

# THE 2011/2012 MID-YEAR NATIONAL BUDGET ANALYSIS WITH FOCUS ON CLIMATE CHANGE

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#### List of Acronyms and Abbreviations

AIDS Acquired Immunodeficiency Syndrome

ART Anti Retroviral Therapy

CEPA Centre for Environmental Policy and Advocacy

DoDMA Department of Disaster Management Affairs

DCCMS Department of Climate Change and Meteorological Services

EAD Environmental Affairs Department

EU European Union

FEWSNET Famine Early Warning Systems Network

Ha Hectare

HIV Human Immunodeficiency Virus

HTC Hospital Testing and Counseling

IGAs Income Generating Activities

ITNs Insect Treated bed-Nets

MEJN Malawi Economic Justice Network

MGDS Malawi Growth and Development Strategy

MK Malawi Kwacha

NAPA National Adaptation Programmes of Action

OPC Office of the President and Cabinet

ORT Other Recurrent Transactions

PE Personal Emoluments

SADC Southern Africa Development Community

TCC Tobacco Control Commission

UNDAF United Nations Development Assistance Framework

UNDP United Nations Development Programme

UNEP United Nations Environment Programme

UNFCCC United Nations Framework Convention on Climate Change

WUAs Water User Associations

#### **EXECUTIVE SUMMARY**

#### Introduction

This report presents a review of the approved 2011/2012 budget with a focus on resources earmarked for implementation of activities and programs that relate to climate change and natural resource management. Specifically, the report aims at promoting policy advocacy and lobby for increased funding and resources allocation to and within sectors that are involved in climate change activities, while at the same time enhancing the linkages between approved Government of Malawi policy and national budgetary allocations. The review will also inform the process of developing the 2012/13 budget so that implementing sectors allocate meaningful resources to address climate change effects in Malawi.

The review has concentrated on examining resources allocated to the Ministry of Natural Resources, Energy and Environment; and all eight sectors identified in the National Adaptation Programme of Action (NAPA) that include; agriculture, human health, forestry, wildlife, energy, fisheries and water.

#### **Key review Findings**

The following are key findings from the review of the mid-year budget allocations:

- There is generally lack of awareness of NAPA interventions framework in the public domain which poses as a serious challenges to the full implementation of the climate change activities. It is therefore highly recommended that a proper programme be developed to sensitize the general public on NAPA framework interventions.
- The Government has reduced allocations to some sectors of which the funds would have been used directly for the implementation of NAPA framework activities. For instance, development funding to the health sector has been reduced. On the other hand, allocations to some sectors have slightly increased such as Gender. Apparently, the increase is on personal emoluments which may have indirect effects on NAPA framework interventions.
- The energy sector has registered very little progress in the implementation of NAPA framework activities despite the fact that climate change effects are more prominent in the sector. The use of wood leading to deforestation in the country is not being adequately addressed. This is compounded by the fact that more and more households continue to use wood fuel as a source of energy in their homes.
- The review finds that fisheries sector has made an effort to implement the intervention as outlined in NAPA framework on climate, although not all of it is being adequately reported. However, efforts are being made to mainstream climate change issues into the fisheries strategy.
- In wildlife sector, the review also finds that little progress has been made in the implementation of the activities. During the review, it was noted that some officers were

- not aware of the specific interventions under their sector. This only shows that implementation of such activities still remain a challenge.
- The water sector has not made much progress either since most of the priority interventions were left out. However, for the few areas that were implemented, some progress was noted.
- It is very critical that funds be made available for the implementation of specific interventions like in the forestry sector because of the nature of the activity. For instance, the planting of tree is mostly done during rainy season and indeed resources must be made available during that period. The sector has however, managed to carry limited activities during the period under review, owing in to limited funding, which is further affected by the non-availability of adequate funds from the Forestry Management Funds.

#### **Key recommendations are:**

- The NAPA implementing sectors need clear implementation guidelines so that NAPA
  activities are implemented according to the framework considering that a number of
  activities are cross cutting. Again, there is need to review the NAPA and sensitize the
  implementers on their roles and responsibilities.
- There is need for an expenditure tracking system for climate change in most sectors as very few sectors are clearly earmarking resources for climate change. Very few actions are included in the respective budget, and without budgetary provisions for that matter. The creation of a specific sub-program or cost center (at district level) for climate change would enhance accountability of resources for the activity.
- The NAPA framework needs to clearly define roles and responsibilities for the coordinating Ministry of Natural Resources, Energy and Environment so that the advocacy on climate change agenda is pursued with a purpose.
- The forestry management fund should be operationalised as soon as possible if the fight against deforestation is to be achieved.
- The Government should provide funding to the district assemblies for disaster preparedness, adaptation and mitigation, more especially in disaster prone areas.
- There is no clear strategy for sensitization campaigns for NAPA interventions across
  most sectors, which compromises efforts of mainstreaming climate change issues into the
  core business of the sectors. Along the same lines, district assemblies are not aware of the
  interventions under NAPA framework due to lack of awareness.

#### 1.0 INTRODUCTION

This report highlights the progress made in implementing the approved 2011/12 budget with emphasis on National Adaptation Programmes of Action (NAPA) framework focusing on climate change and environmental management sector. The review has been commissioned by the Malawi Economic Justice Network (MEJN) in collaboration with the Centre for Environmental Policy and Advocacy (CEPA) to specifically assess the progress on climate change activities following the approved budget for 2011/2012 financial year. The review has been necessitated following a number of stakeholder meetings, some involving the parliamentary committee on agriculture and natural resources and other stakeholders. The report presents the extent to which such advocacy initiatives aimed at promoting the prioritization of climate change and drought relief management within the public sector have translated into increased resource allocation to climate change and drought relief management activities during the mid-year budget review processes.

#### 1.1 Methodology of the Review

The review focused on the approved 2011/2012 national budget and the progress reports from various stakeholders in relation to climate change. The local council's budgets were also analyzed to assess the extent to which they have responded to the calls to address climate change and drought relief management impacts, adaptation and mitigation. The review focused on the main sectors as identified in NAPA framework as follows: agriculture, water, human health, energy, fisheries, wildlife, forestry and gender. The Department of Disaster Management Affairs vote of charge was also reviewed taking into account the department's crucial role in drought relief management by among other things addressing emergencies that have a bearing or are a result of climate change like floods.

#### 1.2 Limitations

The major limitation in the review process was the inability by most of the district councils that were asked to provide progress reports on how they have performed in addressing climate change and drought relief management during the budgetary year under review, bearing in mind that districts are the implementers of programs. As a result, the analysis has largely focused on sectors, which is unfortunate since these mostly deal with policy issues and backstopping of services delivery.

#### 2.0 BACKGROUND INFORMATION

#### 2.1 The 2011/2012 Budget General Overview

The 2011/2012 revised budget stands at MK300 billion, down from the estimate of MK304 billion representing a decline in expenditure of 3%. This provision represents further decline from the MK310 billion revised budget for the 2010/2011 budget. In the mid year revised budget, Domestic revenues are projected to amount to MK242.5 billion while MK45 billion will come as grants, making total revenue and grants to be revised downwards from MK307.7 billion to MK 287.5 billion, representing a decrease of 7%. The major reduction on the overall revenue is from the grants while the domestic revenue has remained the same as approved by Parliament. This implies that the contribution of grants towards the national budget has further been reduced from the projected 21% at the time of budget presentation in Parliament to 16% under review. The revised Recurrent expenditures now stands at MK299 billion, up from the projected MK234 billion at the start of the 2011/2012 financial year. This notwithstanding, the development budget has slightly been revised upwards from MK69 billion to MK70 billion. On the development budget, there is an increase from MK40.4 billion to MK41.9 billion under Part II while Part I has seen a reduction from MK29.4 billion to MK28.2 billion (foreign financed projects).

It should be mentioned that the overall decline in expenditure levels and revenue projections are largely attributed to the Zero Deficit Budget Policy, which is an issue of great concern bearing in mind that in the 2011/2012 budget, the local currency (the Malawi Kwacha) was relatively weaker as compared to other currencies, and hence the reduced purchasing power.

In terms of vote allocation, the 20011/12 mid-year revised budget maintains the emphasis on the core sectors of education, agriculture and health, having the lion's share of the national budget, although the three sectors have individually experienced mixed fortunes. There have been increased allocations for the Ministry of Education, Science and Technology by nearly 10% from MK39.8 billion; and for the ministry of Agriculture's by 6% from the approved budget of MK37.7 billion. On the other hand, the Ministry of Health's budget has suffered a decrease of around 21% from the approved budget of MK 26.8 billion.

# 3.0 THE 2011/2012 MID YEAR REVISED BUDGET ON CLIMATE CHANGE AND ENVIRONMENTAL MANAGEMENT

#### 3.1 Overall and Institutional Allocations for Climate Change

With the revised mid-year national budget pegged at MK300 billion, around MK90 billion (representing 29% of the total budget) has been allocated to the climate change policy coordinating Ministry of Natural Resources and Environment and all the eight sectors identified in NAPA, including the Greenbelt Initiative. This allocation represents an overall increase of over 3 % when compared to the approved budget (Table 3.1).

Table 1. 1: 2011/12 Budget Allocations to Ministries and Departments engaged in Climate Change and Environmental Management Programs

Sector Description	2011/12 Approved Budget	2011/2012 Revised Budget	As % change
Natural Resources, Energy & Environment	2,742,544,113	2,829,478,886	0.9%
Agriculture (includes Fisheries)	37,715,019,284	40,153,683,217	13.4%
Human Health	26,766,460,000	21,066,526,654	7.0%
Wildlife	2,149,528,026	2,168,635,557	0.7%
Water	7,270,423,302	7,822,289,161	2.6%
Gender	1,675,865,348	1,683,503,836	0.6%
Greenbelt Initiative	200,000,000	0	0.0%
Information & Civic Education	915,122,575	928,921,984	0.3%
Local Councils – Agriculture	517,102,666	517,102,666	0.2%
Local Councils – Gender	127,120,096	127,120,096	0.0%
Local Councils – Health	9,992,388,280	9,420,825,837	3.1%
Local Councils – Water	33,478,961	33,478,961	0.0%
Local Councils – Fisheries	70,330,959	70,330,959	0.0%
Local Councils – Environment	51,897,175	51,897,175	0.0%
Local Councils – Forestry	35,333,571	35,333,571	0.0%
Aggregate for Climate Change & Environment	90,062,814,356	86,909,128,560	29.0%
National Total	303,724,222,777	299,998,281,231	100.0%

It is further pleasing to note that the allocation to the central coordination Ministry of Natural Resources, Energy and Environment has slightly increased by nearly 1 % from the approved allocation of MK2.7 billion, thereby giving the institution more impetus to effectively coordinate sectoral policies implementation, including climate change.

# It is therefore recommended that that Government sustains increased funding allocation towards full implementation of NAPA prioritized activities across the sectors.

The Environmental Affairs Department has been allocated as little as MK 67.9 million for its activities. The allocation is so little considering that the NAPA action framework (see annex A1) estimates that key intervention is in excess of MK 700 million for the next 5 years of NAPA implementation (see annex A1). The department's role which centers on providing excellent services in cross-sectoral coordination, monitoring, overseeing compliance, and facilitating integration of environmental concerns into sectoral policies, plans and programs to ensure sustainable development and poverty reduction cannot be effectively discharged with inadequate funding.

The review finds that there is no climate change policy and that plans are underway to develop one. During the period under review, the department has only managed to draft Terms of Reference (ToR) for the policy development. In addition to the development of TORs, the department is also developing the Climate Change Investment Plan.

### 3.2 Distribution of Allocations by Level of Government

The total mid-year revised budget for the allocation towards sectors that are implementing climate change and environmental management programs and activities is MK 87 billion of which MK10.2 billion has been allocated to Local Assemblies, representing 12.0 % of the total provision for climate change, and nearly 4 % of the national revised budget. The decrease in the Local Assemblies allocation is mainly due to the decrease in the overall Health sector budget from MK9.9 billion to Mk9.4 billion, which has also been applied to the districts.

The mid-year review has noted that there is no special provision for disaster preparedness at district level, including even the districts that are annually prone to disasters and other emergencies like entire Shire Valley, Karonga, Salima, Phalombe, and Mulanje among others.

There is need for Government to consider funding the districts so that NAPA activities are implemented in the rural communities, especially those that are more vulnerable to adverse impacts of climate change. For accountability of climate change allocations, it is further being proposed that a sub-programme or programme be created within the budget structure, and personnel be designated to manage such activities.

# 4.0 ALIGNMENT OF SECTOR BUDGETS AND ACHIEVEMENT TOWARDS CLIMATE CHANGE DURING THE MID YEAR OF 2011/2012 BUDGET

The analysis of the performance of sectors that are presently supposed to implement the NAPA also focused on the medium term framework of key interventions as outlined in the NAPA framework. This involved looking at interventions, the proposed cost, and trying to identify the lead sector among others. The interventions were cross-checked against the 2011/2012 output based budget to see whether the activities were included in the revised budget and if resources were allocated. The assessment of performance of the climate change and environmental management sectors was done basing on the work-plans for the 2011/2012 national budget as presented and approved by the Malawi Parliament. This assessment is for the period from June 2011 to December 2011 as presented below:

### 4.1 Agriculture

The vision of agriculture sector in Malawi is a nation that enjoys increased agricultural productivity to ensure food security and sustainable agricultural growth and development while its mission is to promote and facilitate agricultural productivity and sustainable management and efficient use of land based natural resources to ensure food security and increased incomes to improve sustainable socio economic growth and development. The approved budget for the agriculture sector stands at MK 37, 738, 653, 625 for the 2011/2012 financial year.

Hence the agriculture sector is therefore one of the sectors that NAPA framework has prioritized for implementation with focus on climate change. This is in view of the nature of work the sector is involved in. The following are the interventions that NAPA framework identified for implementation:

#### 4.1.1 Improved early warning systems

It was noted that there was some notable progress in the critical area of implementing actions aimed at addressing early warning systems in the sector budget. The target in the implementation of early warning activities was to modernize 20 weather stations across the country. As of December, 2011 a total of 31 automatic weather stations were operational across the country.

# 4.1.2 Recommended improved livestock breeds

The sector planned to import 50 dairy cattle, produce 16,000 straws of semen and also 500 ha of pasture established. As of December 2011, the progress has been slow. For instance, the sector failed to import the 50 dairy cattle to distribution due to what the Ministry indicated is lack of foreign exchange. On the other hand, the sector only managed to produce 3,889 straws of semen against an annual target of 16,000. However, some progress was made in pasture development with 229 ha of pasture established out of the targeted 500 ha by December 2011.

#### 4.1.3 Improved crop and livestock management practices

There was some progress though not very satisfactory in promotion of soil and water conservation technologies. About 19,000 ha of land (about 30 percent) have been realigned against the annual target of 60,000 ha. The sector also managed to incorporate 150,000 ha into crop residue management out of the annual target of 350,000 ha of land across the country (Figure 1 below).

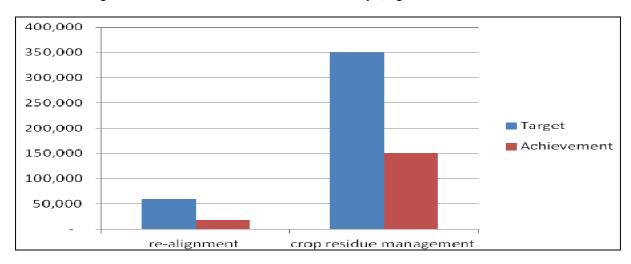


Figure 1.1: Progress made on soil and water conversation management

The figure shows that slightly less than 50% of the target is achieved during the period under review.

On the other hand, the sector planned to promote awareness on environment issues and formation of conservation clubs. As of December 2011, only 1,200 awareness meetings were conducted from the annual target of 3,500 while 364 conservation clubs have been formed.

The sector has also taken an initiative in improving soil fertility and agro-forestry technologies that are aimed at maintaining soil fertility and water management. The sector planned to have 100,000 ha of land applied with organic manure and 5,000,000 seedlings raised and planted across the country. As of December 2011, a total of 87,228 ha of land had been applied with manure and 7.7 million seedlings were raised. This implies that the sector has surpassed its targets by December 2011 (Figure 2).

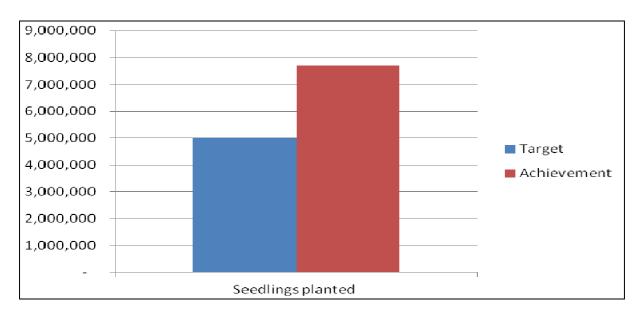


Figure 1. 2: Progress in seedlings planting

# Summary of priority actions implementation for activities within NAPA framework

The study further analyzed whether all the proposed priority interventions are being considered in the agriculture sector budget as indicated in the NAPA framework. The findings show that most of the priority actions are being sidelined, while those that have been included are receiving too little funding (Table 3.2) below:

Table 1. 2: Other NAPA interventions that have been sidelined by the agriculture sector

Intervention	Estimated cost (MK)	Lead sector	Is it in the budget for 2011/2012	Allocation in the budget (MK)
Promotion of rearing of small ruminants to improve nutrition among rural communities	256,500,000	Agriculture	No	0
Appropriate crop production technologies	85,500,000	Agriculture	Yes	1,285,710

Development and implementation of dams	1,026,000,000	Agriculture	Yes	406,760,000
Development of community based storage systems for seed and food	68,400,000	Agriculture	No	0
Development of low cost food supplements	25,650,000	Agriculture	No	0
Promotion of dimba production of maize and vegetables	684,000,000	Agriculture	No	0
Development of sustainable livelihoods strategies for vulnerable communities	171,000,000	Cross cuttings – Disaster??	No	0

**Source: Computed from the NAPA framework** 

The lack of implementation of most of the priority NAPA interventions by the agriculture sector could be attributed to lack of awareness about the NAPA framework, hence the need for the coordinating sector (Ministry of Natural Resources, Energy and Environment) to sensitize key stakeholders and lobby for inclusion of sector specific NAPA activities.

#### 4.2 Human Health

The health sector, just like other sectors, is affected by climate change, more especially linking to infant malnutrition and chronic ailments associated with malaria, cholera and diarrhea as a result of droughts and floods. To this effect, NAPA framework identified specific intervention areas and these are:

- (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 diarrhea;
- (iii) Water treatment; and
- (iv)Crop diversification and food supplements for the under-fives.

The mid-year review has noted that the human health sector has made some progress in implementing such activities in relation to NAPA framework. The achievements made by the sector during the period under review are presented below:

# 4.2.1 Prevention of diseases such as malaria through increased distribution of insect treated bed-nets (ITNs) and diarrhea

Specifically, the sector has in the past 6 months, managed to distribute 2 million ITNs against an annual target of 1.8 million, implying that the sector has surpassed the targeted within half a year. This

is attributed to the national campaign programme the Ministry of Health undertook in key districts such as Karonga, Chikhwawa and Nsanje, among others.

The Ministry has revised its target on the increased access by HIV persons to Anti Retroviral Therapy (ART) from 250,987 to 359,700 persons for the 2011/2012 financial year. The sector has therefore reached 208,000 persons within the first half of the year. The access to Hospital Testing and Counseling (HTC) and reception of sero-status results among persons aged 15 – 49 now stands at 1,000,000 against a target of 2,200,000 persons. The TB cure rate has so far reached 86% against the target annual of 88%.

An issue of concern however is absence of activities aimed at promoting adequate nutrition particularly for the under five, which is equally a priority area within the NAPA framework.

While most of the NAPA actions appear to have been factored in the budget, and that the sector has made some impressive progress in implementing those actions, the reduction in the overall provision for the sector by 21%, from the approved budget of MK26.7 billion, will prove to be a big obstacle for smooth implementation of activities in the remaining half of the year.

It is therefore strongly recommended that Government should explore alternative ways (even outside the budget) of ensuring adequate resources towards the sector if the activities are to be achieved as indicated in the approved work plans.

### 4.3 Energy

The review of the sector's budget does not appear to have changed from the approved allocation of MK103.9 million. However, the 2011/12 revised budget represents a more than 80 % reduction when compared to MK525.8 million in the 2010/11 revised budget. Much of the reduction is from the development budget whose share has dropped from MK461 million in 2010/11 down to MK60 million in the revised 2011/12 budget. This notwithstanding, the sector has earmarked implementation of some NAPA relevant actions on the following:

- (i) Energy diversification;
- (ii) Reforestation of upper, middle and lower shire valleys catchments;
- (iii)Efficient use of charcoal and expended use of ethanol stoves;
- (iv)Reduction of wood fuel dependence; and
- (v) Arresting siltation.

The review finds that only MK19.83 million has been allocated for all these interventions, of which MK 7 million is available for all activities pertaining to reducing dependence on wood fuel. The resources distribution trend within the sector, particularly the low allocation to interventions aimed at reducing dependence on fuel wood is of great concern considering that overdependence on wood fuel

is the major catalyst of climate change in developing countries like Malawi. The performance of some major interventions related to climate change management in the energy sector is as summarized in sections below.

#### 4.3.1 Diversification of energy sources

As a way of diversifying energy sources in the country, the department is currently assessing the quantities of coal that the country has which will be used to generate electricity in addition to hydroelectric power generation. During the period under review, the department has drawn up the ToRs and the consultant is being engaged to assess the quantities of coal in the country. The project has an allocation of MK200 million in the 2011/12 budget.

#### 4.3.2 Reforestation of upper, middle and lower shire valleys catchments

The review on the sector has found that this particular intervention falls under the forestry sector. The Department of Forestry is currently planting trees in the middle of the Shire Valley but there appears to be no major activities outlined for the upper and lower Shire Valleys.

#### 4.3.3 Arresting siltation

There is no progress registered on this interventions, let alone clearly outlined actions in the budget.

#### 4.3.4 Reducing dependence on fuel wood

The Department of Energy Affairs is pursuing two technologies aimed at reducing dependence on fuel wood and these are:

#### (a) Biomass based fuels which uses biomass briquettes

The department in collaboration with other stakeholders has identified and trained 250 groups in Dedza, Ntcheu, Balaka and Machinga districts. The training centered on production of biomass briquettes and improved ceramic firewood stoves. However, it was difficult to assess performance levels for this activity since the budget document did not indicate the planned target.

#### (b) Biogas technology

The department placed an advert in the paper in October 2011 for the construction of biogas plants on pilot basis. Apparently, the technical specification lacked some key and important information to the extent that the whole process was suspended. The department re-advertised for the construction of biogas plants in February 2012. Again, it was difficult to assess performance levels for this activity since the budget document did not indicate the planned target.

#### 4.3.5 Efficient use of charcoal and expended use of ethanol stoves.

Although no specific progress has been made, the department is promoting the use of Liquefied Petroleum Gas (LPG) together with the supplier, AFROX. The department is yet to agree with the supplier on the modalities to be deployed in the implementation of the technology, more especially at the household level.

The review finds that some interventions under NAPA framework are aligned to the core activities of the department. The continuation of certain activities is therefore important for the achievement of interventions under NAPA framework. For instance, the phasing out of the Promotion of Alternative Energy Sources Project has left the sector with a substantial funding deficit. It is therefore being recommended that the project should be re-formulated and that adequate funding be made available to the sector.

#### 4.3.6. Use of electricity provided through the rural electrification programme.

The energy sector continued implementing the Malawi Rural Electrification Programme (MAREP) Phase VI for the 54 trading centres. During the period under review, construction works for 30 trading centers were completed and all were energized and commissioned. Construction works in the remaining trading centers are in progress.

#### 4.4 Fisheries

The fisheries sector has a number of activities that NAPA framework has proposed and these are: (i) Fish breeding to restock lakes, rivers and dams;

- (ii)I 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.

The sector has been implementing a number of activities that are directly and indirectly related to climate change effects and mitigation. Below is the progress of the activities that the sector has implemented from July to December 2011:

#### 4.4.1 Fish breeding to restock lakes, rivers and dams

As part of promoting fish breeding to restock the lakes, rivers and dams, the sector earmarked the production and distribution of fingerlings. The sector firstly conducted training of farmers in fingerling management to prepare them for restocking of the fish. A total of 25 groups were trained under the review period as was target, implying that the activity has been achieved as planned. In addition, the sector organized and undertook 2 study tours for fish farmers at a cost of K1 million.

The sector planned to procure and distribute 4 million fingerlings for the period under review. The plan was to procure and distribute 2.5 million fingerlings from July to December 2011 but due to frequent blackouts and fuel shortage, there were over 40% damages of eggs, thereby not meeting the target. However, during the second quarter, the sector managed to distribute 1.7 million fingerlings against the planned 1.5 million, which was a satisfactory level of performance.

# 4.4.2 Improving knowledge and understanding on how temperature profiles in the disrupt fish breeding and survival

lake

The review finds that efforts are being made in this regards, though the progress is not visible.

#### 4.4.3 Establishing climate observations or monitoring systems on Lake Malawi; and

The Fisheries Department has established climate change monitoring system in some strategic points on Lake Malawi in collaboration with the Department of Climate Change and Meteorological Services (DCCMS). For instance, the sector monitors environmental changes on areas surrounding cages on the Lake Malawi. It also collects and compiles metrological data as well as water levels on the Lake Malawi. This data is collected at Senga-bay in Salima.

#### 4.4.4 Mainstreaming climate change into fisheries strategies.

The department of fisheries is in the process of formulating the fisheries strategy and the review finds that the climate change issues will be incorporated into the policy document as a way of mainstreaming climate change into the core functions of the sector.

As noted the sector has made good progress in fish pond construction and production and distribution of fingerings. Other areas still lag behind and it is therefore necessary that the Government should consider investing more in areas that are identified under NAPA framework. For instance, there is very little progress in monitoring the climate on lake considering that this has a bearing on the breeding and survival which in turn would impact the fisheries harvest.

Considering that implementation of intervention still lag behind, it is necessary that the Government collaborate more with the private sector and other stakeholders for an increased investment in the fisheries sector. Such efforts should ensure continued and constant monitoring of climatic changes on Lake Malawi considering the impact this might have on the breeding programmes taking place on the Lake.

#### 4.5 Wildlife

The NAPA framework recognizes that drought affects the wildlife sector, as it affects animal reproduction systems and migratory habits. It points out specifically to 1979/80 drought that resulted in deaths of Nyala in Lengwe National Park and also migration of most animals from the park. The framework therefore proposes four intervention areas as follows:

- (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.

An overview of the sector show that MK287.8 million of the MK680.6 million allocated to the sector was meant for interventions aimed at improving fire management in game reserves, awareness campaigns as well as to undertake law enforcement operations and capacity building. The interventions under the sector will therefore be affected considering that the increased allocation was effected on personal emoluments.

On the other hand, the development budget has an allocation of MK300 million which was meant for the relocation of animals, construction of breeding sanctuary at Kasungu National Park as well as for the construction of perimeter fence in game reserves. However, due to limited funding under development budget, the department has not implemented any of the interventions under NAPA framework.

Specific activities on the intervention areas under NAPA framework:

### 4.5.1 Improved fire management in game reserve

There has been no progress in this activity due to limited funding to the department.

#### 4.5.2 Construction of watering points

There has not been any progress on this activity, especially that this activity is deemed to belong to another department and not the Department of Wildlife.

#### 4.5.3 Nyala breeding programme in Lengwe National Park

There has been no progress in this activity due to limited funding to the department.

#### 4.5.4 Ability to translocate animals

The department carried out some preparatory work in readiness for the translocation of animals. The department undertook a mapping exercise for the sanctuaries in Kasungu National Park at a cost of Mk 74 million. The target to translocate animals during the period under review did not take place due to lack of funding.

#### 4.5.5 Community based ranching

This activity was not done and is attributed to lack of adequate funding the department is receiving.

As has been noted from the above, only one intervention has been implemented against the five intervention areas under the sector. The failure to implement the interventions is attributed to inadequate funding. It is therefore imperative that Government avails development budget allocations which will improve the implementation of NAPA interventions, without which the activities will still face a challenge to be implemented.

#### 4.6 Water

Water is a critical resource for human and industrial use, and for the maintenance of ecosystems. This is however, affected by water disruption through droughts and floods. The NAPA framework therefore came up with interventions to manage and mitigate the impact of water disruption as follows:

- (i) Demand side management through water allocation;
- (ii) Construction of boreholes;
- (iii) Water harvesting;
- (iv) Water resource management; and
- (v) Flood management.

The review finds that the sector has been allocated MK7.3 billion compared to MK5.14 billion in the 2010/11 revised budget, representing 41.3 % increase. Of this total annual provision, MK4.4 billion (60.2 %) has been earmarked for implementation of NAPA relevant budget actions. The following interventions areas have been implemented under the NAPA framework.

#### 4.6.1 Demand side management through water allocation

Under the intervention, the sector is expected to install of Non Revenue water equipment, production of a tariff calculation model, and construction of Kiosks (165) and recruit of local operators for the kiosks. During the period under the review, the sector has managed to undertake the following:

- Construct 3 piped water schemes and rehabilitated and extended 3 piped water schemes. The sector has also prepared detailed designs for extension of 2 water supply schemes.
- The sector managed to form 3 Water User Associations (WUAs) and also trained 139 Water point committee.

#### 4.6.2 Construction of boreholes

The sector has promoted various technologies as one way of providing the much needed irrigation water. Through this initiative, a number of schemes were developed comprising of the following technologies: gravity fed based schemes, motorized pump based and treadle pump based schemes.

On motorized pumps, 240 motorized pumps were targeted for installation during the year; however, 110 pumps were installed during the period under review. The total number of motorized pumps under utilization during the period was 784, and irrigating 3093.01 hectares.

On treadle pumps, the target for 2011/12 was to install 6540 pumps, however, so far 1,825 were installed during the reporting period

The findings further reveal that the gravity fed based schemes were the most utilized due to the low operational costs. Thus gravity fed based schemes constituted 51% of all irrigated area utilized during the period, whereas the least utilized technology was the motorized pump (Figure 3).

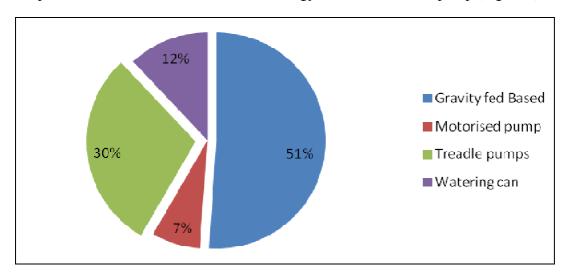


Figure 1. 3: Irrigation technology utilization levels

It is therefore encouraging that low cost technologies are being preferred, a factor that may reduce further degradation of the environment, hence preventing further climatic changes

#### 4.6.3 Water harvesting

The sector was to conduct study on old dams with a view of rehabilitate the schemes. It was also supposed to maintain ground water monitoring stations and database, borehole construction and rehabilitation. The sector was to collect 2000 samples for analysis. The review finds that not much progress has been made on this intervention.



Figure 1. 4: Irrigation technology utilization levels

#### 4.6.4 Water resource management

- Constructed 3 piped water schemes and rehabilitated and extended 3 piped water schemes while detailed designs for extension of 2 water supply schemes have been done.
- Formed 3 WUAs formed and trained 139 Water point committee.

#### 4.6.5 Flood management

The intervention was meant to facilitate the stabilization of the Songwe river course; improve agricultural systems, marketing, hydropower, fisheries and tourism, in an environmentally sustainable manner.

The review finds that some progress has been made in this regard. The sector has formulated terms of reference for the detailed design consultancy. During the same period, the sector short-listed the consultants for the assignment. On the other hand, the sector has interviewed candidates for posts of Project manager and National Project Coordinator.

The review finds that the intervention has made very good progress considering that 90% of the preparatory activities have been completed since the commencement of detailed design.

#### 4.7 Forestry

The Department of Forestry has been allocated MK1.8 billion compared to MK1.3 billion in the 2010/11 revised budget, representing 40.1% increase on account of an increase in the development budget from MK150 million in the 2010/2011 revised budget to MK776.5 million in the 2011/2012. This implies that much of the department's budget is under the development budget (MK776.5 million) which is largely donor financed and ring-fenced.

The review finds that the department is allowed to use a certain percentage of the Forest Management Fund for its afforestation activities whilst waiting for the Forest Management Board to be constituted to oversee the expenditure of the fund. On the other hand, the review finds that the Tobacco Control Commission (TCC) has introduced a levy on every US cent of tobacco sold on the auction floors. This levy has been introduced in the 2011/2012 season and the proceeds are earmarked for afforestation across the country. However, the Ministry of Finance was not ready to indicate how much has been collected through the levy.

In the planning year, the Department continues to provide resources only for budget actions under improved forest extension services, which includes management of existing forest reserves and plantation and carrying out monthly environmental and pollution control inspections. However, there continues to be completely no action in the other two areas of NAPA intervention that include community level forestry management programs and monitoring of endangered species even after the coming into force of the NAPA framework.

During the period under review, the forestry sector has implemented a number of activities in line with the NAPA framework. Among such activities include the following:

- i. 2.4 million Seedlings were raised by both the forestry and other stakeholders against an annual target of 2 million.
- ii. Of the annual target of 94,000 ha of forestry to be protected, the sector has managed to protect only 4,123.5 ha from fires under fire management programmes across the country. The sector

further managed to weed 100 ha of the plantations against a target of 3,000 ha, implying very slow progress in this area.

The sector managed to raise 2,386,620 seedlings for plantations. In addition, 8 million polythene tubes were procured for both plantations and customary estates. On the other hand, the department managed to collect MK60, 887, 413.26 as revenues from log sales, fees and royalties, all of which is deposited into government account and not necessarily available for implementation of NAPA framework interventions.

In addition to the current initiatives taking place in the sector, the Government needs to do more especially in providing adequate funding to the local assemblies, where a number of activities are taking. It is necessary that the re-afforestation levy be implemented in the coming year and that the national budget recognizes the funds for implementation.

There is need to make a proper follow-up on the forestry levy being collected by TCC, in view of that fact that this levy has just been introduced into the system. Proper expenditure tracking is required to ensure that the resources are used for the intended purpose i.e. on climate change activities.

There is urgent need for Government to operationalize the Forestry Management Fund to enhance the capacity of the Department of Forestry to deliver on community level forestry management programs and step-up its targets on tree planting to replace the reserves currently being harvested. It is also paramount that the newly introduced Re-afforestation levy on tobacco buyers is really channelled to more tree planting and management.

# 4.5.6. Summary of progress in implementation of NAPA Framework for the forestry, fisheries, wildlife and energy sectors:

Further observations reveal that most of the actions outlined in the NAPA framework for the four sectors assessed above (energy, forestry, wildlife and fisheries) show that most of the key interventions were left out of the budget, or, were ambiguously presented, hence they could not be traced (table 3.3).

Table 1. 3: Priority interventions for energy, fisheries, wildlife and forestry sectors in the NAPA Framework

Intervention	Cost estimates - MK	Lead sector	Is it in the budget for 2011/2012	Budget provision (MK)
Extension of Malawi Rural Electrification Programme	136,800,000	Energy	Yes	19,830,000
Technologies to mitigate climate change	171,000,000	Energy sector	No	0
Dissemination of biogas technology to rural households	51,300,000	Energy sector	No	0
Dissemination of low cost improved institutional stoves	17,100,000	Energy sector	No	0
Standby power generation	342,000,000	Energy sector	No	0
Women in fisheries	68,400,000	Fisheries and Gender sectors	No	0
Lakeshore aquaculture	85,500,000	Fisheries sector	No	0
Integrating climate into fisheries	119,700,000	Fisheries sector	No	0
Community based wildlife ranch and nyala breeding	171,000,000	Forestry and wildlife sectors	No	0
Afforestation project for chongoni plantation and neibouring villages	342,000,000	Forestry sector	No	0
Community based forest fires management	342,000,000	Forestry sector	Yes	15,000,000
Enhancement of reliance of chongoni plantation and neighbouring villages	427,500,000	Forestry sector	No	0
Impact of deforestation and degradation on river systems and forest ecosystems	513,000,000	Forestry sector	No	0

**Source: computed from the NAPA framework** 

As mentioned earlier, there is need for the concerned sectors to seriously look at the NAPA framework, appreciate it and ensure that activities falling within their mandates are included in the budget and implemented accordingly. The present status simply demonstrates that the NAPA framework is the least on the list of priorities for the implementing sectors that were actually supposed to champion its cause.

#### 4.8 Gender

The NAPA framework takes recognition of the role women play within their households a result of the impacts of the HIV/AIDS epidemic. The women among other roles take care of the sick and orphans arising for the effects of the epidemic. NAPA framework therefore came up with interventions for the vulnerable women which include:

- (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.

The gender sector budget increase in the 2011/2012 financial year was quite decimal from the approved MK1.675 billion to MK1.683 billion, representing a less than 1 % increase. In addition, the portion of the increased budget is on the personal emoluments (PE) as opposed to the operational costs component (the Other Recurrent Transactions, ORT). Nevertheless, the PE component could be made more useful if the sector intends to recruit and train business groups, particularly for women so that they properly use the various energy saving technologies and in the process conserve vegetation.

For some of these planned activities, the progress achieved so far as follows:

#### 4.8.1 Empowerment of women through access to microfinance to diversify earning potential

The annual target for the sector was to provide cash transfers to MK 610 million to 83,000 beneficiaries. During the period under review, the sector has managed to reach out to 27,975 beneficiaries worth MK 559.4 million. This implies that the sector has surpassed its mid-year target on the amount of money disbursed even though the number of beneficiaries is by far less than the target by December, 2011.

The sector undertook entrepreneurship and credit management training of various aspects. The sector used MK 2 million on training of women.

The review finds there was an even distribution of training opportunities among the women with almost half of the women 54%) being trained in credit management and the rest (46%) were trained in various business training of food processing which include juice baking and baking.

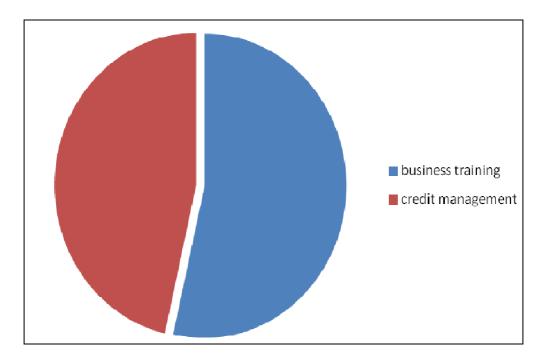


Figure 1. 5: Training provided to women beneficiaries

# 4.8.2 Ensuring easier access to water and energy sources by drilling boreholes and planting trees in woodlots

The activities under this intervention are cross cutting and have been presented in other sectors. For instance, drilling of boreholes is addressed under water sector while planting of trees has been reviewed under the forest sector. This being the cross cutting intervention, progress is reported from the irrigation and water sector. During the period under review, the sector has constructed 19 boreholes using funding from cooperating partners and 22 boreholes across the country were also drilled with funds from the Borehole Treasury Fund. In total, 41 boreholes were drilled against a target of 219 boreholes, representing less than 20 % achievement levels, hence the need to encourage the concerned sector to pull up its socks in the remaining months of the financial year

#### 4.9 The Greenbelt Initiative

The greenbelt initiative does not fall within the NAPA, but was found to be very relevant in attaining effective adaptation goals and objectives. In terms of the allocations, about MK200 million under the OPC vote has been allocated in the 2011/12 budget for preparatory activities, including feasibility studies and design development, for three irrigation schemes in the Lower Shire Valley, Salima and Karonga districts. It was also noted that the initiative has other extra-budgetary financing support but these could not be taken on board because they are not reflected in the 2011/12 national budget. The major point of concern is that about MK2 billion was also provided for the same during the 2010/11 budget and no proper target achievements have been reported in the budget.

#### 4.10 Information and civic education

The information and civic education sector is largely expected to raise awareness on the NAPA policy framework to all stakeholders and relevant sectors. To date, nothing tangible has been done under the sector budget. The Ministry has to be lobbied to start working on this during the 2011/12 budget within the MK102.3 million that has been set aside for the formulation of civic education policy, strategic plan and conducting public meetings and debates on topical issues.

The general observation is that apart from the water sector, and to some extent the agriculture sector, NAPA sectors' performance has not been impressive in terms of aligning their annual budgets to the framework and responding to Government's declaration of "natural resources, climate change, environment" as one of the nine priorities in 2009. There is particularly little (in some cases) or no (in most of the cases) indication that some effort was made to do so. It was noted that where some alignment is observed, such alignment is merely coincidental than strategic. Besides, consistency in budget actions and requisite targets is lacking in most of the sector budgets, thereby making it difficult to assess progress over time.

A general observation in relation to sector's performance is that there is need to urgently review the NAPA framework and guide sectors in aligning their specific interventions to the framework. This should also ensure that cross cutting activities are clearly demarcated so that all sectors take note of those and be mainstreamed into the core functions of the sectors as per the existing tradition.

#### 5.0 DISTRICT IMPLEMENTATION STATUS

Implementation of interventions under NAPA framework is at both central and district level. At district level, the implementation is based on decentralization through which functions have been devolved to the districts. It is expected that the districts across the country will carry out similar activities on climate change as outlined in NAPA framework for the identified sector. It should also be noted that despite the climate change activities, Local Authorities output based budgets articulates desired outputs which contribute towards the realization of Malawi Growth and Development Strategy (MGDS). The review therefore presents key activities that are in line with NAPA framework on climate change.

#### 5.1. Consolidated district funding

The review finds that the total budget for all the districts, except for Nsanje whose figures were not readily available, for the sector identified as implementing climate change activities stands at MK10.9 billion, of which MK5.6 billion was provided to the districts, representing 97% of the cash flow. Table 8.1 below is a summary of district funding.

The Ministry of Finance needs to be commended for funding the district assemblies with nearly all the required funding (97% disbursement rate). This in essence exonerates the Ministry from any blame should sectors claim to have performed poorly due to resource unavailability.

Table 1. 4: District funding on climate change

Sector	2011/12 Approved Budget	July-December Cash Flow	July-December Funding	Funding as %age of Cash flow
Agriculture	517,102,659	283,955,531	273,058,345	96
Health	9,992,388,280	5,184,541,824	5,120,236,355	99
Water	33,478,961	18,464,841	17,843,004	97
Gender	127,120,096	66,988,570	64,762,692	97
Environment	51,897,175	29,304,985	28,102,197	96
Forestry	35,333,570	19,838,531	19,166,337	97
Fisheries	70,330,956	37,755,943	36,516,503	97
Irrigation	84,000,000	46,734,957	45,186,722	97
Total	10,911,651,697	5,687,585,182	5,604,872,155	97

### **5.2. Implementation progress**

The review assessed the performance and implementation status of the sector that NAPA framework identified as implementing climate change activities. The report highlights the status of the sectors concerned, Agriculture, Health, Environment, Forestry, Fisheries, Irrigation, Water and Gender.

#### (i) Agriculture and Food Security

The sector's budget stands at MK517.1 million and during the period under review, the sector had received MK273 million representing 53% of the budget and 96% of the required cash flow.

On performance with respect to set targets, the districts performed extremely well in ensuring farmer's access to improved livestock breeds (small ruminants) and quite impressive in access to improved livestock breeds. However, there was need for improvements in areas of soil and water conservation and conservation agriculture technologies.

Table 1. 5: Progress on district agriculture sector

Output	Annual	Achievement	Rate of
	Target		achievement
Hectares under modern farming practices and	178,050	137,653	
inputs			77
Farmers trained in soil and water conservation	188,934	97,472	
measures			52
Hectares under various conservation agriculture	6,000	3,500	
technologies			58
	90,057	83,775	
Farm families access improved livestock breeds			93

### (ii) Irrigation Sector

The sector planned to put 20,648 hectares under irrigation and half year performance reveals that 9,788 hectares were actually put under irrigation translating to 47 % performance while only 30% of the irrigation schemes were maintained during the period under review.

Table 1. 6: Progress on district irrigation sector

Output	<b>Annual Target</b>	Achievement	Rate of
			achievement %
Hectares under irrigation	20,648	9,788	47
Irrigation Schemes	63	19	
maintained/constructed			30
Farm Families trained	12,180	6,223	51

# (iii) Fisheries Sector

The sector's activities included fish pond construction and fingerings produced and distributed among other. The table below shows the performance of the sector in the activities linked to climate change.

# (iv) Fisheries Sector Output Performance

Table 1. 7: Progress on district fisheries sector

Output	Annual Target	Achievement	Rate of achievement %
Fish pond constructed	306	171	56
Fingerings produced & Distributed	180,200	156,060	87

The sector has performed in the both activities of ponds construction at 56 % of the target and 87 % of the target for production and distribution of fingerings.

#### (v) Water Sector

The review assessed the performance of the sector in terms on provision of portable water, borehole construction and maintenance and also water points committees for water management.

Table 1. 8: Progress on district water sector

Output	Annual Target	Achievement	Rate of achievement %	%
People provided with potable water	318,749	259,580		81

Boreholes/taps maintenance	4,439	2,510	57
Water Points Committees revamped	1,184	266	22

It is pleasing to note that key functions have been achieved during the period under review as compared to the annual targets. The review finds 81 % of the targeted people were provided with portable water and 57 % of boreholes were maintained during the review period.

#### (vi) Health Sector

A number of activities are being implemented under the health sector which is not in line with climate change interventions. As such, the review was not able to make tangible assessment of the health sector. Suffice to say, the health sector make expenditure on its on-going functions.

#### (vii) Gender

The review finds that the sector has implemented a number of activities including economic empowerment. The sector undertook training programme to prepare the groups for the credit they were to receive during the period under review.

Table 1. 9: Progress on district gender sector

Output	Annual Target	Achievement	Rate of achievement %
People trained	5,184	2,643	51
IGAs Groups formed	521	163	31

The achievements under the sector are mixed considering that only 163 groups, representing 31%, of the groups have been formed against an annual target of 521 groups. However, the performance levels point to the need for the sector to pull up its socks.

#### (viii) Forestry Sector

The forestry sector is one of the key sectors whose activities have a greater impact on the climate change. Among a activities in line with NAPA framework that have been implemented under the sector include: planting trees, patrolling the forests and formation and building capacity of village natural resources.

During the period under review, about 22.4 million trees had been planted, presenting 65% of the annual target. The achievement is remarkable but must be noted that tree planting has specific period during the rainy season. It was however reported that the annual target will be attained since the tree planting period is extended to March, 2012.

Table 1. 10: Progress on district forestry sector

Output	Annual Target	Reported	Rate of
		Achievement	achievement %
Tree seedlings planted	34,160,444	22,366,533	65
Patrols conducted	174	81	47
Village natural resources			
management committee formed and			
trained/ revamped	12	3	25

The district assemblies are not aware of the interventions under NAPA framework as demonstrated by lack of clear activities aimed at addressing climate change challenges in the district. There is need therefore to sensitize districts about the NAPA framework and the accompanying implementation guidelines so that they guide the planning and implementation of budgets.

#### 6.0 REVIEW OF THE RECOMMENDATIONS WITH VARIOUS STAKEHOLDERS

The 2011/12 National budget analysis was commissioned to assess the extent to which Government is implementing its commitment to addressing climate change challenges. The findings were to be used by stakeholders in lobbying for sufficient financial allocation to the sector before the budget is approved by parliament. One of the key findings of the analysis was that there is weak alignment of sectoral budget actions to the NAPA framework.

To this effect, CEPA in conjunction with MEJN held a series of dialogue meetings with key stakeholders responsible for resource allocation, making and implementing policies; and engage parliamentarians in sharing a common view. The meetings were one of the processes of lobbying for additional resources towards climate change. The meetings were further aimed at enhancing linkages between approved Government of Malawi (GoM) policy and national budgetary allocations. The stakeholders included the following:

- i. Parliamentary committees on agriculture and natural resources;
- ii. Budget and finance committee; and
- iii. Members of parliament from disaster prone areas/districts.

Various stakeholders made the following recommendations towards full implementation interventions from various sectors as identified in the NAPA framework.

• Need to seriously address disaster management. Have a budgetary allocation for both disaster risk and response. It is recommended that all resources for disaster response should be allocated under the vote for the Department of Disaster Management Affairs instead of aggregating it under the 'Un-Foreseen vote'. This will allow speedy response to disasters.

The review finds that no progress has been made on this recommendation. It was agreed that there would be a meeting involving the OPC, Ministry of Finance and the Department of Disaster Management Affairs to agree on the establishment of an account for disaster management.

It is further being proposed that the Government should also provide funding to the district assemblies for the disaster management at the local level. The funds will among other things assist the local authorities in sensitizing and preparing the communities during disasters and also to assist the districts in case of emergencies, where they will be able to provide immediate response. The Ministry of Finance is encouraged to consider creating a specific vote or program to clearly earmark resources for disasters and risk management within the budget.

- There is need to do some budget tracking to see to it that these allocations are used properly. (Budget tracking is difficult to establish, real utilization of resources, target process and consistency on budget tracking is very weak).
- Government should allocate sufficient resources for implementation of NAPA activities particularly for the core NAPA sectors.

The review finds that the Government has not provided additional resources towards the climate change activities across the sectors despite the advocacy meetings held in June 2011. The Government reduced the development budget allocation towards the health sector and this will negatively impact on the implementation of interventions in the sector. On the other hand, the allocation to selected sector slightly increased on personal emoluments, whose impact on climate change is not clear. However, a point that should be made clear is that once sectors are allocated resources for climate change, such resources should be clearly indicated in the output based budgets with tangible targets and meaningful resource allocations for each activity.

• There is need for resources to be committed for sensitization of stakeholders on NAPA including institutions involved in NAPA implementation.

Sensitization of stakeholders on NAPA framework has received little attention due to limited funding even though it is a requirement of the sectors to undertake the initiative. The coordinating Ministry of Natural Resources, Mines and Energy need to seriously take up this issue particularly now as sectors and districts are preparing for the 2012/13 budgets.

• Energy requires urgent attention in terms of adequate financing for energy diversification and reduction of wood fuel use. Sufficient resources need to be committed for these activities.

Some effort has been made by the energy sector on diversification on energy sources albeit the limited resources available. There is likelihood that the sector can achieve more if adequate resources were made available.

• Urgent need for GoM to operationalize the Forestry Management Fund to enhance the capacity of the Department of Forestry to deliver on community level forestry management programs and step-up its targets on tree planting to replace the reserves currently being harvested.

There is little progress made in this regard and it is alleged that the Forestry Management Board to oversee the implementation of the Forestry Management Fund has not yet been constituted. There is therefore need for the Government to consider constituting the Board as soon as possible so that the funds are used for the intended activities,

• More resources need to be allocated to the Local Councils in line with the decentralization policy. Particular focus need to be made also to those Councils that are prone to disasters, such as Nsanje, Chikhwawa, Salima and Karonga districts.

The review finds that Local Assemblies have not been given resources for disaster management and mitigation. As such, they use resources meant for other activities towards disaster when they occur within their districts. The Department of Disaster Management Affairs (DoDMA) also indicated that it has to subject its budget to Ministry of Finance whenever there are disasters, from which they are provided resource, which is most cases is late. Again, the DoDMA is usually provided with fewer resources than it requires, hence it cannot cope with the magnitude of disasters that occur.

#### 7.0 IDENTIFIED FUNDING GAPS

- i. There are no disaster management funds at the district assemblies, even though there are a number of activities to be implemented considering that the natural disasters take place at the district where the district authorities attend to the affected communities.
- ii. The energy sector the re-formulation of the Promotion of Alternative Energy Sources Project was phased out. The resources under the project provided the much needed resources to the sector.
- iii. The Department of Disaster Management Affairs does not have a budget allocation for sensitization meetings, preparedness, disaster management and mitigation. There is therefore need for the Government to seriously consider allocating resources towards disaster management affairs.
- iv. The Forestry Fund should be made available for the sector to use unlike the present situation where all the revenue is deposited to Government account number 1. There is no funding provision for civic education on climate change which is crucial for alerting public sector institutions especially at district council level to plan and implement climate change activities as per the NAPA framework.

#### 8.0 CONCLUSIONS AND RECOMMENDATIONS

The review for the 2011/2012 budget finds that not much change has been made on allocations to various sectors as recommended by CEPA in its report on the analysis of the 2011/2012 budget. As a result, there are various degrees of achievements made by different sectors and recommendations have been drawn for each sector as well as for the Government to consider.

#### 8.1 Agriculture sector

Among the achievements made, the sector operationalised 31 weather stations across the country in conjunction with the department of climate change and meteorological services as a way of improving early warning reporting. The sector also managed to implement soil and water conservation technologies such as crop residue management. On soil fertility and agro-forestry technologies, a total of 87,228 ha of land had been applied with manure and 7.7 million seedlings were raised. This implies that the sector has surpassed its targets by December 2011.

However, little progress was made on improved livestock breeds considering that only 3,889 straws of semen were produced against an annual target of 16,000 while 229 ha of pasture has been established out of the targeted 500 ha of pasture. The sector did not procure the 50 dairy cattle during the period under review because of forex shortages.

It is therefore recommended that the agriculture sector needs clear funding guidelines so that NAPA activities are implemented according to the framework considering that a number of activities are cross cutting.

### 8.2 Energy sector

The sector is strategically positioned to offer alternative solutions to mitigate climate change. However, most of the priority actions have been left out of the budget. Another challenge the sector faces are inadequate resources with the phasing out of the Promotion of Alternative Energy Sources Project has left the sector with a substantial funding deficit. It is therefore being recommended that the project should be re-formulated and that adequate funding be made available to the sector.

#### 8.3 Water

#### 8.3.1 Demand side management through water allocation

Under the intervention, the sector is expected to install of Non Revenue water equipment, production of a tariff calculation model, establishment of water users associations for the LIAs of Lilongwe and Blantyre (2) and construction of Kiosks (165) and recruit of local operators for the kiosks. During the period under the review, the sector has managed to undertake the following:

- Construct 3 piped water schemes and rehabilitated and extended 3 piped water schemes. The sector has also prepared detailed designs for extension of 2 water supply schemes.
- The sector managed to form 3 WUAs and also trained 139 Water point committee.

#### **8.3.2** Construction of boreholes

The sector installed 110 motorized pumps were installed during the period under review against a target of 240 pumps and 1,825 treadle pumps were also installed against a target of 6540 pumps. The review finds that gravity fed based schemes were the most utilized due to the low operational costs. It is therefore encouraging that low cost technologies are being promoted more than the rest.

The review finds that the intervention has made very good progress considering that 90% of the preparatory activities have been completed since the commencement of detailed design.

#### 8.4 Fisheries

The sector has been implementing a number of activities that are directly and indirectly related to climate change effects and mitigation, most of which are responsible for the declining or even drying up, of water bodies resulting in low fish production. The NAPA framework included fisheries sector because of the danger climate change pose to depletion of fish in water bodies.

The sector has initiated efforts in promoting fish breeding to restock the lakes, rivers and dams through production and distribution of fingerlings. Training in fingerling management was conducted among farmers as well as study tours for the trained farmers. During the period under review, the sector procured and distributed 3.2 million fingerlings for restocking in some water bodies.

The sector however has not demonstrated that other interventions were implemented during the period under review, one of which is improving knowledge and understanding on how temperature profiles in the lake disrupt fish breeding as well as mainstreaming climate change into fisheries strategy.

Considering that implementation of interventions still lags behind and it is necessary that the Government collaborate more with the private sector and other stakeholders for an increased investment in the fisheries sector. Such efforts should ensure continued and constant monitoring of climatic changes on Lake Malawi considering the impact this might have on the breeding programmes taking place on the Lake.

#### 8.5 Wildlife

Among other interventions, the sector worked on improving fire management in game reserves, undertake awareness campaigns in addition to undertake law enforcement operations and capacity building. However, very little progress was achieved under the sector due to lack of adequate funding. The sector only managed to undertaken mapping exercise of the Kasungu National Park in readiness for translocation of animals. The review further finds that other interventions are cross cutting and as such, the Department of Wildlife did not take any initiative to implement them.

The review finds that only one intervention has been implemented against the five intervention areas under the sector and this is attributed to inadequate funding. It is therefore imperative that Government avails development budget allocations which will improve the implementation of NAPA interventions, without which the activities will still face a challenge to be implemented.

It is therefore recommended that NAPA framework be reviewed so that key interventions are aligned to core function of specific sectors.

It is also recommended that the Government should ring-fenced funds for key interventions which are cross cutting if the fight against climate change is to yield results.

#### 8.6 Gender

The role of women in a society cannot be overemphasized. The NAPA framework took recognition of their roles, hence the identification of interventions being recognized under climate change. Among the interventions identified, the sector implemented a number of the prioritized activities.

The sector empowered the women through access to microfinance facilities. The selected women were provided with cash transfers during the period under review amounting to about MK560 million. In addition, the sector provided business training such as food processing which included juice making.

The amount of time women take in fetching water is critical and accessing to water and energy sources was prioritized under the sector. Though specifically for the gender sector, boreholes were drilled by the Department of Water and Irrigation Development, though the achievement is much lower than the target for the mid-year. Apart from planting trees as a source of energy, the department of energy is implementing activities aimed at reducing dependence on fuel wood. The promotion of tree planting to provide wood energy is therefore in conflict with other interventions under the same framework.

It is therefore imperative that the NAPA framework be reviewed so that the interventions are complimentary even though they appear under different sectors.

There is therefore need for the NAPA framework to be reviewed so that proper activities are aligned to specific line sectors according to mandates and functions of the sectors. It is also

imperative that cross cutting activities be mainstreamed into the core functions of the sector strategies for easy lobbying of resources for their implementation.

More funding under development budget is required for the construction and commissioning of more boreholes.

#### 9.0 GENERAL CONCLUSION

- There is generally lack of awareness of NAPA interventions framework in the public domain which poses as a serious challenges to the full implementation of the climate change activities. It is therefore highly recommended that a proper programme be developed to sensitize the general public on NAPA framework interventions.
- Few sectors like agriculture and water have performed well in achieving most of the planned targets for climate change, while the rest of sectors need to pull up their socks. The generic disease across all the sectors is that they have left out of their budgets the priority interventions in accordance with the NAPA framework. It is therefore recommended that the NAPA implementing sectors be provided with clear implementation guidelines so that NAPA activities are implemented according to the framework. Again, there is need to review the NAPA and take on board emerging issues and sensitize the implementers on their roles and responsibilities.
- There is general lack of expenditure tracking system for climate change in most sectors. The challenge with this is that very few actions are included in the respective budget. Thus, some interventions do not have corresponding activities. The solution to this problem lies in the creation of a specific sub-program or cost center (at district level) for climate change to ensure accountability of resources for the activity.
- The review finds that the NAPA framework does not have clearly defined roles and responsibilities for the coordinating Ministry of Natural Resources, Energy and Environment. There is therefore need to review the NAPA and clearly spell out the roles of the ministry so that the advocacy on climate change agenda is pursued with a purpose.
- The forestry management fund should be operationalised as soon as possible if the fight against deforestation is to be achieved.
- The Government should provide funding to the district assemblies for disaster preparedness, adaptation and mitigation, more especially in disaster prone areas.
- There isn't clear strategy for sensitization campaigns for NAPA interventions across most sectors, which compromises efforts of mainstreaming climate change issues into the core business of the sectors. Along the same lines, district assemblies are not aware of the interventions under NAPA framework due to lack of awareness campaigns.

Annex 1.0: The analysis of whether the revised 2011/12 budget integrated NAPA framework interventions

interventions		1	1	1	I	
Intervention	Proposed estimates - US\$	Proposed estimates - MK	Lead sector	Is it in the revised budget for 2011/2012	Cost in the 2011/12 budget	Remarks
Promotion of rearing of small ruminants to improve nutrition among rural communities	1,500,000	256,500,000	Agriculture sector	No		
Appropriate crop production technologies	500,000	85,500,000	Agriculture sector	Yes	1,285,710	
Development and implementation of dams	6,000,000	1,026,000,000	Agriculture sector	Yes	406,760,000	This is in two votes - Irrigation and Water
Development of community based storage systems for seed and food	400,000	68,400,000	Agriculture sector	No		
Development of low cost food supplements	150,000	25,650,000	Agriculture sector	No		
Promotion of dimba production of maize and vegetables	4,000,000	684,000,000	Agriculture sector	No		
Development of sustainable livelihoods strategies for vulnerable communities	1,000,000	171,000,000	Cross cuttings – Disaster??	No		
Drought mitigation	9,000,000	1,539,000,000	Disaster	No		
Reconstruction and resettlement programmes	500,000	85,500,000	Disaster	No		
Improved road infrastructure / construction of schools within villages	3,000,000	513,000,000	Education sector	No		
Extension of Malawi Rural Electrification Programme	800,000	136,800,000	Energy	Yes	19,830,000	
Technologies to		171,000,000	Energy	No		

mitigate climate	1,000,000		sector			
change	1,000,000		Sector			
Dissemination of		51,300,000	Energy	No		
biogas technology to	300,000	, ,	sector			
rural households						
Dissemination of low		17,100,000	Energy	No		
cost improved	100,000	.,,	sector			
institutional stoves	,					
Standby power		342,000,000	Energy	No		
generation	2,000,000	, ,	sector			
Women in fisheries		68,400,000	Fisheries	No		
	400,000	, ,	and Gender			
	,		sectors			
Lakeshore		85,500,000	Fisheries	No		
aquaculture	500,000	, ,	sector			
Integrating climate	·	119,700,000	Fisheries	No		
into fisheries	700,000		sector			
Community based		171,000,000	Forestry	No		
wildlife ranch and	1,000,000		and			
Nyala breeding			wildlife			
			sectors			
Afforestation project		342,000,000	Forestry	No		
for Chongoni	2,000,000		sector			
plantation and						
neighboring villages						
Community based		342,000,000	Forestry	Yes		
forest fires	2,000,000		sector		15,000,000	
management						
Enhancement of		427,500,000	Forestry	No		
reliance of Chongoni	2,500,000		sector			
plantation and						
neighboring villages						
Impact of		513,000,000	Forestry	No		
deforestation and	3,000,000		sector			
degradation on river						
systems and forest						
ecosystems						
Dissemination of		85,500,000	Health	No		
bednets to high	500,000		sector			
malaria areas						
Seasonal difference of		47,880,000	Health	No		
malaria in different	280,000		sector			
agro-ecological zones		100 000 000	** **			
Seasonal variation in	<b>550000</b>	128,250,000	Health	No		
incidence and	750,000		sector			
prevalence of						
malnutrition		24.200.000	T. C.	<b>.</b>		
IEC / behavioral	200.000	34,200,000	Information	No		
change strategy:	200,000		and Civic			
increased rate of men			Education			
caring for the sick		£1 200 000	Water	Ma		
Flood delineation and	200,000	51,300,000	Water	No		
zoning	300,000		sector			

Flood mitigation		2,205,900,000	Water	No		
works	12,900,000		sector			
Elephant research and		171,000,000	Wildlife	No		
monitoring project for	1,000,000					
Liwonde and						
Kasungu						
Fence Installation		427,500,000	Wildlife	Yes		
around Lengwe	2,500,000				150,000,000	
National Park						
	58,780,000	10,051,380,000				