have ownership and thus their rights might not survive the death of their spouse (Bullock, 1993; 45). In the case of male migration and de facto women heads of households, conflicts may arise as prevailing land rights rarely endow women with stable property or user rights (IFAD, 1993:25).

Land reform schemes have rarely worked to women's benefit. In fact, the reform schemes may replace a complex system of land use and tenure where women have certain rights in common law and local practice, if not in legislation. The new land titles are almost always assigned to male
heads of households, regardless of women's economic contribution to the household, their customary rights, or the increasing number of women heads of households (Bullock, 1993:45).

In the nine countries examined, women rarely own land and when they do, their land holdings tend to be smaller and less fertile than men's. In some countries, women's formal access to land is increasing, while in those areas where customary law prevails and male traditional authorities allocate the land or where land is passed from father to son, women continue to receive smaller and less fertile plots. In some countries, women are forced to rent land for their use (particularly in Mauritania).

As illustrated in Table 2.4, women generally hold less land than men, ranging from a low of 3% in Zimbabwe in the small scale commercial sector to a high of 25% of the agricultural land in the Congo and Tanzania. Nor do women appear to profit from land reform as they received only 5-23% of the land-use permits in Zimbabwe and only 6% in Morocco. In Tanzania, when village land was allocated, all rights were given to men and no provision was made in the law for widows, divorced or separated women. In contrast to traditional practices men were able to sell or rent their land without their wives permission. In Burkina Faso, the amount of land allocated to the household plot was smaller than women's traditional food fields, which had allowed them to sell a small surplus (Bullock, 1993:45).

Table 2.4: Women and Land Ownership

<table>
<thead>
<tr>
<th>Country</th>
<th>Women's Land Holdings as Percent of Total Agricultural Holdings</th>
<th>Average Size of Holdings (Hectares)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Women's</td>
<td>Men's</td>
</tr>
<tr>
<td>Benin</td>
<td>11</td>
<td>0.98</td>
<td>1.76</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Congo</td>
<td>25</td>
<td>0.5</td>
<td>1</td>
</tr>
<tr>
<td>Mauritania</td>
<td>14</td>
<td>0.5 (1987)</td>
<td>1</td>
</tr>
<tr>
<td>Morocco</td>
<td>14</td>
<td>0.53 (1987/91)</td>
<td>0.73 (1990/91)</td>
</tr>
<tr>
<td>Namibia</td>
<td>14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sudan</td>
<td>25</td>
<td>0.6 (1986/87)</td>
<td>0.39 (1986/87)</td>
</tr>
<tr>
<td>Tanzania</td>
<td>Small-scale commercial sector: 3</td>
<td>1.86</td>
<td>2.73</td>
</tr>
<tr>
<td></td>
<td>Large-scale commercial sector: 10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


In terms of land size, women's holdings tend to be smaller than men's, ranging from one-half 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, according to survey data,
of the women headed households have less than the sample mean arable land holding. It is interesting to note that in Tanzania, the size of the average land holding decreased between 1983 and 1990 for both men and women, indicating that both genders are being similarly affected by land degradation and population pressure, although women's holdings remain smaller.

2.2.4.2 Women's access to credit

In Africa, rural women have less access to credit than rural men, which limits their ability to purchase seeds, fertilizers and other inputs needed to adopt new farming techniques. A FAO analysis of credit schemes in five African countries, where women predominate in food production (Kenya, Malawi, Sierra Leone, Zambia and Zimbabwe), found that women received less than 10% of the credit directed at smallholders and just 1% of the total credit directed to agriculture (Bullock, 1993:47). In addition, in all of the countries, rural populations generally have less access to credit than urban residents.

Women's access to credit is clearly lower than men's in each of the countries for which data was available (Table 2.5), receiving from a low of 5% of agricultural loans in Burkina Faso to a high of 32% in Zimbabwe. In Benin, less than 5% of the rural female-headed households have access to credit. A substantial increase in the number of women clients was registered in Zimbabwe, increasing from 11% in 1982 to 32% in 1994.

Table 2.5: Percentage of Credit Going to Rural Women

<table>
<thead>
<tr>
<th>Country</th>
<th>Institution</th>
<th>% of Total Credit to Rural Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benin</td>
<td>Local Fund for Agricultural Credit and Regional Fund for Agricultural Credit</td>
<td>24</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>National Fund for Agricultural Credit</td>
<td>5</td>
</tr>
<tr>
<td>Congo</td>
<td>All credit institutions (1987-89)</td>
<td>17*</td>
</tr>
<tr>
<td>Mauritania</td>
<td>Data not available</td>
<td></td>
</tr>
<tr>
<td>Morocco</td>
<td>Data not available</td>
<td></td>
</tr>
<tr>
<td>Namibia</td>
<td>Data not available</td>
<td></td>
</tr>
<tr>
<td>Sudan</td>
<td>Livestock Bank</td>
<td>4*</td>
</tr>
<tr>
<td>Tanzania</td>
<td>Data not available</td>
<td></td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>Agricultural Finance Corporation</td>
<td>32</td>
</tr>
</tbody>
</table>


* The figure includes credit to both urban and rural women

* The figure only includes loans to women's cooperatives
Gender disaggregated data was not available for a number of countries including Mauritania, Morocco, Namibia and Tanzania, although some insights can be gained. In Mauritania, women's access to credit is limited to their involvement in rotating savings and informal credit clubs (tontines). In Namibia, since late 1992, over 450 small-scale communal farmers have been able to obtain loans through a special scheme administered by the Ministry of Agriculture, Water and Rural Development. However, over three quarters of the total amount has been for the acquisition of stock which, in the absence of conclusive gender based data, suggests that women may be underrepresented as the purchase of stock often falls to men. In Tanzania, it appears that rural women's access to credit has been almost exclusively confined to donor supported women's grants, despite some efforts on the part of the Co-operative and Rural Development Bank to ease capital contribution requirements for women.

A variety of legal, socio-cultural and institutional constraints continue to limit rural women's access to credit. Many of these were raised in the sectoral reports and include the following:

- High rates of female illiteracy in rural areas;
- Socio-cultural constraints whereby women's economic independence is limited (i.e., women do not have land in their own name to use as collateral and/or they cannot enter into a contract without male authorization);
- Fear of indebtedness given many rural women's position on the margins of survival;
- Lack of knowledge regarding credit programmes and opportunities;
- Complex procedures for securing credit; and,
- Lack of transportation to credit institutions which are often located in urban areas.

More encouragingly, in recent years special programmes and funds have been created in many countries targeted at rural areas and/or rural women in order to address these constraints. The programmes are often developed as components of larger development projects run by the government, international donors and NGOs. In addition, women have often taken measures to help themselves in gaining access to credit, either through traditional group savings schemes or associations and cooperatives (Bullock, 1993:27). For instance, in Mauritania women have turned almost exclusively to savings and credit clubs. In Zimbabwe, savings clubs have been formed to help meet the needs of the rural population and the majority of their members are women. Through group savings schemes women have been able to accumulate enough funds to buy fertilizers, improved seeds, and pay for transportation to market their produce (FAO, 1994b).
In Burkina Faso, more than 80% of the total loans provided by an integrated project through the Savings and Credit Commercialization Fund were extended to women's groups in 1991. Most of the loans were used for food processing of agricultural products. In addition, in 1993, the government created the Support Fund for Women's Income Generating Activities to extend credit to urban and rural women for commerce.

In the Congo, the Credit Rural was created in 1989 to provide loans to the rural, semi-rural and peri-urban areas. Of the 71 loans made, 9 were to women, although these loans were made primarily to urban women. The Women's Mutual Savings and Credit Fund was a project financed by UNDP in 1992 to assist women micro-entrepreneurs in urban and peri-urban areas. By 1994, loans totalling 5,400,000 CFA (US$ 10,500) had been extended to seven women's groups working in a variety of areas including agriculture.

In Morocco, recognizing the potential of female clients, the Caisse Nationale de Credit Agricole carried out a study in a pilot zone exploring the institutional and socioeconomic constraints limiting women's access to credit. The results of the study permitted the implementation of a credit system that employs female personnel and uses simplified procedures and lower collateral requirements in order to more effectively respond to rural women's needs. In four years, the number of female clients has multiplied by 5 going from 400 to 2,000 clients.

In the Sudan, a growing number of lending institutions are extending credit to women for agricultural and livestock production, food processing and other income generating activities. The Agricultural Bank of Sudan (ABS) began financing women's cooperatives as early as 1978 in order to provide seasonal credit for women to produce certain crops. By 1992/3 50 women's cooperatives had received credit, up from 14 in 1980/81. Between 1983 and 1989, a branch of the ABS started to provide loans to small farmers to purchase machines and production inputs, and the majority of beneficiaries were women. The ABS also developed a programme with the agricultural extension and cooperative department to extend credit to women farmers to grow sesame, groundnuts and gum arable.

In Namibia, programmes run by NGOs have enhanced women's access to credit by targeting small loan programmer to them. Also important is the fledgling credit union movement and credit schemes supported by farmers' associations which provide an opportunity for farmers to access
loans without collateral restrictions. Currently, the Ministry of Agriculture, Water and Rural Development is developing an agricultural bank to administer a loan programme designed for small-scale communal farmers. The programme would make loans available to individual farmers organized into informal groups, and to formally registered cooperatives. The proposed model does not consider affirmative action for women, but it is hoped that loans managed through cooperatives will reach women.

In Tanzania, women's access to loans has tended to be confined to donor supported special women's grants due to the strict collateral requirements of banks. Donors have supported women's access to loans through the Cooperative and Rural Development Bank, and the number of loans disbursed to women has increased from 28 in 1984 to 734 in 1992. In terms of government support, a major breakthrough was made during the 1993 budget session when the Union government allocated 500 million Tanzanian shillings (US$ 1 million) to support more women with credit. Women's own initiatives include the formation of informal rotating savings and credit associations, although they are primarily urban-based.

In Zimbabwe, the Self Help Development Foundation, a savings organization, promotes savings on a regular basis by groups of poor people to mobilize their small sums into useful amounts for productive purposes. Women constitute 83% of the membership.

It can be noted that all of the programmer use group membership to guarantee the loans, thereby eliminating one of the major obstacles to women's access to credit - lack of collateral. While a considerable amount of research is being conducted on the remaining constraints, the lack of accurate gender disaggregated statistics on clients by lending institutions continues to be a limitation both in the design of interventions and in the monitoring and evaluation of on-going projects.

2.2.4.3 Extension services and agricultural training

In Africa, men continue to dominate the agricultural disciplines in secondary schools, they constitute the majority of the extension department personnel (with the exception of home economics), and are the primary recipients of extension services. This situation is clearly illustrated in the sectoral reports. However, the reports also give some positive indications as to women's increased access to agricultural extension services and enrolment in agricultural courses of study.
Overall, the data which is available in the sectoral reports indicates that women's enrolment in agricultural programmes, especially at the intermediate and university levels, has grown since the mid-1980s, although it remains low in comparison to men's enrolment (Benin, Congo, Namibia, Tanzania and Zimbabwe).

In terms of women's enrolment in agricultural subjects in secondary schools, the results have been mixed. In Benin, the participation of women in agriculture courses/programmes at the secondary level increased slightly from 4% in 1986 to 8% in 1991. In the Congo, women's enrolment in agricultural technical secondary schools increased between 1984 and 1989 from 34 to 53% of total enrolment. In Namibia, there continues to be more males taking agricultural subjects at the secondary level, which has implications for subsequent entrance into agricultural colleges. While there is gender tracking based on gender stereotypes, the lower number of female students may also be due to the lack of women agricultural teachers who might serve as mentors to girls.

The results have also been mixed in terms of women's enrolment at the intermediate levels of agricultural education. In Benin, women's enrolment at the superior school level increased slightly from 3.8 to 4.6% in 1991. In the Congo, women's enrolment in agricultural training centres (CMA) increased from 46% in 1984 to 51% in 1989. In Namibia, however, men still outnumber women in agricultural colleges, with women representing 45% of first year enrolment at the Ongongo Agricultural College and 12% at the Neuclamrn Agricultural College. In Tanzania, female enrolment in certificate and diploma programmes in agriculture remains low. In certificate level programmes in agriculture and livestock there are only 34 women compared to 85 men. In diploma training in agriculture, out of a total of 161 students, only 29 are women. As for livestock diploma training, male intake increased from 108 in 1992 to 122 in 1993, while female intake decreased from 18 to 10 during the same period.

Women's enrolment is also increasing in agricultural disciplines at the university level. In Tanzania, the percentage of women enrolled in the B.sc. programme in agriculture in the Faculty of Agriculture, Forestry and Veterinary Medicine has increased from 15.1 % in 1988 to 28.8% in 1994, while in the forestry programme, female intake increased from one student in 1988 to four in 1994. In Zimbabwe, agricultural training was not readily available to women in the early 1980s as
the majority of agricultural training institutes had no facilities for training women. By 1990, 42 women qualified, and by 1992, all agricultural colleges could enrol female students. In 1993, the female output was 30% per annum for colleges and 26% for university graduates.

The increase in women's enrolment in agricultural programmes between the mid- and late-1980s was the most impressive in the Congo, where they presently account for more than half of the students in the CETAs and CMAs. An increase in women's enrolment in agricultural colleges and university programmes in the 1980s was also notable in Zimbabwe, where in ten years women's enrolment increased from relatively female few students to 30% for colleges and 26% for universities in 1993.

2.2.4.5 Gender composition of extension departments

According to FAO's 1989 global survey on extension and farm women, women accounted for 10.5% of extension staff (1989a:82-3) in Africa. These extension agents were predominantly specialized in home economics and are rarely represented as administrators/supervisors (4%), subject-matter specialists (1%) and field workers in agriculture (8%). According to data collected for five African countries (the Gambia, Mauritius, Senegal, Tunisia and Zimbabwe), increases were registered in the number of female extension staff, going from 2.8% in 1980 to 5.2% in 1989 (FAO, 1993a:46). An overview of the percentage of female extension staff in the nine countries examined is presented in Table 2.6.

Table 2.6: Percentage of Female Extension Staff by Year

<table>
<thead>
<tr>
<th>Country</th>
<th>Early Year</th>
<th>Most Recent Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Congo</td>
<td>9.9 (1989)</td>
<td></td>
</tr>
<tr>
<td>Mauritania</td>
<td>3.1 (1989)</td>
<td></td>
</tr>
<tr>
<td>Namibia</td>
<td></td>
<td>8.7</td>
</tr>
<tr>
<td>Sudan</td>
<td>22 (1989)</td>
<td></td>
</tr>
<tr>
<td>Tanzania</td>
<td>15.6 (1989)</td>
<td></td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>0.5 (1985)</td>
<td>10 (1993)</td>
</tr>
</tbody>
</table>

Source: FAO, 1993a:82-3.

*There were no female extension agents in livestock or forestry.*
By the mid 1990s, the number of female extension staff had increased, although their representation continues to remain extremely low, ranging from 3.1% of the extension staff in Mauritania to 22% in the Sudan. While increased numbers of women agents does not necessarily guarantee that more women farmers will be reached, it was mentioned in several reports that female extension agents are more inclined to contact female farmers and are more likely to address issues of concern to them, such as subsistence production and household food security. At the same time, women farmers may be more inclined to attend a demonstration when it is given by a woman.

In terms of decision-making positions inside extension institutions, women's representation is very low in Africa, accounting for only 4% of the administrators and supervisors and 9% of the subject matter specialists. Of the nine countries, the Sudan had the highest number of women administrators/supervisors with 18%, and Mauritania and Zimbabwe the lowest with no female representation.

Efforts to increase the number and technical competence of women extension agents have been made in several countries. In Burkina Faso, a training course was held for women extension workers in 1985. In the Congo, a Service-de Promotion Rurale with a female component was created in the Ministry of Agriculture's Direction de la Recherche Development, Formation et Vulgarisation. In Morocco, a significant effort was made to increase the number of female extension agents during the mid-1980s. A precise strategy of intervention was implemented and intensive retraining programmes were undertaken.

2.2.4.6 Gender composition of extension service recipients

According to FAO's 1989 global survey, in Africa only 7% of all agricultural extension resources were allocated to women farmers, and the area of extension traditionally available to women - home economics - is given minimal support, receiving only 1% of total extension resources. Nevertheless, extension services are increasingly reaching women farmers as many of the issues surrounding women and extension have begun to be addressed. These issues include socio-cultural norms that restrict male agents from contacting female farmers, male agents' preference to work with male farmers, constraints in women's time and transportation and inability to travel to central demonstration points, the content of extension messages focusing on male commercial crops rather than on subsistence farming and food security, and the almost exclusive focus of women-oriented extension services on reproductive roles.
Although increasing numbers of rural women are being contacted by government extension programmer, the number of female farmers receiving extension services is still much lower than for men, with the notable exception of the Congo where, due to extremely high rates of male rural-to-urban migration, the agricultural workforce is composed primarily of women.

In Benin, although data is not available, extension services are overwhelmingly directed to farmers organized into cooperatives, and only 9.4% of rural women are organized as such. Therefore, it is likely that very few women are reached by extension.

In Burkina Faso, between 1980 and 1985 the only extension service available to rural women was advice on the family economy, while men received information on production techniques and the use of inputs, among others. In 1985, the "Operation Test de Renforcement de la Vulgarisation Agricole" was initiated using training visits as the basic principle. However, only 4.5% of women farmers benefited from this programme. Due to new strategies undertaken in the late 1980s, including the creation of the Bureau du Promotion des Activités Féminine, the number of organized female contact groups increased tremendously from 20 in 1988-89 to 1,394 in 1991-92, while the number of women reached by extension grew from 15,500 to 299,000 during the same period. Nonetheless, 2-5 times more men than women continue to be reached by extension agents. In terms of pastoral extension, women represent 16% of the total number of producers contacted.

In the Congo, by the 1994, there were 10 extension centres in the country which focused on food crops. These centres reached approximately 14% of the farming population, of which over 50% were women.

In Morocco, there are three principal extension approaches: individual, intensive and mass. Overall, the extension activities have been well developed since 1988, and in 4 years the total beneficiaries went from 533,734 to 1,722,357 farmers. However, rural women represent less than 3% of the total beneficiaries.

In Namibia, agricultural extension and services have historically served the interests and needs of commercial farmers, and although steps have been taken to reorient support towards subsistence farmers, many programmes fail to take account of the activities and priorities of women farmers. Women also have little positive contact with government staff concerned with natural resource management, as they are seen as carrying out a policing rather-than an assistance function. No data
is available on women farmer's access to livestock, forestry and fisheries training and extension services.

In the Sudan, agricultural extension services are linked with cash crop production in the modern sector. Extension messages are targeted to male farmers while women are expected to receive the information from their husbands and male relatives. In the Gezira scheme, of the 120,000 farmers targeted, 11% were women.

In Zimbabwe, the Extension Services Department did not focus on gender issues until 1990, when it became apparent that agricultural extension was contacting only 44% of the women farmers. In 1993, the Department began focusing on the constraints to women's participation in an attempt to develop a more appropriate package for reaching women farmers. Prior to 1980 women were not awarded master farmer certificates. However, from 1982 to 1992, women constituted 33% of the participants in this training programme, and in 1993 women's participation increased 60 to 90%.

2.2.5 Data gaps in assessing women's access to land, credit and agricultural extension services

In terms of land, five out of the nine countries were not able to supply gender disaggregated data on land ownership and use, while four were unable to supply data on the average size of land holdings by gender. Regarding women's access to credit, none of the countries were able to supply figures at the national level, and the information provided by individual institutions varied considerably. In terms of data on agricultural training and education, gender disaggregated data was available for only five countries. In terms of the gender composition of farmers reached by agricultural extension, several countries were unable to supply a national breakdown.

The dearth of statistics on women's access to land, credit and agricultural extension services limits the efficacy of rural development policies and programmes, both with respect to analysis and to representation, identification and targeting of beneficiaries. It has been demonstrated worldwide that agriculture and rural development policies, programmes and projects have often not fully succeeded because rural women and their social, economic, legal, technological and other short-term strategic needs and constraints were not addressed adequately. The inter-relationships between women's productive, reproductive and community roles have often not been perceived due in part to the lack of adequate data, leading rural development experts and planners to underestimate the importance of these relationships.
While the gender division of labour in rural areas differs from country to country, and even within the same country, some generalizations can be made.

- In all the countries, women are almost exclusively responsible for domestic tasks, including food processing (which is both a domestic and productive task), cooking, cleaning, child care, water and wood collection.

- In all of the countries, women are involved in both domestic and productive activities; consequently, they frequently work longer hours than men.

- In Burkina Faso, the Congo, Namibia, Sudan, Tanzania and Zimbabwe, women are generally responsible for the production of food crops, while men are responsible for cash crops or work in formal employment.

- In Burkina Faso, Morocco, Sudan, Tanzania and Zimbabwe, particular agricultural tasks tend to be dominated by women, even for the male crops, including weeding, harvesting, transportation, processing and storage.

- In Burkina Faso and the Sudan, within livestock production women generally are responsible for small animals, while men are responsible for large animals. In the case of cattle, women almost always take care of the milking, processing and sale of dairy products.

- In the Sudan and Zimbabwe, within fishing, women are almost exclusively confined to processing and or/marketing, while in Tanzania Mainland women are increasingly involved in all stages of fishing, and in Zanzibar women dominate in on-shore fishing.

Rural women's productive role in agriculture continues to be underestimated in many countries as unpaid family workers are frequently excluded from national statistics and/or farm women are considered housewives in agricultural and population censuses. Such underestimation must be addressed in order to clearly demonstrate the importance of rural women-in agricultural production, and thus the extent to which current policies and programmes must be redressed.
The preparation of the national sectoral reports represents an innovative exercise in compiling national statistical data on rural women in order to provide an overview of their situation and the constraints they face in each particular country. The reports are equally useful in that they identify gaps in the collection of data disaggregated by gender and thus where further work in this area is required.

However, this review has several limitations, including variations in the quantity and quality of the information provided as well as the availability of data and the consistency of definitions used, especially over a given period of time. In particular, measuring women's participation in the labour force continues to be problematic all over the world. In Africa, although several countries have taken important steps to include unpaid family workers in the definition of the economically active, others continue to define the economically active as those who earn a cash income. The latter definition excludes a large number of women working in the agricultural sector, and especially in subsistence farming. As the definition of the economically active population varied among the countries examined, there were limitations to the comparability of the data at the regional level.

It is also important to note that the sectoral reports were prepared within a limited amount of time and resources, and therefore the information presented was that which was readily available at the national level. Given these constraints, data may have been omitted on the differences among women within a country as a thorough analysis of all available statistical indicators was not always feasible.

Moreover, given the lack of data disaggregated by gender at the national level, the information included in the sectoral reports may have only covered one aspect or institution and is thus only indicative of a particular situation. For example, in terms of rural women's access to credit, several countries have gender disaggregated data for only one institution. While such data is helpful in gaining an understanding of women's access to credit, a more thorough analysis is required for policy making and planning purposes.

In addition, it is necessary to be cautious when making generalizations about the situation of rural women at the regional level as it often differs not only among countries but also within a country, depending upon the socio-economic and ethnic groups to which women belong and to environmental and other factors characteristic of a particular area.
Despite these limitations, the review attempts to provide a general picture of the situation of rural women in Africa, focusing on the similarities among countries and identifying those countries which vary strongly from the norm. Overall, the analysis is essentially qualitative given the constraints and limitations mentioned above.

### 2.2.7 What is the situation in Kenya?

Although gender disaggregated agricultural data is scarce, the information available confirms that the situation is not different from that of the other nine countries examined. Kenya’s agricultural sector is dominated by about 3 million smallholder farms accounting for approximately 75% of total output, with women managing at least 40% of the small holdings and providing about 75% of the labour force. Women are thus largely responsible for attaining food security and contribute significantly to the country’s economy, which is largely agricultural-based. There are indications that as a result of liberalisation and privatisation policies in Kenya, input use has declined resulting in a concurrent decline in agricultural productivity and food security among small holders, most of whom are women.

Although rural women are assuming an increasingly prominent role in agriculture, they remain among the most disadvantaged of populations. The rural-to-urban migration of men in search of paid employment and rising mortalities attributed to HIV/AIDS has led to a rise in the numbers of female-headed households in most rural areas in Kenya. This 'feminization of agriculture' has placed a considerable burden on women's capacity to produce, provide, and prepare food in the face of already considerable obstacles. The problems facing these female-headed households vary according to their degree of access to production resources. The absence of male labour, however, forces women with an expanded workload to grow less labour intensive - and often less nutritious - crops with a reliance on child labour. This has serious implications both for the family and the human capital of the country.

Even though women and men often play complementary roles in agriculture, quite a number of literature have shown that in almost all Kenyan communities, women tend to work longer hours than men. The difference in workloads is particularly marked for rural women, Kenya’s principal food producers. Women are involved in every stage of food production and, although there is a gender-based division of labour, women do tend to shoulder the larger share. In addition to food production activities, women have the responsibility of preparing and processing the food while
fulfilling their fundamental role of nurturing and caring for children and tending to elderly members of the household.

Despite their significant role in agricultural production, women lack access to valuable productive resources such as land, credit and agricultural inputs, technology, extension, training and services that would enhance their production capacity.

2.2.7.1 Decision making at household and community levels

Culturally, most Kenyan communities are patriarchal and major decision-making rests with males, who are also the heads of households. Decisions for instance on the allocation and use of agricultural land, the sale of agricultural produce, level of investments and disposal of livestock are made by men, even in cases where they have migrated to urban areas in search of paid work and no longer reside in the rural areas. Generally, the degree to which women have decision-making power on day to day farm management depends on several factors including the frequency of the presence of the husband, the acreage and crop under production and level of investments required. This therefore means that women are not always in a position to implement their own decisions and measures recommended by extension services in order to improve agricultural productivity in the farms which they manage daily.

Findings suggest that since it is women who are mostly responsible for household food security, male decision-making on the use of land may result in an insufficient nutritive food package through the displacement of food crops for cash crops. The limited access to land by women also hampers the production of ‘women’s crops’ which sustain households. In addition, decisions to sale protein-rich produce meant for household consumption such as eggs and meat may also contribute to high malnutrition rates at household level.

Decision-making structures including elders’ councils, chiefs’ meetings and water management committees at the community level are structurally male-dominated. Women’s heavy workloads, low levels of education, and subordinate position in gender power relations further reduce their chances of effectively participating in these important fora. Water management committees dominated by men in pastoralist communities tend to give priority to drinking water for animals rather than for domestic purposes, forcing women to fetch water even further off.
2.2.7.2 Access to capital and credit and other productive resources

Research carried out in 1998 in three districts of Kenya (Isiolo, Vihiga and Kitui) by the Gender Equity Mobilisation Support unit within the Ministry of Agriculture confirms that women have less access to productive resources than men. Livestock and land are almost exclusively owned by men, who also make major decisions on the use of available water resources and on the level of investment of other agricultural inputs e.g. the type of seeds, equipment and fertilisers etc. Land is the most common form of collateral used by farmers to access credit from lending institutions. Although the Kenyan law permits women to inherit land, the practice is usually governed by culture and traditional land tenure practices which in most cases hands down land through males only, with women having access to family land through marriage. This locks out women from accessing credit as they only have usufruct rights to land and are always almost never land owners. Low levels of literacy and numeracy and lack of any savings further constrain women’s access to formal sector loans.

2.2.7.3 Gender division of Labour

Although there are regional variations in the division of labour between men and women in agricultural production, there is ample evidence that women carry the major burden in farm and household activities, and the imbalance between men’s and women’s workload is quite noticeable. Women do the major share of labour-intensive activities such as sowing, weeding, applying fertilizer and pesticides, harvesting and threshing. They also carry out the post-harvest tasks before the produce can be stored, marketed, cooked or eaten.

Men tend to do the work of large-scale cash cropping, especially when it is highly mechanized, while women take care of household food production and small-scale cultivation of cash crops, requiring low levels of technology. Men tend to grow cash crops and keep the income, while women use their land primarily for subsistence crops to feed their families. Women also play a big role in growing secondary crops, such as legumes and vegetables. In addition to providing essential nutrients, these crops are often the only food available during the lean season between harvests or when the main harvest fails. Home gardens, often tended almost exclusively by women, also claim precious labour-intensive time.
2.7.4 Extension services

In Kenya, a large proportion of smallholder farmers, most of who are women, have no direct contact with agricultural extension workers. One of the main reasons cited for this is limited mobility for extension service workers (lack of vehicles, bicycles, motorcycles and/or difficulty of terrain or distances involved). The question of coverage, however, is more subordinate to the more fundamental question of adequacy of messages passed on and the approach used in dealing with farmers. Furthermore, extension information is not presented in accessible forms for illiterate women farmers.

In the ministry of agriculture, the number of female extension staff is considerably lower than that of male staff. Female staff constitute 30% of the total number of staff, and the proportion is even more disproportionate at divisional and location level. Furthermore, the number of female extension staff is more concentrated in the Home Economics department (which has no specific budget allocation at district level) than in the department of Livestock and veterinary services where they constitute about 10% of the staff.

The complexity of gender concerns in agricultural development, the variation of conditions and the needs of female and male farmers as well as socio-cultural dimensions of gender-related problems that affect agricultural productivity is high. Extension service providers should be able to discuss and analyse underlying factors regarding production problems with farmers and explore various alternatives, rather than simply transferring prescribed messages. Such participatory approaches will however require the collection of gender disaggregated data, the training of extension officers in gender-sensitive methodology and bottom-up approaches and continuous monitoring and evaluation.

2.2.7.5 Organisation, leadership, community management and co-operatives

For women farmers, women groups are the focus for delivery of different types of agricultural services. In Kenya, there are important regional differences in the degree of organisation as judged in the percentage of women organised in groups, which is higher in some areas than others. Not all women farmers however belong to groups. Poor young women and female-headed households are less often members due to various reasons including lack of membership fees, time constraints or lack of consent from husbands for the former. Therefore, the challenge is to find ways to reach the non-organised women who are the majority. Where these organisations exist, most face limitations as they are not legally recognised entities and are classified as welfare organisations rather than
economic entities. Furthermore, the agricultural policy does not have a clear mandate nor incentive to promote women's groups, nor to assess and respond to their specific needs.

2.2.7.6 Policies and planning

Although certain programmes include gender-responsive efforts, the agricultural framework in Kenya is not guided by a formal and explicit gender policy. Major factors that hamper this are:

- Policy makers in most departments are men who are unfamiliar with gender equity and are by culture accustomed to policies and practices that favour males compared to women.
- The nature of the various agricultural institutions is more service and commercially oriented and gender is not one of the factors put into consideration e.g. when designing extension services.
- An environment where gender-biased customary laws and traditions are dominant.
- Negative views on 'soft objectives' such as the equal sharing of agricultural benefits and preference for 'hard objectives' such as increase in agricultural production.
THEORETICAL FRAMEWORK

2.3.1 The Equity Approach

"By the 1970s, studies showed that although women were often the predominant contributors to the basic productivity of their communities, particularly in agriculture, their economic contribution was referred to neither in national statistics nor in the planning and implementation of development projects (Boserup 1970). At the same time, new modernisation projects, with innovative agricultural methods and sophisticated technologies, were negatively affecting women. These were displacing them from their traditional productive functions, and diminishing the income, status and power they had in traditional relations. Findings indicated that neo-colonialism, as much as colonialism, was contributing to the decline in women's status in developing countries.

Tinker, in her documentation of development projects that had widened the gap between men and women, argued that development planners were "unable to deal with the fact that women must perform two roles in society whereas men perform only one" (Tinker 1976:22). She attributed the adverse impact of development on women to three types of planning error: first, errors of omission or failure to acknowledge and utilise women's productive role; second, errors that reinforced values which restrict women to the household engaged in childbearing and childrearing activities; and third, errors of inappropriate application of Western values regarding women's work. On the basis of evidence such as this, the WID group in the United States challenged the prevailing assumption that modernisation was equated with increasing gender equality, asserting that capitalist development models imposed on much of the third world had exacerbated inequalities between men and women. Recognition of the damaging effects of ignoring women in USAID projects during the First Development Decade (1960-1970) made the WID group work to influence USAID policy. Lobbying of congressional hearings resulted in the 1973 Percy Amendment to the US Foreign Assistance Act, which mandated that US assistance help 'move women into their national economies' in order to improve women's status and assist the development process.

The original WID approach was in fact the equity approach. This approach recognises that women are active participants in the development process, who through both their productive and reproductive roles provide a critical, if often unacknowledged, contribution to economic growth. The approach starts with the basic assumption that economic strategies have frequently had a negative impact on women. It acknowledges that they must be 'brought into' the development
process through access to employment and the market place. It therefore accepts women's practical gender needs to earn a living. However, the equity approach is also concerned with fundamental issues of equality which transcend the development field. As Buvinic (1986) has described, its primary concern is with inequality between men and women, in both public and private spheres of life across socio-economic groups. It identifies the origins of women's subordination not only in the context of the family, but also in relations between men and women in the market place. Hence, it places considerable emphasis on economic independence as being synonymous with equity.

In focusing particularly on reducing inequality between men and women in the gender division of labour, the equity approach meets an important strategic gender need. Equity programmes are identified as uniting notions of development and equality. The underlying logic is that women have lost ground to men in the development process. Therefore in a process of redistribution, men have to share in a manner which entails women from all socio-economic classes gaining and men from all socio-economic classes losing (or gaining less), through positive discrimination policies if necessary. The rational consequence of this is seen to be greater equality with an accompanying increase in economic growth (Buvinic 1983). Although the approach emphasised 'top-down' legislative and other measures as the means to ensure equity, gendered consultative and participatory planning procedures were implicitly assumed. This was particularly the case since the introduction of the equity approach itself had been the consequence of the bottom-up confrontation of existing procedures by feminist women's organisations.” (Moser O.N. Caroline, 1993:62-66)

2.3.2 Relevance of the Theory to the Study

Despite women's significant contributions to agricultural production and to rural households, generally they have less access to land, capital, credit, technology, and training than men in that same system. The constraints women face in gaining access to these resources significantly reduce the productivity of both the rural sector and the entire national economy. Current development policy, because of incorrect assumptions, often, if inadvertently, discriminates against or 'misses' women, while even correctly formulated policy too often fails to get translated into practice. Some researchers believe that until women's agricultural participation is targeted to approximately reflect the work they do, food crop production is destined to remain at current stagnant levels.

This study proposes a policy-approach to tackling this problem through a gender planning practice. Gender planning focuses on the interrelationship between gender and development, the formulation
of gender policy, and the implementation of gender planning practice. The goal of gender planning is to ensure that women, through empowering themselves, achieve equality and equity with men in developing societies, where women are seen as active participants in development.

The equity approach lends itself very well to this purpose by providing the basis for a gender analysis of the roles of women and men in agriculture, access and control of critical productive resources and decision-making within the household. It emphasises 'top-down' legislative and other measures as the means to ensure equity. It challenges women's subordinate position and recognises women's triple role and seeks to meet strategic gender needs through direct state intervention, giving political and economic autonomy to women, and reducing inequality with men.

2.4 HYPOTHESES

1. Despite women's significant contributions to agricultural production and to rural households, generally they have less access to land, capital, credit, technology, and training than men in that same system.

2. The constraints women face in gaining access to these resources significantly reduce the productivity of both the rural sector and the entire national economy.
Sex and Gender: Sex refers to the biological differences between men and women, which are universal and do not change. Gender refers to social attributes that are learned or acquired during socialisation as a member of a given community. Because these attributes are learned behaviours, they can and do change over time, and vary across cultures. Gender therefore refers to the socially given attributes, roles, activities, responsibilities and needs connected to being men (masculine) and women (feminine) in a given society at a given time, and as a member of a specific community within that society. Gender is one of the principle intersecting variables (along with race and class) deployed in the distribution of privilege, prestige, power and a range of social and economic resources.

Gender Relations: "These are the social relationships between men and women. Gender relations are simultaneously relations of co-operation, connection, and mutual support, and of conflict, separation, competition, of difference and inequality. Gender relations are concerned with how power is distributed between the sexes. They create and reproduce systemic differences in men's and women's position in a given society. They define the ways in which responsibilities and claims are allocated and the way in which each are given value". The term "gender relations" also refers to the relationships between people and their broader community, if these relationships vary with the sex of the people concerned.

Sexual division of labour: In all societies, tasks and responsibilities are typically undertaken by either women or men. This allocation of activities on the basis of sex is known as the sexual division of labour, and is learned and clearly understood by all members of a given society, as are the circumstances under which the typical practices can be varied, and the limitations of this variation.

Gender roles and responsibilities: This is another term for the division of labour. It tends to be used most frequently in those analytic frameworks, which emerged before the use of the term "gender relations" became widespread during the 90s. Gender planning recognises that in most low-income societies, women have a triple role: women undertake reproductive, productive and...
community managing activities, while men primarily undertake productive and community politics activities.

**Productive work:** This is work that produces goods and services for exchange in the market place (for income) as well as the production of items for consumption by the household whereby this becomes consumption of a non-monetary income.

**Reproductive work:** This work involves all the tasks associated with the supporting and servicing the current and future workforce – those who undertake or will undertake productive work. It includes child-bearing and nurture, but is not limited to these tasks.

**Differential Access and Control over Resources:** This refers to how resources (land, labour, credit income, etc) are allocated between women and men. Base-line data in a complete gender analysis establishes whether there is any differential in men’s and women’s access to three key categories of resources: Economic/Productive resources (land, credit, cash income, employment; Political resources (education, political presentation, leadership); Time (a critical resource, which increasingly acquires a monetary value). **Access** gives a person the use of a resource e.g. land to grow crops. **Control** allows a person to make decisions about who uses the resource or to dispose of the resource e.g. sell land

**Practical and Strategic Gender needs/interests:** Women and men have different roles and responsibilities and therefore have different interests/needs. These are called gender interests/needs, practical and strategic. Practical and strategic gender interests should not be seen as separate but rather as a continuum.

**Practical Gender Needs:** These are gender needs that women and men can easily identify, as they related to living conditions. E.g. Women may identify safe water, food, health care, cash income, as immediate needs which they must meet.

**Strategic Gender interests/needs:** Strategic gender interests/needs are those women identify because of their subordinate position to men in their society. They relate to issues of power and control and the gender division of labour. They may include changes in the gender division of labour, legal rights, equal wages, an end to domestic violence, equal wages e.t.c.
**Women in Development (WID):** WID first came to prominence in the early 1970s as an approach to include women in development. Research and information collected throughout the UN decade for women (1975 – 85) highlighted the existing poverty and disadvantage of women and their invisibility in the development process. Different policy responses and interventions focused on women as a separate group resulting in women’s concerns being “added on” and peripheral to mainstream development efforts. WID policies and interventions have in the main concentrated on women’s productive work. Failure to make an explicit link with their reproductive work often adds to women’s workload. Focusing on women in isolation means that unequal gender relations in various social and economic settings remain unaddressed.

**Systemic discrimination:** Systemic discrimination is caused by policies and practices that are built into the ways that institutions operate, and that have the effect of excluding women and minorities.

**Gender blindness:** The inability to perceive that there are different gender roles and responsibilities; the perception that farmers and technology are male (or neuter); and the failure to realise that project activities can have different effects on men and women.

**Gender planning:** A planning approach that recognises that because women and men play different roles in society, they often have different needs.

**Gender Analysis:** Gender analysis is an intrinsic dimension of policy analysis. It identifies specifically how public policy affects women and men differently. It demonstrates that policy and implementation cannot be gender neutral in gendered societies. It is supported by specific analytic tools.
CHAPTER THREE

STUDY METHODOLOGY

3.1 RESEARCH SITE

The Geographical area selected for this study was Ramunde Sub-location in Siaya District in Nyanza province of Western Kenya. Siaya district is one of the 12 Districts that comprise Nyanza province. It is bordered by Busia District to the North, Vihiga and Butere-Mumias Districts to the North East, Bondo District to the South and Kisumu District to the South East. The total area of the District is approximately 1,520 square kilometres and it has a population of 493,326 persons with a female/male sex ratio of 117:100 and a population growth rate of 0.9%. (Source: Republic of Kenya. Ministry of Finance and Planning, Siaya District Development Plan 2002 - 2008).

The district is divided into seven administrative divisions, namely, Yala, Wagai, Karemo, Ugunja, Boro, Uranga and Ukwala. These divisions are further divided into 30 locations and 128 sub-locations. Ukwala Division is the largest, covering an area of 319.5 square kilometres with the most locations and sub locations. It has a total of 6 locations and 28 sub locations.

3.1.1 Physiographic and natural conditions

The District has three major geomorphologic areas, namely dissected uplands, moderate lowlands and Yala swamp. These have different relief, soils and land use. The altitude of the district rises from 1,140 metres in the eastern parts to 1,400 metres above sea level in the west. These physical features including 5 Hills and 2 Rivers (Nzoia and Yala) have a bearing on the overall development potential of the district. High altitude areas forming Yala, Ukwala and Ugunja divisions have higher rainfall and are hence suitable for agriculture and livestock keeping.

The district experiences a bimodal type of rainfall. The long rains fall between March and June with the peak realised in April and May. The short rains occur between August and November. The main soil types are ferrasols and its fertility ranges from moderate to low with most soils being unable to produce without the use of either organic or inorganic fertilisers. Most of the areas have underlying murrain with poor moisture retention.
3.1.2 Settlement Patterns

Settlement patterns in the district follow the agro-ecological zones with the high potential areas having the highest population density in the District. These are Ukwala, Yala and Ugunja divisions. The population is largely rural, (76%) with women constituting 70% (393,012).

The main economic activity is subsistence agriculture where most participants are women, contributing 80% of the total agricultural labour force. Urban areas comprise 282.6 square kilometres, with men forming the majority and engaging in informal sector activities. (Table 3.1)

Table 3.1: Sectoral contribution to household income.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Contribution (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>62</td>
</tr>
<tr>
<td>Urban self-employment</td>
<td>14</td>
</tr>
<tr>
<td>Wage employment</td>
<td>17</td>
</tr>
</tbody>
</table>

3.1.3 Agriculture

The arable land in the district is approximately 1,263 square kilometres. The main food crops grown in the district are maize, sorghum, beans, cassava, sweet potatoes and vegetables. Main cash crops are sugar cane, cotton, and Robusta and Arabica coffee varieties. The average farm size is 1.05 ha denoting small scale farming. There are no large scale farms in the District. The total area under food crops is 71,229 ha while 1,500 of the land is utilised for cash crop farming. The population working in the agricultural sector constitutes 120,000 farm families. The main livestock bred in the district are local Zebu and dairy cattle, sheep, goats, poultry and bees.

3.2 RESEARCH DESIGN

The research study adapted and utilised relevant social gender analysis tools identified in the Harvard Analytical Framework and various Participatory Learning and Action techniques.

3.2.1 Participatory Learning and Action

The research communication used the participatory learning and action (PLA) approach. PLA draws on RRA (Rapid Rural Appraisal), participatory and action research traditions and anthropology. Both RRA and PLA are grounded in all three philosophical orientations of post positivism, phenomenology and critical theory. However, while RRA is mainly "extractive" in nature, PLA, by contrast, is more participatory. PLA places a value not only on local knowledge, but on local analytical abilities. RRA and PLA are adaptive learning strategies rather than sets of
standard techniques. They are based largely, but not entirely, on qualitative techniques, such as participant observation, interviews, social and physical mapping and diagramming, case studies, and various emic techniques, as well as on brief surveys and innovative approaches to sampling.

3.2.2 The Harvard Analytical Framework

The Harvard Analytical framework is most useful for collecting and organising agriculturally based information at the micro-level. It provides clear information on the gender division of labour and makes women’s work visible. It makes a distinction between access and control over resources and makes an economic case for allocating resources to women as well as men. It sets out to assist planners to design more efficient projects at every stage of the project cycle. It is also useful to explore the twin facts of productive and socially reproductive work, especially with groups that have limited experiences of analysing differences between men and women.

The framework is designed as a matrix (or grid) for collecting data at the micro level. It has four interrelated components: The activity profile, the access and control profile, influencing factors; and the project cycle analysis. For the purposes of this study, only the first two tools were used.

3.3 STUDY POPULATION

The study population consisted of 6,500 men, women and children of Ramunde sub-location of varying ages. They constitute a total of 979 farming households in the area. It was not possible to study the whole population and the researcher therefore selected a sample for interviewing.

The study was carried out in the following sites in the sub-location. (Table 3.2)

<table>
<thead>
<tr>
<th>Site</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urenga Primary School</td>
<td>Jointly with PLA Team after mobilisation</td>
</tr>
<tr>
<td>Ouru Shopping Centre</td>
<td>Village congregation point on market day</td>
</tr>
<tr>
<td>Urenga Catholic Church</td>
<td>After Sunday Service</td>
</tr>
<tr>
<td>Bar Ober Shopping Centre</td>
<td>Jointly with PLA Team after mobilisation</td>
</tr>
<tr>
<td>Ohagire Shopping Centre</td>
<td>Village congregation point on market day</td>
</tr>
<tr>
<td>10 households</td>
<td>Interviews with both male and female household heads.</td>
</tr>
</tbody>
</table>

The five sites were purposively selected because they are focal points and are easily accessible to targeted respondents. Key informants were visited at their individual households. These constituted much older members of the community well-versed in tradition and who were seen as able to provide crucial information that would allow an analysis of the changing circumstances and gender roles in agricultural production.
3.3.1 RESPONDENT SAMPLING

The sampling frame was taken from the number of rural farming households in the area. A method of non-probability sampling, (purposive sampling), was used in the selection of respondents to be interviewed. Household interview respondents and Key informants were selected using the same technique with a bias towards female respondents. This method of sampling was chosen as the study was interested in specific issues that may not have been obtained through probability sampling.

Focus group and household interview respondents were screened using the following demographic criteria: (See appendix 1)

1. Gender: The study selected more women than men.
2. Occupation: Although most people in the study area are farmers, this was a precautionary measure in order to avoid including the few people exclusively involved in other occupations e.g. traders and fishermen.
3. Geographical area of residence: This was ascertained for each respondent in order to avoid over-representation of certain areas and to have as many areas as possible in the sub-location represented.
4. Age: The study was mostly interested in adult males and females between the ages of 18 and above.
5. Marital status: The study selected men and women who were married at the time or had been married in their lifetime. This was important for discussing male-female household dynamics in relation to the gender division of labour and access to and control of resources.

In all the sites, the study team met and held discussions with farmers in village focus group discussions involving men and women jointly (during plenary sessions) and also incorporating gender-specific exercises. Ten household interviews were carried out with both women and men, but biased in favour of the former. There were also interviews with key informants namely opinion/traditional leaders and experts at local level.

In total, sixty five (65) people were interviewed during the study consisting of 40 women and 25 men. Discussion group sizes ranged from between 8 to 15 villagers per session. (Table 3.3)
Table 3.3 Respondents per site

<table>
<thead>
<tr>
<th>Site</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urenga Primary School</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Ouru Shopping Centre</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Urenga Catholic Church</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Bar Ober Shopping Centre</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ohagire Shopping Centre</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>10 households</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Key informants</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>25</strong></td>
<td><strong>40</strong></td>
</tr>
</tbody>
</table>

3.4 DATA COLLECTION METHODS

This study drew on data from secondary and primary sources illustrated below:

3.4.1 Library Research

Documentary materials including publications, journals and seminar/workshop papers were reviewed. This was useful in providing essential data on the subject of study and extracting relevant information regarding the role of women in agriculture, gender division of labour, the differential access of men and women to productive resources, and strategies for gender analysis and gender-responsive agricultural planning. This data served to externally validate the field research findings.

3.4.2 Focus Group Discussions

Field research was the primary source of data collection for this study. Using appropriate guides, tools from the Harvard analytical framework (a gender disaggregated Seasonal Cropping Calendar, Daily Activity Schedule, Activity Profile and an Access and Control Profile) were administered to a total of fifty one (51) respondents that participated in focus group discussions. The process consisted of a participatory documentation and analysis of the roles of women and men in agricultural production and the opportunities and constraints encountered by each gender with respect to work-load, and access and control of productive resources. (See appendices 2 to 5).

3.4.3 Semi-structured interviews

The Harvard analytical framework guides (Seasonal Cropping Calendar, Daily Activity Schedule, Activity Profile and an Access and Control Profile) were administered to the ten (10) heads of households that were interviewed in the study. Through these interviews, the researcher sought to augment and substantiate information gathered in focus group discussions regarding power and decision-making and resource sharing at household level. (See appendices 2 to 5)
3.4.4 Informal interviews

Informal interviews were conducted with four (4) key informants that were purposefully selected for the purposes of the study. With the objectives in mind, the researcher interviewed the area sub-chief, two clan heads and a traditional healer. These interviews touched on general life in the sub-location through time, and served to provide an insight into the current state and changes that have occurred in the livelihoods of men and women in the area.

3.5 DATA ANALYSIS

Gender disaggregated information was captured in the various tools used for data collection. Data collected was analysed and reduced/organised in order to establish recurrent patterns (groupings and relationships). These were then used to form topics for discussion. The information was presented in narrative formats and in frequency tables and percentages, which formed the basis for drawing conclusions to the research findings.

3.6 PROBLEMS ENCOUNTERED IN THE FIELD AND THEIR SOLUTIONS

Field work was conducted between the months of March and June 2006, visiting five sites in March and April and conducting key informant and household heads interviews during the month of June. The study team consisted of 3 persons, (2 female and 1 male). Two members of the team were locally recruited facilitators. Two days were allocated per site during which the team held extensive discussions and consultations with the respondents.

Due to time and logistical constraints, it was not possible to carry out the whole research study within one continuous time frame, hence the three-month period. In some villages, it was difficult to enlist farmers’ cooperation (especially women) for focused group discussions especially during times of intensive farming seasons (planting and weeding).

To mitigate the above situation, the study design incorporated various approaches namely: observations, discussions/interviews with key informants, individual (household) interviews and secondary data review at the divisional and district levels.
CHAPTER FOUR

GENDER AND AGRICULTURE IN SIAYA DISTRICT

4.1 INTRODUCTION

In this chapter, descriptive data are presented from the Harvard analytical framework and PLA findings. A gender disaggregated Seasonal Cropping Calendar, Daily Activity Schedule, Activity Profile and an Access and Control Profile demonstrate the gender division of labour, decision-making and access to and control of productive resources in the study area.

The primary data are summarised and organised using descriptive analysis.

4.2 SEASONAL CROPPING CALENDAR (Table 4.2)

4.2.1 Land Preparation

Land preparation for maize, means, sorghum and millet is done jointly by men and women in January and February for the first season and in August for the second season of maize and beans. However, women are increasingly doing the bulk of this work. Vegetables, cassava and sweet potatoes are farmed all year round and the land preparation for this is the responsibility of women.

4.2.2 Sowing

Maize and beans are sowed twice during the year in the short and long rain seasons. For the first crop of the year, sowing begins in March while for the second crop, this is done in August. Respondents mentioned that even though men may help with this activity, it is predominantly the responsibility of women. Sowing of indigenous vegetables like *apoth, mto, bo, akeyo,* and *osuga* for household consumption is exclusively the role of women. Respondents mentioned that a few men undertake commercial growing of other vegetables like kales if they have large farms with small scale irrigation capabilities. Sorghum and millet are sowed once a year in March and the responsibility for this is borne by women. The sowing of cassava and sweet potatoes is another exclusive responsibility of women and this is done throughout the year as each crop matures at different times.

4.2.3 Weeding

The weeding of maize and beans for the first season begins in mid March and can continue into May for maize, sorghum and millet while second season weeding is mostly done in September for maize and beans. Since, vegetables, cassava and sweet potatoes are farmed throughout the year, their weeding is also continuous and is done when required. Weeding in the study area is predominantly the responsibility of women.
4.2.4 Harvesting
The harvesting of the first crop of maize begins in mid July and this is mainly done by women. Beans are harvested in May. The second season crop of maize and beans is harvested in December by women assisted by children. Sweet potatoes are usually ready for consumption 4 months after sowing while cassava may take from between 1 and 2 years to mature. The harvesting of these is the responsibility of women. Vegetables are for household consumption and are picked by women all year round.

4.2.5 Threshing/processing and storage
Threshing, processing and storage of all crops is exclusively the responsibility of women, who may be assisted by children.

4.2.6 Household water supply
This is a daily activity all year round and is the exclusive responsibility of women. Children also assist in fetching water.

4.2.7 Household fuel and wood supply
This is also a daily activity throughout the year and another exclusive responsibility of women, who obtain assistance from children.

4.2.8 Labour availability
To determine labour availability and related issues, respondents were asked to indicate type(s) of labour used in agricultural activities. Results show that a combination of types of labour, i.e. family labour, hired labour and group labour is used. (Table 4.1). Some families use hired labour to supplement family labour. Hired labour is mainly used during planting, weeding and harvesting.

<table>
<thead>
<tr>
<th>Type of Labour</th>
<th>MHH No.</th>
<th>%</th>
<th>FHH No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Labour only</td>
<td>19</td>
<td>47.5</td>
<td>10</td>
<td>40</td>
</tr>
<tr>
<td>Hired Labour</td>
<td>6</td>
<td>15</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>Group Labour</td>
<td>11</td>
<td>27.5</td>
<td>8</td>
<td>32</td>
</tr>
<tr>
<td>Hired Labour + Group Labour</td>
<td>4</td>
<td>10</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td></td>
<td>25</td>
<td>100</td>
</tr>
</tbody>
</table>
Across both female and male-headed households, the percentage of respondents using family labour was much higher than for all the other categories. Constraints to using hired labour even among those that really needed it especially female headed households, were mostly linked to affordability. Most of the households that could use hired labour were those that had regular cash remittances from other family members employed in urban areas while others had pension. There were not many families that relied on group labour as well as hired labour, as group labour was seen by most respondents as a way of mitigating the lack of funds to hire labourers, hence the need to pull together. This suggests that families, especially female headed ones have a much lower productivity compared to the male headed households due to lack of adequate farm labour. More women therefore rely on group labour in order to undertake any significant agricultural work. Women’s groups (aliuor) work on each other’s farm providing approximately equal labour to each of the members.

4.3 THE DAILY ACTIVITY SCHEDULE (Tables 4.3 and 4.4)

4.3.1 Workload

Tables 4.2 and 4.4 illustrate that in addition to field activities, women in the study area are also responsible for all household or domestic chores including the preparation of food, fetching of water and fuel wood and general home/housekeeping. Tables 4.3 and 4.4 show that while men have a few hours of resting and leisure activities (11.30 a.m. to 4.00 p.m and 8.00 p.m. to 9.00 p.m), women continue working throughout the day (preparing food, bathing children, fetching water, e.t.c) until 9.00 p.m. when both go to bed.
Table 4.2: Seasonal Cropping Calendar – men & women

<table>
<thead>
<tr>
<th>CROP/ACTIVITY</th>
<th>JANUARY</th>
<th>FEBRUARY</th>
<th>MARCH</th>
<th>APRIL</th>
<th>MAY</th>
<th>JUNE</th>
<th>JULY</th>
<th>AUGUST</th>
<th>SEPTEMBER</th>
<th>OCTOBER</th>
<th>NOVEMBER</th>
<th>DECEMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. MAIZE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land preparation</td>
<td>Fm</td>
<td>Fm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sowing</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weeding</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harvesting</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Threshing/storage</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. BEANS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land preparation</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sowing</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weeding</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harvesting</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Threshing/storage</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. SORGHUM &amp; MILLET</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land preparation</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sowing</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weeding</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harvesting</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Threshing/storage</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. VEGETABLES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land preparation</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sowing</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weeding</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harvesting</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Processing</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. CASSAVA &amp; SWEET POTATOES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land preparation</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sowing</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weeding</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harvesting</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Processing/storage</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HOUSEHOLD WATER SUPPLY</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HOUSEHOLD FUEL &amp; WOOD SUPPLY</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td>Fm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**KEY**
- **Activity Responsibility Indicator (Full participation)**
  - M - Male
  - F - Female
  - C - Children
- **Partial Participation**
  - m - male
  - f - female
  - c - Children
### Table 4.3: Daily Activity Schedule - men

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wake up</td>
<td>5.00 a.m. (far fields)</td>
</tr>
<tr>
<td></td>
<td>6.00 a.m. (near fields)</td>
</tr>
<tr>
<td>Give instructions</td>
<td>5.00 a.m. to 5.15 a.m. or 6.00 a.m. to 6.15 a.m.</td>
</tr>
<tr>
<td>Walks to the field</td>
<td>5.15 a.m. to 6.00 a.m.</td>
</tr>
<tr>
<td>Field activities (land preparation, sowing, etc)</td>
<td>6.00 a.m. to 11.00 p.m.*</td>
</tr>
<tr>
<td>Breaks for coffee</td>
<td>11.00 a.m. to 11.30 p.m.</td>
</tr>
<tr>
<td>Lunch and resting</td>
<td>11.30 a.m. to 12.00 p.m.</td>
</tr>
<tr>
<td>Resting</td>
<td>1.00 p.m. to 2.00 p.m.</td>
</tr>
<tr>
<td>Works in nearby field or homestead (fencing, thatching etc)</td>
<td>2.00 p.m. to 4.00 p.m.</td>
</tr>
<tr>
<td>Resting/leisure activities</td>
<td>6.00 p.m. to 7.00 p.m.***</td>
</tr>
<tr>
<td>Dinner</td>
<td>7.00 p.m. to 8.00 p.m.</td>
</tr>
<tr>
<td>Leisure activities/chatting with friends/smoking</td>
<td>8.00 p.m. to 9.00 p.m.</td>
</tr>
<tr>
<td>Goes to bed</td>
<td>9.00 p.m.</td>
</tr>
</tbody>
</table>

* Cattle herders (*jokwath*) return home between 9.30 a.m. and 10.00 a.m. take their breakfast and go to graze the cows. They return at around 6.00 p.m. do the milking if required and have the same activities as the other males.

** Some men tend to their cash crops during this time namely sugar cane, pineapples etc.

*** They may listen to the radio, discuss politics, main events or play *Bao*.

### Table 4.4: Daily Activity Schedule - women

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wake up</td>
<td>5.00 a.m. (far fields)</td>
</tr>
<tr>
<td></td>
<td>6.00 a.m. (near fields)</td>
</tr>
<tr>
<td>Prepares porridge for young and school-going children*</td>
<td>5.00 a.m. to 5.30 a.m. or 6.00 a.m. to 6.30 a.m.</td>
</tr>
<tr>
<td>Walks to the field</td>
<td>5.30 a.m. to 6.30 a.m.</td>
</tr>
<tr>
<td>Field activities (land preparation, sowing, weeding etc)</td>
<td>6.30 a.m. to 11.00 p.m.</td>
</tr>
<tr>
<td>Collects vegetables, firewood etc</td>
<td>11.00 a.m. to 11.30 a.m.</td>
</tr>
<tr>
<td>Walks back home</td>
<td>11.30 a.m. to 12.00 p.m.</td>
</tr>
<tr>
<td>Goes to fetch water and prepares breakfast, sweeps etc.**</td>
<td>12.00 p.m. to 12.30 p.m.</td>
</tr>
<tr>
<td>Prepares lunch and feeds family</td>
<td>12.30 a.m. to 1.30 p.m.</td>
</tr>
<tr>
<td>Goes back to the field</td>
<td>1.30 p.m. to 2.30 p.m.</td>
</tr>
<tr>
<td>Works in nearby field or kitchen garden tending to vegetables, tubers etc.</td>
<td>2.30 p.m. to 3.00 p.m.</td>
</tr>
<tr>
<td>Goes back home with vegetables, tubers, fire wood etc.</td>
<td>3.00 p.m. to 4.00 p.m.</td>
</tr>
<tr>
<td>Fetches water</td>
<td>4.00 p.m. to 4.30 p.m.</td>
</tr>
<tr>
<td>Prepares dinner while supervising children’s bath</td>
<td>4.30 p.m. to 5.30 p.m.</td>
</tr>
<tr>
<td>feeds the family their evening meal</td>
<td>5.30 p.m. to 6.30 p.m.</td>
</tr>
<tr>
<td>Takes a bath, does some household chores, e.g. preparing porridge mix (flour and water) to ferment, checking and feeding chicken coop, etc.</td>
<td>6.30 p.m. to 8.00 p.m.</td>
</tr>
<tr>
<td>Goes to bed</td>
<td>8.00 p.m. to 9.00 p.m.</td>
</tr>
<tr>
<td></td>
<td>9.00 p.m.</td>
</tr>
</tbody>
</table>

* Women without very young children in the household usually go straight to the field upon waking, while many take their infants with them to the field carrying them on their backs during field work or putting them to sleep in a shade.
** Children that are old enough may help with washing dishes, taking grain to the mill and fetching water etc.
ACTIVITY PROFILE (Table 4.5)

4.4.1 Agriculture

Both men and women undertake agricultural activities with tasks like the clearing of land and ploughing being traditionally male tasks. Sowing, weeding, harvesting, preparing produce for storage and managing the storage itself is mostly the task of women while livestock (cattle, sheep) is the responsibility of men. Crop wise, the growing of other foods especially indigenous vegetables and oil seeds (sesame, groundnuts etc) and insect-gathering is done by women. Farming of tubers (cassava, sweet potatoes e.t.c) is undertaken by both genders with women have more responsibility. All key decisions concerning household agricultural production activities are handled by males in male-headed households.

4.4.2 House building

This is traditionally the responsibility of male members with activities like roofing being taboo for women to perform. Women participate in house building by fetching water and the mud used for smoothening the walls and floors and their decoration. All other activities like the purchase of inputs, timber/wood collection, brick-making and construction of the structure is the responsibility of male members of the family. Key decisions regarding house building are traditionally handled by males within a household or clan setting.

4.4.3 Income generating

The sale of cash crops like sugarcane e.t.c is mainly carried out by men while men and women may both undertake the sale of other crops like bananas. The preparation and sale of processed or cooked food like cassava and groundnuts and fish is mainly the activity of women. Craft production and sale is shared by both men and women with women doing pottery and weaving and men mostly producing larger items like pare (sleeping mats) and fishing paraphernalia. Men are more likely to sale their personal labour than women as they have fewer household/domestic responsibilities and the freedom to seek employment opportunities away from their areas of residence. Small enterprises and petty trading like the selling of local brews, paraffin, soap, cooking oil e.t.c is mainly a women’s activity. The processing of charcoal and selling of firewood is predominantly a male activity. The acquisition of material and production for income generating purposes is done by both men and women for their respective activities.
4.4.4 Household maintenance activities

While water is used by all members of a household, its collection and storage is the responsibility of women, who may elicit the help of children in this activity. This is also the same for fuel collection whose collection and use is the responsibility of the female members of the household. Food preparation and child care are exclusively the role of women including care of the elderly and house cleaning. The repair of houses is the responsibility of men while the care for household items is shared by both men and women with women doing most of the household daily management activities and males caring for their personal items like Bicycles, radios, ploughs, e.t.c. The purchase of clothing for all family members is mostly done by women, while payments, including school fees/school supplies, medical expenses e.t.c is shared by both men and women. While consultations may be done, all key decision making (final say) concerning different aspects of household management is done by male members of the family.
Table 4.5: Activity Profile

<table>
<thead>
<tr>
<th>I. PRODUCTION ACTIVITIES</th>
<th>FEMALE</th>
<th>MALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRICULTURE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STAPLE CROP</td>
<td>Land clearing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Purchase of inputs</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Hand ploughing</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Ploughing by oxen</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Fertilising</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Sowing/Planting</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Weeding</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Harvesting</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Preparing for storage</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Storing</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Animal husbandry (cattle, sheep)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Poultry keeping</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Key decision-making</td>
<td></td>
</tr>
<tr>
<td>GROWING OTHER FOODS</td>
<td>Indigenous vegetables</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Groundnuts, sesame e.t.c</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Other staples (millet, sorghum, cassava, sweet potatoes)</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Fruits</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Beans</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Animal husbandry (Cattle)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Poultry keeping</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Insect-gathering</td>
<td>✓</td>
</tr>
<tr>
<td>HOUSE BUILDING</td>
<td>Timber/wood collection</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Water collection</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Brick/mud preparation</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Materials purchase</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Construction (skeleton) &amp; Brick-laying</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Construction (mud-walling)</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Roofing</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Key decision-making</td>
<td>✓</td>
</tr>
<tr>
<td>INCOME GENERATING</td>
<td>Sale of cash crops</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Sale of other crops</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Preparation/sale of processed or cooked foods</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Craft production</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Craft sale</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Sale of personal labour</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Enterprise (local brews, e.t.c)</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>-Purchase/acquisition of materials</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Employment</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Other income generating activities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Petty trading</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Processing charcoal</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Selling firewood</td>
<td>✓</td>
</tr>
</tbody>
</table>

59
<table>
<thead>
<tr>
<th>2. HOUSEHOLD MAINTENANCE ACTIVITIES</th>
<th>FEMALE</th>
<th>MALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water collection</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Water storage</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Water use</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Fuel collection</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Fuel use</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Food preparation</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Child care</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Health care of children</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Health care of elderly</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>House cleaning</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>House repair</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

**Purchase of:**
- Household items ✓
- Children’s clothing ✓
- Women’s clothing ✓
- Men’s clothing ✓
- Other purchases ✓

**Payment of:**
- School fees/school supplies ✓
- Medical expenses ✓
- Other payments ✓

**Key decision-making:**
- Health and sanitation ✓
- Children’s education ✓
- Women’s work ✓
- Household economy ✓
- Other key decisions ✓
4.5 ACCESS AND CONTROL PROFILE (Table 4.6)

4.5.1 Land

Culturally, the first son is entitled to inheriting a large portion of the family land. Other sons can also inherit part of the land. Daughters cannot inherit land nor build houses in their fathers’ compound or land. Traditionally, women have access to land through marital arrangements. However, married women do not co-own this land with their husbands but have access to family agricultural farmland with the land being *de facto* owned by and under the overall control of the husband and his family/clan. Women therefore cannot make decisions as to access rights, bequeathing, leasing or sale of such land.

4.5.2 Agricultural inputs

Males generally have overall access to and control of farm equipment such as ox-driven ploughs and sprinklers while for other tools and small farm implements (hoes, machetes axes) both women and men share in access and ownership. Local household level seeds selection and storage is mostly the domain of women while the purchase of the same, including fertilisers is the responsibility of men. Even though women may own livestock such as sheep or even cattle, decision-making as their slaughter or sale belongs to the male head of the household. Poultry keeping is mostly the responsibility of women although traditionally it was taboo for women and girls to eat chicken or eggs.

4.5.3 Labour

While men have control over their productive labour, the labour (productive and domestic) of married women is traditionally not seen as a personal asset but as the asset of her husband and the extended family into which she marries. Male members of the family therefore have decision-making powers over the use of female labour within a family/clan setting. In addition, women do not have assistance from men or any other helpers in performing household activities. Both male and female respondents had limited access to cash and credit but in male-headed households, men generally exercised greater overall control over household cash whether its source was themselves or their wives.

4.5.4 Education and training

Most respondents (90%) had only attained primary level of education with the majority of those that had completed (85%) being male. The main reason given for this was lack of money by
families to pay school fees, poor education standards, and among the older respondents; another reason was the perceived low importance of education versus contributing to family labour by their older generation parents. For female respondents, all the above reasons were given in addition to early pregnancies and marriages, domestic duties and male child preference with regards to education. This is a Patrilineal society and traditionally, males stay within the clan and are therefore seen as a better investment compared to women who marry outside the clan.

4.5.5 Benefits

Both women and men have access to basic needs and most household assets although these ultimately belong to the husband who allocates their use in male headed households. In some cases, women did not have access to some household assets like radios, bicycles and mobile phones which were treated as personal to the man. However many reported that bicycles can be used for women-related activities such as fetching water or firewood as well as for the provision of convenient transport e.g. to distant areas. While men felt that they were generally free to pursue their personal interests/leisure, employment/income-earning activities, and political power e.t.c, none of the women interviewed felt that they had the personal independence to do the same even if they wished to. Of all the above-mentioned activities, only income generation was seen by female respondents as something that they could undertake within a matrimonial setting, and none had financial independence. In discussions with female respondents, it emerged that although it is not shared proportionally, they have indirect access to household cash obtained by husbands in male-headed households e.g. in the payment of school expenses and medical costs and purchase of household items like bicycles e.t.c.
Table 4.6: Access and Control Profile

<table>
<thead>
<tr>
<th>RESOURCES</th>
<th>ACCESS</th>
<th>CONTROL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Agricultural land</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Residential land</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Environment inputs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment (Ploughs, machines e.t.c)</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Tools and small farm implements</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Farming inputs (seeds, fertilisers, e.t.c)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Livestock (Cattle, Oxen, Goats, sheep, pigs)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Poultry (chicken, guinea fowl)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>To help in production activities</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>To help in household activities</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Credit</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Education/Training</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Secondary</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Post secondary</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Extension training/courses</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Other sources of employment</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Loan resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appropriate technologies</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>BENEFITS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outside source of income</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Financial independence</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Asset ownership (machines, equipment, bicycle, radio, furnishings etc)</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Basic needs (food, clothing, shelter etc)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Education</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Employment/income-earning skills</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Political power/prestige</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Ability/freedom to pursue personal interests</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Leisure</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Other benefits</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER FIVE
DISCUSSION AND CONCLUSIONS

5.1 THE CASE FOR POLICY REVIEW AND REFORMS

This study draws attention to the nature of the gender-linked division of labour in agricultural production; the male and female differentials in access to and control of key productive resources including land, capital, labour, credit information, and inputs; and the specific farming responsibilities which are uniquely and particularly assigned to female members of the household or community. The final objective of this study was to demonstrate the explicit strategies that can be employed in building gender-role aspects of farming into all policy, programme and project aspects. An analysis of the primary and secondary data obtained from the study forms the basis for the following discussions. This chapter also provides an example of a gender-responsive agricultural policy planning process.

5.1.1 Women's workload

An analysis of the daily activity schedule, the activity profile and crop calendar shows that women's workload is heavier than that of men. This is as a result of the gender biased division of labour in agricultural production in general and in household chores in particular. Agricultural activities are shared with varying degrees of responsibilities between men and women. Men tend fewer crops compared to women whose operations on various crops tend to overlap and hence create pressure of work for this particular group. While women are expected to work on crops mainly considered the responsibility of men, men do not have to work on women's crops. In addition, all domestic chores are the responsibility of women. Some of these, e.g., water and firewood fetching may be very time-consuming depending on location/source. Generally, the study site faces problems of fuel wood and access to nearby clean and safe water for domestic consumption. Overall, the poor infrastructure and lack of social services have a negative impact on the workload of rural women.

5.1.2 Low access by women to agricultural resources including land, livestock, implements, and labour

In the study area, land is traditionally owned by men through inheritance. Married women have user rights to family land. The insecurity of land tenure combined with low access to other
Agricultural resources and proceeds from crop production are factors that could limit women’s investment in land and therefore lead to low productivity.

Livestock, especially cattle, are generally owned by men. In cases where women own some livestock, the final decision as to their disposal rests with the husband within male headed households or male family members in some female headed households. Cattle are an important source of food and cash in times of difficulties. Cattle act as savings, providing food security in serious food shortage periods. Cattle ownership is still an indicator of wealth that relates strongly to food security. By not owning this resource, female headed households (which fall under socially and economically poor groups in the community) become vulnerable to food shortages and lack savings for solving emergency problems.

Ox-drawn implements, especially ploughs, are generally not widely used in the area. However, where present, these implements are used predominantly in male-related tasks such as ploughing. Adoption of draft power technology has implications on farmers’ workload. While lessening the strain and amount of time used on male tasks, the use of ox-drawn ploughs may lead to an increase in the amount for workload for activities predominantly done by women such as weeding and harvesting, where there is no use of draft power.

Most activities are carried out using family labour consisting of women, men and children producing for household consumption and for cash. Women’s and children’s labour is generally controlled by males.

5.1.3 Credit/Cash
There are no formal credit institutions serving communities in the study area. Women and men have their own informal credit arrangements usually on spontaneous basis (i.e., when there is need). There are also merry-go-rounds (aluor) whose membership mostly consists of women. These provide credit on a revolving basis to members who each contribute an equal amount of money for each member in turns.
At household level, cash control is by males. However, women may have control of small cash amounts realised from petty trade.
5.1.4 Invisibility of women in decision-making at household and community level

The patriarchal system operates in the study site. Men are heads of households and therefore decision-makers. It is not very clear to what extent consultations or unilateral decisions are made. In discussion groups with women, the impression given was that men make all decisions with little or no consultation. On the other hand, discussions with men suggested that to maintain good relations, consultations do take place.

A typical woman does not participate in community level decision-making processes. None of the women interviewed for example sat on village committees. The low profile of women in decision-making structures at community level means that women have little influence on the development of their community as their interests are not articulated.

5.1.5 Low access to technology, information and extension services

Extension workers are a major source of information to farmers. In the study area, none of the respondents interviewed had received extension services although they mentioned that they had seen government agricultural officers in the area. However, at the divisional level, all the extension officers were male, which has an implication on the accessibility of these services to women. There is a high possibility that women are by-passed due to:

a) Over-representation of male extension workers who it has been observed generally feel freer to approach male and not female farmers.

b) The concept of farmer extension groups is not being utilised. Extension officers at the divisional level confirmed that they contact individual farmers and not groups because farmers (particularly women) are not easy to group together if one has no tangible packages, e.g., seeds, or credit to offer. This means that female farmers could still be bypassed as the system of contact farmers focuses on heads of households (usually males). Women therefore mostly get second hand information.

c) Low level of organisation among women is another possible reason for women’s lack of access to information and technology as implied in (b) above. Existing women groups in the study area are not strongly organised. The tendency is to have spontaneous/informal social support groups.
GENDER AND AGRICULTURE - A SUMMARY OF THE SITUATION

As illustrated in the study findings, within a farm household, all household members (men, women and children) have a gender-and-age specific role to play (farming, trading, wage labour, etc.) and combine efforts to generate food and income for the family's survival. Until recently, however, the contributions of women and children within the farm household remained invisible. Equally invisible were women's limited access to productive resources, and particularly land, and the gender-specific constraints they encountered. As a result, the gender implications for agricultural and rural development policies and programmes were frequently overlooked, thus compromising their success and sustainability.

That rural women play a major role in agricultural production, food security and rural development, and that in many countries, they are the mainstay of agricultural sectors is now recognized worldwide. Whether reference is made to sub-Saharan Africa or the Caribbean where women produce 60-80% of basic foodstuffs, or to Asia, where they perform over 50% of the labour in rice cultivation, or to the Pacific or Latin America, where their home gardens represent some of the most complex agricultural systems known, women have a major responsibility for, and knowledge of, food systems and agriculture. Rural women the world over are also responsible for rearing small livestock and handling large livestock not raised on free ranges (which is the domain of men), for gathering food, fodder and fuelwood and for drawing water. They often provide most of the labour for, and make decisions on, a wide range of post-harvest operations, including storage, handling and marketing, and for off-farm food processing either in micro-enterprises or as wage workers in agro-industries. To this should be added their community roles as well as their childbearing, childcare and domestic roles.

In many parts of the world, women’s contributions even exceed those of men. To give but one example, in the Indian Himalayas (see Figure 5.1), it was found that a pair of bullocks worked for 1,064 hours, a man for 1,212 hours and a woman for 3,485 hours a year on a one ha farm. In effect, this means that a year of farm work by a woman is equivalent to that of one man and two bullocks! In this case, women's work, which includes weeding, irrigation, transporting organic manure and transferring it to the field, seed sowing, harvesting and threshing, amounted to more than male and farm animal work combined.
Despite women's important contributions to rural and socio-economic development, gender bias and blindness persist at all levels: farmers today are still generally perceived as "male" by policymakers and agricultural service deliverers alike and women are mere assistants to their husbands. In this equation, the male farmer is also the head of household, the decision-maker and thus the target group of agricultural policies, programmes and services. As a result, rural women have often been the last to benefit, or have been negatively affected, by economic growth and development.

Poverty, food insecurity and environmental degradation have a disproportionate impact on rural women, not only due to their inferior socio-economic, legal and political status, but also due to their critical roles as both producers and household managers. Rural women are also normally worst hit by generally low and sometimes worsening health and nutrition conditions and by growing labour shortages due to male out-migration. Growing population pressure on increasingly degraded land, male out-migration, and socio-economic changes are transforming the traditional pattern of intra-household rights and obligations and the very role of women in agriculture. At the same time, levels of time and human energy inputs required in women's farm- and home-based productive and reproductive chores are increasing, giving rise to what the United Nations has termed "the feminization of agriculture."
Insecure rights to landownership and use are a crucial, gender-based barrier to enhancing women's agricultural productivity and income. Secure land rights encompass the rights to lease public land and use community-owned property, and not just the right to own private property. For instance, female respondents in our study site confirmed that women would certainly make better use of land to which they had some sort of guaranteed rights, as such rights would help and encourage them to make the correct long- and short-term input and management decisions and achieve higher yields.

Limited access to land is still a major constraint to women's full participation in rural development. The Beijing Platform for Action underlined this aspect as a direct cause of female poverty. Among the options for eradicating poverty, it urged governments to implement policies to promote women's access to and control over land, and to reform legislation that deprived women of the right to own and inherit land. (UN. 1995. Chapter 3, item 44 p.23 A7CONF.172/20)

5.2.2 Research

In the context of food security, sustainable development and poverty eradication, research and extension objectives are to: increase food supplies, create employment opportunities, reduce environmental degradation and enhance resource management. Despite this, agricultural research has focused nearly exclusively on profitable cash crops and other basic commodities such as maize, to the detriment of cereal, fruit, pulse and vegetable crops. In addition, even though women constitute the backbone of the small farming sector, they have much less access than men to the information and farm support services that were established to boost productivity.
To achieve sustainable agricultural production in developing countries, research programmes need to target food crops and small livestock, making the most of the farming expertise of women who are responsible for growing food.

Women are extremely knowledgeable about the value and use of wild and domestic varieties, and this has major implications for food, health, income and the conservation of plant genetic resources. If women are overlooked as food producers and resource managers, modern technology will lose the benefit of traditional practices.

There are pragmatic gender differences in men's and women's knowledge about the environment, plants and animals, and their respective uses and products. This gender differentiated knowledge is crucial to in situ genetic resource conservation, management and improvement. Deciding which species to conserve demands an intimate local understanding of the value of each resource.

Long-term strategies for the conservation, utilization and improvement of the full range of plant genetic resources for food and agriculture should:

- Acknowledge and consider the gender roles, responsibilities and contributions of various socio-economic groups;
- Acknowledge and enhance the capabilities, skills and practices, as well as the rights, of men and women farmers;
- Promote appropriate and equitable agricultural policy incentives for sustainable resource use, paying particular attention to in situ and ex situ conservation and better linkage between the two;
- Define and adopt appropriate national legislation to protect endangered productive and food genetic resources, so as to guarantee continuity in their use and management by local and indigenous communities and people, and ensure a fair and equitable distribution of the benefits from their utilization;
- Reinforce rural women's access to land and water, education, extension, credit and appropriate technology;
- Promote women's active participation in decision-making processes, to ensure gender equity in the benefits of agricultural development.

A concomitant requirement would be to set up a database for an initial analysis, followed by permanent monitoring and evaluation of progress.
Although women are highly instrumental in food production and food security, they have little access to production support services such as extension and training.

Several weak points prevent extension programmes from reaching rural women: The traditional focus of most extension services is the farmer-landowner, who is in a position to claim credit and invest in inputs and new technology. Few women have access to land and other resources, and encounter serious constraints to obtaining credit. Extension services tend to sideline them, focusing more on cash crops than on the subsistence food crops that are a priority for women farmers and are vital to the food security of millions.

Deep-rooted, erroneous beliefs on the part of extension workers lead them to overlook women. They may claim that it is difficult to establish dialogue with women (who are, in any case, of only minor importance in agricultural production), that women have little say in farm decisions or a poor grasp of what extensionists are teaching, or that they are too shy or reluctant to accept new technology.

As illustrated in the study findings, other factors hindering women's access to extension are their lack of formal schooling, mobility and time for extension activities. However, women are good at finding ways of balancing domestic responsibilities with farm duties. Their inclusion in extension programmes would make their work more productive, helping to boost agricultural production. Extension programmes would be more likely to succeed if they were tailored to women's special circumstances.

The lack of extension service provision for women restricts their access to inputs such as improved seed, fertilizer and pesticides. Women rarely belong to cooperatives, but cooperative membership is often a necessary qualification for government-subsidized inputs for small farmers.

Extension services are pivotal to increased productivity, agricultural development and poverty eradication. Both cash and food crops stand to gain from gender equity in access to extension. A participatory, continuous, gender-differentiated database is imperative in identifying target groups for extension services, reorienting extension programmes, maximizing experience, ensuring feedback and monitoring and evaluating extension activities.
Modern technology offers unquestionable benefits, such as labour-saving devices and increased productivity, but agricultural modernization can also have a dramatic, negative impact. It can reduce rural women's opportunities for paid work by abolishing jobs (such as cottage industries) that were traditionally done by women and brought in extra income from value-addition. Most of the negative impacts of farm modernization can be traced to the introduction of technologies that were not designed to solve the problems of small farmers (much less women farmers), but rather to meet the needs of larger producers. The introduction of high-yielding wheat and rice varieties in Asia, for example, proved disadvantageous in terms of work and employment opportunities for rural women for the following reasons:

- Households found that they needed more money to buy technological inputs, so women had to seek paid work as farm labourers.
- Women's unpaid workload increased on small farms that were unable to hire outside labour as the larger farms did.
- Paid workers had to call on family members to meet production quotas, and women's workloads increased as they could no longer work the small plots that were the source of the family's food security.
- Mechanization reduced women's opportunities for paid work; not only could the work be done by fewer people, but jobs once done manually by women were now done by men using machines.
- There was no automatic improvement in living standards even when there were more jobs.
- Modernization increased the yields of the larger holdings, while day labourers' wages remained static.
- Women were paid less than men, although they often did the harder work such as weeding, transplanting and harvesting. (FAO 199).

In addition to these points, it is worth mentioning the fact that farmers do not judge a crop solely on the grounds of higher yields; they also look at the potential for using a plant's biomass and harvest and other residues. To a small farmer, rice means more than just grain - it provides straw for roofing and mats, fodder for animals, feed for aquaculture and hulls for fuel. These products are essential items in the budget of poor rural families and crucial inputs for the money-generating activities that provide a livelihood to many of the rural poor, especially women.
Despite this, technological advances can be very beneficial. Farm households headed by single women who have no one to do the heavy jobs that require great physical strength would benefit immensely from the introduction of energy-saving devices. Unfortunately, however, labour- and energy-savings devices are usually designed with men in mind.

New techniques for the collection of water and fuel and the easing of post-harvest tasks such as processing and storage have also received scant attention from the research sector. Little value is attached to women's activities, and the volume of work they do tends to be overlooked. Women are rarely enlisted to help select topics for technological research, experimentation, production and dissemination. As it looks for ways to lighten workloads, research would greatly benefit everyone's living conditions by seeking to ensure that women farmers continue to retain the few employment opportunities they still possess.

§2.5 **Financial resources**

In general, gender prerogatives concerning local resources and the benefits of national policies rarely match women's mounting responsibilities for food production and natural resource management.

Throughout much of the world, poor women farmers cannot afford to purchase even subsidized inputs such as fertilizers, pesticides and veterinary medicines, good, nourishing food, and fuel for cooking or heating.

In most countries, rural women have difficulty getting credit because they are unable to put up the collateral that lending institutions require, or because of the prevailing laws. Civil and/or farm legislation either does not grant women property rights on a par with those enjoyed by their husbands, or fails to acknowledge women as heads of households, even when they play that role.

Not only does the lack of secure title limit women's access to credit, it also bars them from joining farmers' associations, especially those concerned with processing and marketing. If women had secure title to land they could invest in it rather than merely working it, and this would encourage them to adopt sustainable farming practices.

Lending institutions do not recognize women's capacity for loan repayment, so they often fail to target women who are then forced to resort to unofficial moneylenders charging exorbitant interest
Despite this, technological advances can be very beneficial. Farm households headed by single women who have no one to do the heavy jobs that require great physical strength would benefit immensely from the introduction of energy-saving devices. Unfortunately, however, labour- and energy-saving devices are usually designed with men in mind.

New techniques for the collection of water and fuel and the easing of post-harvest tasks such as processing and storage have also received scant attention from the research sector. Little value is attached to women's activities, and the volume of work they do tends to be overlooked. Women are rarely enlisted to help select topics for technological research, experimentation, production and dissemination. As it looks for ways to lighten workloads, research would greatly benefit everyone's living conditions by seeking to ensure that women farmers continue to retain the few employment opportunities they still possess.

5.2.5 Financial resources

In general, gender prerogatives concerning local resources and the benefits of national policies rarely match women's mounting responsibilities for food production and natural resource management.

Throughout much of the world, poor women farmers cannot afford to purchase even subsidized inputs such as fertilizers, pesticides and veterinary medicines, good, nourishing food, and fuel for cooking or heating.

In most countries, rural women have difficulty getting credit because they are unable to put up the collateral that lending institutions require, or because of the prevailing laws. Civil and/or farm legislation either does not grant women property rights on a par with those enjoyed by their husbands, or fails to acknowledge women as heads of households, even when they play that role. Not only does the lack of secure title limit women's access to credit, it also bars them from joining farmers' associations, especially those concerned with processing and marketing. If women had secure title to land they could invest in it rather than merely working it, and this would encourage them to adopt sustainable farming practices.

Lending institutions do not recognize women's capacity for loan repayment, so they often fail to target women who are then forced to resort to unofficial moneylenders charging exorbitant interest.
Thus exacerbating female poverty. Alternatively, women may turn to family or informal lending facilities, which can, of course, only offer very small loans.

The challenge for the future is to achieve full gender equity in access to resources and land, so that women can increase their buying power and productivity, buy extra food and help to lay the foundations for food security. Credit machinery designed to reach small farmers and the landless must also be devised.

5.2.6 POLICY AND PROGRAMME COST OF NEGLECTING GENDER

The lack of gender-disaggregated data has probably been the main constraint to serious consideration of women's real role in agriculture. Such data would help to enlist women's full participation in the formulation of rural development and food security strategies. In addition, gender-disaggregated data would illuminate gender-differentiated impacts on food and cash crop production, financial management and supervision, and the storage and sale of agricultural products.

The effects of the disproportionate impact of poverty, food insecurity and environmental degradation on rural women are systemic and have far-reaching implications for all initiatives aimed at raising levels of nutrition and standards of living; improving production and distribution of food and agricultural products; enhancing the living conditions of rural populations; checking population growth; and improving reproductive health.

The cost of ignoring gender has been amply demonstrated in various research on the economic contributions of rural women and is becoming increasingly more explicit as concepts and definitions of economic activity become more gender balanced. Findings from the field research together with the literature reviewed for this study suggest that potential agricultural output is substantially reduced owing to women's disadvantaged access to resources, inputs and support services (land, labour, technology, extension and credit). It is further pointed out that the effectiveness of policy interventions and agricultural support services hinges critically on a solid understanding of who is doing what with what at the household level, and of the dynamics of rural intra-household decision-making.
Ignoring gender considerations largely explains why new technologies and development initiatives often produce unsatisfactory results, both in terms of degree and in terms of the distribution of benefits, particularly among women. It is also partly reflected in the perpetuation of chronic development problems such as rising food insecurity among vulnerable groups in some developing countries, the feminization of agriculture and poverty, environmental degradation and high population growth. These problems are often inextricably linked and tend to reinforce one another. As part of an inter-dependent system, changes in one variable often trigger a response in one or several others.

Thus, a critical area which needs to be addressed is the limited appreciation of gender and other relationships within and between rural households, of the access to resources that different household members have at their disposal, of the constraints under which different household members operate, and of the complexity of the farming systems they practise. All these factors, in turn, impact on the demographic characteristics and strategies of a household.
5.3.1 Background

The end of the century had been characterized by a process of liberalisation of trade and market for food and other products, increasing privatization of resources and services, reorientation of economic policies under structural adjustment programmes and increased commercialization of agriculture. Clearly these trends have an impact on farmers, both women and men, and information on how these factors influence their livelihoods is an important tool in agricultural policy planning.

Democracy calls for more participation, better-informed citizens, good governance and accountability. These are conditions that we are requesting from our decision-makers.

Development agencies are increasingly using more participatory methods, born from the technical developments of the new information and communication era. The availability of information and the speed at which it circulates are influencing the mechanisms of social control and regulation. To ensure agricultural policy and planning that will meet the needs of the people, we have to create an understanding of the situation and activities of rural women and men. When gathered, produced and used accurately, information about rural populations can serve as a strong support to achieve food security as well as sustainable development for all. Nevertheless, rural women form a segment of the population that has insufficient access to the flow of information and is not consulted in central government decision-making processes.

5.3.2 The issue

The challenge of agricultural and economic policy-making and planning is to enhance productivity and output while maintaining the natural resource base, safeguarding and increasing rural incomes, generating employment and promoting the nutrition and food security status of households and individuals. There is increasing evidence and recognition that what is needed for development, even more than natural resources and physical capital, is for people to be effective and productive economic agents; in short, investment in human capital is what really matters.

Changes in the economy, especially in agriculture, affect women and men differently since the roles, responsibilities, needs and constraints of women differ from those of men. Although women play a central role in the economy, their contribution to agricultural production is largely invisible in national statistics and is thus overlooked in both economic analysis and policy formulation. This represents a significant obstacle to promoting gender-responsive sustainable development.

76
This section discusses how participatory approaches and information can facilitate the formulation of gender-responsive plans and strategies. It also attempts to respond to the question of why a gender perspective is important for agricultural and economic development policy and planning. The underlying assumption is that such policy and planning would benefit from incorporating a gender dimension, yet lack of information is one of the main constraints to incorporating gender issues. Data on women are still seen as only marginally relevant to policy-making and reliable sources of such data, particularly in the agricultural sector, are generally lacking.

Gender biases are present at every stage from conceptualization and design to field interviews, analysis and implementation. This compounds the difficulties of data collection in rural areas, particularly in the informal sector. Data disaggregated by sex cannot alone provide insights into the processes that determine the differential impacts of policies on women and men. For policy-making purposes the analytical framework necessary to understand gender relations must accompany these data.

The current policy environment advocates "involving women", but does not necessarily promote an analysis of gender issues in policy, programme and project planning and implementation. Gender analysis studies the different roles and responsibilities of women and men, the differences in women's and men's access to and control over resources, and their consequent constraints, needs and priorities. Incorporating gender analysis into the tools of participatory agricultural planning helps policy-makers and planners to understand how the structure of policies and programmes needs to be modified if women are to be involved equally with men. It can demonstrate why some projects and policies have negative consequences for women.

Well-planned macro and sectoral policy changes have the potential for stimulating growth with equity. They also provide the opportunity and the tools for rural women to improve their productivity in production, processing and marketing activities in the rural agricultural and industrial sectors.

Gender-responsive planning means first learning about how gender shapes the opportunities and constraints that women and men face in securing their livelihoods within each cultural, political, economic and environmental setting. Because women and men have different tasks and responsibilities, and different livelihood strategies and constraints, they must each be consulted. There is overwhelming evidence that development has to address the needs and priorities of both women and men in order to be successful.
planners worldwide are increasingly called upon to engage in "bottom-up" participatory planning that will benefit women as well as men. However, participatory, gender-responsive agricultural planning is rarely practised. One reason for this is the question of method. It is not clear just "how" to conduct participatory planning or how to change current planning procedures in order to make them more responsive to gender and other differences among farmers. However, as a start, a review of the different steps and operations of the planning process is needed. This will also determine the nature and level of information required.

Agricultural policy-making

Policy-makers are the elected or appointed officials, high-level civil servants who may:

- set goals for the agricultural sector (such as growth, food security, regional equity);
- develop strategies to pursue these goals (such as giving priority to export crops, commercial farms and smallholders); and
- set price, input, credit and land policies designed to induce farmers, technicians and others working in the sector to take decisions that will achieve the policy objectives. (FAO.1999).

Agricultural planning

Planners develop national, regional, district or investment plans and projects as well as line agency programmes that are compatible with the goals, strategies and policies set by policy-makers. Planners may be economists, social scientists or technical specialists employed in the planning units of the Ministry of Agriculture or its various line agencies, such as extension or livestock services, or in national or international development non-governmental organizations (NGOs) and agencies. Managers may also be involved in planning, especially in programme planning for line agencies. (FAO 1999).

Gender-responsive agricultural planning

It is agricultural development planning that responds to the different priorities of diverse groups of farmers where these differences are based on gender and other socio-economic factors. Planners and policy-makers are aware of these differences and of how best to respond to them because these groups of women and men farmers have taken an active part in planning agricultural development activities. It is a process in which both farmers and planners are committed to following up plans together. (FAO 1999)
AN OVERVIEW OF THE DIFFERENT TYPES OF AGRICULTURAL PLANNING

The structures, processes and relative importance of the various "levels" of planning differ from country to country. A basic familiarity with the common features of most agricultural planning systems can assist in determining where and to whom the information produced by gender-sensitive participatory processes can be directed in order to increase the responsiveness of planning to gender and other differences among farmers.

Development planning, including agricultural planning, may be divided into two basic categories: centralized and decentralized. In a centralized planning system all major policy, planning, programming and budgeting decisions for the sector as a whole and for sub sector line agencies are made at the national level. In a decentralized system, responsibility for a large number of planning, programming and budgeting decisions is devolved to regional and/or district levels. A separate regional or district planning apparatus may be formed to develop an area-based investment plan.

The decentralization of planning and agricultural administration tends to bring problem analysis and planning closer to regional and local realities.

Village- or community-level planning is still rare. As decentralization takes hold, however, village planning may well become increasingly important. It has two basic functions:

i) to provide information for higher planning levels by means of participatory problem analysis; and
ii) to set community priorities and formulate action plans that can be carried out either independently or with some outside assistance.

The increasing importance of decentralized planning is one of three main elements in the current context of agricultural policy-making and planning.

Major elements in the current planning environment

- new constraints, especially a squeeze on operational funding and the loss of staff in a wide range of government agencies as a result of structural adjustment;
- new approaches, government administrative decentralization, regional and district interdisciplinary planning; and
- new demands, for participation, "bottom-up" planning, and for taking women into account. (FAO 1999).
While all these elements do not necessarily "fit" in all countries, and every element is not necessarily "new" in all contexts, they are common enough to constitute a relatively new policy and planning environment. This environment presents an important opening for gender and socio-economic difference-responsive, participatory agricultural planning.

The challenge to planning to "become more participatory" has several sources. Among the most compelling is the failure of many development projects and programmes to meet their objectives when farmers have failed to respond as expected. The old habit of blaming farmer ignorance and backwardness has lost its appeal, especially in the face of evidence that many farmers, such as the resource-limited, women farmers and some pastoralists, face constraints that make it impossible for them to respond as expected. Moreover, successful community development programmes based on participatory planning, implementation and monitoring processes have demonstrated that rural communities are indeed interested in development and will work to make plans and projects succeed so long as those plans respond to local priorities. Finally, the push for democratization has added an important political dimension to the demand for more participatory, "bottom-up" planning.

The admonition to "take women into account" also stems in part from the lacklustre performance of projects that have ignored women's roles in farming systems. Two decades of gender-sensitive project evaluations have resulted in a growing recognition that many projects, while improving men's situations, have actually made women worse off. Other factors have gradually shifted attitudes at both international and national levels. Among them, pressure on donors and governments to respond to women's needs as farmers, and the momentum created by major international conferences on population, the environment and women. The rapid growth in women's organizations throughout the world and their growing links with one another have added a political thrust.

A far less positive factor in the current environment is the often extreme pressure on governments to reduce their budgets in order to meet structural adjustment and stabilization targets. This factor weighs in at many levels, from cutting into planning funds and personnel, to prioritizing "men's" export crops and restricting funds for government services such as extension, marketing and credit for women farmers. The implication for gender-sensitive participatory planning methods is that much more attention must be paid to cost-effectiveness in generating and using information that promote gender-responsive policy, programme and project development.
While the new voices in this complex "planning environment" have, in many places, evoked a positive political response, the question for planners is still, what exactly should be done? That there are no easy answers is obvious. There are, however, promising new approaches for involving different groups of farmers, including women and the poor, in agricultural planning.

3.5 Participation

Participation is a term that is notoriously broadly interpreted. It may even be interpreted differently by different stakeholders in the same agricultural planning process. Stakeholders, a new notion in comparison to beneficiaries or partners, are all persons and organizations who stand to gain or lose from a particular policy, programme or project. Many people and groups have a "stake" in the results of agricultural planning, including women and men farmers from different socio-economic, ethnic or age groups. A FAO study of multilevel planning for agricultural development in Asia and the Pacific (FAO, 1995:89-90, cited in the box below) reviews the various ways that "participation" is practised in planning processes.

<table>
<thead>
<tr>
<th>Levels of people's participation in agricultural planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. participation limited to elites only (mostly elected representatives);</td>
</tr>
<tr>
<td>2. participation in which people are asked to legitimize or ratify projects identified and formulated by government, but do not participate in the detailed planning and management of the project;</td>
</tr>
<tr>
<td>3. participation in which people are consulted from the start and also actively participate in planning and management of projects;</td>
</tr>
<tr>
<td>4. participation in which representatives from different strata of society/occupation groups find their places in all planning/coordination/evaluation mechanisms devised at the various levels including the highest policy-making level; and</td>
</tr>
<tr>
<td>5. participation in which representatives in (4) actually control the decisions at all levels.</td>
</tr>
</tbody>
</table>

The same FAO study points out that, as of 1995, "experience in the various countries shows that the modes of participation in (4) and (5) have not effectively materialized". While this may no longer be strictly true, participation even at level (3) is still quite rare. In promoting participatory agricultural planning, there is a need to analyse current levels of participation to understand better the changes that will be required to reach higher levels.
Participation is key in terms of involving rural people in the information collection and planning process. Participatory methods can be used to collect information on the activities and constraints of women and men farmers. This new information can then be shared with policy-makers and planners to allow the formulation of development plans that reflect the interest of the rural population and support a sustainable development.

5.3.6 Tools and methods to analyse diversity

Projects to improve the responsiveness of agricultural planning to the priorities of women and men farmers from different socio-economic groups need to foster participation by as wide a range of stakeholders as possible. The ideal would be to have an active involvement in planning by representatives from all groups with a stake in the policy or programme.

5.3.6.1 Participatory rural appraisal (PRA)

Participatory rural appraisal, commonly known as PRA, is a set of tools to facilitate a research and action process managed by the local community. It is an exceptionally relevant and powerful method for involving communities in the information-generating, analysis and priority-setting phases of agricultural planning. Specific tools such as village resource maps, problem trend lines and institutional profiles assist in the analysis of community issues. Other tools such as farming systems diagrams, seasonal calendars, daily activity profiles and household resource maps can be combined with gender analysis to facilitate the study of livelihood systems of different socio-economic groups. A third set of tools helps communities and different socio-economic/gender-based focus groups to identify and prioritize their problems and resource needs and to develop group or community action plans.

5.3.6.2 Gender analysis

Over the past three decades, wider recognition has been given to the manner in which the structure of gender relationships and roles affects development policies, programmes and projects, irrespective of whether or not these activities are specifically targeted towards a particular sex. Moreover, there is a much wider understanding of the linkages between gender issues and general development problems such as poverty, lack of political power and environmental degradation. As both a cause and a result of this increased awareness, numerous methods and tools have been
developed to facilitate the consideration of gender issues in the full range of development activities.

Gender analysis identifies established patterns of gender-based inequality in economic and social life. This can be threatening to more advantaged stakeholders in the agricultural planning process. Frequently, senior staff or policy-makers appear to be more resistant to undertaking gender analysis than farmers and government field staff. In some cases, the use of gender analysis tools at the community level may foster a level of conflict that can be inimical to women's interests. To avoid such negative outcomes, local women should decide whether or not specific gender analysis tools are best used in mixed sex settings or by women alone. Where gender relations are hierarchical (the vast majority of cases), participatory methods such as PRA should always include a separate "women's problems analysis" as well.

One example is FAO's Socioeconomic and Gender Analysis Programme (SEAGA), which emphasizes the fact that the outcome of development activities (in both public and private spheres) is affected by a range of factors that are, or can be, broader than those that are generally dealt with in the context of gender analysis. These factors include socio-cultural patterns, economic trends and political issues. In other words, the SEAGA approach recognizes that the issues that affect women, such as poverty, lack of power and vulnerability to environmental degradation, while partly attributable to women's inequality and traditional roles, are also related to the same social and economic factors that keep men poor and politically alienated.

The recognition and understanding of the processes, structures and linkages between these different levels is therefore central to the gender analysis process. It is simply not sufficient to focus, for example, on household and community issues, to the exclusion of important intermediate and macrolevel structures and institutions that significantly determine the overall social and economic position of women and men. Cross-sectoral issues and national development concerns are not sufficiently identified or addressed at the field level and thus hinder the identification of proper development strategies.
4.7 Strategy for a Gender-Responsive Agricultural Planning

The ideal gender-responsive agricultural planning process would entail the following elements:

- Information flow up, down, and across the planning ladder to provide valuable information to all stakeholders;
- Dialogue, negotiation, consensus building, and the creation of channels of communication that allow farmers and planners at all levels to take decisions together about appropriate actions;
- Building linkages and partnerships among stakeholders at the same level (for example, among farmers themselves) as well as between levels;
- Empowering women and men to express their needs and aspirations in institutional planning processes at all levels; and
- Follow-up to community-based planning efforts and commitment of resources (both financial and human).

Planning is a forward-looking process that allows us to consider where we are now, where we want to be, and the best ways to get there. The process of strategic planning facilitates communication and participation, accommodates divergent interests and values, fosters wise and analytic decision-making, and promotes successful implementation.

Different entry-points, tools, and methods for gender-responsive planning can include the use of focus groups, local cases for PRA training, methods to adapt PRA and gender analysis tools to local circumstances, statistical surveys to supplement PRA-generated information, participatory impact monitoring and methods to strengthen grassroots organizations. Capacity building is another important component where government officials, line agency officers, and field workers can be trained in participatory methods and/or gender analysis. Capacity building will allow planners to capture better the information most relevant for agricultural planning and can thus improve the gender-responsive nature of policies and interventions and linking to the right sources for coordination and information sharing. There is also a need to establish a mechanism to respond to community-planning efforts and secure follow-up activities.

5.3.8 Gender-Responsive Policy and Institutions

The fact that agricultural sector planners rarely take rural women's needs into consideration can have a serious impact on food security, for example, as agricultural training and services are not targeted at the rural women who grow a significant amount of the world's food. In many cases,
planners lack information about the important role that women play in agricultural production and household food security. But, as mentioned above, more often than not they do not know how to learn from women farmers about their activities or how to respond to their needs. One way to address these problems is to improve information on the situation of rural women and men and to involve them in local processes of planning in the agricultural sector.

3.9 Policy-Making

In many parts of the world, there is a renewed recognition of the crucial role that the agricultural sector can play in increasing export earnings, generating employment and improving food security. Within economic liberalization and privatization formulas, efforts to raise productivity, achieve food security and reduce poverty must consider the micro- and mesolevel institutional and cultural factors that mediate their impact at the local level. For the farming sector, economic policies should avoid giving a differential advantage to large-scale and commercial farming while largely ignoring the smallholder sector which is the most vulnerable and has the most impact on rural women's and men's work and lives.

Policies should recognize the need to place people at the centre of the development process. This promotes a gender-sensitive and participatory approach to development based on a cyclical and multidirectional flow of information between international agencies, governments, NGOs, research institutions, extension and community development services and individuals in rural households.

To take advantage of changing macroeconomic dynamics, rural workers need their governments and civil society to invest in human capital development, education, schools, vocational and technical training, and in the expansion and improvement of the rural infrastructure to serve agriculture and rural non-farm enterprises (e.g. roads, electric power, sewerage, health facilities, schools and marketplaces).

In most countries, there is still a need for proactive policy to ensure that women are a part of the dynamic process of change and that their requirements are addressed separately from men's, where necessary. This means that policies need to:

1. encourage self-employment opportunities and small business creation through equal access to existing support measures such as credit, equality of opportunity and equal pay for equal work;
enhance the legal and social position of women through measures such as joint or individual title to land, informing rural women of their legal status and rights;

enhance education and vocational training and supporting services (day care, transport services, better sharing of domestic and family responsibilities).

Policy recommendations rely on up-to-date, accurate and detailed information. The present lack of a reliable assessment of the different contributions made by women and men to an economy represents a significant obstacle to promoting gender-responsive sustainable development. Action is needed to support the collection, compilation, analysis and diffusion of time and task allocation data disaggregated by sex as well as the development of indicators on women's participation in agriculture and the rural economy. Changes will first need to be made in mainstream data collection programmes by broadening the definitions of work to include both paid and unpaid work and women's and men's separate contribution to agricultural and non-farm output. It is also important to raise awareness among policy-makers of the utility of these data, and thereby create a demand for data collection and use.

5.3.10 Institutional Responsiveness

Government ministries, financial and training institutions, research centres, NGOs and other social and economic structures that sponsor agriculture and rural development programmes need to reorient their operations so that they also target rural women as clients of human resource development initiatives and beneficiaries of development programmes. Several important issues need to be addressed through institutional reform, the most important of which is access to land. This determines self-employed women's access to credit and complementary services. Education and training are other critical areas where a major investment in women is needed, not only to increase women's participation in economic development but also to achieve important national development goals that are very much related to women's knowledge and skill levels (such as reduced fertility rates and increased household food security and nutritional levels).

Connecting development in the rural sector to the priorities of local women and men farmers entails a strengthening (or creation) of institutional mechanisms for learning and responding to diversity and change. The potentially powerful role that information and communication technologies can play in providing improved access to and sharing of information for gender-responsive planning needs to be further addressed. Particularly with regard to gender, there is a clear need to change the "rules of the game", i.e. the everyday rules and procedures of institutions,
which reflect the physical and social needs and capabilities and political interests of those who
designed them in the first place. Since women are rarely involved in political, economic and social
decision-making, these rules of the game are currently stacked against them. The challenge is
therefore to institutionalize gender-sensitive policy and approaches by making equitable forms of
social interaction routine and limiting the possibilities for choosing discriminatory forms of social
organization.

The main thrust in supporting institutional change has been through sensitization and training of
bureaucrats and technicians on gender issues and on the use of participatory approaches. The main
objective of gender training is to help people in organizations to change the way they think by
eliminating the stereotypical notions they hold about women's work and needs and consequently
influence the way they act. Gender analysis training is also important to make allies and build
support within the ranks by providing bureaucrats, policy-makers and planners with the knowledge
and skills they need to deal with the conflict provoked by policy proposals to orient more resources
to women.

In addition to training and sensitization, efforts to create gender-responsiveness
should also be supported by:

• continuing the work to develop methodologies for integrating gender and the needs of women
into the various phases of project and programme management - identification, formulation,
planning, implementation, monitoring and evaluation;

• widely disseminating and promoting good practice methodologies in the integration of gender
and women in rural development to encourage their adoption;

• technical assistance programmes aimed at the reorientation of operations to make institutional
activities more gender-responsive; and

• building up a "critical mass" of women in public administration and rural organizations.

• The existence of a policy environment that encourages planners at the local level in particular,
extensionists, mid-level planners and other development agents to take an interest in gender-
sensitive participatory approaches facilitates the institutionalization of projects and methods.
Most of the constraints that women workers face derive from cultural attitudes and values that give women low status in society and relegate their work and needs to second place. Thus, practical measures to increase the productivity of women’s labour, create employment opportunities, improve working conditions and reduce the workload and wage disparities experienced by rural women will remain largely marginal, if little is done to address the inequity and discrimination that lie at the heart of the problem.

Three fundamental barriers can be highlighted for improving rural women’s situation. These are:

- discriminatory laws, policies and practices that impede women’s access to productive resources, the most important of which are land and water, and institutional support in the form of training, credit, and services;
- women’s exclusion or marginal participation in organizations that could increase the productivity of their labour as well as their access to economic opportunity or representation to demand better wages and working conditions; and
- The low investment in women’s economic, managerial and technical capability.

In order to achieve gender-responsive agricultural policy and planning decisions, accurate information about the conditions of the rural population is crucial. The tools and methods used for collection of information therefore need to be adapted to the situation at hand and supported by participatory approaches so as to involve and engage rural communities in planning for their own future. With accurate information about rural women and men, the work of rural women in particular can be highlighted and their increased access to fundamental productive resources promoted. The allocation of and access to productive resources remain important steps to sustainable development. With rural women as producers of a large part of the world's food for household consumption, food security is largely dependent on the acknowledgement and consideration of their work.

Changing from the inside out, to institutionalize gender-responsive policy and planning, is not going to happen overnight. Learning comes from doing. Naturally, new approaches and methods meet with resistance. Therefore, gradual evolution, establishing and securing small successes, works better than going abruptly to scale. It is only realistic to start on a small scale with a focus on practical actions (rather than philosophies), to undertake collaborative field work, and to build
igger programmes slowly over time as attitudes and capabilities begin to change; in fact, a process approach.

The challenge is to try to view every element of every farm through the lens of each female and male farmer to redefine every line in agricultural planning in terms of the farmers' perceptions.

Governments in partnership with the private sector and civil society need to formulate strategies for improving the quality and use of information for gender-responsive policy-making. An attitude of listening followed by quick response to specific needs in a specific place with specific groups of women and men farmers is desired.

To this end, it is a matter of high priority to enhance the capacity of governments and their partners to collect primary data and to analyse and use gender-disaggregated data for formulation of gender-responsive policies, strategies and programmes in the agricultural sector. Institutionalization of gender-sensitive planning through the systematic use of socio-economic and gender analysis is an important step in building the capacity of national partners to capture and respond to new global trends and emerging issues.
5.5 RECOMMENDATIONS

There is little ground for optimism in supposing that current macroeconomic trends, with their strong focus on market mechanisms, will significantly improve the lot of rural women unless they are better prepared to enter into and take advantage of the new dynamics. The challenge is to help rural women ride the waves of change. This involves promoting a systematic strategy directed towards:

1. Raising the level of skills and productivity of rural women workers through public and private investment in basic education and literacy as well as special skills programmes and vocational training;

2. Eliminating legislative, administrative, socio-economic and attitudinal barriers to rural women's access to the factors of production through changes in legislation and proactive economic and social policy, institutional restructuring and socio-economic and gender analysis training;

3. Building and empowering women's organizations and enhancing their participation in mainstream policy- and decision-making bodies so that women can more effectively lobby for needed changes on their own behalf or have their needs represented in decision-making processes; and

4. Changing the mind-set and operational procedures of rural institutions, both public and private, to increase their responsiveness to rural women's needs.
REFERENCES


The role of women in agriculture and constraints to their effective participation in agricultural development in Nigeria. Paper presented at UNDP/ILDO/DFRRJ Training Workshop on Monitoring and Evaluation of Rural Women in Productive Skills Project.


Gender-Responsive Planning and Programming Workshop, Reference material, Nyeri, Kenya.


Women and national development in African countries. Position paper prepared by Human Resources Development Division, ECA.


Agricultural extension and farm women in the 1980s. Rome: FAO.

Gender issues in agricultural and rural development policy in Asia and the Pacific. FAO/UN RAP Publication 1995/2. Bangkok, FAO Regional Office for Asia and the Pacific.

Gender and participation in agricultural development planning - key issues from ten case studies. Women and Population Division. Rome.
Participation and Information: the Key to Gender responsive agricultural Policy. Rome


Gender and Rural Development Profile: The Republic of Namibia. Rome, Italy.

Gender and Rural Development Profile: The Republic of Zimbabwe. Rome, Italy.

Gender and Rural Development Profile: The United Republic of Tanzania. Rome, Italy.

Agricultural Extension and Farm Women in the 1980s. Rome, Italy.


Rural Poverty Alleviation: Policies and Trends. FAO Economic and Social Development Paper 113, Rome, Italy.

Development Strategies for the Rural Poor. FAO Economic and Social Development Paper 44, Rome, Italy.


Women in Agricultural Development Series: Gender Issues in Rural Food Security in Developing Countries. Rome, Italy.

The Impact of Development Strategies on the Rural Poor: Second Analysis of Country Experiences in the Implementation of the WCARRD Programme of Action, Rome, Italy.

Rapport national sur les femmes, l'agriculture et le développement rural, Benin. Préparatifs de la quatrième conférence mondiale sur les femmes (Draft), prepared by Anastasie Tomety and Raphael Dansou for the Ministère du développement rural.

Rapport Sectoriel, Femmes, agriculture et développement rural, Burkina Faso, Ministère de l'agriculture et des ressources animales.

Rapport national sur les femmes, l'agriculture et le développement rural, République du Congo, prepared by Félicité Tchibindat and Henriette Makoumba-Nzambi for the Ministère delegué chargé de l'intégration de la femme au développement.

Equisse de pays pour un cadre politique et plan d'action régional pour les femmes en agriculture au proche orient (Draft), Mauritania, prepared by Mounina Mint Abdellah.

Projet de programme d'actions régionales de la F.A.O. pour la femme rurale dans l'agriculture en Afrique du Nord et au Moyen Orient (Draft), Morocco, prepared by A. Bennis, Ministère de l'agriculture et de la mise en valeur agricole.


The Role of Women in Agriculture in the Sudan, Contribution to the Policy Framework and Regional Programme of Action for Women in Agriculture in the Near East (Draft), prepared by Amna A. Farah, Women in Agriculture Consultancy House and Country Coordinator, RPAWANE.

National Report on Women, Agriculture and Rural Development (Draft), Tanzania, prepared by Bertha Koda, Institute of Development Studies.


Fieldstein, H. S. (1994)


Gender Equity Mobilisation Support Programme Phase II. MOA/ASIP Secretariat, Nairobi Kenya.


Gittinger, Chernick, (1990)


Heyzer, N. (1992)

Gender, economic growth and poverty. Development, 1, 50-53.


Huang Xiushen, (1995)

Implement projects, learn skills and get benefits - Discussion about the new way of rural women's technical training. Paper presented at international seminar on women in agriculture, Beijing, CECAT.

ICAR, (1988)

International conference on appropriate agricultural technologies for farm women: Proceedings and recommendations. New Delhi, ICAR.

IFAD, (1985)


IFAD, (1993)

The State of World Rural Poverty: A Profile of Africa. Rome, Italy.

IFAD, (1991)

The Economic Advancement of Poor Rural Women, Guidelines for Action, Rome, Italy.

Joekes, Susan, (1991)

Women and Structural Adjustment: Operational Implications for Member Organizations of the Joint Consultative Group on Policy, Brighton, UK: Institute for Development Studies.


How poor women earn income in sub-Saharan Africa and what works against them. World Development, 17 (7), 953-963.


Promotion of women remains controversial. D + C: Development and Cooperation, I, 7-8.

Gender priorities and issues in agricultural extension delivery. Paper presented at the inaugural conference of the Society for Agricultural Extension of Nigeria at ARMTI, Ilorin, Nigeria.

The role of gender in agricultural development. Issues in Agriculture No. 3. Washington, DC: CGIAR


They reap less than they sow. The Hindu (April), No. 7. Madras: India.

Most farmers in India are women. New Delhi: FAO.

Women: The key to ending hunger. The Hunger Project Papers No. 8.


APPENDICES

APPENDIX I

FOCUS GROUP DISCUSSION RESPONDENT SELECTION

March - April 2006

Identifying Variables:

Gender (Please note and record)..........................................................................
Sublocation (Write name)..................................................................................
Village (Write name)..........................................................................................
Respondent Occupation.....................................................................................
(Proceed if answer is farming)
Respondent Number..........................................................................................
HH Name:...........................................................................................................
Respondent Name................................................................................................
Respondent Age..................................................................................................
Respondent Marital Status..................................................................................
Date.....................................................................................................................
Enumerator (Write name)...................................................................................

“We are part of a team from the University of Nairobi who are doing Research that will be used to write a project paper regarding the role of women and men in agriculture and policy reforms that would best support food production in Kenya’s rural areas. Your help in answering these questions is very much appreciated. The survey should take less than an hour. Your participation is completely voluntary. Your responses will be COMPLETELY CONFIDENTIAL and will be added to those of 64 other respondents in the area and analysed together. If you have any questions or concerns about this study, you may contact the Director, Institute of African Studies, University of Nairobi P.O Box 30197, 00200. Nairobi”

“You indicate your voluntary agreement to participate by beginning this interview. Do you have any questions?”

Admit respondent into FGD (Indicate Venue)......................................................
APPENDIX II

SEASONAL CROPPING CALENDAR GUIDE

March – June 2006

Objective:
To identify for men and women patterns of labour, income and expenditure patterns, shifts in household health and welfare and free time.

Materials: Seasonal Calendar, flipcharts, markers

<table>
<thead>
<tr>
<th>CROP/ACTIVITY</th>
<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
<th>APR</th>
<th>MAY</th>
<th>JUN</th>
<th>JUL</th>
<th>AUG</th>
<th>SEP</th>
<th>OCT</th>
<th>NOV</th>
<th>DEC</th>
</tr>
</thead>
</table>

Procedures:
1. Groups of men and women in separate work spaces identify their daily seasonal tasks. These may be drawn on small pieces of paper or directly on a large grid representing the months of the year. As each task is placed on the calendar, the various aspects of the task are discussed and a line is drawn horizontally across the appropriate months to indicate when the different aspects take place (e.g. land preparation, planting, weeding, fertilising, harvesting, post-harvest activities, marketing).
2. After labour, (if relevant) income levels are marked according to when income flows in and out of the household.
3. Variations in household expenses are added, (if relevant) identifying times during the year of special expenses (school, religious festivals).
4. Other rows (if relevant) may represent weather conditions, illness, food availability, income generating projects.
5. Each group individually analyses their own calendar by looking vertically at the patterns of labour and expenses.
6. The men and women bring their calendars together, explain what they each have diagrammed, and analyse similarities and differences. The community provides its own interpretation of the results, which should lead to insights with regard to constraints and opportunities.

Steps for interpreting the Seasonal Calendar
1. Times of the year with the most/heaviest work.
2. Time of least income.
3. Time of largest expenses.
4. Time when food is scarce.
5. Similarities and differences between men's and women's seasonal calendars.
6. The best time to implement projects e.g. Agricultural trials, Seed selection, irrigation.
APPENDIX III

DAILY ACTIVITIES SCHEDULE GUIDE

March – June 2006

Objectives:
1. To use representative daily activity schedules as the basis for discussion of differing perceptions of the tasks and time commitments of men and women
2. To use the schedules to identify labour constraints and opportunities for new or additional projects for women and men.

Materials: Daily activity schedule, flipcharts, markers.

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Procedures
Working in separate groups, men and women generate typical schedules for themselves; beginning with the time they rise, identifying all the various tasks in time blocks of 30 minutes. The schedules are then written on flipcharts. The season will also be reflected in the schedule.

Steps for interpreting the Daily Activities Schedule

1. The schedules for men and women will be examined separately and the following determined:
   a) Times of the day with the most/heaviest work.
   b) Tasks that take the most time.
   c) Tasks that are the most physically demanding
   d) Times in the day when there is less work.
2. Obvious differences between men's and women's responses
3. Aspects that are share or common in both
4. When women/men could engage in project activities during the day.
**ACTIVITY PROFILE GUIDE**

March – June 2006

This tool assists in identifying the productive and socially reproductive activities of women and men, girls and boys. Other data disaggregated by gender, age or other factors can also be included. It can record details of time spent on tasks and their location.

**Objective:**

- To determine which activities are accomplished by women and men.

The activities listed in the ACTIVITY PROFILE are divided into Production Activities such as agricultural and income generating activities, and Household Maintenance Activities. Apart from listing basic activities, many activities can further be subdivided into smaller tasks for a more accurate breakdown of the division of labour in any particular sector.

**Materials:** Activity Profile, flipcharts, markers.

<table>
<thead>
<tr>
<th>ACTIVITIES</th>
<th>FEMALE</th>
<th>MALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRODUCTION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOMESTIC</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Procedures**

The activities listed on the Activity Profile are read out one by one, and participants are asked whether each is the responsibility of men or women. A check mark is put on the appropriate column. If both women and men carry out the activity, both are checked and a + is marked next to the check if one is more involved in the activity than the other. The exercise is quite lengthy hence the necessity to limit of discussion and aiming for generalisations rather than details.

**Steps for interpreting the Activity Profile**

1. Any emerging patterns in the activities for which only men/only women are responsible are noted and explanations sought.
2. Men and women are jointly involved in some activities. Reasons for this joint venture are pointed out.
With this tool, the resources that women and men use to carry out the tasks identified in the activity profile can be listed. It identifies whether women or men have access to resources, who controls their use and who in the household or community controls the benefits from them (benefits can include outside income, basic needs, training).

**Procedures**

The difference in Women's and Men's ACCESS AND CONTROL of RESOURCES and BENEFITS from resources are identified and analysed.

Differences between ACCESS and CONTROL are established. Time is then allowed for responses. For instance, women may have access to the use of land, but do they have control over the land? Do they own the land? Can they say who can use the land and for what purposes. Also, if the use of land provides benefits of food and cash, who has control over that food and cash? Who can say what will be done with the food and how the cash will be spent?

With reference to the ACCESS AND CONTROL PROFILE, it is explained to the participants that RESOURCES include all the means by which women and men meet the needs of themselves and their households. BENEFITS refer to the benefits that women and men enjoy as a result of using resources and carrying out activities.

**Materials:** Access and Control Profile, flipcharts, markers.

<table>
<thead>
<tr>
<th>RESOURCES</th>
<th>ACCESS</th>
<th>CONTROL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
</tbody>
</table>

**Steps for Interpreting and Debriefing the Access and Control Profile**

**The Access Column**

1. Do men have access to some resources/benefits that women do not?
2. Do women have access to some resources/benefits that men do not?

**The Control Column**

1. Do men have control over some resources/benefits that women do not?
2. Do women have control over some resources/benefits that men do not?

What changes would have to occur if women were to be incorporated into policy implementation processes?
The objective of these interviews is to get a general overview of life in the sub-location through time, and an insight into the nature of women and men’s participation in agriculture, their access to resources, and changes that have occurred in the livelihoods of men and women in the area. Open-ended questions are administered and respondents are allowed to discuss at length the different subject matters while being probed for additional information where necessary.

Guide/Probing Questions

- What would you say is the population of this area?
- What natural resources are available here?
- How is land allocated in this area? What is the land tenure system?
- What are the main economic activities carried out by men and women in this area?
- How are agricultural roles shared between men and women in this area?
- What about household/domestic responsibilities? Who does what?
- How is decision-making done at household and community level?
- How are resources shared at household and community level?
- What is a typical day like for you from the time you rise until you go to bed?