



# African Gender, Climate Change and Agriculture Support Program (GCCASP)

**Malawi Workshop Proceeding**

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## Abbreviations and Acronyms

AIDS	Acquired Immunodeficiency Syndrome
ASWAp	Agriculture Sector Wide Approach
AU	African Union
CAADP	Comprehensive African Agriculture Development Programme
COMESA	Common Market for Eastern and Southern Africa
DAESS	Decentralized Agricultural Extension Services System
FHH	Female Headed Household
GDP	Gross Domestic Product
HIV	Human Immunodeficiency Virus
MDGs	Millennium Development Goals
MGDS	Malawi Growth and Development Strategy
MP	Member of Parliament
MVP	Millennium Villages Project of the United Nations
NAPA	National Adaptation Programmes of Action
NASFAM	National Smallholder Farmers' Association of Malawi
NEPAD	New Partnership for African Development
NGO	Non-Governmental Organisation
NGP	National Gender Policy
NPCA	NEPAD Planning and Coordinating Agency
NRC	Natural Resources College
PIU	Project Implementation Unit

# 1. Introduction

The objective of national consultation in Malawi was to contribute to the development of an Africa-wide Programme on Gender and Climate-Smart Agriculture through a national level study that involved a broad consultation and participatory process. In this regard, a national team was constituted with the following terms of reference:

1. Review gender equality and policies that create conducive environments for equitable participation of women in agriculture. That is:
  - a. Conduct review of the CAADP investment plan and other agricultural initiatives and appraise the extent to which these incorporate women-specific investments;
  - b. Review and appraise the inclusion of women-specific technical support activities in national policy and programme documents related to agriculture, environment and climate change;
  - c. Review the existence of any climate smart agriculture and gender programmes that have been implemented at national level and identify lessons from any such programmes for up-scaling;
2. Conduct national consultative meetings and individual interviews with key stakeholders and resource persons to assess the extent to which gender issues, specifically women-specific investments are incorporated in the CAADP and other national programmes and strategic documents related to agriculture, environment and climate change;
3. Produce an inception report based on the desk reviews described above; and
4. Produce a national consultation report based on the national consultation workshop as well as the field study.

This consultation report therefore presents the results of the above stated terms of reference, including the methodology of the study and its outcomes. Specifically, it presents briefly a situation analysis of the gender and climate change in Malawi, the experienced climate change impacts and coping strategies of women farmers in Malawi, constraints and barriers to women farmers' effective adaptation to climate change, and the priority investment needs for enhanced resilience and adaptive capacity to climate change of women farmers in Malawi. The report begins with the background information to contextualise the above issues.

## 1.1 Background

In recognition of the critical role of women in agriculture and the gender-differentiated impacts of climate change, the New Partnership for African Development (NEPAD) Planning and Coordinating Agency (NPCA) is designing a five-year '**Gender, Climate Change and Agriculture Support Programme**'. The aim of the programme is to support implementation of regional and country interventions to empower rural women farmers and other vulnerable sections of communities to better cope with the adverse impacts of climate

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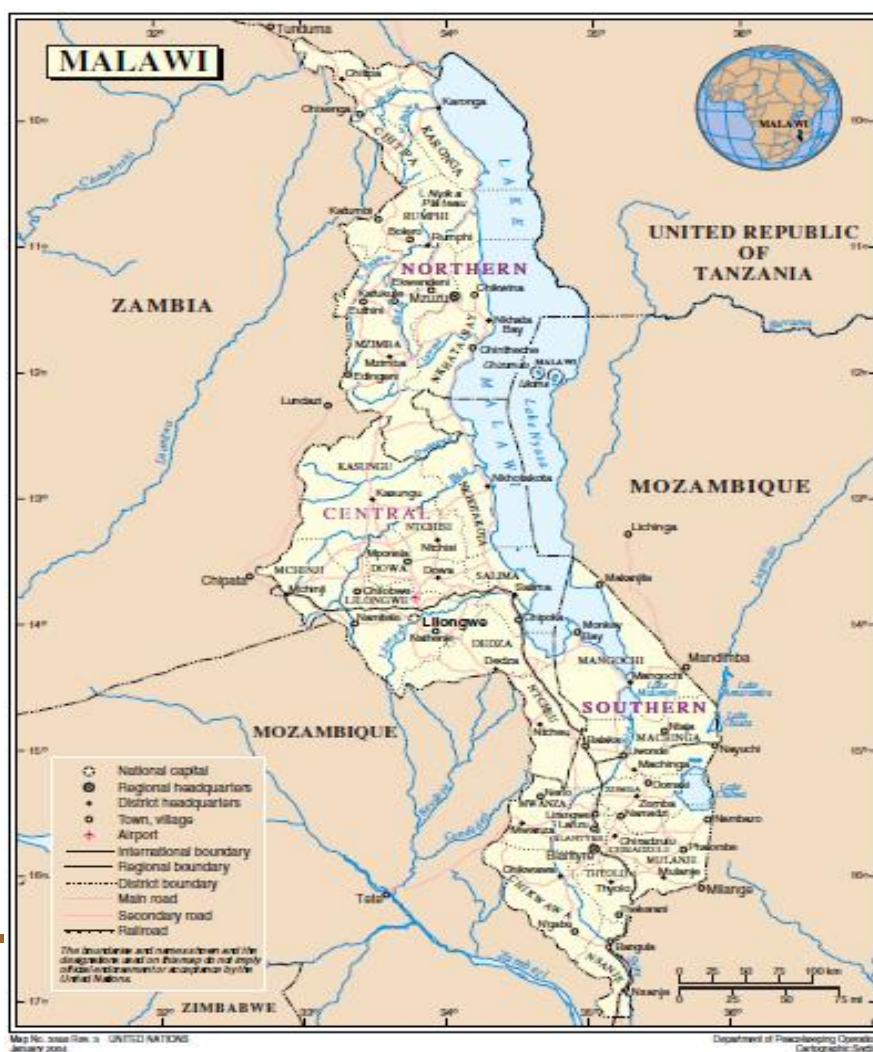


change. In this regard, it was imperative for NEPAD to have a clear understanding of the country related specific issues impacting rural women farmer's ability to engage in the agricultural sector in a more productive and profitable manner in the face of climate change.

To this effect, the NEPAD Agency, enlisted GeoSAS, an Ethiopia-based consulting firm to facilitate national consultations on gender, climate change and agriculture in five selected African countries including Malawi. Each of the selected countries conducted a desk review on policy and strategic documents; an in-depth assessment and primary data collection and a national consultation two day workshop. The national level findings are meant to provide inputs into a continental level consultation. Overall, the findings from these consultations will feed into the design of the ***Gender, Climate Change and Agriculture Support Programme***.

This report presents the findings from the consultations in Malawi, which is a land locked country bordered by Tanzania to the east; Zambia to the west and the rest of the land by Mozambique. It has a population of approximately 15 million inhabitants on 120,000 square km of land. Lake Malawi covers almost a third of the country (Figure 1).

**Figure 1: Map of Malawi**



## **1.2 Objectives, Scope and Limitations**

The objective of this study was to develop a clear understanding of the specific issues impacting on rural women farmers' ability to engage in the agricultural sector in a more sustainable and profitable manner than at present. Specifically, the study:

1. Conducted a situational analysis at policy, institutional, programme and service levels;
2. Assessed gender linkages with agricultural productive resources such as access to inputs and services, land, labour, livestock, education, training, extension and financial services;
3. Identified the problems experienced by women farmers in achieving sustainable livelihoods and the gaps; and
4. Proposed priority areas of interventions as investments plans.

To achieve the above objectives, the study included a desk review of policy and strategic documents, conducted an in-depth situational analysis of women farmers' experiences and consultative meetings with related stakeholders in the public and private sectors, as well as conducted a national consultative workshop to validate the findings. The situation analysis of women farmers covered three sites, one in each of the three administrative regions of the country, namely the south, centre and north. The documents reviewed included the CAADP compact, national investment plan such as the Malawi Growth and Development Strategy (MGDS) II and sectoral investment plans such as the Agricultural Sector Wide Approach (ASWAp), the National Gender Policy, and the National Adaptation Programmes of Action (NAPA).

The study was limited to selected stakeholders involved in climate-smart agriculture and women farmers from three districts and villages served by public extension workers due to time constraints. However, the findings from these selected participants were validated and enriched through the national consultative workshop as described below. Thus, the findings could be perceived as representative of a cross-section of women farmers and service provider stakeholders in Malawi.

## **1.3 Methodology**

As stated above, the study involved desk review of documentary materials, collection of primary data through a mini-farmers' survey using a questionnaire, focus group discussions with farmers and consultations with key informants using separate checklists. In addition, a national consultative workshop was conducted to validate the findings from the primary data collection tools and the desk review. These study methods and tools are described below in detail.

### **1.3.1 Selection of Informants and Case Study Sites**

Key Informants were selected from organisations that are involved in gender and climate smart agricultural activities. These included Ministry of Agriculture and Food Security;

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Ministry of the Environment and Climate Change; Ministry of Gender, Children and Social Welfare; Oxfam, Actionaid, Millennium Villages Project (MVP) and Total Land Care.

### **1.3.2 Data Collection from Case Study Sites**

The study targeted selected villages in Mzimba (Lusangazi), Lilongwe (Ndevu and Chakwawa) and Machinga (Mliwo) districts. The study was designed to cover 12 households in each of the sites. These were purposely selected to respond to the study structured questionnaire that was complimented by some key informant interviews and focus group discussions in order to validate some of the collected data. Analysis and interpretation of the data used descriptive statistics using simple means and percentages.

### **1.3.3 Consultation Workshop**

A national consultative workshop was held at the Crossroads Hotel in Lilongwe from 25 to 26th July 2012. The objectives of the workshop were to: (i) share preliminary findings from the Malawian case study amongst key stakeholders; (ii) obtain views and feedback from the stakeholders on the preliminary analysis of the challenges and identifying gaps in addressing the concerns of women smallholder farmers in the context of climate change impacts at policy, institutional and service delivery levels; and (iii) obtain views from the stakeholders in identifying priority investment programme needs for Malawi.

The workshop drew 36 participants from various stakeholders including smallholder farmers, farmers' organisations, NGOs and the government. It was officially opened by the Deputy Minister for Gender, Children and Social Welfare, Hon. Jenipher Chilunga Kaferankhande, MP. In attendance throughout the meeting were the representatives from NEPAD and the lead experts from GEOSAS.

There were four main presentations from the study team members on the first day as follows: Gender, Climate Change and Agriculture in Malawi: Policy, institutional and service provision levels; Food Security, Climate Risks, Vulnerabilities and Coping Strategies of Women Farmers; Gender and Access to Inputs, Services and Technologies; and Major challenges, Gaps and Investment Programmes. During discussions, women farmers also made presentations of their experiences, concerns and areas of support needed. The four presentations were followed by a panel discussion of farmers on 'Climate Change and Women Farmers in Malawi'.

On the second day, participants were divided into four groups to identify priority areas for interventions in the Gender, Climate Change and Agriculture Support Programme. During plenary, the four groups presented their priority areas and four common priority areas were identified. Participants then deliberated on these and agreed on three priority areas that would be part of the support programme by NEPAD. Thus, the major output of this workshop was that participants agreed on three priority areas for intervention.



## **2. Gender and Climate Change in Malawi**

### **2.1 Importance of the Agriculture Sector**

Agriculture is the most important sector of the economy, employing about 80% of the workforce and contributing over 80 per cent of foreign exchange earnings. It contributes 63 percent of the income of the rural poor in Malawi and contributes significantly to national and household food security. More than 85 percent of rural households derive their livelihoods from agriculture. Tobacco accounts for around 60 percent of the foreign exchange earnings with tea and sugar contributing about 10 percent each. Livestock contributes about 7 percent of gross domestic products (GDP). Cattle, goats, sheep, pigs and chickens are the major livestock providing for both subsistence and commercial requirements. Production and consumption of animal products in Malawi are low below African average.

The sector is dualistic, comprising smallholder and estate subsectors. More than 90% of the rural population (2.5-3.0 million households) are smallholder farmers with customary land tenure. They cultivate small and fragmented landholdings over approximately 2.4 million hectares, with low yields, and are mainly subsistence-oriented. Average landholding size has fallen from 1.5 hectares in 1968 to around 0.4 hectares today. Over 80% of this land is planted to maize. The estate land is mainly under freehold or leasehold tenure and the main crops include tobacco, tea, sugar and coffee as cash crops.

### **2.2 Role of Women in Agriculture.**

Of particular importance in the smallholder sub-sector are women. About 88 percent of rural women are employed in the agricultural sector as smallholder farmers, compared with 73 per cent of rural men (NSO, 2009). More women than men are full time farmers mainly responsible for the daily food supplies. Their high numbers are reflected in village meetings, where more women than men attend. They work as much as men on the farm, with minimal differences in farming activities such as land preparation, planting, weeding, harvesting, grading, curing, packaging and marketing (NSO, 2009). Women participate fully in both cash and food crops; and their contribution to food and nutrition security is considerable. They are the major growers of staple foods such as maize, rice, sweet potatoes, potato, sorghum, plantains and cassava; and other food crops including grain legumes (pigeon peas, common beans, soya beans, cow peas, groundnuts, chick peas and ground beans), fruits and vegetables. Women care for all important small livestock that include poultry, goats, sheep and pigs. As it will be noted below, these are the most important animals in Malawi. Women also participate in spraying crops against insect pests and diseases particularly in areas where cotton is grown and their children are at risk on food chain when it comes to the pesticides getting into breasts for lactating mothers.

In addition to the work on the farm, women are responsible for most domestic work. For example NSO (2009) reports that 75 percent of females were engaged in fetching firewood as compared to 33 percent for males; 88 percent of females were engaged in fetching water as compared to 45 percent for males and about 53 percent of females did care for the sick while for males it was 40 percent. The gravity of these tasks is being exacerbated by the

recurrent droughts and floods associated with climate change and the advent of HIV&AIDS pandemic. Most women are therefore overburdened by a heavy workload, and require labour saving technologies and practices.

However, despite their contribution to the country's agricultural production, our consultations agree with previous writers that there is disparity between men and women in access and control of agriculture production resources and services.

### **2.3 Agriculture, Climate Change and Gender**

Agriculture relies mainly on rain-fed crop production; formally or semi-formally irrigated land is only 28,000 hectares. This increases risks and uncertainties in the agricultural sector. Over the past several decades, Malawi has experienced a number of adverse climatic hazards. The most serious have been dry spells, seasonal droughts, intense rainfall, riverine floods and flash floods. Some of these, especially droughts and floods, have increased in frequency, intensity and magnitude over the last two decades.

The frequent droughts have resulted in poor crop yields or total crop failure, leading to serious food shortages, hunger and malnutrition, and no feed for livestock. Flooding has also severely disrupted food production in several districts especially along the lakeshore and in Shire Valley low lands. In addition, the frequent droughts and floods seriously disrupt water availability, in both quantity and quality. Worst flood episodes have been coupled with deaths of people due to acute water borne diseases such as cholera.

The droughts and floods have negatively affected hydroelectric power generation in the energy sector, contributing to frequent power cuts. The water flow disruptions in rivers have also been exacerbated by siltation caused by poor and unsustainable agricultural practices, deforestation, and noxious weeds, such as water hyacinth. The fisheries sector has not been spared. Water bodies are declining or even drying up, resulting in low fish production and loss of biodiversity. Floods destruct fish ponds and droughts have contributed to frequent drying of shallow rivers and lakes. One of the lakes in Malawi is Lake Chilwa and this lake has dried before in 1995 and recovered over the years. Today, it is widely documented that the lake is drying up due to the recent and increasing droughts. In general, these adverse climatic changes have jeopardised the livelihoods of the affected communities particularly women who look after families and walk long distances to fetch water (Fig 2) and firewood.

Fig 2. A woman fetching water in terrible conditions due to climate change.

## Gender issues related to climate change

It is mainly women with their multi-tasks, who bear the brunt of the back-straining field tasks such as fetching firewood and water from long distances. At times they do it with babies at their backs under sunny windy conditions and aggravated by the hoe culture and low access to labor, time and energy saving technologies



### 2.4 Gender and Climate Change

According to the NAPA (Ministry of Mines, Natural Resources and Environment, 2006), the rural communities, especially women, children, female-headed households and the elderly are the most vulnerable groups. A gender analysis indicates that women bear most of the burden in activities that are most impacted by adverse climate, including collection of water, firewood and ensuring daily access to food. This burden is exacerbated by the changing demographics as a result of the impacts of HIV and AIDS, leading to women taking up greater responsibilities as sole heads of households and taking care of the sick and orphans. This causes the vulnerable groups to turn to risky and unsustainable various coping mechanisms (Table 1).

**Table 1.** Some of the coping strategies in Malawi as a result of climate change

Level of application for the strategies used	The type of coping strategies
Commonly practiced	Casual labour; selling of inputs donated by government like fertilisers and improved seeds donated and charcoal selling
Less practiced	Rationing of food; selling of vegetables; dry fish, firewood; local brew; assistance from relatives and prostitution (along lakes).
Change of location	Migration into urban centres to look for piece work

Production systems	Conservation agriculture
Rain-fed agriculture and frequent droughts	Irrigated crops and green belt initiative by government
Group dynamics	Micro finance through soft loans in clubs and co-operatives

## **2.5 Institutional Response and Policies**

A number of strategies have been put in place by institutions as well as smallholder farmers. In addition, there are policies guiding these strategies.

### **2.5.1 Strategies by Institutions and Farmers**

A number of adaptation strategies are in place being promoted by various organisations, including the Ministries of Agriculture and Food Security; Water and Irrigation; Department of Disaster Management Affairs; and Non Governmental Organisations such as Actionaid, Oxfam, Care International, Millennium Villages Project (MVP); National Smallholder Farmers' Association of Malawi (NASFAM), Total Land Care, the Wildlife and Environmental Society of Malawi, among others. Many strategies, including conservation agriculture, agro-forestry, minimum tillage, use of improved and recommended high yielding varieties and breeds, diversification in crops and livestock, integration of crops and livestock, village loans and savings, and farm input subsidy have been undertaken by these organisations. The smallholder farmers too have taken measures such as changes in crops grown and changes in growing patterns (Actionaid, 2006).

However, farmers have faced limitations in adapting to climate change because they lack capacity including knowledge, skills and financial resources. Current government policies on hybrid maize and privatisation of seed companies have made agriculture unprofitable for smallholder farmers. Moreover, implementation of NAPA faces capacity constraints at the district levels and lack of coordination among various sectors. The overarching problem is the fact that NAPA seems to exist in isolation of other sector policies. In addressing adaptation challenges, it is imperative that a multisectoral approach is taken, beginning at the community level with the smallholder farmers who are directly affected by climate change. These farmers need skills, knowledge and access to credit for addressing short and long-term needs of diversifying from maize into other crops.

### **2.5.2 Policies**

The government has recognised the importance of supporting interventions to help smallholder farmers to adapt to climate change impacts. This is evident in recent policies such as the Malawi Growth Development Strategy, Agricultural Sector Wide Approach, and the Agriculture Sector Gender and HIV and AIDS strategy.

#### **a) The Comprehensive African Agriculture Development Programme (CAADP)**

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The CAADP was agreed by all African Heads of State and Government in 2003 in Maputo, Mozambique, to allocate at least 10% of the national budgets to agriculture and natural resources. In Malawi, the percentage was reached and that the Malawi CAADP Compact was signed by the Government, development partners and other stakeholders on 19<sup>th</sup> April 2010, and commits all partners to support the Agriculture Sector Wide Approach Programme (ASWAp), within the CAADP framework. The CAADP/ASWAp envisages a single comprehensive programme and budget framework, and a formalised process for better coordination between the Government and donors.

**b) The Malawi Growth and Development Strategy (MGDS)**

The Millennium Development Goals (MDGs) in Malawi are domesticated through the Malawi Growth and Development Strategy (MGDS). It is the overarching medium term strategy aimed at reducing poverty in Malawi through sustainable economic growth and infrastructure development. The first phase of the strategy was implemented from 2006/7 to 2010/11 fiscal years. Second phase document (MGDS II) which has not yet been launched, covers the period 2011 through 2016.

The MGDS II has identified six broad thematic areas, namely: sustainable economic growth; social development; social support and disaster risk management, infrastructure development; governance; and gender and capacity development. From these broad themes, the MGDS places emphasis on nine key priority areas that would sustain and accelerate economic growth within a short period of time and available resources. These are: agriculture and food security, transport infrastructure and Nsanje World Inland Port; energy, industrial development, mining and tourism, education, science and technology, public health, sanitation, malaria and HIV&AIDS management; integrated rural development; green belt irrigation initiative and water development; child development; youth development empowerment; and climate change, natural resources and environmental management. Through these priority areas, the MGDS is expected to maintain a balance among economic, social and environmental components of the economy. Eventually, this will facilitate attainment of the Millennium Development Goals (MDGs) by 2015. MDGs are also implemented directly in Malawi by Millennium Villages Project (MVP) in two districts of Zomba (southern Malawi) and Mchinji (central Malawi) where all the 8 MDGs are implemented to more than 41,000 households and positive impacts are shown.

The MDGS isolates agriculture as key to food security, economic growth and wealth creation. The goal in this priority is to increase agricultural productivity, diversification and food security by i) providing effective extension services; enhancing livestock and fisheries productivity; improving access to inputs; promoting contract farming arrangements and irrigation farming; and promoting wide range of agricultural products for exports. These strategic objectives are expected to be achieved through the Agriculture Sector Wide Approach (ASWAp). The MVP now aims at scaling up business and formation of co-operatives to create wealth by reducing dependence syndrome.

The emphasis in climate change management as a priority area is to enhance resilience to climate change risks and impacts through the following strategies: improving weather and



climate monitoring, prediction systems and databases; mainstreaming climate change issues in sectoral policies, plans and programmes; reducing emission of greenhouse gases; developing adaptation and mitigation measures to climate change related impacts; enhancing capacity for resource mobilisation from bilateral, multilateral and other international donors; and macro and micro crop weather insurance.

**c) The Agriculture Sector Wide Approach (ASWAp)**

The ASWAp is Malawi's national agricultural development and food security strategy that is aligned to the CAADP pillars and the MGDS. It offers a strategy for increasing agricultural productivity, food security and the contribution to economic growth. The ASWAp is a harmonised framework for agricultural development that has targeted three focus areas, two key support services and two cross-cutting issues. The focus areas are i) food security and risk management, ii) commercial agriculture, agro-processing and market development and iii) sustainable management of land and water. The key support services are i) technology generation and dissemination and ii) institutional strengthening and capacity building; while the cross-cutting issues are i) HIV prevention and AIDS impact mitigation and ii) gender equity and empowerment.

The ASWAp has mainstreamed gender issues in order to reduce gender disparities and enhance capacity of the youth, women and men to contribute to agricultural productivity. In addition, it has mainstreamed HIV&AIDS issues to minimize morbidity and mortality attrition, enhance resilience and household coping mechanisms and also reduce HIV infection risks and vulnerability. The document has clearly outlined both gender and HIV&AIDS issues as they relate to household food and income security as well as research and extension services. It has also outlined some action points for addressing the situation.

The importance of climate change is taken into account in the ASWAp. The document clearly spells out the climate change issues and recognises that women (particularly female household heads), children, the youth and elderly are most vulnerable. The possible interventions to mitigate the effects of climate change have been included in the focus areas of the ASWAp.

**d) Agriculture Sector Gender, HIV and AIDS Strategy: 2012-2017**

Based on the above gender issues in agriculture, as well as the impact of HIV&AIDS, the Ministry of Agriculture and Food Security has developed the above strategy. The Ministry has aligned the strategy with the MDGs, ASWAp and MGDS. Its purpose is to promote gender equality, prevent the spread of HIV and mitigate the impacts of AIDS in order to increase agricultural productivity in line with ASWAp priorities. The strategy has three strategic pillars namely i) quality participation of women and other vulnerable groups in ASWAp focus areas and key support services ii) gender, HIV&AIDS responsive technology generation and dissemination and iii) effective coordination, capacity building and resource mobilization.

### **3. Experienced Climate Change Impacts and Coping Strategies of Women Farmers in Malawi**

Most communities in the world especially sub-Saharan Africa are challenged by climatic risks and hazards (Fig 2). Climate change threatens agriculture and makes the farming community especially women vulnerable. Most of these climatic risks are a result of climatic changes exacerbated by human activity or natural forces. This study examined how farmers, particularly women, experience climate change impacts and coping strategies used.

Most communities in the country are faced by climatic risks and hazards that make them vulnerable. Participants were asked whether they have noticed any change in the frequency or severity of climate related disasters (drought, diseases, floods) affecting their area over the past 30 years. Drought has been experienced by all in the past 30 years; diseases and floods are a result of recent climate change. The results revealed that about 64 percent of the respondents in the three sites indicated to have experienced major climate related disasters due to drought, high temperatures and late onset and early offset of rainfall (Table 2). Out of these, 48.7 percent observed an increase in frequency or severity and all of them expect the trend to continue.

**Table 2: Climate risks changes**

Climate risk changes	% respondents (n=36)			
	Lilongwe	Machinga	Mzimba	Mean
Experienced major climate related disasters	60	100	33	64.3
Noticed changes in frequency or severity of climate related disasters	83	50	40	57.7

In response to a question on what are the most vulnerable social groups to climate change-induced disasters, 64 percent and 80 percent of the participants indicated that the female household heads (FHH) and the elderly respectively were the most vulnerable.

The mini survey illustrated the difference in the division of labour from the

Notably roles and responsibilities that are performed by men and women. The table below illustrates who predominantly plays a role in the different activities:

**Table 3:** Activities Performed by Gender Categories

Gender category	Activity
Men	<ul style="list-style-type: none"><li>• House and granary construction</li><li>• Farm management and water conservation</li><li>• Ploughing</li></ul>
Women	<ul style="list-style-type: none"><li>• Storing</li><li>• Fetching water</li><li>• Fetching firewood</li><li>• Cooking</li><li>• Feeding children</li><li>• Caring for children</li></ul>
Men and women jointly	<ul style="list-style-type: none"><li>• Planting</li><li>• Weeding</li><li>• Harvesting</li></ul>
Children	<ul style="list-style-type: none"><li>• Herding cattle, goats</li></ul>

However, it was observed that when activities that are usually performed by women change to start generating income then the roles are easily taken over to be performed by men as evidenced from the respondents from Mzimba who are engaged in Dairy production.

We asked respondents: ‘what are the most important coping strategies you adopt during emergency (hunger) situations?’ In response, *ganyu*<sup>1</sup> or piece work was indicated as the most common coping strategy (67 percent for Mzimba, 100 percent in Lilongwe and 75 percent for Machinga) in the event of food crisis or disasters. Other coping strategies cited to a less extent are food rationing and selling of vegetables, dry fish, local brew, and assistance from relatives. This mostly affected women as they could not engage in other coping strategies like migrating to towns since society has bestowed upon women the role of caring for the family hence they are required to be closer. This also brings the issue of de-

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<sup>1</sup> *Ganyu* or piece work is one of the commonest marginal ways of coping with poverty.

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facto<sup>2</sup> household head where a household may be perceived as being male headed but all the roles are performed by the woman including coping up with vulnerabilities brought by climatic risks.

The communities indicated that there was sufficient awareness on environmental hazards (66 % in Machinga, 92 % in Lilongwe and 67% in Mzimba) brought by the effects of climate related changes and this has resulted in implementing some interventions in environmental conservation in order to mitigate some of climate change impacts. For example, in Lilongwe and Mzimba, 83 percent and 75 percent, respectively, were engaged in conservation agriculture. Note that these were areas where an agricultural extension worker was close by as this is the focus in the public extension service. Most participants cited the farm inputs subsidy as the main support received from government and other NGOs in the area. They indicated that support in the area of small scale irrigation, conservation agriculture, sustainable agriculture technologies, access to inputs such as fertiliser and seed, soft loans, and training would reduce the impact of climate related disasters.

## 4. Constraints and Barriers to Women Farmers' Effective Adaptation to Climate Change

Representatives from organisations consulted identified a number of constraints which were presented during the consultation workshop (Table 4).

**Table 4: List of challenges identified by organisations' representatives**

Type of Challenge	Details
Climate change related disasters leading to food insecurity	Forests disappearing – firewood and other resources scarce Land degradation – soil infertile Water scarcity – women walk long distances. Overall, livelihoods in jeopardy and Women and children more vulnerable
Beautiful policies but little implementation due to inadequate funding and policy change directions	Gender and HIV and AIDS strategy National Adaptation and Programmes of Action (NAPA)
HIV&AIDS scourge reducing available labour for production activities.	Women work load increases Number of orphans and widows increasing.
Inadequate capacity of public extension service to reach more women	Inadequate numbers of extension staff to respond to created demand. Some Natural Resource College (NRC) graduates not interested to work in rural areas NRC turned commercial, only the elite can afford tuition fees

<sup>2</sup> De facto household heads are women whose husbands have temporarily migrated and do or do not send some remittances for the use of the household.

Limited access to input and output markets	No profitable outlets for produce. Farmers frustrated -- fuelling migration of men Limited access to inputs – in remote areas.
Land tenure insecure	Land ownership a big issue for women – no control Important as climate smart agriculture requires long term investment in land Land policy only in draft form
Uncoordinated climate-smart agriculture efforts	Promotion of copy cut interventions not validated in Malawi. Use of short cuts in promoting technologies to meet targets – unsustainable approaches Need to follow proper steps in community mobilisation Need for government to strengthen its coordinating role.

During discussions, the voices of the women farmers enhanced the list. The enhanced list of constraints has been grouped into policy and institutional constraints, economic barriers, and social and cultural factors as below.

#### 4.1. Policy and Institutional Constraints

a. Malawi has a number of **beautiful policies** that were developed with little progress on their implementation due to inadequate funding and political will. Some of these policies that directly relate to the gender, climate change and agriculture support programme are the Malawi Comprehensive African Agriculture Development Programme (CAADP), Malawi Growth and Development Strategy (MGDS), Agriculture Sector Wide Approach (ASWAp), Gender and HIV and AIDS strategy, National Gender Policy (NGP), National Adaptation and Programmes of Action (NAPA), and the Land Policy.

Brief descriptions of these policies are below:

**i) The Malawi CAADP.** The Malawi CAADP Compact was signed by the Government, development partners and other stakeholders on 19<sup>th</sup> April 2010, and commits all partners to support the Agriculture Sector Wide Approach Programme (ASWAp), within the CAADP framework. The CAADP/ASWAp envisages a single comprehensive programme and budget framework, and a formalised process for better coordination between the Government and donors. The CAADP is gender blind and only makes reference to gender only through the ASWAp which is its main vehicle for implementation. But the ASWAp has mainstreamed gender with a section devoted to gender as a cross-cutting issue.

**ii) The MGDS II.** The Millennium Development Goals (MDGs) in Malawi are domesticated through the MGDS which is the overarching medium term strategy aimed at reducing poverty in Malawi through sustainable economic growth and infrastructure development. The first phase of the strategy was implemented from 2006/7 to 2010/11 fiscal years. Second phase document (MGDS II) which has not yet been launched, covers the period 2011 through 2016.

The MGDS II has identified six broad thematic areas, namely: sustainable economic growth; social development; social support and disaster risk management, infrastructure

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development; governance; and gender and capacity development. . From these broad themes, the MGDS emphasises on nine key priority areas that which are central to the achievement of sustainable economic growth and wealth creation. These are: Agriculture and Food Security; Energy, Industrial Development, Mining and Tourism; Transport Infrastructure and Nsanje World Inland Port; Education Science and Technology; Public Health, Sanitation, Malaria and HIV and AIDS Management; Integrated Rural Development; Green Belt Irrigation and Water Development; Child Development, Youth Development and Empowerment; and Climate Change, Natural Resources and Environmental Management.

The strategy isolates agriculture as key to food security, economic growth and wealth creation. The goal in this priority is to increase agricultural productivity, diversification and food security by i) providing effective extension services; enhancing livestock and fisheries productivity; improving access to inputs; promoting contract farming arrangements and irrigation farming; and promoting wide range of agricultural products for exports. These strategic objectives are expected to be achieved through the Agriculture Sector Wide Approach (ASWAp).

The emphasis in climate change management as a priority area is to enhance resilience to climate change risks and impacts through the following strategies: improving weather and climate monitoring, prediction systems and databases; mainstreaming climate change issues in sectoral policies, plans and programmes; reducing emission of green house gasses; developing adaptation and mitigation measures to climate change related impacts; and enhancing capacity for resource mobilisation from bilateral, multilateral and other international donors. With climate change, rainfall is scarce and erratic, consequently, water table goes down and boreholes, boreholes, rivers and natural springs dry and women tend to travel long distances to fetch water for domestic and construction use.

The MGDS II recognizes gender and capacity building as a theme, isolating them from other crosscutting issues such as research and development, nutrition, HIV&AIDS and climate change that impact all sectors. This is because the MDGs report (Malawi Government, 2011) has noted that the MDGs targets that are lagging behind have very pronounced gender connotations<sup>3</sup>.

**iii) The ASWAp.** The ASWAp is Malawi's national agricultural development and food security strategy that is aligned to the CAADP pillars and the MGDS. It offers a strategy for increasing agricultural productivity, food security and the contribution to economic growth. The ASWAp is a harmonised framework for agricultural development that has targeted three focus areas, two key support services and two cross-cutting issues. The focus areas are i) food security and risk management, ii) commercial agriculture, agro-processing and market development and iii) sustainable management of land and water. The key support services are i) technology generation and dissemination and ii) institutional strengthening and capacity building while the cross-cutting issues are i) HIV prevention and AIDS impact mitigation and ii) gender equity and empowerment.

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<sup>3</sup> The gender related MDGs where expectations are not being met are: MDG 2 (universal education); MDG 3 (gender equality and women's empowerment); and MDG 5 (maternal health).

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The ASWAp has mainstreamed gender issues in order to reduce gender disparities and enhance capacity of the youth, women and men to contribute to agricultural productivity. In addition, it has mainstreamed HIV&AIDS issues to minimize morbidity and mortality attrition, enhance resilience and household coping mechanisms and also reduce HIV infection risks and vulnerability. The document has clearly outlined both gender and HIV&AIDS issues as they relate to household food and income security as well as research and extension services. It has also outlined some action points for addressing the situation.

The importance of climate change is taken into account in the ASWAp. The document clearly spells out the climate change issues and recognises that women (particularly female household heads), children, the youth and elderly are most vulnerable. The possible interventions to mitigate the effects of climate change have been included in the focus areas of the ASWAp.

**iv) Agriculture Sector Gender, HIV and AIDS Strategy: 2012-2017.** Based on the above gender issues in agriculture, as well as the impact of HIV&AIDS, the Ministry of Agriculture has developed the above strategy. The Ministry has aligned the strategy with the MDGs, ASWAp and MGDS. Its purpose is to promote gender equality, prevent the spread of HIV and mitigate the impacts of AIDS in order to increase agricultural productivity in line with ASWAp priorities. The strategy has three strategic pillars namely i) quality participation of women and other vulnerable gender categories in ASWAp focus areas and key support services ii) gender, HIV&AIDS responsive technology generation and dissemination and iii) effective coordination, capacity building and resource mobilization.

**v) The National Gender Policy (NGP): 2000-2005, Reviewed 2008.** The overall goal of the draft NGP policy is to mainstream gender in the national development process to enhance participation of women and men, girls and boys for sustainable and equitable development for poverty eradication. The Draft NGP notes that “gender inequalities still exist and are deeply rooted in society due to historic patriarchal values that have continuously put women at a disadvantage”. The NGP recognizes the challenges faced in addressing gender issues including poor linkages between the National Gender Machinery and other sectors, lack of harmonization and coordination of national policies, lack of guidelines and technical know-how to mainstream gender at programme and institutional levels and uncoordinated efforts in gender initiatives among partner organizations. Agricultural issues in general are documented but not specifically on climate change. The policy is criticised for taking a piecemeal approach to solving gender imbalances (UNDP, 2010). In addition, the gender policy has expired and needs replacement urgently to take into consideration emerging issues.

**vi) The National Adaptation and Programmes of Action (NAPA).** Malawi developed its NAPA in 2006 by evaluating the impacts of adverse climatic conditions in eight important sectors of economic growth, namely: agriculture, water, human health, energy, fisheries, wildlife, forestry and gender. Within the agriculture sector, the NAPA identifies Malawi's dependency on rain-fed agriculture, frequent droughts and floods as the major climate change risks which result in poor crop yields or total crop failure, leading to serious food shortages, hunger and malnutrition and no feed for livestock. It isolates rural communities, especially women, children, female-headed households and the elderly as the most

vulnerable groups. The proposed interventions include: (i) improved early warning systems (ii) recommended improved crop varieties, (iii) recommended improved livestock breeds, and (iv) improved crop and livestock management practices.

In the gender sector, the NAPA acknowledges that women bear most of the burden in activities that are most impacted by adverse climate, including collection of water, firewood and ensuring daily access to food. This burden is exacerbated by the changing demographics as a result of the impacts of the HIV and AIDS epidemic, leading to women taking up greater responsibilities as sole heads of households and taking care of the sick and orphans. A number of interventions were proposed that target women in highly vulnerable situations, including: (i) empowerment of women through access to microfinance to diversify earning potential, (ii) ensuring easier access to water and energy sources by drilling boreholes and planting trees in woodlots, and (iii) use of electricity provided through the rural electrification programme. Apart from the small sections on gender issues, the NAPA is gender blind for the most part (UNDP, 2010). In addition, implementation of the NAPA is limited due to lack of funding.

**vii) The Land Policy.** The Malawi National Land Policy of 2002 has put in mechanisms to regulate such land which is held by chiefs in trust for the people of land. However, the National Land Policy has not enacted (been made operational) as there is no effective implementation plan for that to happen. Primarily this land is guided by customary rules and practices emanating from matrilineality and patrilineality as the case may hold. More details below.

**b. Insecure land tenure.** In terms of access to land, it should be noted that the Malawi National Land Policy divides land into three categories (White, 2007): Government, public and private land. Smallholder farmers' land (customary land) is under public land, which comprises land that village heads, chiefs and public officials hold on behalf of the people of Malawi. They in turn grant leaseholds and permission to use this land to the people. Private land comprises all land exclusively held, occupied or owned under freehold tenure (possession). It also involves customary land which is land that is managed by a recognized Traditional Authority (T/A), and allocated exclusively to a particular community, corporation, institution, family, clan, or individual. The law or government policy does not preclude anyone from buying or acquiring freehold or leasehold land and widows are at liberty to do so.

The problem emanates with customary land. Land ownership for smallholder farmers is under customary land tenure, which varies from place to place depending on family system of inheritance and succession (matrilineal or patrilineal). Although women own land under the matrilineal system, women in both systems have access but limited of any control. A land policy has existed since 2002 and it is not clear when it can be finalised. Gender is one of those contentious issues in this policy. In practice, women continue to be subjected to land grabbing and have no control over matters concerning land. Some men make unilateral decisions that jeopardise the livelihoods of their families. This is an important issue as climate smart agriculture requires long term investments.

**c. Inadequate capacity of public agriculture extension service to reach more women.** The weak capacity of the public extension service is widely documented in Malawi. The number of extension workers is low compared to the population of smallholder farmers. The average extension worker to farmer ratio is 1:2,500 compared to the recommended 1:750. As such, some areas have no agricultural extension workers. Although there are some NGOs working in agriculture, most of them do not have extension workers at grassroots level and rely on the same public extension workers. The extension policy encourages the group approach in community mobilisation. As such, most of the extension service is offered through different types of groups, clubs, clusters, associations and cooperatives. Individual approach is used for follow ups and is limited due to the large extension worker to farmer ratios. The group approach has reduced the cultural challenges associated with extension workers working with the opposite sex.

To make it worse, some extension graduates are not interested to work in rural communities. And, most of the rural youth who may be interested to become extension workers cannot afford to pay high fees at the Natural Resources College, which was previously a government college training extension workers and now it is a public trust with its own Board of Governors and consequently charging commercial fees.

**d. Limited participation of women in cooperatives and associations.** At community level, extension workers work with farmer organisations such as groups and clubs, associations and cooperatives, and community based organisations. These organisations are formed under a parent organisation such as government, NGO or a private organisation; are of different types and operate at different levels in the district. After some time, a few farmers' groups and clubs develop into associations, cooperatives, and trusts and become autonomous. In all this, the village is used as the entry point and community mobilisation is based on the district decentralised structures of village development committees, area development committees, a district programme management team, and a district assembly.

Our consultations in the field and during the workshop indicated that few women are in cooperatives and associations. Most women are in club/groups which have no legal entities and are regarded as informal organisations. Farmers' voices at this level are weak and extension service tends to be supply-driven unlike in cooperatives and associations. The clubs or groups represent the most common type of farmers' organisation in Malawi and attract both the better off and the poor farmers depending on the type of interventions. For clubs and groups that focus on food security (maize and other food crops) as the primary goal, the participation of women is high as they are concerned with daily household food supplies. However, when the main intervention deals with cash crops such as tobacco and cotton; or activities that require purchase of inputs; the better off farmers and particularly men tend to dominate unless the extension organisation includes measures to facilitate their participation.

Associations and cooperatives tend to focus on high value cash crops or export commodities such as tobacco, sugar, tea, coffee, paprika, milk and poultry. Members pay fees for registration and other associated costs. Usually, it is the better off or commercial farmers

who participate in these associations and cooperatives, while the participation of the women in general and other poor men is minimal.

**e. Limited access to inputs and output markets.** The most important extension messages in Malawi concern the use of purchased inputs with emphasis on improved varieties of maize and the use of fertiliser. Most farmers are aware of their importance but fail to take full advantage of them due to inadequate knowledge and skills and access to cash or credit to purchase the inputs. Although it is difficult for most smallholders to access credit, it is harder for women than men. Most of the credit is offered to facilitate the production of cash crops such as tobacco and cotton, which is typically the domain of men. Group loans are popular as they do not require collateral, yet few women participate in such groups particularly as they get more organised as in associations and cooperatives. In remote areas, access to inputs is more difficult due to poor road networks. For sustainable agriculture techniques that require access to inputs, it is essential to facilitate access to inputs to both men and women to enable them participate.

Marketing is a big challenge for smallholder farmers since the liberalisation policy on agricultural produce in the 1990s. Agriculture has become unprofitable for many as most of them are exploited by vendors. Farmers are frustrated. There is need for farmers to be more organised to meet the marketing challenges of today.

**f. Uncoordinated climate-smart agriculture efforts.** Climate change has become the new bandwagon. As such, a number of organisations are involved in the promotion of climate smart agriculture. However, some of these are technically ill-prepared to do so and end up promoting copy cut interventions that have not been validated. The result is confusion. Others use short cuts (unsustainable extension approaches) in promoting technologies to achieve deliverables. There is a need for service providers to follow proper steps in community mobilisation and for the government to strengthen its coordinating role if Malawi is to achieve its climate change goals.

#### **4.2. Economic Barriers**

The country's macroeconomic performance during 2011/2012 declined drastically compared to the past two to three years (2008 - 2010). The country experienced low prices for tobacco, a major foreign exchange earner as well as a decline in development aid. The combined situation caused serious foreign exchange shortages, which adversely affected economic activities. There were also persistent fuel shortages and power cuts in 2011/12 fiscal year, including a devaluation of more than 50 percent of the Malawi Kwacha. Malawi has therefore seen a sharp increase in prices for both food and non-food products in 2011/12, which pushed the general rise in prices and average annual inflation rate. These events, coupled with the frequent climate change related disasters such as floods and dry spells have adversely affected the livelihoods of Malawians in general and the smallholder farmers in particular. Within the smallholder subsector, women and children are the most vulnerable. This trend is unlikely to be reversed soon.

Malawi has registered notable success in poverty reduction in the past five years from 52% in 2004 to 39% in 2009 (Malawi Government, 2011). This steady decline has also been registered in the rural areas. However, poverty is still widespread involving a cross section of

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the population and country. The proportion of people living in poverty and those suffering from hunger is highest in rural areas than in urban areas – a person in a rural area is three times as likely to be poor. No new data is available to show the status in terms of poverty gap ratio and income inequality. Previous data showed that the extent of inequality does not vary much across rural areas but is substantially higher in urban areas. According to National Statistical Office (2005) the richest 10 percent of the population has a median per capita income that is eight times higher (MK50, 373<sup>4</sup> per person per annum) than the median per capita income of the poorest 10 percent (K6, 370 per person per annum). The MDG report states that ‘the poorest 20 percent of the population controlled 10 percent of national consumption, implying that although the economy has grown over the same period inequality is not decreasing’. The most poor are most vulnerable during climate change related disasters such as floods, drought, and dry spells as they are unable to cope with the crisis. Furthermore, it is this same group that is particularly constrained in terms of access to credit service and other services; and women tend to dominate.

#### **4.3. Social and Cultural Factors**

**a. HIV&AIDS scourge continue to disrupt and reduce available labour for production activities.** AIDS is the leading cause of death amongst adults in Malawi, and is a major factor in the country’s low life expectancy of 55 years. It also contributes to an increase in the number of orphans in Malawi. Intensive efforts have been made by government to minimise the spread of HIV. While awareness of HIV has been high, change has been slow. The change process is affected by poverty, gender inequality and poor legal protection of women and girls. There are also social and practical considerations that often stop people from changing their behaviour. The agriculture sector therefore continues to suffer from the impact of the HIV&AIDS and women farmers are worse off as the epidemic has resulted in an increase of their workload.

**b. Land ownership is a big issue for women.** The issue of land although it was presented above as a policy issue, it is embedded in the country’s social and cultural traditions where a man is considered the decision maker of the household. Solving this issue requires a change of mind set by the custodians of culture who are the chiefs, village elders, including the men and women involved.

## **5. Priority Investment Needs for Enhanced Resilience and Adaptive Capacity to Climate Change of Women Farmers in Malawi**

Organisation representatives consulted identified a number of priority investment areas which were presented during the national consultation workshop on day one (Table 2). On day two, participants were grouped into four groups to deliberate on priority investment areas based on this presentation, input from farmers and their own experience. Each of the four groups came up with three to four potential priority areas. During plenary, participants

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<sup>4</sup> In 2005, the exchange was \$1=Malawi Kwacha (MK) 150.

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agreed on three investment areas that would respond to the needs of the women farmers in Malawi, namely: technology, access to inputs and output markets and environmental management. The study team refined these further (while sticking to the broad areas identified) and developed objectives and activities for each priority investment area based on the group discussion details and the paper on challenges and priority areas presented earlier. The refined priority areas are presented below.

### **5.1 Appropriate Technology and Information**

Compared to men, women face serious constraints in access to information and technology for the production and marketing of their goods and services. Extension service is generally inadequate with high extension worker to farmer ratio averaging 1:2,500 which is difficult to reach more women farmers. As such, most women use unsustainable farming practices and inefficient technologies. They generally have limited access and control to information and improved technologies necessary to increase agricultural productivity.

**Purpose:** Improve access and control to appropriate technologies and information

**Objective:** Promote gender responsive climate smart agricultural technologies and information

**Activities:**

1. Promote efficient water harvesting and utilisation technologies such as water harvesting structures (dams, weirs, boreholes, etc), women friendly irrigation pumps, wind mills, etc. (Initiatives by NEPAD - COMESA on the Gender Climate Change on sustainable livelihood should scaled-out in Malawi).
2. Promote the use of value addition technologies for agricultural produce such as mini-processing plants, solar driers, solar power, etc. within the cottage industry basis as a start, and building on to more intensive commercial levels.etc.
3. Provide access and control to simple, yet efficient gender friendly farm mechanization technologies such as planters, agro-processing equipment such as shellers, and grinding machines, irrigation water pumps, animal-drawn implements, work animals such as oxen or donkeys, and solar powered gargets.
4. Promote the use of labour, time, energy, and cost saving technologies related to climate-smart agriculture (e.g., fuel efficient stoves, solar powered cooking and cooling systems, iceless cooling cupboards and electrical devices)
5. Promote improved technologies for reducing post harvest losses and activities such as pounding and drying foods
6. Conduct awareness campaigns on gender and climate-smart agriculture for both men and women farmers, including the youth, opinion leaders such as lead farmers and area stakeholder panels and village development committees

7. Establish and strengthen “one stop for all information resource centres in rural communities” for climate smart agriculture reading materials, radio listening and savings and loan groups, including market information.
8. Promote the use of cost-effective participatory and demand driven farmer-led extension approach, maximizing on building the Decentralized Agricultural Extension Services System (DAESS)
9. Build capacity of staff in various climate smart agricultural technologies and information
10. Strengthen collaboration on the dissemination and utilisation of gender responsive climate smart agricultural technologies and information among extension workers and farmers

## **5.2 Access and Control to Farm Inputs and Output Markets**

Most extension messages on climate smart agriculture require the purchase of farm inputs such as improved seed, fertilizers, pesticides, equipment and livestock breeds. Input supply is a challenge in some rural communities and where available, most men and women cannot afford to purchase. There is need therefore for a reliable source of inputs within easy reach. In addition, there is need to enhance the ability of men and women to purchase the inputs that are critical to sustain their livelihoods.

Farmers often complain that agriculture is becoming less and less profitable. In a good year, they may have a good harvest only to sell it at low price and make losses. Access to lucrative markets within Malawi and abroad is a major challenge for smallholder farmers and it is worse for women. Often, there are no organised markets for their produce and have to sell to vendors with no market information and skills for bargaining prices. In addition, most of the produce they sell is unprocessed, no value addition hence low prices.

Most farmers are not organised and only a few women participate in the existing farmers' organisations. Access to loans and markets is easier to those who are organised.

**Purpose:** Improved access and control to farm inputs and output markets

**Objective:** To improve access and control of women farmers to farm inputs necessary for adopting climate smart agriculture technologies.

**Activities:**

1. Promote participation of women farmers in farmers' groups, associations and cooperatives
  2. Strengthen farmers' groups, associations and cooperatives through training in group development and entrepreneurial skills
  3. Provide access to farm inputs through loans to facilitate adoption of climate smart agricultural technologies
  4. Promote village savings and loans schemes in rural communities
  5. Support agro dealers to service remote areas with inputs
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**Objective:** To improve access and control of women farmers to agro-based produce markets

**Activities:**

1. Provide skills in the management of contract farming
2. Promote value chain approach to agriculture production enterprises
3. Provide training on value addition activities and equipment
4. Provide road networks to enable men and women access to markets throughout the year

### **5.3 Environment and Natural Resources Management**

Malawi depends on rain-fed agriculture, and the current droughts and dry spells have resulted in poor crop yields or total crop failure, leading to serious food shortages, hunger and malnutrition. Flooding has also severely disrupted food production in a number of districts of the country. In such situations, the most vulnerable groups are the rural communities, especially women, children, female-headed households and the elderly. To maintain or improve their livelihoods, male and female smallholder farmers have to adopt climate smart agriculture practices.

**Purpose:** Enhance management and conservation of the environment and natural resources

**Objective:** Facilitate the adoption of climate smart agricultural practices

**Activities:**

1. Promote conservation agriculture through the adoption of minimum tillage, maintenance of soil cover (crop residues or cover crop) and rotation of crops that includes nitrogen fixing legumes.
2. Promote sustainable small scale irrigation farming practices and use of gender responsive technologies
3. Improve management of natural resources through the promotion of tree planting, linking farmers to carbon markets, conservation of forests, agro-forestry, watershed management, and river impounding, among others.
4. Improve livestock productivity by minimising resource use and greenhouse gas emissions. This includes making and using compost manure.
5. Promote integrated agriculture (crop, livestock and fisheries, with the agro-forestry, fuel and fruit trees within compounds or homesteads)
6. Promote crop diversification, including drought tolerant crops such as pigeon peas, sorghum, cassava and sweet potato.
7. Support cultural practices and land use policy that promote access and control over land by women farmers.

### **Proposed Project Implementation Unit (PIU)**

To manage financial resources to reach the intended beneficiaries, a Project Implementation Unit (PIU) is proposed to be established to manage activities and funds at grass root level. The funds will go direct to PIU from donors and utilised according to agreed activities on schedule. This avoids the long route of funds passing through government, Ministry Headquarters, regional and real structures before the beneficiary benefits and usually very little funds reach the farmers.

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## Annex I: List of People Interviewed and Institutions Contacted for the Study

Name	Position
Mr Zwide Jere	Director, Total Land Care, Eastern and Southern Africa
Ms Wezi Moyo	Women's Rights Coordinator. Actionaid
Mrs. Erica Maganga	Principal Secretary, Ministry of Agriculture and Food Security
Mrs. Stella Kankwamba	Director of Agricultural Extension Service, Ministry of Agriculture and Food Security
Mrs Mary Shaba	Principal Secretary, Ministry of Gender, Social Welfare and Children
Mr. Grey Munthali	Deputy Director, Department of Climate Change and Meteorology
Ms Jean Sauti Phiri	Mzuzu Agricultural Development Division (ADD)
Prof. S. Chiotha	Lake Chilwa Basin Project, University of Malawi
Dr. M.P.K. Theu	Program Manager, Lilongwe Agricultural Development Division
Ms. Gertrude Kalinde	Program Manager, Machinga Agricultural Development Division
Mrs. A. Moyo	Mzuzu Agricultural Development Division
Ms Chrissie Mtambo	Ministry of Agriculture and Food Security
Mr. Joseph Chibwe	Community Development Coordinator and Gender Focal Point, Millennium Villages Project (MVP)
Mr. Tonny Maulana	Assistant Director for Bvumbwe Agricultural Research Station
Mr. Mwendo-Phiri	World Vision International, Malawi Office
Mr. C.C Nkhonjera	District Agricultural Development Officer (DADO), Machinga ADD
Mr. Fletcher Zenengeya	Principal Secretary for Ministry of Lands
Mr. E. Zirikudondo	Labour Commissioner, Ministry of Labour
Mr. Mlumbe	Traditional Authority of Zomba district
Dr. Henderson Chimoyo	Director General of Malawi Science and Technology within the Ministry of Education

## Annex II: Data Collection Instruments

### Checklists: in assessing Policies

- 1. Explicit mention of 'gender equality' as an objective?
- 2. Contents of the 'gender equality' objective i.e. do we have specifics in terms of particular areas such as increasing women's access to productive resources, decision making?
- 3. Are these objectives supported by (or tied to specific strategies) to achieve the same?

- 4. Adequate articulation of the needs and interests of women and men farmers? Or does the policy document speak of farmers' needs in general?
- 5. Recognition of women small holders as a separate category?
- 6. Articulation of the needs and priorities as well as challenges of women small holder farmers? Do policy documents consider the differences in the resources available to men and women, the respective roles and the constraints faced by each and how are these differences relevant to the proposed policy interventions such as technologies, infrastructure, market access, and credit/capital?
- 7. Specific strategies to address the needs and priorities of women small holders?
- 8. Do policy documents address women and agriculture in a separate chapter or are the needs of women in agriculture mainstreamed (integrated) in all aspects of policy documents?
- 9. What policy frameworks exist to support women smallholder farmers adapt to climate change?
- 10. Do policy frameworks identify women as drivers of change? (recognizing the role of women in agricultural production and also adaptation to climate change)

**Institutional level: identify and examine institutional frameworks that work on gender and agriculture.**

**Checklists in assessing institutions:**

- ID-----

Identifying actors: government, non-governmental (local non-governmental organizations such as NGOs; local community organizations such as farmers groups, cooperatives; traditional institutions as well as donors

- 1. Assessing the mandate and work program of institutions vis-à-vis what is contained in policy frameworks – do the mandates of these institutions and their work programs (perhaps over a span of a given period) reflect policy commitments.
- 2. Do institutions recognize women as key producers in their own right and is this discernable from institutional mandates and work programs? For example women farmers as one category of stakeholders?
- 3. Examining the capacity of institutions in terms of: executing mandate; articulating gender based needs i.e. the needs of women and men farmers as well as women small holder farmers for instance identifying these different groups, gathering and utilizing disaggregated data for planning, communication strategy to reach these different groups ...; responding to the needs of these different groups in terms of finance, human resource

- 4. Are there institutional arrangements in relation to climate-smart agriculture?
- Is there institutional structure with the mandate to address gender issues within institutions responsible for agriculture and climate change such as Ministries of Agriculture and Environment Ministries/agencies?
- 5. Do institutional arrangements exist to support women small farmers adapt to climate change?
- Are there institutional arrangements to promote the participation of women small farmers and women associations in climate resilient agriculture?

6. Services level: the reference here is to the actual services (and goods) that ultimately reach to the beneficiaries – farmers (women and men, women small holders). These are the results of policies and institutions that have the mandate to execute policies.

**Checklists for assessment:**

- Assess the types of services; technical assistance, extension services, productive inputs, technologies, financial services...
- Are these services gender sensitive i.e. do they respond to the particular needs of each group (men farmers, women farmers and women smallholder farmers)
- What is the level of access to these services?
- What are the intervening factors that determine access and utilization of these services by the respective groups (men farmers, women farmers and women small holders), for instance, culture, harmful traditional practices, religion, matrilineal vs. patrilineal.

## Some of the adapted instruments used to interview respondents

### Sex

Male	Female

### Age

<18 years	
19- 24 years	
25-34 years	
35-45	
> 45	

### Educational Status

Illiterate	
Primary (first cycle 1-4 Grades)	
Primary (second cycle 5-8 Grades)	
Secondary (9-12)	
Technical and vocational (12 +)	
College +	

### Household size

1-3	
4-6	
7-10	
10+	

### Marital Status and type of marriage

#### Age at first marriage

A. < 18 years		
B. 18 – 20 years		
C. 21-25 years		
D. 26-30 years		
Other		

### How many children do you have?

None	
1-3	
4-7	
> 7	

### Who decides on the number and spacing of children?

Wife
Husband

### Household Headship

### Who is the bread winner of the family?

### No cattle were available in the village

### Who owns small animals (sheep, goats, chicken) in your household?

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Husband	
Wife	
Both	
Children/others	

**Ownership of land**

Husband	
Wife	
Both	
Children/others	

**Decision on sale of land produce at the household?**

Husband	
Wife	
Both	
Children/others	

**Decision on household expenditure like education, health?**

Husband	
Wife	
Both	
Children/others	

**Power and Decision Making**

	Response			
	Male (Yes)	Male (NO)	Female (YES)	Female (No)
Can you decide on the sale of livestock products like milk?				
Can you make decisions on selling farm produce by yourself?				
Can you decide on the use of contraceptives by yourself?				
Can you decide on the number of children you wanted to have?				
Do you discuss about household matters (farm incomes, use of inputs, livestock, etc) with your husband?				
Do women have equal rights with men to inherit their parents' property?				
Do you believe that women have equal right and position in society to men?				
Can women have equal decision making power				



with men over house hold resources?				
Do you have any leadership position in traditional and formal organizations?				
Do you take part in community structures				
Do you participate in Women's associations in your community				
Do you participate in customary institutions?				

#### Division of Labour

Activities/Services	Response
Herding	
Supplying fodder	
Sowing/planting	
Hoeing	
Ploughing	
Weeding	
Harvesting	
Transporting the crop	
Storing	
Honey production	
Herding	
Farm management (Soil and water conservation, Terracing	
House and Granary construction	
Accessing credits	
Attending community meetings	
Accessing agricultural extension services (DA's technical advice, seeds, fertilizers)	
Fetching water	
Schooling	

#### Livelihood Sources/Activities

What is your household's major means of earning livelihood?

Crop cultivation	
Cattle rearing	
Mixed farming	
Non-agricultural	

#### Who controls/ possesses major assets (agricultural produce, livestock, and finance) in your family?

Women	
Men	

**Size of farm land**

Less than half a hectare	
1 Hectare	
1-1.5 hectare	

**Access to irrigation**

**Ownership farming oxen**

**Household livestock holding**

**Food Security, Climate Risks, Vulnerabilities and Coping**

**Food security**

**Whose labour is more important to provide food and water for your family during food crisis in your household?**

Women	
Men	
Children	
Others	

**Major climate related disasters in the area**

**Change in the frequency or severity of climate related disasters affecting the area for the past 30 years**

**Most vulnerable social groups to climate change-induced disasters?**

Social group	Most vulnerable	Less vulnerable	Not vulnerable
Female headed households			
Husbanded women			
Girls			
Elderly			
Boys			
Small children			
Disabled			
HIV& AIDS infected			
Poor households			

**Most vulnerable groups to food insecurity in the area**

Social group	Most vulnerable	Less vulnerable	Not vulnerable
Female headed households			
Husbanded women			
Girls			
Elderly			
Boys			
Small children			
Disabled			
HIV& AIDS infected			
Poor households			

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Coping strategies adopted during emergency (hunger) situations

Awareness about various environmental hazards and risks in the community

Environmental conservation?

Support (technical, material) to improve agricultural production

Impacts brought by climate related disasters

Help to poor women farmers and youngsters to adapt to climate change and attain food security

**Gender and Access to Inputs, Services and Technologies**

	<b>Strongly agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly disagree</b>	<b>Don't know</b>
Agricultural extension services address female headed households and male headed households equally					
Health extension services address female headed households and male headed households equally					
Female headed households have equal access to agricultural technologies as male headed households					
Female headed households have equal access to credit facilities as male headed households					

Women are more vulnerable to climate change risks than men					
Female headed households are more vulnerable to climate change risks than male headed households					
Female headed households are more vulnerable to climate risks than husbanded women					
Women contribute more to environmental management than men					
Women have limited access to, and control over productive resources (land, watering points, etc)					
Women have equal access to education and information about agriculture and health					
Women spend more time in agricultural work than men					
Women have equal representation in local (indigenous) institutions					