

**Journalists Association Against AIDS**



**An advocacy Paper on the Integration of Reproductive Health and Gender Issues in  
Climate Change – A case of Malawi**



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This is a key step towards driving the climate change agenda as the effects of the phenomenon continue to derail the livelihoods of already vulnerable communities in Malawi. JournAIDS thanks the Government of the Republic of Malawi through the Environmental Affairs Department (EAD) for developing the National Adaptation Plan of Action on climate change in 2006 which has informed the direction of this particular paper.

JournAIDS recognizes the role the media in Malawi plays in disseminating information on climate change although, there is need of more actions to be undertaken to ensure that there is increased debate on climate change in the local print and electronic media.

It is in this context that we would also like to call upon all the civil society organizations and the line departments in population, gender and environmental sectors to ensure this paper is effectively used for advocacy efforts towards responding to climate change in the country.

The issues on climate change date back to 1992 and 1996 when the earth summit convened one of the largest gatherings of the century in Rio de Janeiro in Brazil to debate on climate change and the Kyoto Protocol which expires in 2012.

Malawi cannot afford to ignore the relationship between gender, population and climate change, hence it is the time for the people to join hands, as all eyes look towards the development deadline of 2015 to ensure that there is environmental sustainability.

## List of Acronyms

<b>AU:</b>	African Union
<b>CBO:</b>	Community Based Organization
<b>COP:</b>	Conference of Parties
<b>CSO:</b>	Civil Society Organization
<b>CEDAW:</b>	Convention on the Elimination of All forms of Discrimination Against Women
<b>EAD:</b>	Environmental Affairs Department
<b>FECO:</b>	Forum for Environmental Communicators
<b>FP:</b>	Family Planning
<b>GEF:</b>	Global Environmental Facility
<b>JournAIDS:</b>	Journalists Association Against AIDS
<b>LDC:</b>	Least Developing Country
<b>MGDS:</b>	Malawi Growth and Development Strategy
<b>NAPA:</b>	National Adaptation Plan of Action
<b>NEPAD:</b>	New Partnership for African Development
<b>NSO:</b>	National Statistical Office
<b>PAI:</b>	Population Action International
<b>PRSP:</b>	Poverty Reduction Strategy Paper
<b>ICPD:</b>	International Conference on Population and Development
<b>NGO:</b>	Non Governmental Organization
<b>IPCC:</b>	Intergovernmental Panel on Climate Change
<b>IUCN:</b>	International Union for Conservation of Nature
<b>ITN:</b>	Insecticide Treated Net
<b>RH:</b>	Reproductive Health
<b>REDD:</b>	Reducing Emissions for Deforestation and Degradation
<b>SADC:</b>	Southern African Development Community
<b>UNFCCC:</b>	United Nations Framework Convention on Climate Change
<b>UNEP:</b>	United Nations Environmental Program
<b>WEDO:</b>	Women's Environmental and Development Organization

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## Executive Summary

Climate change is real, it is happening already, and its impacts on people are not gender-neutral. It is affecting men and women all over the world differently, especially in the world's poorest countries such as Malawi and amongst the most vulnerable people and communities.

Environmental financing mechanisms have provided only limited benefits for the poorest and most disadvantaged countries. Women are generally least considered by modern environmental financing mechanisms. The reasons are manifold and can be found among those impeding women's development all over the world. They range from a lack of access to capital and markets, to women's unrecognized and uncompensated care contributions, to lacking legal protection and ownership rights to cultural and societal biases against women's engagement in learning, political participation and decision-making processes.

Reproductive rights and gender equality are topics that aren't typically raised when discussing climate change, however, a growing number of non-governmental organizations (NGOs) argue that women and their reproductive choices are at the heart of reducing global emissions. Many people admit that they fail to see the important connection, despite understanding that population plays a huge role in rising greenhouse gas emissions, and [Barbara Crosette's article in The Nation](#) argues that the connection might not be the best approach to take when fighting for women's rights.

In October 2010, at the NGO Forum on Sexual and Reproductive Health and Development in Berlin, groups from around the world insisted that leaders of developing countries accept that:

- rising population and climate change need to be considered together in an integrated policy
- The United Nations seems to agree as Helen Clark, the new administrator of the UN Development Program, who attended the Berlin forum, explained the virtuous circle of:

*Educating women and families in the developing world on the number of children they actually wish to have, improving the health of women and promoting gender equality, reducing poverty and hunger, and mitigating climate change*

There are also opponents of including family planning and sexual education in the climate discussion, who claim the topic of population raised by Western countries should remain off the table. Ultimately, Crosette pretty convincingly argues that discussions that see family planning as a population control tool to fix the climate crisis gets the issue backwards:

*Reproductive choice is an end in itself, to make women healthier and happier in their sexual lives. If that means they choose to have fewer children, or just protected sex, the long-term impact may be positive for the environment as well as the family and community, but that is a side effect of the primary goal.*

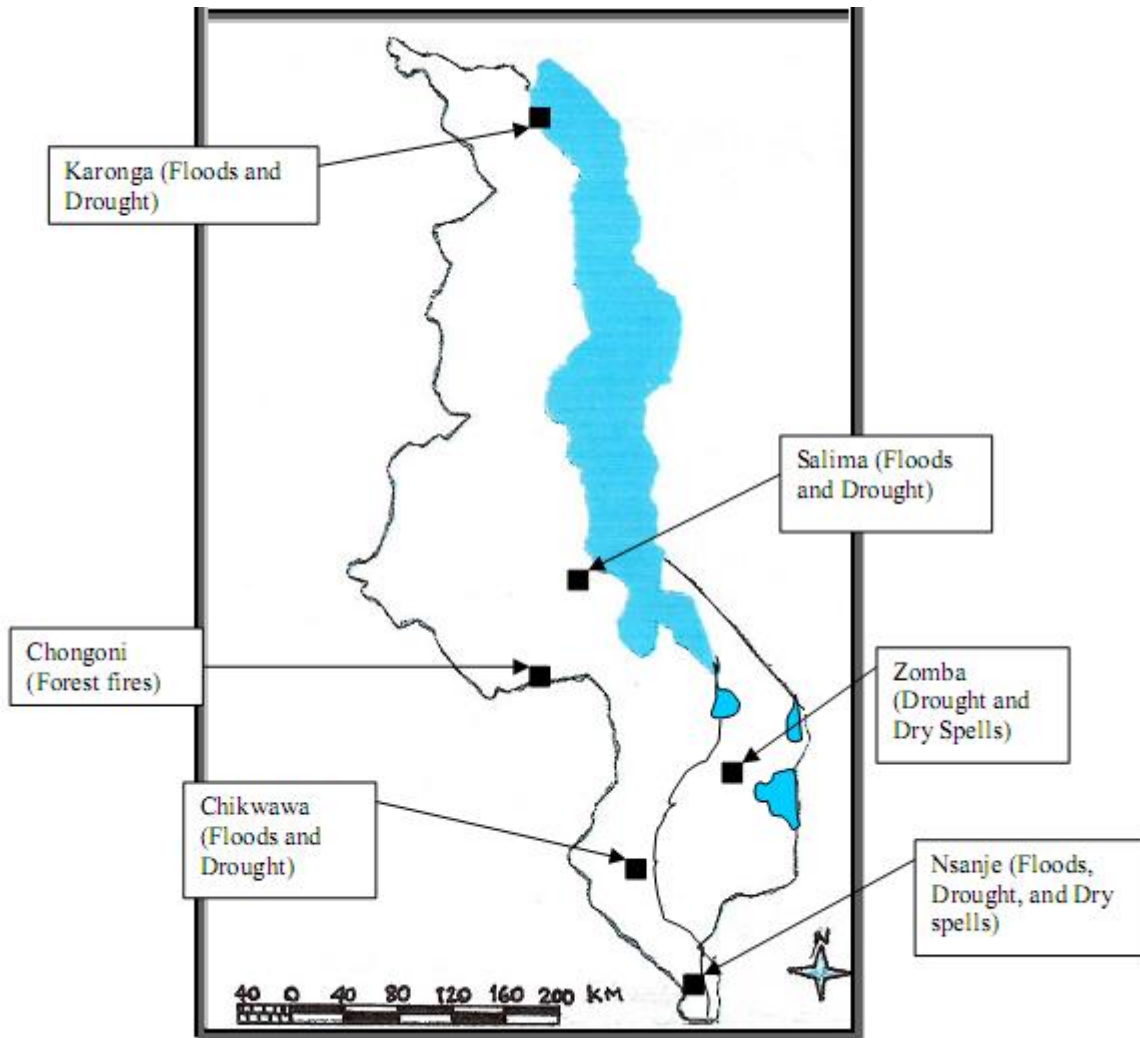
While it is generally agreed that reproductive choice should be a goal unto itself, it should not be entirely left out of the equation when considering the variety of approaches to combating climate change.

The following suggestions are therefore provided:

- ❖ Government should send a strong message that gender equality is to be integrated as a cross-cutting issue in the negotiations and debates and that women's equal participation must be ensured. Government should draw on the innumerable global agreements that relate directly or indirectly to gender equality and climate change as well as gender expertise at the national level.
- ❖ Given that women's knowledge and participation has been critical to the survival of entire communities in disaster situations, government should take advantage of women's specialized skills in various aspects of their livelihood and natural resource management strategies that lend themselves to mitigation and adaptation.

- ❖ Since climate change disproportionately affects poor women, government should analyze and identify gender-specific impacts and protection measures related to floods, droughts, diseases, and other environmental changes and disasters. The NGO community (local and international) should prioritize reducing the high levels of female mortality rates resulting from climate-induced disasters and livelihood changes.
- ❖ Given the vulnerability of the poor, and particularly women, to climate change, adequate funds must be allocated to help these groups adapt to the impacts.
- ❖ Practical tools should be developed that allow government and institutions to incorporate gender equality in climate change initiatives.
- ❖ Government at national and local level should develop strategies to enhance women's access to and control over natural resources, in order to reduce poverty, protect environmental resources, and ensure that women and poor communities can better cope with climate change.
- ❖ As women and men have different adaptive and mitigative capabilities, the financing instruments and mechanisms committed to climate change activities in mitigation and adaptation need to take these gender-differentiated impacts into account in funds design and operationalization as well as concrete project financing.
- ❖ Government and institutions should enhance opportunities for education and training in climate change mitigation and adaptation. Capacity building and technology transfer measures should draw on priorities put forward by women and poor communities.
- ❖ Women's participation in climate change related debates and planning must be enhanced by tools and procedures that augment their capacity and sensitize decision-makers to the advantages of equal participation.
- ❖ The Ministry of Energy, Mines and Natural Resources should develop a gender strategy, invest in gender-specific climate change research, and establish a system for the use of gender-sensitive indicators and criteria for use in national reporting to the UNFCCC.
- ❖ Market-based approaches to curbing climate change should be made accessible to both women and men and ensure equitable benefits, considering that women and men do not have equal access to natural resources such as water and energy, land titles, credit, or information. In particular, government should fund projects that make renewable energy technologies more available to women and meet their household needs.

What does the Malawi NAPA look at?



# 1. Introduction

## 1.0 Introductory paragraphs

Climate change is the biggest global health threat of the 21st century. Countries in the developing world least responsible for the growing emissions are likely to experience the heaviest impact of climate change, with women bearing the greatest toll. In tandem with other factors, rapid population growth in these regions increases the scale of vulnerability to the consequences of climate change, for example, food and water scarcity, environmental degradation, and human displacement.

Women want, but currently lack, access to modern contraceptives. As a result, millions of unintended pregnancies occur every year. Meeting this unmet need could slow high rates of population growth, thereby reducing demographic pressure on the environment. There is now an emerging debate and interest about the links between gender, population dynamics, sexual and reproductive health and rights, and climate change.

In Berlin recently, non-governmental organisations (NGOs) from more than 130 countries reviewed progress on commitments made in 1994 at the landmark International Conference on Population and Development (ICPD) Programme of Action consensus in Cairo, which defined the needs of individuals for universal education and sexual reproductive health care and rights as the best road to sustainable development.

Although there have been some successes, overall, progress has been inadequate. A deplorable lack of financial investment and political will has dominated the inertia in the past 15 years. Many of the NGOs still seem to be working in silos, avoiding the multisectoral engagement required to change societal attitudes. Whether ICPD is really relevant today, now the Millennium Development Goals are the focus of the world's attention, and what happens after 2015 is unclear. It is disappointing to see that there are still tensions between the population and some of the sexual and reproductive health and rights community. However, the discussions on how the sexual and reproductive health community is grappling with the emergent environmental crises that now shadow the landscape of women's health drew much attention at the Berlin meeting.

A study of the Malawi National Adaptation Programmes of Action (NAPA) submitted to the UN Framework Convention on Climate Change showed that there hasn't been made the link between population growth and climate change. Neither has family planning been identified as part of their adaptation strategy—likely because of the fact that family planning falls under the remit of the Ministry of Health rather than Environment, who are responsible for the NAPA documents.

Clearly, a comprehensive women's health response is missing from adaptation efforts and could make a much needed contribution.

An economic case is made in a [new UK report](#), *Fewer Emitters, Lower Emissions, Less Cost*, which found that family planning is five times cheaper than conventional green technologies to combat climate change. The report models the consequences of meeting the global unmet need for family planning and found that each MK1, 000.00 spent on basic family planning over the next four decades would reduce global carbon dioxide emissions by more than 1 tonne.

The sexual and reproductive health and rights NGOs are a powerful constituency whose rights-based agenda in the framework of justice, equality, and equity is a key strength. The concerns and vision of Cairo are as relevant today as they were back in 1994, but perhaps it is time for the sexual and reproductive health community to use the climate change agenda to gain the traction women's health deserves. Undoubtedly, more research specifically looking at the links between reproductive health and climate change require greater investment and clarification of the issues to allow an informed dialogue with the environmental groups.

The UN Copenhagen conference on climate change provides an opportunity to draw attention to the centrality of women. The sexual and reproductive health and rights community should challenge the global architecture of climate change, and its technology focus, and shift the discussion to a more human-based, rights-based adaptation approach. Such a strategy would better serve the range of issues pivotal to improving the health of women worldwide.



## 1.1 Statement of the problem

While most international focus related to climate change is on the critical issue of reducing carbon emissions through mitigation efforts, adaptation as a response to the climate change problem has gained importance in the international policy agenda.

Malawi has had the least to do with growing emissions but is likely to experience the most severe impacts. There is a growing consensus that helping affected people adapt to climate change is also important since the impacts of climate change are already being felt and will worsen in the future.

Malawi, among the most vulnerable to, and have the least capacity to cope with extreme weather events and the adverse effects of climate change, established National Adaptation Programmes of Action (NAPAs) as part of the 2001 Marrakech Accords at the 7<sup>th</sup> meeting of the Conference of Parties (COP) of the United Nations Framework Convention on Climate Change. NAPAs, which are supposed to link with national development processes, provide an avenue for LDCs to identify priority activities that respond to their urgent and immediate adaptation needs.

As the global community moves beyond short-term approaches to adaptation, it is important to assess experience with NAPAs to ascertain if important issues related to climate change and development have been adequately included and what should be changed in the approach leading to longer-term adaptation strategies. One such issue related to both climate change and national development is population.

The Intergovernmental Panel on Climate Change (IPCC) Special Report on Emission Scenarios (SRES) identifies population growth, economic growth, technological change, and changes in patterns of energy and land use as the major driving forces of the growth in greenhouse gas emissions. Analysis conducted over the past decade has addressed the links between population and demographic factors and climate change mitigation and adaptation.

A large share of the population in developing countries is already vulnerable and living in marginalized areas that are susceptible to climate variation and extreme weather events. Population growth is occurring most rapidly in the developing world, increasing the scale of vulnerability to the projected impacts of climate change.

Malawi is projected to at least triple the current population by 2050, based on the most recent population projections of the NSO. In 2008, the average population density in developing countries was 60 people/km compared to 27 people/km in developed regions. Human population growth will increase vulnerability to many of the most serious impacts of climate change.

Scarcity of food and water, vulnerability to natural disasters and infectious diseases, and population displacement are all exacerbated by rapid population growth.

Likewise, population has long been identified as an issue related to poverty reduction and development. Slower population growth has been identified as a factor that can contribute to development and achievement of the Millennium Development Goals, the world's agreed-on targets to reduce poverty. Access to family planning, in addition to promoting girls education and programs to promote gender equity, can contribute to population stabilization (Ross 2004; Moreland and Talbird 2006; O'Neill et al. 2000).

## 1.2 Purpose and Significance of the study

This paper explores how gender, reproductive health have been integrated in climate change as reflected in Malawi's NAPA and other documents submitted to UNFCCC are integrated to the national development process and how they address one aspect of sustainable development, namely population, with a focus on reproductive health and gender. To further explore this integration, the paper analyzes the range of interventions included in the NAPA and examines how population and reproductive health are addressed in the NAPA priority setting process and in the NAPA documents. The paper ends with a discussion of the challenge of addressing gender and reproductive health through the existing NAPA process and makes suggestions for longer-term adaptation and Advocacy processes to include more integrated programming that links with national development processes.

## 1.3 Modus Operandi

### **1.3.1 Desk Research**

JournAIDS made available to the consultants all the relevant documents related to the study such as:-

1. Malawi NAPA
2. CEDAW
3. Malawi DHS
4. SADC gender protocol
5. IPCC

### **1.3.2 Review of Literature**

In this approach, we also conducted a thorough review of relevant literature related to climate change including

1. Project Documents and terms of reference
2. Advocacy Strategic Plan
3. The Consultant conducted a literature review on the issues of gender, climate change and reproductive and analyze them in the context of the National Adaptation Plan of Action on climate change, Malawi Demographic Health Survey, gender related documents within Malawi and international agreed conventions such as CEDAW, SADC gender protocol on development, national gender policy etc.

This information was supplemented by a review of the literature on NAPAs of few other countries and their relationship with national development strategies, adaptation and the relationship between reproductive health, gender and climate change.

### **1.3.3 Research questions and/or hypotheses**

This paper is prepared on the premise that only an equitable representation of all segments of society in decision-making can deliver effective change in reducing the impact of climate anomalies. It hopes not only to support the work of planners, policy-makers and anyone who works on climate mitigation and adaptation, but also to bring down gender inequities as an outcome of being sensitized to gender-specific issue in climate change. The paper contributes to presenting an understanding of the climate change phenomenon, its causes, effects and impact on human societies. It moves on to provide a gender analysis of the differential impacts of climate change on the MDG outcomes in relation to poverty, food, health, education and HIV/AIDS for women and men. The document reviews international frameworks related to gender equality, the environment, and climate change, and highlight recent global efforts to link them. It makes a number of recommendations towards integrating and promoting reproductive rights, gender and climate change.

The Journalists Association Against AIDS (JournAIDS) with support from Population Action International (PAI) based in Washington, United States of America seeks to advocate for the integration of gender and reproductive health into issues of climate change.

Based on studies by Action Aid Malawi, gender is one of the critical issues that are not clearly stated in the National Adaptation Plan of Action (NAPA) of 2006 to address climate change.

Malawi has developed its National Adaptation Programmes of Action (NAPA) by evaluating the impacts of adverse climatic conditions in eight important sectors of economic growth, and ranked the identified activities using multi-criteria analysis to arrive at a list of fifteen urgent and immediate priority needs for adaptation.

The sectors that were analyzed are agriculture, water, human health, energy, fisheries, wildlife, forestry and gender.

Although gender mainstreaming is the mandate of the United Nations, very little efforts have been made to integrate gender in the climate change policy – at the negotiations and in the development of mechanisms, instruments and measures – at the national or international levels. The document tracks the progress of how gender issues were taken

up at the various international climate and earth summits starting from Rio to the UNFCCC Conference of Parties (COP) conferences. The paper recommends that gender needs to be integrated into the context of sustainable development and social/equity aspects in environmental issues. They stress that all post Kyoto commitments should draw on women's experiences and expertise and that meeting the challenges of climate change cannot be achieved without ensuring gender justice.

#### **1.3.4 Research Question(s)**

- Gender is one of the critical issues that is not clearly stated in the National Adaptation Plan of Action (NAPA) of 2006 to address climate change
- What issues/opportunities can be identified to advocate for the integration of gender and reproductive health into issues of climate change.

## 2. Background

As climate change adaptation planning moves beyond short term National Adaptation Programmes of Action (NAPA) to longer-term approaches, it is instructive to review the NAPA process and examine how well it was linked to national development planning. This paper reviews NAPA submitted by Malawi to the United Nations Framework Convention on Climate Change (UNFCCC), to assess the NAPA process in terms of NAPAs integration within national development strategy MGDS.

The review outlines and identifies the range of interventions included in priority adaptation actions. The paper uses the example of population as an issue related to both climate change and national development to assess how it is addressed as part of Malawi's adaptation and national development agendas. The analysis shows that although Malawi recognizes population pressure as an issue related to the ability to cope with climate change and as a factor hindering progress in meeting development goals, it is not well incorporated into either adaptation planning or in national development strategies.

The Malawi NAPA links high and rapid population growth to climate change. However the NAPA does not propose a project with components of RH/FP among their priority adaptation interventions. The paper points to structural issues that hamper better alignment between climate change adaptation and national development planning and offers recommendations for longer-term adaptation strategies that better meet the development needs of countries.

### 2.1 Definition of terms

- i. Adaptation
- ii. Climate change
- iii. National Adaptation Programmes of Action (NAPAs)
- iv. Population
- v. **Reproductive Health (RH)** as defined in the Cairo Programme of Action - Reproductive health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes. Reproductive health therefore implies that people are able to have a satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so. Implicit in this last condition are the right of men and women to be informed and to have access to safe, effective, affordable and acceptable methods of family planning of their choice, as well as other methods of their choice for regulation of fertility which are not against the law, and the right of access to appropriate health-care services that will enable women to go safely through pregnancy and childbirth and provide couples with the best chance of having a healthy infant.
- i. National development strategies

### **3. Results**

#### **3.1 Impacts of Climate Change in Different Sectors – excerpts from Malawi NAPA**

##### **3.1.1 Agricultural sector**

Malawi relies on rain-fed agriculture, and the current droughts 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 several districts of the country. The most vulnerable groups are rural communities, especially women, children, female-headed households and the elderly. 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.

##### **3.1.2 Human health sector**

The human health sector is directly affected by climate change, and is especially linked to infant malnutrition and chronic ailments associated with malaria, cholera and diarrhoea as a result of droughts and floods. For example, malaria is expected to increase and spread to previous cool zones as temperatures increase due to global warming.

The proposed interventions include:

- (i) improved nutrition for infants and other vulnerable groups,
- (ii) prevention of diseases, such as malaria through increased distribution of insect treated bed-nets (ITNs), and diarrhoea,
- (iii) water treatment,
- (iv) crop diversification and food supplementations for the under-fives.

##### **3.1.3 Energy sector**

The energy sector primarily derives the hydro-electric power from the Shire river. The hydro-electric power generation has been negatively affected by the droughts and floods. The water flow disruptions in rivers have been exacerbated by siltation caused by poor and unsustainable agricultural practices, deforestation, and noxious weeds, such as water hyacinth. The proposed interventions include: (i) diversification of energy sources, (ii) reforestation of the Upper, Middle and Lower Shire Valleys catchments, (iii) arresting siltation, (iv) reducing dependence on wood fuel, and (v) efficient use of charcoal and expanded use of ethanol stoves.

##### **3.1.4 Fisheries sector**

Droughts and floods are the major climatic hazards affecting the fisheries sector, and have been responsible for the declining, or even drying up, of water bodies resulting in low fish production and loss of biodiversity. Floods have been responsible for the destruction of fish ponds, such as in 2000/01, while droughts have been responsible for drying of lakes, such as Lake Chilwa in 1995 which resulted in total loss of fish stocks. The proposed interventions include: (i) fish breeding to restock the lakes, rivers and dams, (ii) improving knowledge and understanding on how temperature profiles in the lake disrupt fish breeding and survival, (iii) establishing climate observations or monitoring systems on Lake Malawi, and (iv) mainstreaming climate change into fisheries strategies.

### 3.1.5 Wildlife sector

The major climatic hazard that affects the wildlife sector is drought. Drought affects animal reproduction systems and migratory habits. For example, the 1979/80 drought resulted in the deaths of Nyala in Lengwe National Park in Chikhwawa and the migration of most animals from the game reserve. The proposed adaptation measures include: (i) improved fire management in game reserves, (ii) construction of watering points, (iii) a Nyala breeding programme in Lengwe National Park, (iv) ability to translocate animals as needed, and (v) community based ranching.

### 3.1.6 Water sector

Water is a critical resource for human and industrial use, and for the maintenance of ecosystems. Increasing droughts and floods seriously disrupt water availability, in both quantity and quality. The proposed interventions include: (i) demand side management through water allocation, (ii) construction of boreholes, (iii) water harvesting, (iv) water resource management, and (v) flood management.

### 3.1.7 Forestry sector

The major climatic hazards that threaten the forestry sector are extended droughts, which lead to land degradation and loss of soil fertility, as well as forest fires. For example, during the drought of 1995, some 5,550 ha (or 36%) of Chongoni forest were destroyed by forest fires caused by human activities such as hunting resulting in smoke haze, pollution, loss of seedlings and biodiversity. The proposed interventions include: (i) improved extension services to ensure sustainable land and forest management, (ii) forest fire management at the community level, and (iii) periodic monitoring of plant development to identify species that may be in danger of dying back or are facing serious reproductive ability with diurnal and seasonal climate changes.

## 3.2 Connection between Gender, Reproductive Health and Climate Change

### 3.2.1 Gender

Gender aspects are rarely addressed in climate change policy. This applies – with few exceptions – to the national as well as the international level. Various reasons account for this neglect: gender aspects in climate change are often not self-evident, and there is little data, research, or case studies clarifying and exemplifying the linkages between gender and climate change.

Nevertheless, there are a number of issues that point to the crucial role of gender when understanding the causes of climate change, aiming to mitigate it, and working towards successful adaptation to inevitable climate change:

- **Women and men in their respective social roles** – are differently affected by the effects of climate change. Reasons are inter alia to be found in different responsibilities for care work and income generating work, in dependency on natural resources because of lacking access to environmental services, or in knowledge and capacities to cope with the effects because of differences in the access to education and information systems.

- **Women and men differ with regard to their respective perceptions of and reactions to climate change** – It is well known that women have a higher risk perception than men, and also recognize climate change as a more serious problem than men do. Gender differences are crucial when it comes to assessing adequate measures, too. While men trust in technical solutions, women vote stronger for lifestyle changes and reduction of energy consumption.
- **Social roles and responsibilities of women and men** lead to different degrees of dependency on the natural environment. Women are usually the ones engaged in household subsistence activities, thus degradation of forests, watersheds, foreshores and agricultural land in developing countries can have a severe effect on their ability to perform the daily household maintenance tasks.
- **The participation of women in decision-making regarding climate policy** – mitigation and adaptation – and its implementation in instruments and measures is very low. Thus, in general it is men’s perspectives which are taken into account in planning processes.

Women and men are not homogenous groups but include people of various age, ethnicity, education, income. These social categories also relate to differences in influence, attitude and in contribution to climate change, to how people are affected by it and which possibilities they possess to adapt to climate change. Research about extreme weather conditions show that women and elderly people are most sensitive to hot summer weather in terms of mortality, and that women perceive hot and dry summer weather more unfavourably than men and are more likely to change their behaviour (PIK 2000).

### 3.2.2 Impacts of climate change on women's lives

Climate Change impacts will be differently distributed among different regions, generations, age classes, income groups, occupations and genders (IPCC, 2001). This fact is not highlighted in NAPA. The IPCC also notes that the impacts of climate change will hamper development and harm human living conditions and lifestyles. The effects will fall disproportionately upon developing countries and the poor within all countries, and thereby exacerbate inequities in health status and access to adequate food, clean water, and other resources. Today, women represent about 70 per cent of the poor in Malawi.

Most of the key areas of the negative consequences of climate change are strongly connected to gender equality issues. “Women in developing countries are generally considered part of the vulnerable groups. High dependence from agriculture, forest resources, fisheries and biofuels can increase the vulnerability and the risk of environmental depletion. Moreover, the problems relating to the management of the environmental common assets can become worse under the pressure of global warming.” (Lambrou and Piana 2005:20) These problems include food security, freshwater supply, rural and urban settlements and their infrastructures. The impact on women’s lives varies between regions and cultures, thus planning for adaptation to climate change need to take a close look at each individual and concrete situation. However, there are some general subjects, which are effected throughout regions and cultures:

#### 3.2.2.1 Care work, poverty reduction, income generating activities

In Malawi, women are responsible for household tasks and care for children and the elderly. They have to secure food, provide clean water and household energy, and care for the sick. At the same time, due to the need for poverty reduction, they have to run income generating activities. Climate change may put additional burdens to the double and triple burdened women.

- ❖ Depletion of natural resources and agricultural productivity could place additional burdens on women who will have to spend more time for collecting plants and cultivating their crops for subsistence and local markets. Women make up the majority of the agricultural workforce. Due to patrilinear inheritance, women’s access to and control over land is often limited, and if they own or control land, it is often the less fertile ones. Thus, additional depletion of soil productivity forces women to spend more time providing food for their families and

thus have limited time to participate in decision-making and income-generation activities. So climate change might lead to a vicious cycle aggravating injustice.

- ❖ Decreased availability of water in quantity and quality as well as heavy rainfalls and more frequent floods will have the same negative impacts on workloads and economic resource base. In general, it is women who are responsible for collecting and storing the water for drinking/household needs, while men are responsible for irrigation. Often the norm is that irrigation water should only serve men's businesses. Because of a lack of participation of women in water related decision making and planning, it is often men's interests that are served in such planning. Additionally, droughts and floods can be particularly detrimental to women who keep livestock as a source of income and food security.

### 3.2.2.2 Health impacts

Climate change will also place additional burdens on women's health and have a triple effect on women. First, they are affected because of special physical vulnerabilities, second because of their caring roles in families, and third because the additional work which is required due to depletion of environmental conditions may lead to health damage.

- ❖ Waterborne and vector-borne diseases will increase in a warmer world. Pregnant women for example are particularly vulnerable to malaria, because they are twice as attractive to malaria carrying mosquitoes as non-pregnant women. Additionally, pregnancy reduces women's immunity to malaria, making them more susceptible to infection and increasing their risks to illness and secondary diseases, too. Anaemia which can result from malaria infection is responsible for a quarter of maternal mortality (Duncan 2007).
- ❖ Decreased agricultural productivity is supposed to increase malnutrition and hunger by 10 per cent (Duncan 2007). Women are responsible for up to 80 per cent percent of household food production. Because women usually are involved in a very labour-intensive, low-emission subsistence agriculture, while men are more often found in mechanized agriculture, women's livelihood strategies and efforts to ensure food security are seen to be disproportionately affected by impacts of climate change.
- ❖ A similar situation is to be found where energy consumption/use is concerned. Decreased availability of firewood to provide household energy has the same negative impact as water scarcity in terms of time to be spent for collection of biomass, of workloads and income-generating activities. In addition, indoor air pollution by burning biomass in inefficient ovens causes heavy respiratory diseases, accounting for about 2 million deaths a year worldwide, most of them women and children.
- ❖ As described above, climate change may put additional work on women. More work, heavier loads to carry, longer ways to find water or biomass in a sufficient amount - this all has a negative impact on women's health. Additionally, due to the gendered division of labour, women have to take care of sick family members, which are contributing to time constraints.

### 3.2.2.3 Climate change related natural disasters

Natural disasters like floods or droughts or heavy rains, are already impacting livelihoods in many districts of the country. There are clear gender differences in the prevention of disasters (e.g. early warning systems don't get through to women), in emergency response (e.g. different risk reduction strategies and different needs), and in the reconstruction phase (e.g. gender differences in migration). It is often reported that women's workloads double or triple in the aftermath of disasters, while their income generating conditions deteriorate. The following are only a few examples out of the wide range of research and reports available

- ✚ Because of gender differences in property rights, access to information and in cultural, social and economic roles, natural disasters are likely to affect men and women differently: Following the earthquakes in Karonga and floods in the lower Shire, the casualty rate was almost three times as high for women as for men. Warning information was transmitted to men by men in public spaces, but rarely communicated to the rest of the family. As many



women are not allowed to leave the house without a male relative they perished while waiting for their relatives to return home and take them to a safe place.

- ✦ Another clear illustration of the different vulnerabilities women and men face is offered by the fact that more men than women died during in Haiti disasters. It has been suggested that this was due to existing gender norms in which ideas about 'heroic' masculinity encouraged men to take risky actions (Nelson 2002). This means: women are at risk mostly during the disaster (and often in post- disaster situations), when they find themselves thrown into situations where they are unable to decide whether to stay or leave. Men on the contrary are most at risk in the search for survivors and cleanup after disasters and are more likely to be able to decide for themselves how to act.
- ✦ Men and women also have different needs and priorities following a disaster. Some women have clear physical needs such as obstetric-gynaecological care or feminine hygiene products. More broadly, they also tend to prioritize different activities from their male counterparts. "Men tend to focus almost exclusively on productive activity, including agriculture and waged income. Women tend to prioritize physical and psychological health, economic opportunities, and their children's welfare." (Delaney et al. 2000:15)
- ✦ While women are known as experts in post-disaster management, their involvement in institutionalized disaster mitigation and response efforts is often lacking.

The effects of climate change on gender inequality are not limited to immediate impacts and needs for changing behaviour patterns but may also lead to subsequent changes in gender relations. The shortfall of resources like water and fuel wood or the role of care-giver in post-disaster-situations may increase women's workloads. Due to increased burdens, a negative cycle is starting: if time for information and income-generating measures is lacking, girls have to take on more tasks in the household and don't have time to attend schools. Poor education of girls results in high number of children and marginal participation in community planning, and then the poverty-cycle starts all over – chances to break it are diminished in the long run. Spending more time on traditional reproductive tasks additionally re-enforces traditional work roles and works against a change in which women might begin to play other roles or take up non-traditional activities.

Each of the issues mentioned before is highlighting women's vulnerability due to gendered roles in society and the impacts of climate change on daily live. Nevertheless, that's only half of the picture: On the other side, these special situations sometimes bear opportunities for women and men to change their gendered status in society and to go beyond traditional roles. "As destructive as they are, natural disasters clearly offer rich opportunities for social change. But, too often, opportunities to address gender inequalities are overlooked in the rush to return to "normal" life, including normal or routine gender norms. "But there is also ample evidence that long-established rules lose force when people are forced to respond to emergency conditions produced by natural disasters. Though often against men's wishes, women have been willing and able to take an active role in what are traditionally considered "male" tasks. This can have the effect of changing society's conceptions of women's.

### 3.2.3 Reproductive Health/Population related to Climate Change

The case of population and family planning/reproductive health offers an example of the need for longer-term approaches to adaptation and the need to more clearly link long-term adaptation and national development. NAPA identifies population and health issues as relevant for climate change adaptation strategies. NAPA explicitly makes linkages between climate change and population and identifies rapid population growth as a problem that either aggravates the vulnerability or reduces the resilience of populations to deal with the effects climate change. Although there are diverse concerns, the effects of rapid population growth have been linked with climate change through five factors: food insecurity; natural resource depletion/degradation; water resource scarcity; poor human health; and migration and urbanization.

#### 3.2.3.1 Population pressure and food insecurity

NAPA links high population growth to food insecurity. Population pressure contributes to this by increasing the country's vulnerability to food shortages in the event of occurrences such as droughts and floods and by increasing demand for food and putting additional pressure on the food supply system and already diminishing food resources. Population pressure is more pronounced in certain areas that are more susceptible to events such as droughts and floods. For instance, lower Shire and Karonga.

### 3.2.3.2 Population pressure and natural resource depletion/degradation

Natural resource depletion or degradation is a central theme of the NAPA and is often linked to population pressure. Excerpts from NAPA indicate that rapid population growth:

- results in the imbalance of the already limited resources and the threat of climate instability
- is a cause of decline in resources base,
- is partly contributing to unsustainable natural resource use,
- is linked to environmental resource stress and leads to excessive fishing and to structural changes to the lake and rivers,
- has led to ecological imbalances expressed by the deterioration of livelihoods,
- is an important factor of pressure on the environment
- is exerting pressure on sensitive environments, and “tend[s] to degrade highland ecosystem”
- population pressure is directly linked to deforestation. NAPA goes further in associating high population density with observed biodiversity loss.

This classification was guided by analysis on population and NAPAs characterizing population as affecting climate change primarily in three ways:

- by acting in tandem with climate change to deplete key natural resources, for example through soil erosion and deforestation,
- by causing a significant escalation in demand for resources, such as fresh water and food, that are declining in availability due to climate change, and
- a heightening of human vulnerability to the effects of climate change, including by increased pressure on human health and by forcing more people to migrate and settle in areas at risk of extreme weather events.

### 3.2.3.3 Population pressure and water resource scarcity

Population pressure is deemed to increase the demand for water and further reduce its future availability. In the cities' crowded townships, for example, population growth has rendered the rivers incapable of sustaining the townships. Water scarcity is identified as a common problem in Blantyre and is associated with the growth in population and urbanization. The government acknowledges that population growth, particularly in urban areas, has already placed pressure on water resources and supply services and that climate change is likely to increase demand for water while impacting on both the quantity and quality of water resources.

## 6.1 Population pressure and poor human health

NAPA links population and climate change to risks to human health. The spread of waterborne diseases is associated with high population density in urban areas. The vulnerability to climate change related health risks is further compounded by local characteristics such as the high level of malnutrition in children, accessibility and quality of healthcare, high population congestion and low income levels. Overpopulation increases pressure on resources and risks of waterborne diseases. In the lower Shire, the NAPA notes, heavy rainfall has led to flash floods and resulted in the outbreak of waterborne diseases such as diarrhoea and cholera, while prolonged dry spells have resulted in outbreaks of respiratory diseases.

Population pressure increases the country's vulnerability to these diseases and its ability to cope with increased health costs.

### 3.2.3.4 Population pressure, migration and urbanization

Eighteen NAPAs link climate change to another major demographic concern, migration. Climate change imposes additional burdens on communities already facing migratory challenges caused in part by rapid population growth. The migrating populations, either in search of new agricultural lands or urban areas, are already economically vulnerable, and this vulnerability is increased since, in most cases, the zone that receives them is often already faced with a high risk of economic, social and environmental vulnerability.

In Thyolo, people migrating from densely populated placing in “kudzigulira malo” project looking for better living conditions in less-populated areas not only increase their vulnerability by exposing themselves to a high risk of drought and desertification in the recipient areas but also by contributing to further degradation.

Climate change will have a significant impact on urban settlements, especially in the face of increasing population and continual urban migration. Poor drainage systems, lack of strategic planning and an increasing urban population will only exacerbate the impacts of climate change on urban settlements. In some cases, unfavourable climatic conditions have led to migration from rural areas to “new urban areas”. Rapid urbanization in Lilongwe is “paralleled by clearing of forests and woodlands, expansion of cultivated area, over-fishing of particular species and severe erosion. With an increasing population, waste management problems are an issue of increasing concern. Given that population pressure is highlighted in NAPA, does the document include project activities to address the effects of rapid population growth, including through inclusion of family planning in any NAPA projects? The next section examines which sectors and projects were prioritized in the NAPA.

## 4. Conclusions and Recommendations

### 4.1 Conclusions

Although the Malawi NAPA identifies rapid population growth as an integral key component of vulnerability to climate change impacts, it does not prioritize NAPA funds for reproductive health.

Description of how family planning/reproductive health is included in NAPA and MGDS

- NAPA notes that population growth is a source of vulnerability and credits FP for the reduction in the growth rate.
- Although the NAPA team establishes the link between climate change and population and population and family planning, the NAPA team fails to identify FP/RH in a priority project.
- High population growth is identified as one of the causes of vulnerability to climate change. Although the MGDS identifies mainstreaming of family planning into agriculture as one of the potential cross-sectoral adaptation options, there is no component of FP/RH in any of the proposed priority agricultural projects.
- Partly as a result of population pressure, the natural environment, the forest cover, rangelands and aquatic and marine organisms—has taken the full brunt of unsustainable use of natural resources. The NAPA proposes the stabilization of rural populations as a strategy for adaptation. However, none of the identified priority adaptation actions have FP/RH health components.
- The NAPA mentions that the country has population policies to encourage family planning, although these policies are yet to have a substantive effect. In the final ranking of projects, the NAPA Team does not identify family planning as an adaptation strategy. The identified priority projects did not any FP/RH projects.
- NAPA mentions the vulnerability of its essentially predominantly rural women population, manifested through frequent to an increase in floods and erosion. However, the NAPA while acknowledging population pressure does not link it to climate change or to FP/RH. Therefore it does not identify a project with components of FP/RH.
- The NAPA makes a clear link between population and climate change but no link with reproductive health or family planning
- Faced with multiple competing development priorities and climate change challenges, the NAPA process is compelled to prioritize projects that are geared towards the immediate priorities in single sectors. Thus, it is not surprising that Malawi prioritized alleviation of food insecurity and water resource scarcity. At the same time, the country identified a longer-term issue which exacerbates climate change, sustainable livelihoods.

There is also a likelihood that a majority of stakeholders involved in the preparation of NAPA, although recognizing the importance of stabilizing population growth to better adapt to future climate changes, do not perceive family planning and reproductive health programmes to be urgent and immediate projects but rather long-term strategic planning interventions, perhaps best addressed in national development plans and MGDS. It is important to note, however, that population and family planning/reproductive health issues have not been adequately addressed by PRSs either. According to a World Bank review (2007), PRSPs recognize population growth as an important issue for poverty reduction and included objectives and strategies but failed to translate these into specific policies or indicators to measure progress over time. A review of MGDS and PRSs found that although they mention family planning, they lack implementation details.

As the country develops longer-term adaptations plans, components of family planning/reproductive health and well as other aspects of health could be integrated into projects in other sectors, as has been done in the NAPAs from Sao Tome and Principe and Uganda.

Including family planning/reproductive health components in projects designed to address food insecurity and water scarcity can help slow population growth and alleviate pressure on limited food and water resources. Furthermore, such integrated projects are more likely to meet the needs of vulnerable populations, which face risks in all aspects of their lives—food, shelter, livelihoods, health, etc., including their voiced desire to stop or space childbearing. A promising model exists in integrated Population, Health and Environment (PHE) projects (Mogelgaard and Patterson 2006; Castro and D'Agnes 2008; Castro and D'Agnes 2009;

## 4.2 Recommendations

The paper has shown that the NAPA process has not been entirely successful in aligning urgent and immediate actions to address vulnerability to climate change with existing national development planning processes, including PRSs, despite the requirement to do so.

The analysis has shown that NAPA and MGDS recognize population pressure as an issue related to the ability to cope with climate change—and that it is a factor hindering progress in meeting development goals, and yet is not well incorporated into either adaptation planning or in national development strategies through poverty reduction strategies. Furthermore, nearly a decade after the 2001 accord that established NAPAs, few projects are underway. Thus, as the country moves towards longer-term adaptation strategies, it will be important to ensure that a stronger link is made in processes and plans between adaptation strategies and national development.

This review leads to these recommendations:

- The current structure of ministries of meteorology and environment being in charge of climate change adaptation programming and ministries of planning in charge of national development planning does not facilitate coordination. There is need for alternate structures that link the two, perhaps through OPC. Guidance and funding from global sources must reinforce the need to address adaptation in the context of national development and the need to ensure that development plans incorporate climate change.
- As Malawi develops longer-term adaptation strategies, a mix of short- and longer-term projects that involve participation across development sectors—including social sectors that are currently lacking in the global architecture for climate change—is important to ensure that the range of people’s needs related to adaptation are met. In addition to focusing on the twelve current sectors associated with adaptation under the UNFCCC, adaptation strategies should strengthen both social (community) and human (individual) capital. Education, for example, is critical for strengthening human capital, yet it is not a sector under the UNFCCC.
- Attention to population, including through family planning/reproductive health and other actions to reduce unintended pregnancy such as girl’s education, women’s empowerment and a focus on youth, should be included in the harmonized longer-term adaptation strategies and national development plans.
- There can be no fair and equitable global climate agreement without a comprehensive global climate financing understanding. And this understanding can only be fair, equitable and comprehensive when it incorporates gender awareness and strives toward gender equitable climate financing solutions. No doubt: the proliferation of funds and actors in global climate finance will continue for the foreseeable future. As there is still a lot of reluctance to consider and ignorance about the relevance of gender in making climate financing mechanisms effective contributors to long-term sustainable development, any gender-focused advocacy strategy addressing the issue of financing for adaptation and mitigation will have to be multipronged and look for a variety of access points and opportunities.
- Raise the gender-awareness and commitment to gender equity with all institutions and donors (multilateral, bilateral, national and private) in the new climate finance architecture.
- Shift the focus of the global discussion on climate change away from a primarily technocratic exercise to one employing the language of global justice and human rights, including the right to development and gender equity.
- Develop a set of gender-sensitive criteria for all new climate finance mechanisms supporting adaptation, mitigation, capacity-building and technology transfer. This includes the funds administered under the UNFCCC and the GEF as well as the CIFs and bilateral funds.
- Strive to incorporate gender-specific language and gender considerations in the outcome document of the COP 15 in Copenhagen so that gender does feature explicitly in a post-Kyoto agreement under the UNFCCC, specifically with reference to financing, capacity building and technology transfer.

- Malawi should develop a Gender Plan of Action, following the example of other agencies. Such a Gender Plan of Action should cover all areas of work and programs by the Secretariat, especially its assistance to the Parties and its work on financing mechanisms.
- Demand the development of gender guidelines or a Gender Plan of Action for the Global Environment Facility with the goal of mainstreaming gender in all its six work areas, including on climate change, so that UNFCCC climate funding administered by the GEF is distributed with gender-equity as one of the funding criteria. Demand that the World Bank and the MDBs allocate their funding under the CIFs and related MDB funds as grants, not repayable loans. Women are often harmed the first and most severely when public sector programs are cut in times of a developing country's balance-of-payments crisis.
- Ensure the generation and collection of sex-disaggregated data in all sectors relevant to climate change by governments, international organizations and financial institutions. International institutions have an obligation to assist developing country government and civil society stakeholders in gaining access to such information. With respect to gender, the old adage is true: what is not counted, does not count.
- Improve the participation of women (political and business leaders, gender experts, from disadvantaged groups such as local communities, and indigenous peoples) in stakeholder and consultation processes for climate finance instruments and ensure their inclusion in decision-making bodies for these instruments, such as Trust Fund Committees.
- Additionally there is another lack preventing the 'mainstreaming of gender' into climate change policies, which is the lack of data and research. This applies to the IPCC Assessment Reports, for example: IPCC is not undertaking research by itself, but reviewing existing research. If there is no research available on gender and climate change, the issue cannot be highlighted in the Assessment Report. Regarding the Stern report we are facing a similar situation: the report is focusing on the economical impact of climate change only, based on a conventional perspective on economics: unpaid labour or care work is not taken into account. Both of the reports certainly would look different if gender experts were involved and gender perspectives were shaping the structures. However, it is not only research and international institutions related to climate change that are lacking gender perspectives. The same applies to donor organizations and development departments in national governments of industrialized countries. And it is for the same reasons: lacking gender sensitivity and lacking knowledge on how to integrate gender perspectives and what the specific women/gender aspects are in a concrete situation/measure. In the same time it is the very technical and science orientated view to climate protection and often to adaptation to climate change too, that make people believe that the policies are 'gender neutral'
- To support these processes, gender trainings have to be carried out, aiming to sensitize people for the gender relevance of the work they are doing. Gender experts must be involved in all stages of the planning to back the people planning or carrying out the projects/programmes with gender knowledge.
- Since 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. In addition, the changing demographics as a result of the impacts of the HIV/AIDS epidemic, are leading to women taking up greater responsibilities as sole heads of households and taking care of the sick and orphans. Other interventions are 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.

## 5. References

*CEDAW- full text*

*National Adaptation Plan of Action, 2006*

*New UK report- fewer emitters, lower emissions*

*International Conference on Population and Development*

*COP 15 report, 2009*

*Intergovernmental Panel on Climate Change report on the special report on emission scenarios-2001*

*National Statistical Office, 2008 population census*

*Ross 2004, Moreland and Talbird, 2006; O'Neill et al. 2000, Mogelgaard and Patterson 2006; Castrol and D'Agnes, 2008, Castro and D'Agnes-2009*

*SADC gender protocol on gender and development, 2009*

*Malawi Growth and Development Strategy-2006-2011*

*Lambrou and Piana 2005:20, Duncan 2007, (Delaney et al. 2000:15)*

## 6. Appendix

### 6.1 Prioritized Adaptation Options in Malawi NAPA

Through a consultative process involving public and private sector organizations, including NGOs and civil society, thirty-one adaptation options were identified from the eight sectors to address the urgent adaptation needs, with emphasis on vulnerable rural communities of Malawi. This list was further analyzed and ranked using multi criteria analysis, resulting in a shorter list of fifteen priority adaptation options. These were further ranked and prioritized for urgency, and categorized as high, medium or low. These prioritized options are as follows

- 1) Sustaining life and livelihoods for the most vulnerable communities,
- 2) Enhancing food security and developing community based storage systems for seed and food,
- 3) Improving crop production through the use of appropriate technologies,
- 4) Increasing resilience of food production systems to erratic rains by promoting sustainable dimba production of maize and vegetables in dambos, wetlands and along river valleys,
- 5) Targeting afforestation and re-afforestation programmes to control siltation and the provision of fuel wood, and for their benefits, such as sources of alternative cash income,
- 6) Improving energy access and security in rural areas (e.g., through extension of the rural electrification programme, energy-efficient stoves and development of ethanol- based stoves),
- 7) Improving nutrition among rural communities (e.g., through the promotion of fish farming, rearing of small ruminants and nutritional supplements for children and the sick),
- 8) Disseminating bed nets in high incidence malaria areas,
- 9) Developing food and water reserves for disaster preparedness and response,
- 10) Developing community based wildlife ranching and a breeding programme for Nyala,
- 11) Developing and implementing strategies for drought preparedness, flood zoning and mitigation works,
- 12) Developing technologies to mitigate climate change,
- 13) Providing standby power generation facilities,
- 14) Managing forest fires in collaboration with communities, and
- 15) Developing small dams, and other storage facilities, to mitigate flooding, to harvest water and to initiate community based fish farming and breeding.



## 6.2 Adaptation of a sector wide approach

Adoption of a sector wide approach			
Thematic area	Challenges	Opportunities	Key drivers
<b>Innovative user friendly technology</b>	<ul style="list-style-type: none"> <li>-Costs can be prohibitive to those who need them most</li> <li>-Lack of knowledge about the availability of technologies</li> </ul>	<ul style="list-style-type: none"> <li>-Availability of (national &amp; regional) institutions that work on technology</li> <li>-Availability of technologies in neighbouring countries (a matter of transfer)</li> </ul>	<ul style="list-style-type: none"> <li>-National, regional and international agencies on science and technology</li> </ul>
<b>Health</b>	<ul style="list-style-type: none"> <li>-Inadequate health facilities</li> <li>-Limited accessibility for some because of distance</li> </ul>	<ul style="list-style-type: none"> <li>-Availability of health policies</li> </ul>	<ul style="list-style-type: none"> <li>-Community public health systems</li> <li>- Disaster management response organisations</li> </ul>
<b>Water</b>	<ul style="list-style-type: none"> <li>-Unpredictable rainfall</li> <li>-Poor infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>-Availability of water harnessing, harvesting &amp; processing technologies</li> <li>-Existence of Regional partnerships</li> </ul>	<ul style="list-style-type: none"> <li>-National, regional and international agencies.</li> <li>-Development banks</li> </ul>
<b>Education sector</b>	<ul style="list-style-type: none"> <li>-Disruption of education (due to floods/droughts)</li> </ul>	<ul style="list-style-type: none"> <li>-Presence of humanitarian institutions/ organisations</li> </ul>	<ul style="list-style-type: none"> <li>-Humanitarian &amp; Disasters response organisations</li> </ul>
<b>Food security and nutrition</b>	<ul style="list-style-type: none"> <li>-Lack of accessibility to extension workers</li> <li>-Lack of conservation agriculture (dependency on rain-fed farming, lack of knowledge on crop diversification)</li> </ul>	<ul style="list-style-type: none"> <li>-Availability of water</li> </ul>	<ul style="list-style-type: none"> <li>-National, regional and international organisations</li> </ul>
<b>Entrepreneurship and business</b>	<ul style="list-style-type: none"> <li>-Lack of entrepreneurship skills</li> <li>-Lack of access to capital</li> <li>-Under utilisation of the private sector</li> </ul>	<ul style="list-style-type: none"> <li>- Specialised agencies for women's empowerment e.g. FEMCOM</li> <li>-Availability of micro insurance</li> <li>-Availability of knowledge transfer</li> <li>-Availability of micro credit institutions</li> </ul>	<ul style="list-style-type: none"> <li>-National, regional and international organisations</li> <li>-Banks and lending institutions</li> </ul>
<b>Decision making and participation</b>	<ul style="list-style-type: none"> <li>-Culture and tradition</li> </ul>	<ul style="list-style-type: none"> <li>-Stakeholder availability on gender issues in climate change</li> </ul>	<ul style="list-style-type: none"> <li>Laws, treaties, national and regional institutions</li> </ul>
<b>Capacity building and knowledge sharing</b>	<ul style="list-style-type: none"> <li>-Lack of information that is packed for different stakeholders &amp; audiences</li> <li>-Lack of dissemination of scientific information</li> <li>-Lack of demand driven research</li> </ul>	<ul style="list-style-type: none"> <li>-Indigenous knowledge</li> <li>-Availability of information</li> <li>-Availability of scientific and policy experts</li> </ul>	<ul style="list-style-type: none"> <li>-National &amp; regional on various sectors e.g. public/community broadcaster, universities, research institutions,</li> </ul>

### 6.3 Advocacy Opportunities

Climate change has the power to undo any development efforts which Africa has struggled to achieve thus far. Those least responsible for causing the problems will be at the sharp end of the policy stick. For Malawi, it is our women and future generations will bear the brunt of the impact. The United Nations Framework Convention on Climate Change and Kyoto Protocol are silent on gender and youth issues. As a result, it is often assumed that climate change is gender neutral.

Communities interact with their physical environment in a gender-differentiated way. Women are more vulnerable to the effects of climate change than men, primarily because they constitute the majority of the continent's poor. About 90 percent of women are engaged in agricultural work. They are highly dependent on local natural resources and the environment for their livelihood. Already, the effects of climate change are being felt through erratic rainfall and unseasonal temperatures which confuse the plating seasons of farmers and small land-holders.

- Many of our populations lack information on climate change. Part of the information void in awareness exists because there is no term for climate change in many local languages. Therefore ensure that the ordinary man and woman understand the relationship between climate change, weather patterns, agricultural activities and the effects on coping mechanisms.
- Civil Society, CSOs and CBOs can take part in some of these activities; many organisations have moved into climate change work. Regional Economic Communities/AU/NEPAD should to work side by side with civil society and outline areas of importance so that efforts are not duplicated and all institutions utilise their core strengths.
- Policies should mitigate the negative consequences which could result from Reducing Emissions for Deforestation and Degradation plus Initiatives. They should take into account women's responsibilities in households and communities including indigenous knowledge and traditional practices.
- Women and youths' land & property rights need to be considered so that land claims are not affected by Reducing Emissions For Deforestation And Degradation Plus Initiatives
- Climate change should take into account women's responsibilities in households and communities including indigenous knowledge and traditional practices.
- New money coming from reduction of emissions from deforestation and degradation schemes should be tailored to ensure that women and youth access funds and start projects.
- Many forest lands are also rural and relatively underdeveloped in terms of services, markets infrastructure, and jobs especially for youth.
- To increase livelihood opportunities for young people, they can be trained to into enter careers that are climate change related or even manage Reducing Emissions for Deforestation and Degradation plus Initiatives projects in their areas.
  - ▶ Sensitive areas such as technology and energy are in need of increased gender and youth balance.
  - ▶ Reducing Emissions For Deforestation And Degradation Plus Initiatives will affect wood and fuel, what alternatives exist for those women who rely on forests for this energy?
  - ▶ In a world that is moving towards renewable and nuclear energy, JournAIDS must advocate for technologies that are accessible to women and young people especially those is in far flung rural areas.
  - ▶ Already, concern has been raised that some of these alternative methods such as nuclear energy will leave women behind.
  - ▶ Government should be urged to entrench gender parity (and youth concerns) in the Kyoto Protocol follow-up documents as well as push for gender to be included in climate change finance mechanisms. Of course gender mainstreaming efforts are not wholly absent. At government level, National Adaptation Programmes of Action currently offer potential for engagement with different sectors of society.

## 6.4 Important Quotes on Impact of Climate Change

### **Rejoice Mabudafhasi Deputy Minister, Ministry of Environmental Affairs, South Africa**

Climate change is a threat to humanity, the environment, and developing countries, and women in particular. Women are responsible for gathering and collecting food, water and energy, therefore climate change impacts more on them. And the problem is worse due to a scarcity of resources. Women in developing countries are the most vulnerable. In the event of natural disasters, such as floods, they become environmental refugees. We need to understand the impact of climate change on women and to educate the community. The science is clear that climate change will hit developing countries and women most quickly. There is a need to empower women to influence policy and create gender-sensitive links to poverty. There is also a need to promote awareness and share information in rural communities in order to prevent illness and death, especially by disasters. The Network of Women Ministers of Environment, along with IUCN, the Council of Women World Leaders and WEDO, will host a side event in Bali a day before the ministerial segment of the UNFCCC COP to look at this issue of gender and climate change further.

### **Lorena Aguilar (expert address) Board member of Women's Environment and Development Organization (WEDO); Global Senior Gender Advisor, World Conservation Union (IUCN), Costa Rica**

I spoke with Doña Vera Sanchez, who is a survivor in Honduras of Hurricane Mitch, which was the second most devastating hurricane in the history of the Atlantic Ocean and killed 18,000 people. Vera is a single mother of three children, and like other women on the coast had not been involved in any of the preparatory meetings about disasters. When the winds, waves, and flood hit the Atlantic coast of Honduras, Vera walked inward, holding on to the hands of two of her children and holding her baby. When the current became too strong, she was forced to let go of her two children, and she never saw them again. She spent three days breastfeeding her baby in a tree, then was rescued and sent to a shelter, where she encountered much despair and violence. After a month, she returned to her community, but there was nothing left, she was alone, and had no land or money to her name. She concluded, "I still believe that Mitch had something against women." The Intergovernmental Panel on Climate Change (IPCC) notes that "the impacts of climate change will fall disproportionately upon developing countries and the poor persons within all countries, and thereby exacerbate inequities in health status and access to adequate food, clean water, and other resources." We also know that 70-80% of overall deaths were women in the 2004 Asian Tsunami. In Bangladesh, women suffered the most following the cyclone and flood of 1991. Among women aged 20-44, the death rate was 71 per 1000, compared to 15 per 1000 men. Warning information was transmitted by men to men in public spaces, but rarely communicated to the rest of the family. Without secure access to and control over natural resources (land, water, livestock, trees) women are less likely to be able to cope with permanent climatic change or willing to make investments in disaster mitigation measures. We women from the South wonder... When will the politicians and scientists recognize that climate change is not gender neutral? When is enough?

Several areas deserve attention in relation to climate change. The international climate change negotiation process, as well as climate policies at regional, national, and local levels, must adopt the principles of gender equity at all stages – from research to analysis, and in the design and implementation of mitigation and adaptation strategies. This applies in particular to the process towards a post-2012 climate protection system. We must invest in research areas such as: gender specific resource-use patterns; gender-specific effects of climate change; gender aspects of mitigation and adaptation; women's capacity to cope with climate change; and gender related patterns of vulnerability. And finally, governments should aim to ensure the involvement of women and gender experts when they prepare their contributions for the international and national processes, and ensure women's participation at international and national meetings.

### **Purnima Mane Deputy Executive Director, UN Population Fund (UNFPA)**

Climate change is a highlight of UNFPA's work. At a recent high-level UN meeting, the first item on the agenda was climate change: the vast majority of the UN is working on this issue, even if in an indirect manner. We are asking ourselves what it is that we can do in-house at the UN. I am delighted to hear about these linkages, in terms of how women and gender can be featured in climate change. I think we need to focus on women as agents of adaptation,

and would like to join hands with other organizations to work on this. We also need to focus on how climate change disproportionately impacts poor women, and governments need to analyze and identify the gender-specific impacts and protection measures related to disasters and other environmental changes. We must consider how women can be equipped to participate and be at the table. Women are not always aware of their own innate capacities and knowledge they have that could help deal with climate change - they can and must participate. We also would support the development of gender-specific indicators to use to report to the UNFCCC and the Clean Development Mechanism, as well as practical tools that would allow gender equality to be incorporated in climate change initiatives. For example, we would support the development of a mechanism to fund projects that make renewable energy technologies more available. This is an important initiative, and please count us in for whatever effort we can undertake jointly.

**Monique Essed Fernandez**

**Board member of Women's Environment and Development Organization (WEDO); Senior Policy Advisor, Planning and Development Cooperation, Suriname**

Last year in Suriname, in 2006, it was the first time there was a natural disaster. There was a major flood, which flooded about 40 villages in the interior, part of the Amazon region. Traditionally, people know the regular rhythm of the river, when the levels go up and down. And yet for the first time, something happened that they could not foresee. Women did the usual thing when the river rises. They put all their household possessions in dugout canoes and sat on the river waiting for the flood to subside, but the water did not subside. Farms, schools, and homes were all flooded, and after days there was nothing left. No one had listened to the women when they expressed doubts about re-building by the river. Women are able to be change agents but their expertise must be listened to. Furthermore, no one talked to the women about climate change effects and their knowledge of how to deal with environmental changes. There is a need to facilitate documentation and dissemination of indigenous women's experiences and knowledge in disaster management. And if you are talking about gender and climate change you have to talk about implementing CEDAW. It is an old issue but it has to come to the fore. You will also have to support gender budgeting, and natural resource management by women.

**Janet Macharia Senior Gender Advisor, United Nations Environment Program (UNEP)**

Climate change impacts women, whether they are coming from the South or North. At UNEP, we are fully committed to working with our partners on climate change and appreciate that the environment has a gender component. We are working closely with WEDO and IUCN and appreciate the commitment of NGOs to push this gender component. Climate change is at the top of UNEP's agenda but we want to see it cut across everything we do. Climate change has turned around many development achievements and is affecting the achievement of the Millennium Development Goals (MDGs), it is a cross cutting issue that requires a multi-pronged approach from different partners and that NGOs and individuals work together.

**Yassine Fall Senior Economic Advisor, UN Development Fund for Women (UNIFEM)**

There is a lack of a framework for addressing climate change and for policy coherence at the national or country level. The Poverty Reduction Strategy Papers (PRSPs) at the country levels do not directly address the climate change impacts on women. For example, in Senegal there is serious flooding and we need to address the episodes of flooding and drought that are affecting women's lives. We must document what has been done and what is needed from global to local level. How can we influence and frame policy at national level to include women?

Order of Project Priority	PROJECT TITLE	PROJECT SECTOR	SECTOR COMPONENT (S)
1	Improving community resilience to climate change through the development of sustainable rural livelihoods	Food security	Sustainable Livelihoods
2	Restoring forests in the Upper, Middle and Lower Shire Valleys catchments to reduce siltation and the associated water flow problems	Terrestrial ecosystems	Forest ecosystems
3	Improving agricultural production under erratic rains and changing climatic conditions	Food security	Agriculture
4	Improving Malawi's preparedness to cope with droughts and floods	Early warning and disaster management	Disaster management
5	Improving climate monitoring to enhance Malawi's early warning capability and decision making and sustainable utilization of Lake Malawi and lakeshore areas resources	Early warning and disaster management	Early warning and climate monitoring