

Climate Finance Tracking Study for Agriculture and Livestock Sector Ministries in Tanzania

2009/10 -2013/14



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ABBREVIATIONS

AF	-	Adaptation Fund
AfDB	-	African Development Bank
AMCEN	-	African Ministerial Conference on the Environment
ASDP	-	Agricultural Sector Development Programme
CAG	-	Controller and Auditor General
CCCS	-	Centre for Climate Change Studies
CMT	-	Council Management Team
COP	-	Conference of Parties
CV&C	-	Climate Vulnerability and Change
DADPs	-	District Agriculture Development Plans
DAICO	-	District Agriculture, Irrigation and Cooperative Officer
DANIDA	-	Danish Development Agency
DASIP	-	District Agricultural Sector Investment Plan
DED	-	District Executive Directors
DFID	-	Department for International Development
DPG-E	-	Development Partners Group on Environment
EAC	-	East African Community
FFS	-	Farmers Field School
FY	-	Financial Year
GBS	-	General Budget Support
GCCA	-	Global Climate Change Alliance
GCF	-	Green Climate Fund
GEF	-	Global Environment Facility
GIZ	-	Deutsche Gesellschaft fuer Internationale Zusammenarbeit
GHGs	-	Green House Gases
JICA	-	Japan International Cooperation Agency
IPCC	-	Intergovernmental Panel on Climate Change
KP	-	Kyoto Protocol
LAAC	-	Parliamentary Local Government Accounts Committee
LGAs	-	Local Government Authorities
LDCF	-	Least Developed Countries Fund
LDCs	-	Least Developed Countries
MAFC	-	Ministry of Agriculture, Food Security and Cooperatives
MDAs	-	Government Ministries, Departments and Agencies

MTEF	-	Mid-Term Expenditure Framework
MLFD	-	Ministry of Livestock and Fisheries Development
NAPA	-	National Adaptation Programmes of Action
NAPs	-	National Adaptation Plans
NGO	-	Non-Governmental Organisation
NORAD	-	Norwegian Agency for Development Cooperation
ODI	-	Overseas Development Institute
OECD-DAC	-	Organisation for Economic Cooperation and Development Development Assistance Committee
O&OD	-	Opportunity and Obstacles for Development
PMO-RALG	-	Prime Minister Office – Regional Administration and Local Government
QDS	-	Quality Declared Seeds
RAFIC	-	Responsible Actions and Financing Climate Change
RAS	-	Regional Administrative Secretary
REDD	-	Reducing Emissions from Deforestation and Forest Degradation
RS	-	Regional Secretariat
RLS	-	Rosa Luxemburg Stiftung
SBSTA	-	Subsidiary Body for Scientific and Technical Advice
SBI	-	Subsidiary Body for Implementation
SCCF	-	Special Climate Change Fund
SEMA	-	Sustainable Environment Management Action
SIDA	-	Swedish International Development Cooperation Agency
TIB	-	Tanzania Investment Bank
ToRs	-	Terms of Reference
TZS	-	Tanzania Shilling
UDSM	-	University of Dar es Salaam
UNFCCC	-	United Nations Framework Convention on Climate Change
URT	-	United Republic of Tanzania
US	-	United States
USAID	-	United States Agency for International Development
VC	-	Village Council
WB	-	World Bank
WDC	-	Ward Development Committee
WRI	-	World Resources

EXECUTIVE SUMMARY

Climate change and the vagaries that come along with it are largely one of the greatest development challenges that the world is dealing with in the 21st century. Also, the amount of resources required to address climate change impacts are huge. Tanzania just like many African counties and Least Developed Countries (LDCs) in the world has not been spared by climate change. One of the key sectors affected is agriculture, livestock and fisheries. The challenge of food insecurity, loss of livelihoods due to climate change variability has contributed to the call for increased resources to deal with climate change.

At the international level, climate finance is central to global negotiations under Nations Framework Convention on Climate Change (UNFCCC). Taking this advantage; Tanzania joined LDCs in the call for increased resources to address climate change. Thus, Parties agree to mobilize fast start finance of \$30billion for a period of five years and a further \$100 by 2020. However, the commitments and delivery of climate finance remains low.

At the national level, it signifies one of the key limiting factors holding back the level of response to climate change negative impacts. Therefore adequate, predictable flows of resources as well as harmonization and alignment of efforts are important for addressing impacts of climate change; particularly to LDCs.

This study commissioned by ForumCC sought to asses if the expenditures in the agriculture and livestock sectors were commensurate with the problem posed by climate change at both national and local levels. At national level, two sector ministries - the agriculture and livestock sectors were assessed and at the local level, two districts, Kongwa and Kilosa, were covered as case studies.

The main objective of this study is to evaluate climate finance expenditure, it's adequacy and level of transparency in delivery of the finances in agriculture and livestock sector ministries for the period 2009-2014.

The findings and recommendations contribute towards a call for transparency and accountability on climate change finance in order for Tanzania to realize climate change resilience in agriculture and livestock sectors. Further, the gaps identified will contribute to a call for increased funding to address climate change from Global

level while calling for climate change mainstreaming at the national and local levels. In addition, the methodology used in this study may serve as a tool to enable the Government of Tanzania to improve the prioritization, efficiency and effectiveness of its climate change resources.

The study used qualitative and quantitative methods of data acquisition and analysis in which various documents including the Mid-Term Expenditure Framework (MTEF) for the development budget (Volume IV); development partners' database; Controller and Auditor General (CAG) reports, districts' development programme implementation reports, district implementation report to the district finance committee, Parliamentary Local Authority Accounts Committee (LAAC) reports, and District Agriculture Development Plans (DADPs). In addition, a literature review of different relevant documents was undertaken and a series of consultations both at national and district levels were conducted. Specifically, three consultations in the districts and one consultation at national level involving planners, policy and decision makers from Ministry of Agriculture, Food Security and Cooperation (MAFC) and Ministry of Livestock and Fisheries Development (MLFD) were held. All inputs generated through these consultations were incorporated in the report accordingly.

Methodological approach combined three different approaches for identifying and assessing climate change budget expenditures for five years (2009/10 through 2013/14) Agriculture and Livestock sector Ministries budget and local budgets for two districts - Kongwa and Kilosa. The approach was informed by using the Climate Change Relevancy method adopted from Overseas Development Institute (ODI)/ Centre for Climate Change Studies (CCCS) 2013; African Development Bank (AfDB) 2014 Climate, Variability and Change (CV&C) criteria; and Organisation for Economic Cooperation and Development – Development Assistance Committee (OECD-DAC) Climate Markers (2002, 2010). In this case various activities were clustered out for the agriculture and livestock sub-sector with their budgets for five years. Different climate change relevant activities were then identified and their levels of relevancy were determined.

The analysis started by identifying the total amounts of funds allocated for the implementation of various climate change related activities, establishing the different sources of funding, and establishing whether or not the funds are sufficient. It further established the funding gaps, tracked climate change related finances in

terms of how they are spent; source of funds (foreign or local); main climate change strategies (adaptation and mitigation) and finally to establish evidence-based actions and recommendations for lobbying and advocacy for enhancing accountability and transparency of climate finance expenditure and advocate for increased mobilization of climate change finance for effective climate change adaptation in Tanzania with special emphasis to agriculture and livestock.

Generally, the study found out that climate change-relevant budget expenditures are a relatively small part of the Agriculture and Livestock sector budgets, especially for the livestock sector, however the trend is on the rise. Most climate change-relevant budget expenditures for both sectors are of *low* relevance; meaning that the spending is not “really” addressing climate vulnerability issues, hence weakly contributing to sector resilience. Unfortunately, most of the climate related budget expenditures in the General Budget Support (GBS) under development budget are financed by development partners by more than 78%. At the sector level; climate related foreign finance is 82% and 66% for the agriculture and livestock sectors respectively. Aggregated at the national level, climate change expenditures accounts for 4-6% of the budget. This has grown steadily since 2009/10 on account of increased donor funding for such activities. On the other hand, domestically financed climate-related activities have fallen marginally in real terms since 2009/10. It is important however to note that the articulation of mitigation and adaptation interventions in the sector budget are very limited; especially at local level. This may be attributed to limited awareness and knowledge among policy and decision makers, including the planners, on climate change issues. In addition, the study revealed that, climate change is not centrally focused in the planning and budgeting process.

Furthermore, the study revealed that there is an insufficient definition of climate finance, and inconsistent methodologies and criteria that may have led to contradicting figures for climate finance in the same scope of analysis, leading to wrong conclusions. However, non-existent climate change markers or codes, inconsistent indicators for the identification of climate change related budget expenditure and actual expenditure may have led to this report’s conclusions. This study has highlighted the fact that much remains unknown about climate finance delivery at national and sub-national levels and further empirical research will be needed to guide the development of mechanisms for climate finance tracking in Tanzania.

Based on the analysis, the study team recommends the following:

1. Resources issues:

- **A paradigm shift:** Climate Change should be looked at as an “economic influence”; particularly for Tanzania because of her economic development pathway is climate dependence. Thus, it’s a high time now for decision makers, technocrats and key actors to look at climate change beyond environmental context.
- **Increase resources mobilization for Agriculture, Livestock and other climate sensitive sectors.**
 - The government is obliged to increase budget allocation of Agriculture Sector to 10% according to Maputo and Malabo declaration of 2014. The disbursements should be timely, according to climate change priorities and reach the targeted groups; particularly small scale farmers and pastoralists. It is important that climate finance is directed to the most priorities and to interventions that have multiplier effects. Accountability and integrity are vital for making foreign funds work.
 - Innovative local resource mobilization: Involve MDAs, LGAs, private sector and CSOs to mobilize resources locally. There is a need to mobilize local resources from various sources including eradication of tax evasion, increase revenue collections from other economic activities and expansion of tax-base at local level e.g. forest resources and mineral resources.
 - At international level; lobby and advocate for developed countries to honor their commitment and not using climate change finance as a conditionality in other areas of cooperation. This is an obligation for developed countries as agreed to mobilize fast start finance of \$30billion for a period of five years and a further \$100 by 2020.

- Climate sensitive sectors should consider taking a holistic approach to addressing climate change starting from the designing, planning, budgeting, and monitoring processes of agriculture and livestock sectors. Awareness; capacity building and learning could be a complimentary solution.

2. Process issues:

- There is a need for a clear and common definition of climate related finance as a fundamental condition to developing criteria and indicators for tracking climate finance and systems to record information
- There is a need to develop national climate finance tracking systems. To establish accurately what resources are available for building resilience is critical for planning and resource mobilization. Tanzania could be proactive and be a champion for “systematic climate finance records”/“classification system” at regional (AU, EAC, SADC and tripartite EAC-SADC-COMESA) and at international levels.
- Tanzania needs to have a stand-alone National Climate Change Policy. This will guide the sector ministries to address issues of climate change. Where possible, there could be an establishment of Climate Change Agency or Unit in the Presidents’ Office for smooth operationalization of the policy and its associated guidelines

The agriculture and livestock sectors can garner multiple benefits from transparency and accurate information about climate finance. In the way that comprehensible budget expenditure and actual expenditure can help decision makers in the sectors to identify gaps, improve planning and execution; mobilize and allocate funds for climate change activities. Thus, promoting transparency, completeness, and accuracy, and help build confidence to the public that their government on one side and development partners on the other side are meeting their obligations and commitment respectively

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Box 1: Key Messages

ISSUES:

At the National Level

- Climate change-relevant budget expenditures are a relatively small part of the Agriculture and Livestock sector budgets, especially Livestock Sector; however the trend is on the rise.
- Most of climate change-relevant budget expenditures for both sectors are of low relevance; meaning that the spending is not “really” addressing climate vulnerability issues hence weakly contributing to sector resilience.
- Donor dependence; all climate related budget expenditures in the Government Budget System (GBS) fall under development budget; which is financed by foreign funds by more than 78%. At sector level; climate related foreign finance is 82% for agriculture; while Livestock was found to be 66% of all climate related budget expenditure.
- Lack of transparency due to insufficient technical processes and systems to identify and record climate finance receipts and expenditures. This because there are no distinct markers or codes identified by the government to guide identification of climate finance.
- Inconsistence, inadequate availability of reliable and accurate data from both Sectors – (Agriculture and Livestock) and Development Partners; hence difficulty to track; establish gaps and estimate/forecast adaption and mitigation costs.

At the District Level

- There are no district-specific assessments conducted to identify climate change vulnerability and its associated costs. This makes it difficult to analyze the adequacy of climate finance needed.
- Climate change is not at the centre of planning and budgeting processes. This may be attributed to low awareness and/or inadequate knowledge on mainstreaming climate change issues among planners, policy and decision-makers at the Local Government Authorities (LGAs).
- District councils’ development budgets including climate change related programmes largely depend on central government funds with very little coming from their own sources funds. The central government funds are unpredictable and mostly disbursed very late and less than the amount requested. This signifies unreliable development funds which also affects climate change related programmes.

A CALL FOR ACTION:

At the National Level

- A paradigm shift: Climate change should be looked at as an “economic influence” and beyond environmental context. This is because Tanzania’s economy depends on climate sensitive sectors.
- Innovative local resource mobilization: Involve MDAs, LGAs, private sector and CSOs to mobilize resources locally. This may include eradication of tax evasion and increase revenue collections from other economic activities such as expansion of tax-base at local level e.g. forest resources and mineral resources.
- At international level: lobby and advocate for developed countries to honour their commitment and not using climate change finance as a conditionality in other areas of cooperation. This is an obligation as developed countries agreed to mobilize fast start finance of \$30billion for a period of five years and a further \$100 by 2020.
- There is a need to develop national climate finance tracking systems in order to establish accurately what resources are available at national and local levels. This will enhance planning and resource mobilisation as well as transparency and accountability.
- Tanzania needs to have a stand-alone National Climate Change Policy. This will guide the sector ministries to address issues of climate change. Where possible, there could be an establishment of Climate Change Agency or Unit in the Presidents’ Office for smooth operationalization of the policy and its associated guidelines.

At the District Level

- There is a strong need for conducting vulnerability assessment at district level to establish the impacts of climate change and its associated costs. This will provide an opportunity for proper planning and budgeting for interventions that are geared towards building resilience at local level.
- Awareness and sensitization initiatives on climate change should be conducted to improve planning, prioritization and implementation of climate-related projects at the council. This will also help communities to raise ‘real’ issues that affect them as a result of climate change during planning process through O&OD.
- Innovative Local Resource Mobilization: Councils should effectively exploit their potentials to mobilize local resources. Taxes collection capacity and financial management control should be strengthened to enhance resources mobilization, avoid funds leakages and corruption. Also, as a major source of council income, investment should be made in agriculture and livestock in order to increase productivity.

Box 2: Definitions¹

Climate change: A change in the state of the climate that can be identified by changes in the mean and/or the variability of its properties and that persists for an extended period, typically decades or longer.

Greenhouse gases: Carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulphur hexafluoride (SF₆) as defined by the Kyoto Protocol.

Category Definition of Adaption and Mitigation:

Mitigation: Human interventions to reduce the sources, or enhance the sinks, of greenhouse gases (GHGs). All climate change mitigation actions aim to reduce the concentration of atmospheric GHGs.

Adaptation: Adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.

It intends to reduce the vulnerability of human or natural systems to the impacts of climate change and climate-related risks, by maintaining or increasing adaptive capacity and resilience. This encompasses a range of activities from information and knowledge generation, to capacity development, planning and the implementation of climate change adaptation actions.

System Definition of Adaption and Mitigation:

Adaptation: In human systems, the process of adjustment to actual or expected climate and its effects, in order to moderate harm or exploit beneficial opportunities. In natural systems, the process of adjustment to actual climate and its effects; human intervention may facilitate adjustment to expected climate.

Vulnerability: The propensity or predisposition to be adversely affected.

Mitigation: A human intervention to reduce the sources or enhance the sinks of greenhouse gases.

Note that the term “mitigation” is also used in the context of risk management (particularly in the results based logical framework) to describe a measure that reduces a risk. In the risk context, the term has a different meaning. The description of measures that mitigate risk does not mean that the project qualifies as a climate change mitigation project. Measures that reduce risk are not usually climate change mitigation measures, unless the risk itself relates to the emission of greenhouse gases.

In this study, “climate variability and change” (CV&C) was to identify and qualify climate change budget and expenditure. This is to emphasise the point that changes in climate variability, without changes to mean temperature or rainfall variables, may also be the result of climate change. However, strictly speaking, the definition of climate change encompasses climate variability.

Non-qualifying elements: These are good development interventions, rather than adaptation. A broader discussion of non-qualifying elements is provided in this report.

Qualifying cost: This explains what can be included as adaptation finance.

1 IPCC, 2012: Glossary of Terms. In: *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation*. Available at: http://www.ipcc.ch/pdf/special-reports/srex/SREX-Annex_Glossary.pdf

CHAPTER ONE

1

1.0 INTRODUCTION

Climate change has continued to be a global threat especially to least developed countries such as Tanzania. As it has been explained on the recent Inter-governmental Panel on Climate Change (IPCC) Fifth Assessment Synthesis report 2014, climate change has negatively affected both natural and human systems on all continents and across oceans². The effects include increase in temperature, melting glaciers, increased water scarcity, sea level rise, submergence of small islands, increased extreme weather events, destruction of infrastructure, outbreak and spread of diseases, changes and uncertainty of rainfall patterns, ecosystem shift and species extinctions. In Tanzania, these effects have also been felt where by temperature has increased by 1°C since 1960, the glacier at Mount Kilimanjaro has decreased by 80% since 1920, submerge of Fungu la Nyani and Maziwe islands at Pangani and Rufiji respectively, and rainfall has decrease by 2.8mm per month and 3.3% per decade³.

In response to such climate challenges, the government of Tanzania has conducted a number of initiatives including plans, strategies, programs and engagements at regional and global levels. The preparation of National Adaptation Programs of Action (NAPA) 2007, National Climate Change Strategy 2012, National REDD+ Strategy 2013, National Climate Change Communication Strategy 2012-2017, various adaptation and mitigation programs and the current preparations for National Adaptation Plans (NAPs) are some of the initiatives undertaken. Furthermore, Tanzania is a signatory of United Nations Framework Convention on Climate Change (UNFCCC) and Kyoto Protocol, and has also been participating in regional climate change processes including African Ministerial Conference on the Environment (AMCEN) and East African Community (EAC).

Despite all the above initiatives, funds to finance the above plans and strategies remain a challenge. The initiatives require a lot of financial resources that are not within Tanzania's deposits. This is the case for most developing countries as well.

2 IPCC. (2014). Fifth Assessment Synthetic Report

3 URT. (2012). National Climate Change Strategy

Appreciating this fact, Parties to UNFCCC agreed (during UNFCCC COP15 in Copenhagen) that there is an estimated total of \$100 billion per year by 2020 needed for climate change mitigation and adaptation initiatives. According to the UNFCCC report⁴, this estimate is not even adequate for adaptation itself for developing countries in which the costs are estimated to go up to US \$ 171 billion. For Tanzania alone, adaptation costs and building resilience for future climate risks are estimated to be more than US \$ 500 million⁵.

There are also other spaces for developing countries to access funds from existing opportunities under different mechanisms such as the Global Environment Facility (GEF); GCF; Special Climate Change Fund (SCCF); Adaptation Fund (AF) under the Kyoto Protocol⁶; and Least Developed Countries Fund (LDCF). Other windows are Regional and Global development banks such as African Development Bank (AfDB) and World Bank (WB) respectively. Also, by the use of bilateral agreements and through development cooperation agencies such as Danish Development Agency (DANIDA), Global Climate Change Alliance (GCCA), Deutsche Gesellschaft fuer Internationale Zusammenarbeit (GIZ) GmbH, Japan International Cooperation Agency (JICA), Norwegian Agency for Development Cooperation (NORAD), Swedish International Development Cooperation Agency (SIDA), Department for International Development (DFID) and United States Agency for International Development (USAID)⁷. Unfortunately, most multilateral climate mechanisms have limited funds. This is attributed to the fact that, most developed countries have not yet fulfilled their climate finance commitments. For those few Global Funds with available finances; capacity to access, priority setting, stakeholders' involvement and transparency issues have remained to be a challenge for most developing countries including Tanzania.

Currently, Tanzania has managed to access climate funds from different sources for climate change mitigation and adaptation programs. Some of these programs

4 UNFCCC (2007), Investment and Financial Flows to Address Climate Change

5 URT. (2012). National Climate Change Strategy

6 ibid

7 http://unfccc.int/cooperation_and_support/financial_mechanism/bilateral_and_multilateral_funding/items/2822.php

include from AF (US \$5.08m), (US \$ 7.5m)⁸, SCCF (\$ 1m), GEF (US \$ 15.20) and GCCA (US \$ 25.20). Other funds come as sector specific projects from bilateral donors and international organizations such as UK International Climate Fund (US \$ 4.6m)⁹, Germany's International Climate Initiative (US \$ 3.2m), Norway's International Climate and Forestry Initiative, UNREDD (US \$ 4.3m). Some of these are channeled through the General Budget Support (GBS) while others, especially from multilaterals and bilateral direct projects, do not go through GBS and are not well known or documented as climate change funds.

This makes it difficult to understand the bigger picture of how much goes towards addressing climate change in Tanzania. Thus, it becomes imperative to develop both global and national climate finance frameworks, with much policy attention focusing on defining the parameters of climate finance, adequacy and its effectiveness at all levels. As yet, governments do not have good ways of measuring public and private climate finance flows, or of promoting transparency and effective practice in the delivery of financial support for climate change-related actions.

The study conducted by Overseas Development Institute (ODI) and Centre for Climate Change Studies (CCCS)¹⁰ in Tanzania indicated that there is a considerable amount of spending taking place in sector ministries without the full realization of the significance of such spending in terms of its relation to climate change. The study further explained that this is because the Chart of Accounts does not contain a marker or code for climate change relevant expenditure that would allow for a straight-forward reference to climate change actions and expenditures. Thus, it is difficult to measure the country's efforts in terms of domestic/external finance to address the impacts of climate change. This undermines transparency and the prioritization of climate change actions in the GBS, local government budgets and adaptation/mitigation efforts in general.

The same effect trickles down to Local Governments Authorities (LGAs) especially rural LGAs whose funding constitutes more than 95% from the central government. Furthermore, local planning is guided by central government priorities, which

8 Total 7.3m (2003 - 0.20; 2010 - 3.10m; 2013 - 4.0m)

9 <http://www.climatefundsupdate.org/data>

10 Tanzania National Climate Change Finance Analysis; CCCS and ODI (2013)

emphasize spending on social services, thus minimal funding for climate change-relevant activities, with little scope for reflecting local priorities (Yanda, et al., 2013). Unfortunately, communities which would have demanded increased resources for coping with climate change effects are not aware of the budgetary planning process because of this lack of transparency. Local problems are aggravated by limited awareness and knowledge regarding the effects of climate change, especially for women, youth and local government officials. This limitation has hampered their abilities to respond to, and cope with climate change challenges, as well as to hold the duty bearers accountable. As a result, it increases their vulnerability to the effects and risks of climate change.

As part of the initiatives to understand and track climate financing in Tanzania, ForumCC commissioned this study in two sector ministries: the agriculture and livestock sectors. At the local level, two districts, Kongwa and Kilosa, were covered as case studies. This study will furthermore be rolled out to other sectors and districts. The findings and recommendations will be used as inputs and tools to enhance greater accountability and transparency in climate finance governance at the national Level.

1.2 Objectives of the Study

The main objective of this study is to evaluate climate finance expenditure in agriculture and livestock sectors, adequacy and level of transparency in delivery of the finances in Tanzania for the period 2009-2014.

The findings and recommendations contribute towards a call for transparency and accountability on climate change finance in order for Tanzania to realize climate change resilience in agriculture and livestock sectors. Further, they contribute to a call for increased funding to address climate change in developing countries at the Global level while calling for climate change mainstreaming at the national level. In addition, the methodology used in this study can serve as a tool to enable the Government of Tanzania to improve the prioritization, efficiency and effectiveness of its climate change resources.

CHAPTER TWO

2

2.0 STUDY METHODOLOGY

2.1 Introduction

The study adds value to previous studies that were more general and exploratory. It narrows down the analysis to specific sector ministries and looks into details regarding the specific climate change interventions to which climate change finance is allocated, and establishes the gaps between budgets and the actual expenditures. It also defines more methodological approach to climate change finance tracking at national and district levels.

The study recognizes that there are climate change related interventions (budgets and spending) by other Government Ministries, Departments and Agencies (MDAs) that affect and contribute to Agriculture and Livestock sectors' resilience. However, for the purposes of this study, only budgets and expenditures under agriculture and livestock sector ministries were considered through Mid-Term Expenditure Framework (MTEF). These two ministries were narrowed down due to their mandate and also informed by the Joint Assistance strategy for Tanzania that recommends how budgetary support is delivered. Furthermore, the focus allowed the analysis to concentrate on financing gaps within the scope of one specific sector ministry, which would lead to the improved articulation of sectorial priorities, planning and budgeting, and transparency and accountability during budget execution.

It is also imperative to recognize that budget expenditures on climate change can be met from a variety of sources. These may include: public funds either through GBS or local direct projects, private sector finance, and external funding that operates on three levels: global funding mechanisms, local bilateral funding, and regional programmes. This study focused on public (GBS) and bilateral project funds allocated to finance climate change actions at sector level through the national budget and direct project supports.

The Government budget is presented in four volumes: Volume I – Revenue book; Volume II – Other Charges and Wages; Volume III – Regional and Districts budget;

and Volume IV – Development Expenditure book. However, for the purpose of this study only development expenditure books (Volume IV) for the past five (2009/10 - 2013/14) financial years were used to ascertain climate change finance in the GBS. In addition, the literature review shows that all climate related funds for adaptation and mitigation interventions are presented in Volume IV.

This indicates that the Government considers expenditure on climate change adaptation and mitigation as development expenditure. Since “climate variability and change” (CV&C) criteria do not qualify, recurrent expenditures identified in, Volume II of the budget were therefore not analyzed as Volume II contains only other charges and wages.

The bilateral project climate finance analysis was based on Development Partners Group on Environment (DPG-E) database which was updated in April 2015. However, their database also lacked systematic and specific timeframe for that particular expenditure budget. The database didn't show clearly where some of the funds were channeled, whether to the GBS or to direct project funding. To avoid the risk of double counting (since it was hard to track foreign GBS and bilateral project funds separately), in-depth financing gap analysis for bilateral direct project funds was not done. Instead, the study team only identified activities i.e. budget expenditures that qualified as climate finance to establish the amount of funds that addresses climate change vulnerability. Thus, international climate funds/bilateral donor direct project budget and expenditure analysis is less complete. Generally, the results of this study provide only a trend analysis of budget expenditures rather than accurate figures and gaps for climate finance for the two sectors.

For district analysis, several documents were used to establish budget estimates, approved budgets, disbursed funds and actual expenditures; these included MTEF, DADPs, District Implementation reports for development programmes/projects, LAAC reports and CAG reports for the five year period 2009/10 to 2013/14 (though not all the books were consistent for all years; some years were missing). This was because comprehensive council budget data covering budgeted expenditure and actual expenditures for the five year period 2009/10 to 2013/14 was not available in one single volume or dataset and had to be constructed. Thus, the team had to manually connect pieces of information together to establish expenditure trends over the study period. In the same way, budgets and expenditure lines of both agriculture

and livestock sector ministries' budgets were not consistent in most cases and hence it was difficult to reconcile budget and expenditures and to directly do year to year comparison. Therefore, the study team could not establish realistic climate finance gaps in the Agriculture and Livestock sectors.

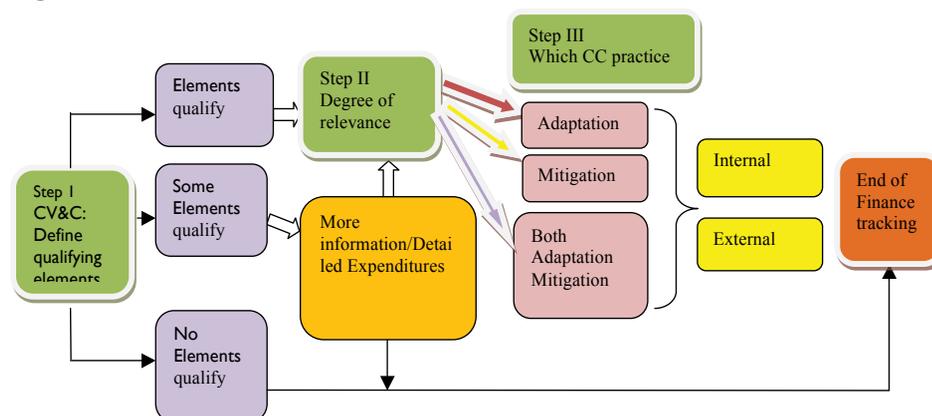
2.2 How climate expenditure were tracked in this study

The approach used was to identify climate change expenditures through three stages by determining: (i) if the elements qualify or some elements qualify or no elements qualify by using CV&C criteria; (ii) if qualified elements have elements that qualify for high, medium or low relevance to climate change; and (iii) categorizing if the climate change intervention was adaptation, mitigation or both. This tailored methodology was a result of experiences with climate change finance analysis undertaken by various institutions including AfDB (2013), ODI/CCCS (2014) and OECD -DAC Climate Markers (2002, 2010).

The methodology was by no means exhaustive; to determine whether the expenditures qualified or not depended solely on the judgment of research team, guided by CV&C criteria.

Figure 1 below shows a summary of approach tailored from AfDB (2013), ODI/CCCS (2013) and OECD -DAC Climate Markers (2002, 2010) studies/guidelines. As can be seen, where issues of qualification was uncertain, further assessment was undertaken in order to determine the exact nature of the expenditure item.

Figure 1: How climate finance was tracked



The climate finance tracking process is illustrated in the flowchart above. Three steps were applied; this depended on the number of qualifying project elements in the analyzed budgets. Detailed descriptions of the process is explained below.

2.2.1 Define qualifying project elements

The climate finance tracking process took a top-down approach beginning at the project level. If the entirety of a component qualified for climate change relevance there was no need for further assessment at the sub-component or activity level. But, if the entire project did not qualify, then the components were further examined, followed by sub-components and activities (detailed expenditure). There were cases where the team went to the indicators level to find the relevance of the intervention when objectives and activities weren't clear enough. Only qualifying expenditure lines were recorded at their respective levels, whether they were considered a sub-component or an activity. If none of the project elements qualified, then the finance tracking was completed.

Qualifying expenditure lines were then weighted in-terms of their relevance to climate change (whether *high, medium or low*). Those activities with "some qualifying elements" were further crosschecked at their respective detailed expenditure lines. Then the sorting was done to separate qualifying elements from non-qualifying elements. The former were taken to step II while the later were dropped.

The process for defining qualifying elements was different for climate change mitigation and climate change adaptation. Rio Markers and CV&C were used to qualify elements (see Rio Markers and CV&C criterion used *Table 1* below) and Criteria for climate change relevance in *Table 2 and 3*.

Table 1: Criteria for Climate Change Markers

Mitigation Marker	Adaptation Marker	Mitigation	Adaptation ²
<p>The activity contributes to mitigation of climate change by limiting anthropogenic emissions of GHGs, including gases regulated by the Montreal Protocol; or -protection and/or enhancement of GHG sinks and reservoirs; or -integration of climate change concerns with the recipient countries' development objectives through institution building, capacity development, strengthening the regulatory and policy framework, or research; or -developing countries' efforts to meet their obligations under the Convention.</p>	<p>The activity contributes to -climate change adaptation objective is explicitly indicated in the activity documentation; and -activity contains specific measures targeting the definition.</p>	<p>A project element is considered to be mitigation if it involves efforts to reduce or limit greenhouse gas (GHG) emissions or enhance GHG sequestration.</p>	<p>It must:</p> <ul style="list-style-type: none"> -Include a statement of purpose or intent to demonstrate that the qualifying element(s) reduces current and future vulnerabilities to climate; -Set out the context of climate vulnerability specific to the location of the qualifying project element based on current available data (climate data, exposure and sensitivity), considering both the possible impacts from climate change-related risks as well as climate variability-related risks; -Link the qualifying project elements to the context of climate vulnerability (e.g., socio-economic conditions and geographical location). Good development practice on its own does not qualify for climate finance because it represents business-as-usual; therefore it may be necessary to explain why the project elements go beyond good development practice.

11 It was not possible to set out simple criteria for components, sub-components, and activities that qualify for mitigation finance. To determine whether or not a project element leads to a net reduction in GHG emissions it required some relatively sophisticated analysis (including boundary setting, application of emission factors and examination of project externalities that may lead to an increase in emissions elsewhere). This analysis was beyond the scope of this study.

12 The approach is conservative. It is designed to prevent the mislabeling of development activities as adaptation. Components, sub-components, and activities that did not explicitly meet more than one criterion were not included in climate finance reporting.

Table 2: Criteria for Climate Change Degree of Relevance

High relevance	<p>Activities where the clear, primary objective is to deliver specific outcomes that improve climate resilience or contribute to mitigation</p> <ul style="list-style-type: none"> • The additional costs of changing the design of a programme to improve climate resilience (e.g. extra costs of climate proofing infrastructure, beyond routine maintenance or rehabilitation) • Building institutional capacity to plan and manage climate change, including early warning and monitoring • Raising awareness about climate change • Specific mitigation investments (e.g. in renewable energy, improving energy efficiency, Reducing Emissions from Deforestation and forest Degradation, the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries (REDD and actions), Disaster risk reduction and disaster management capacity • Healthcare associated with climate sensitive diseases • Activities that met the criteria of international climate change funds (e.g. the GEF, the PPCR)
Mid relevance	<p>Activities that either (i) have secondary objectives related to building climate resilience or contributing to mitigation, or (ii) are mixed programmes with a range of activities that are not easily separated but include at least some that promote climate resilience or mitigation</p>
Low relevance	<p>Activities that display attributes where indirect adaptation and mitigation where benefits may arise</p>

Table 3: Criteria for Climate Change as per the Weighting scale – 0 to 100%

Scale	Activity Relevance	Rationale
1	Strongly relevant (Climate Dimension Weighting 75%+)	Concrete, direct and highly (potentially) visible outcome / effect due to investment - activity which is fundamental in the design of the activity, with an explicit objective of mitigation / adaptation Activities <ul style="list-style-type: none"> • forestation, conservation, eradication of pests and diseases, soil ecosystems, grain quality improvement • new/redesigned dykes, polders, cyclone shelters, warning and forecasting, , roads/homestead raising • estuary development
2	Significantly relevant (Climate Dimension Weighting 50% to 74%)	Remarkable and somewhat concrete and (potentially) visible outcome / effect - objectives important but not one of the principal reasons for undertaking the activity. <ul style="list-style-type: none"> • irrigation facilities/efficiency, removing water logging, crop diversification, biotechnology, innovation of new varieties, • new efforts for removing water logging • Social Protection • Health Initiatives
3	Somewhat relevant (Climate Dimension Weighting 25% to 49%)	Indirect with some potential effect: <ul style="list-style-type: none"> • rehabilitation of embankments, polders, water logging • land use change, ruminant agriculture, storage creation, AIGs, poverty reduction, , livelihood enhancement, R& H construction in ‘critical’ regions/hotspots • O & M, emergency measures, capacity/ resilience building) • human capital development, training research, extension service, measures to respond to changing climate, awareness building
4	Implicitly relevant (Climate Dimension weighting up to 24%)	Implicit effect <ul style="list-style-type: none"> • local/feeder roads, culverts construction, international trade promotion • river training, bank protection

2.2.2 Non-qualifying activities

The study team discovered a number of activities that would serve adaptation or mitigation purposes but did not qualify because they did not meet the above criteria. Most of these lacked intent to respond to CV&C and were simply good development practices. The rationale and examples are provided below:

For example; during FY2009/2010, the government through MAFSC under Research Development strategy budgeted TZS 4.3 billion to improve infrastructure and human resource capabilities for the generation of technologies that would enhance the rice center - this description was disqualified based on criteria provided under *table one (1)* above. *Table 4* below shows some of the projects that were disqualified through the MAFSC for FY2009/2010.

Table 4: Examples of Non-qualifying Activities

Crop Development	1,358,026,420
Capacity of ASLM to provide technical back-stopping to LGAs increased by 2010	1,358,026,420
Policy and Planning	1,318,827,000
Agricultural Sector coordination mechanism strengthened by 2012	1,318,827,000
Research Development	6,424,000,000
Coffee seed and stock multiplication farms enhanced by 2012	703,000,000
Develop and recommend 10 integrated soil fertility management option and produce thematic maps on soils, agro-ecological zones and farming systems by 2012	1,397,000,000
Rice centre of excellency has improve infrastructure and human resource capable for generation of technologies with spill over to Kenya and Ethiopia by June 2012	4,324,000,000

2.3 Limitation of the Study

Since climate change expenditure tracking is a relatively new phenomenon all the budgets that were examined lacked systematization and hence it was very hard to link budgets and expenditures to establish gaps. This is also true for bilateral financing; in as much that the harmonization is being done by Development Partners through JUST, their database lacked systematization. The database did not show clearly where some of funds were channeled to. This brings the risk of double counting between foreign funds to GBS and direct bilateral project support. In this context, the analysis for direct bilateral project funding was not done comprehensively as required by the Terms of References (ToRs).

The ToRs also required reconciliation between budget and expenditure but in most cases actual expenditures were missing, and hence may have not establish realistic climate finance gaps in the agriculture and livestock sectors. Therefore, the results of this study provide only a trend analysis rather than accurate figures as expected. Delays of and lack of data and other relevant information to this study also affected the quality of this piece of work.

CHAPTER THREE

3

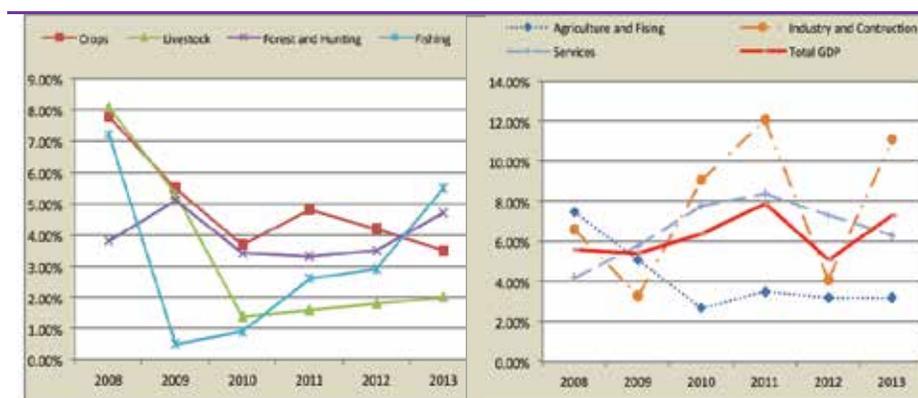
3.0 STUDY CONTEXT

This section provides an overview of Tanzania's general economic performance in all sectors in the financial years 2009/10 through 2014/15. It also provides sector specific performance information for agriculture and livestock in relation to climate change financing. It further provides an analysis of the budgetary allocations and the expenditure of funds from the Government Budget Support (GBS) and bilateral agreements that are relevant to climate change programs, projects and activities in Tanzania for the said years at the national level.

3.1 Economic Growth

Tanzania has experienced an average Gross Domestic Product (GDP) growth of about 6.28% for the past 5 years (2009/10-2013/14). This represents one of the successful countries within the east and central Africa region. For instance, in the year 2013, the GDP grew by 7.3 percent compared to a growth of 5.1 percent registered in 2012. Such an increase in growth was mainly attributed to lively growth in construction, communication and electricity subsectors during the year 2013. Moreover, favorable weather conditions, sustainable power outage and low fuel prices all contained inflation rates and resulted in good performance in these sectors and other economic activities that rely on rainfall and electricity. The construction and communication sectors posted higher growth rates of 18.9 percent and 13.3 percent respectively. The agriculture and fishing sectors, which are referred to as the backbones of the economy, showed a constant rate of 3.2 percent in growth during 2012 and 2013. The largest portion of the growth was in the fishing subsector, which has shown a GDP growth of 5.5 percent higher as compared to 2.6 percent recorded in year 2012. The graphs below show the trends in GDP from year 2008 to 2013.

Figure 2: Agriculture and Fishing GDP Growth Rates 2008-2013 (%) & National GDP Growth Rates 2008-2013 (%)



Source: NBS, 2014

3.2 Sector contribution to GDP

The Tanzania economy is heavily reliant on services, agriculture and fishing industries, and construction sectors. The services sector is the largest contributor to total GDP, accounting for 41.5 percent of the total GDP during the year 2013. The major contributors to the services sectors are trade, hotels and restaurants, trade and repairs, real estate and business services that account for 11.9 percent, 10.6 percent and 7.6 percent of the total GDP respectively. The agriculture and fishing sector, which is the second largest contributor to total GDP, has remained steady at 31.1 and 31.7 percent during the years 2012 and 2013 respectively. Crops and livestock are the largest contributors to the agriculture and fishing sector with an average contribution of 17.8 and 8.4 percent to total GDP respectively.

The contributions of industry and construction sectors have remained steady over the last 5 years, with an increase of 0.1 percent in 2013 from 21.6 percent during the year 2012. The construction subsector is the largest contributor to the industry and construction sector, which contributed to 9.3 percent to total GDP in the year 2013, followed by manufacturing and mining, and mining and quarrying, which contributed 6.9 percent and 4.3 percent to total GDP respectively. From these findings, it is obviously that there is a new light to the Tanzania economy, with the current average per capita income of US\$ 948. This has made Tanzania closer to

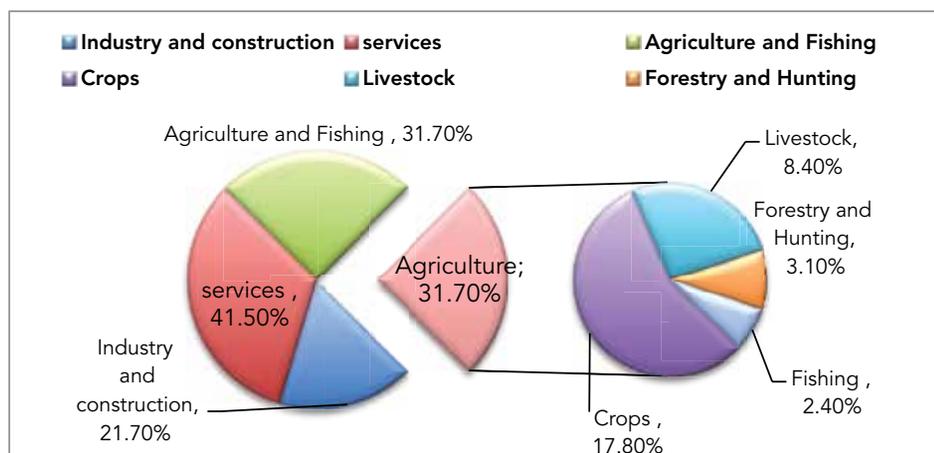
middle income countries that are defined by the threshold of per capita income of US\$ 1,045. Enumerated hereunder, are the economic contributions of key sectors of the Tanzanian economy. (NBS, 2014)

Table 5: GDP Contribution by Sector at Current Market Price

Economic Activity	2009	2010	2011	2012	2013
Agriculture and Fishing	30.2%	30.1%	29.6%	31.1%	31.7%
Crops	16.0%	16.7%	16.6%	18.0%	17.8%
Livestock	9.7%	9.1%	8.7%	8.5%	8.4%
Forestry and Hunting	2.3%	2.2%	2.2%	2.5%	3.1%
Fishing	2.2%	2.1%	2.1%	2.2%	2.4%
Industry and construction	18.6%	19.8%	22.1%	21.6%	21.7%
Mining and quarrying	2.8%	4.1%	5.1%	4.9%	4.3%
Manufacturing	6.9%	6.9%	7.7%	7.2%	6.9%
Electricity and water	1.6%	1.5%	1.0%	1.3%	1.2%
Electricity	0.9%	0.9%	0.6%	0.9%	0.8%
Water	0.7%	0.6%	0.5%	0.4%	0.5%
Construction	7.3%	7.2%	8.3%	8.2%	9.3%
Services	45.6%	44.5%	43.1%	41.9%	41.5%
Trade, hotels and restaurants	11.8%	11.9%	12.1%	11.9%	11.9%
Trade and repairs	10.0%	10.2%	10.7%	10.5%	10.6%
Hotels and restaurants	1.8%	1.7%	1.4%	1.4%	1.3%
Transport and communication	8.5%	8.4%	7.6%	6.9%	6.3%
Transport	6.1%	5.8%	5.2%	4.5%	4.0%
Communications	2.4%	2.6%	2.4%	2.4%	2.3%
Financial intermediation	3.1%	3.2%	3.4%	3.4%	3.2%
Real estate and business services	9.0%	8.6%	8.0%	7.9%	7.6%
Public administration	6.7%	6.1%	6.4%	6.6%	7.1%
Education	3.2%	3.2%	2.8%	2.6%	2.7%
Health	1.8%	1.7%	1.6%	1.5%	1.5%
Other social and personal services	1.5%	1.4%	1.3%	1.3%	1.2%
FISIM	-0.9%	-0.9%	-1.1%	-1.0%	-1.2%
Net taxes	6.6%	6.5%	6.2%	6.3%	6.4%

Source: NBS, 2014

Figure 3: Shares of Economic Activities in GDP 2013
(Current Market Share based on Revised GDP Numbers)



Source: NBS, 2014

3.3 Overall Government Budget

Over the years, deficit between government approved budget and the actual expenditure has remained high. This is mainly attributed to low domestic revenue collection and donors' delay in disbursements that stretch the government interest arrears and delay development projects. For the FY 2013/2014, the government managed to finance only 84% of the total budget. Out of the approved 84%, the proportion of the disbursed amount that went towards development expenditure was only 65% while the recurrent expenditure was 93%. While these cuts were necessary to balance the fiscal deficit, they have a negative indication for the economy since they failed to create new investment for the economy to accelerate growth. It should be noted, however, that the reduction in government expenditure may have a negative impact in addressing the climate change challenges since most climate measures are rely upon the development budget.

For instance, in the year 2014/2015 government expenditure increased by 9%, from TZS 18.25 trillion in 2013/2014 to TZS 19.85 trillion, Out of the estimated budget for 2014/2015, only 32.5% was allocated for development expenditure. Taking into consideration the development budget, more than 30% is sourced externally,

and the remaining 70%, which is almost TZS 4.43 trillion, is sourced locally. The *Table 6* below illustrates the development budget trends with the fraction source for FY2011/2012 through FY2014/2015.

Table 6: Source of Development Budget - Trends for FY2011/2012 - 2014/2015

Development Budget		
	Foreign	Local
2011/2012	62.0%	38.0%
2012/2013	50.2%	49.8%
2013/2014	47.8%	52.2%
2014/2015	31.1%	68.9%

3.4 Comparing National Budget and Expenditure

For example, during the FY2013/2014, the government managed to allocate only 83% of the total budget. The proportion of allocated funds differs between the recurrent and development expenditure, with recurrent taking the lead with almost 93% being allocated. The development allocation was only 63% of the total estimates. Donor dependence could be a major reason for this since the experience showed that all financial responsibilities that were earmarked for financing through local funds were funded with greater proportion when compared to the counterpart donor budgeted.

The said factor is triggered by the 50:50 rules¹³ that forced the government to be indifferent with regards to project selection and thus results in incomplete or failed projects due to underfunding. *Table 7* below, explains the government approved budget vis-à-vis the allocated fund and actual expenditure during the FY2013/2014 in Tanzania shillings.

¹³ For all development projects that is to be financed through both the donor and government fund, the structure should be 50:50 prorate.

Table 7: Approved budget vis-à-vis the Allocated Fund and Actual for FY2013/2014 (TZS)

	Sum of Approved Estimates	Sum of Allocated	Sum of Expenditure
Development	5,698,583,822,708	3,563,809,768,239	3,548,927,561,197
Recurrent	12,661,478,360,321	11,752,728,289,220	11,741,039,826,112
GRAND TOTAL	18,360,062,183,029	15,316,538,057,458	15,289,967,387,308

The previous analysis observed that there is a big mismatch between the approved estimates, allocated amounts, and the actual expenditure for the government budget. As a matter of record, it was too difficult to compare the whole dataset on budgeted amount vis-à-vis the actual approval and disbursement due to the different coding format as per project consent. The section below will focus on national level comparison of budget and expenditure during the FY2013/2014 for agriculture and livestock sector ministries.

It should be noted however, that the dataset for FY2013/2014 does not indicate the target description, and as such the analysis relied on sub vote description as proxy for gaging the climate change relevance for the project. The emphasis will be on the agriculture and livestock subsector, particular on development projects that have components of climate change relevance.

During the FY2013/2014 the government approved TZS 92.5 billion for development projects for the ministry of agriculture, food security and cooperative, and TZS 29.1 billion for the ministry of livestock development and fisheries. The data revealed that more donor funds were allocated to agriculture projects than to the livestock sector from the approved budget. For example, during the FY2013/2014, donors approved 57% of the total development budget for agriculture while only 9% was approved for the livestock sector ministry.

Out of the estimates, the government allocated 74% and 55% of the total developments estimates for agriculture and livestock sector ministries respectively. Remarkably, further livestock projects have low estimates but also the fraction of allocated fund is lower compared to the agriculture sector. Observation shows that projects that are to be financed through the local fund are less likely to be funded when compared with donor funded projects. For example, during the FY2012/2013, out of the total approved development budget, donors have managed to allocate 88% of the total estimate while the government, through the local fund, has managed to allocate only 55% of its estimates.

The different between the allocated funds and actual expenditure is insignificant for agriculture sector while there is a considerable difference for the livestock sector. For instance, during the FY2012/2013 the different was only 3% for agriculture projects and 27% for livestock projects which might have been caused by delays in fund disbursement. For instance, the table below shows the government approved development budget vis-à-vis the allocated fund and actual expenditure for ministry of agriculture, food security and cooperative and ministry of livestock development and fisheries during the FY2013/2014 in Tanzania shillings.

Table 8: Development Budget for Ministry of Agriculture and Livestock for FY2013/2014

DEVELOPMENT PROJECTS	Sum of Approved Estimates	Sum of Allocated	Sum of Expenditure
MAFSC	92,458,684,240	68,446,159,512	66,306,176,385
MLDF	29,099,603,000	16,062,324,145	11,701,379,486
Grand Total	121,558,287,240	84,508,483,657	78,007,555,871

CHAPTER FOUR



4.0 CLIMATE FINANCING IN AGRICULTURE AND LIVESTOCK SECTORS AT NATIONAL LEVEL

This section presents, in brief, literature regarding national budget expenditure relevant to climate change and discusses in detail the time series data for the past 5 years (2009/10-2013/14) for the agriculture and livestock sectors. The three categories of climate change relevancy (mitigation, adaptation and both mitigation and adaptation) are further examined with regards to their extent of climate change relevance. The analysis further looked into the details of the budget expenditure, specifically in the development budget for the agriculture and livestock sectors, which are the focus of this study. The analysis of climate related budget expenditures and expenditures for the agriculture and livestock sectors followed a methodological approach as described under Chapter 2 of this report. The chapter presentation is preceded by a highlight of the key issues observed and/or considered during the analysis.

The Ministry of Agriculture and Food Security (MAFC) and Ministry of Livestock Development (MLD) have considerable overlaps of budget expenditures with other MDAs such as the Ministry of Water and Irrigation, Ministry of Land and Housing and Human Settlements; Ministry of Natural Resources and Tourism, Ministry of Energy and Minerals; and Prime Minister's Office-Regional Administrative and Local Governments (PMO-RALG). However, the analysis was narrowed down to consider only climate finance that went to the specific sector - agriculture and livestock. This allowed the analysis to focus on the financing gap within the scope of one specific sector which would lead to the improvement and articulation of sector priorities, planning and budgeting, transparency and accountability in budget execution.

As indicated in the preceding chapters, budget and expenditure systems across existing fund mechanisms (GBS, bilateral projects and Multilateral Funds) are not fully consistent. This means that expenditure plans published in the annual budget and/or donor reports may not always result in the stated level of funding available to the sector ministries. Likewise, disbursements to the sectors/councils for climate

change-relevant activities do not always mean that the available funds were actually spent. In this situation it may imply a significant variation between approved budgets, disbursed budgets, and actual expenditures. Therefore, the analysis was tailored to make the best use of available data.

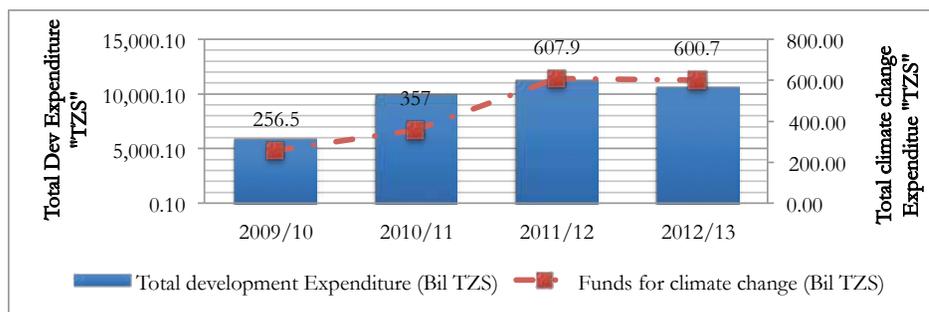
4.1 Overview National Climate Change Expenditure through GBS

The 2014 Climate Budget Screening Study done by the MAFC generally indicated that there has been a marginal increase in the share of the climate change development budget in the overall development budget from the financial year 2009/10 through 2011/12. On average therefore, the growth of the climate change budget has been higher than the overall growth of the development budget. Notwithstanding, Tanzania is generally spending a marginal share of its development budget on climate change. Apparently, such a share of expenditure should be relative to the financial resources needed to address vulnerability to climate change.

Table 9: Growth of Budgetary Allocations for Development vis-à-vis Allocations for Climate Change

Description	Budgetary Allocations			
	2009/10	2010/11	2011/12	2012/13
Total Development Budget (TZS)	2,825,431,000,000.00	3,819,051,000,000.00	4,925,609,000,000.00	4,528,000,000,000.00
Total Actual Development Expenditure (TZS)	2,611,306,156,960.74	2,749,037,184,424.57	3,775,000,000,000.00	
Total Actual Development Expenditure as a percentage of Total Development Budget	92%	72%	77%	
Climate change budget	256,500,000,000.00	357,000,000,000.00	607,900,000,000.00	600,700,000,000.00
Actual development expenditure on climate change (TZS) ¹	237,061,173,675.80	256,976,460,644.28	465,907,833,585.40	
Climate change budget as a % of Development Budget	9.1%	9.3%	12.3%	13.3%
Growth in dev. Budget (%)		35.2%	29.0%	-8.1%
Growth in climate change budget		39.2	70.3	-1.2

Source: MAFC 2014

Figure 4: Development Budget vis-à-vis Climate Change Funds

Source: MAFC, 2014

It was further found that during the same fiscal years (2009/10 through 2011/12), funds allocated to finance interventions related to climate change mitigation and adaptation were considerably low as a percentage of both the total and the development government budgets. As indicated in *Table 10* below, for the 3 years, funds allocated to climate change as a percentage of total and development government budget averaged 0.091% and 0.265%, respectively (Godlove, 2012).

Table 10: Funds for Climate Change Intervention; total and Development Government Budgets (TZS millions)

	2009/2010	2010/2011	2011/2012
Total budget	9,532,685	11,609,557	13,524,895
Development expenditure	2,825,431	3,819,051	4,924,608
Budget for CC Mitigation and adaptation	2,012	14,397	17,127
Budget for CC as % of total budget	0.02%	0.12%	0.13%
Budget for CC as % of development budget	0.07%	0.38%	0.35%

Source: Godlove S. 2014¹⁴

4.2 Agriculture Sector Budget and Expenditure

Agriculture is the backbone of the Tanzanian economy, employing more than 70 percent of the country's total workforce in the production of both food and

¹⁴ (Godlove, S. 2012): Tracking Climate Finance in Tanzania

industrial raw materials, and contributes about 25% of GDP, 24% of exports, and provides 75% – 80% of livelihoods in the country. The sector presents a backward linkage to farmers and forward linkage to agro-processors, consumers and exporters. However, the Tanzania's agricultural production is largely rain fed and is dominated by ill equipped small and medium sized farmers. Only small-scale irrigation schemes are operated in some pockets of the country, notably in the Kilimanjaro, Morogoro, Mbeya and Iringa regions. Projects with proper arrangements for large scale irrigation are almost non-existing (TIB, 2013) . The sector is however very much affected by inadequacy, variability, and unreliability of rainfall as well as periodic droughts (SWMRG, 2005). The sector is further compounded by the associated impacts of climate variability and change which are expected to continue exerting pressure on Tanzanian farmers and the ecosystems as a whole (Kulkarni, 2011). In the face of climate change, water scarcity and other natural resource constraints; it will make it even harder to intensify agricultural production.

Given the nature of challenges that the sector is facing, especially by the anticipated impacts of climate change, various stakeholders including policy and decision makers, individuals, private sector, and Civil Society Organisations (CSOs) need to consider climate financing as a key to assisting climate sensitive sectors such as agriculture in off-setting such associated challenges. Governments, for example, have a role to mobilize financial resources from different sources including multi-lateral, bi-lateral, and increasing shares of funds in the General Budget Support (GBS) for the implementation of climate change relevant activities across levels and scales. As of FY2013/14, the total share of the national budget for the agriculture sector is only 2%, which implies that very little can be implemented by the sector to the desirable levels of expectation including addressing climate change related activities in the country. *Table 11*, below shows that proportions of budgets per the ministries for the FY2013/14.

Further budget estimates show a big difference between the approved estimates and the actual expenditure, for example, during the FY2013/2014 the ministry of agriculture was the third ministry in order of priorities as per the ration of approved estimates and the actual expenditure. This has a serious implication with regards to the execution of various programs and activities as well as with addressing

emerging issues that are likely to affect the sector including climate change challenges. *Figure 5 and Table 11* below shows Government Budget Trends & Share of Agriculture to total Budget (2009/2010 – 2014/2015) and the ministries development budget estimates vis-à-vis actual expenditure during FY2013/2014.

Figure 5: Government Budget Trends & Share of Agriculture to total Budget (2009/10 – 2014/15)

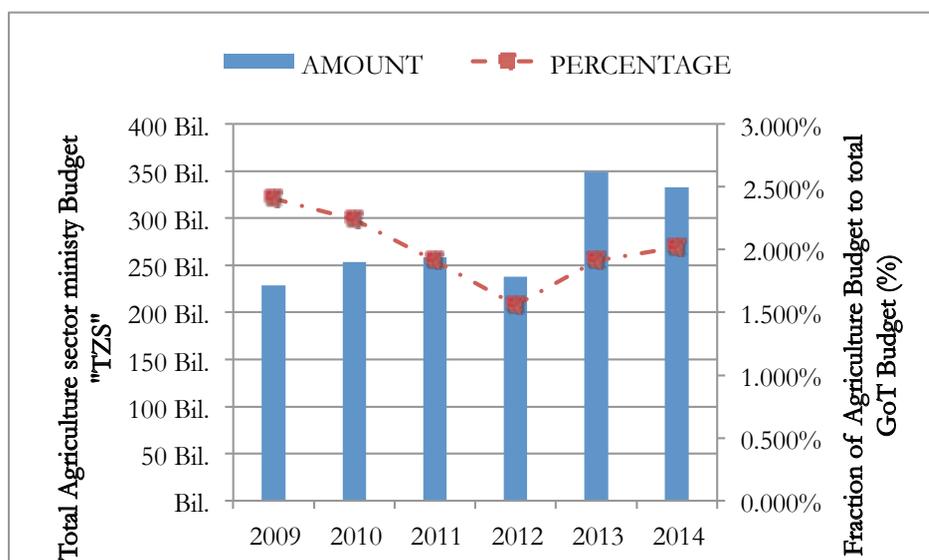


Table 11: Government of Tanzania Development Budget for Sector Ministries during FY2013/2014 (TZS)

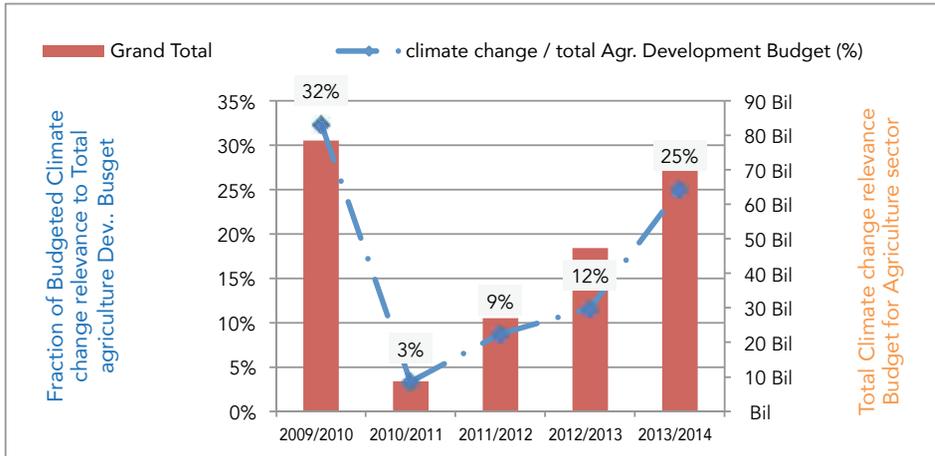
Ministry	GoT Ministries Development Expenditure		
	Approved Estimates	Expenditure	Ration "Expenditure / Approved estimates"
Ministry of Energy and Minerals	1,176,412,745,000	831,891,052,031	71%
Ministry of Works	853,725,979,000	592,901,246,669	69%
Ministry of Water	553,243,220,000	235,016,194,312	42%
Ministry of Health and Social Welfare	471,282,941,000	379,172,795,696	80%
Ministry of Transport	409,220,820,000	211,753,282,855	52%
Ministry of Finance	233,669,169,000	222,081,028,931	95%

Ministry of Defence & National Service	229,582,027,000	107,216,816,577	47%
Ministry Of Education	119,498,051,000	48,380,963,870	40%
Ministry of Agriculture Food Security and Cooperatives	92,458,684,240	66,306,176,385	72%
Ministry of Industry and Trade	78,836,643,000	44,530,874,947	56%
Ministry of Lands and Human Settlement	70,072,349,000	17,224,381,577	25%
Ministry of Communication Science and Technology	33,847,235,000	6,805,273,200	20%
Ministry of Livestock Development and Fisheries	29,099,603,000	11,701,379,486	40%
Ministry of Foreign Affairs	28,000,000,000	25,465,800,000	91%
Ministry of Information Youth Culture and Sports	12,700,000,000	8,327,500,000	66%
Ministry of Comm. Dev. Gender and Child	11,910,672,000	2,923,528,338	25%
Ministry of Natural Resources and Tourism	11,648,166,000	2,426,977,943	21%
Ministry of Home Affairs - Police Force	8,980,451,000	3,830,256,340	43%
Ministry of Constitutional and Legal Affairs	7,898,840,000	2,090,907,649	26%
Ministry of Home Affairs - Prison Services	2,666,566,000	148,604,029	6%

4.3 Climate Finance on Agriculture Sector

The climate change relevance budget is more conversing during FY2009/2010 and FY2013/2014 compared to the five years of comparison that the analysis is centered on (i.e. FY2009/2010 through FY2013/2014). The special project for Lake Victoria environmental management during FY2009/2010 was the main reason for this. The trends revealed that much of the budget for climate change relevance is inclined to the special project, which means that even though a substantial amount is being spent, the associated projects are few.

Further, the analysis revealed that there is a sharp absolute growth in the climate change relevant budget by 54% in FY2013/2014, which is TZS 47 billion in FY2012/2013 to TZS 72 billion in 2013/14. This change represents almost 25% of the total agriculture budget. This has been a result of the Kilimo Kwanza campaign that has forced the ministry to spend more on agriculture land use planning and management, and irrigation and technical services compared to the previous four (4) years that were analyzed. Figure 6 below, shows the identified agriculture climate related budget for the sector ministry (2009/2010 – 2014/2015).

Figure 6: Agriculture Climate related Budget Expenditures (2009/10 – 2013/14)

4.3.1 Climate related budget expenditure in the national level agriculture sector by weight

Comparatively, most of the climate- relevant projects and programs in the agriculture sector weighted medium as opposed to the rest of the categories in the rating scale of climate change relevancy (high, low and medium). For the last five years, an average 50.1% of climate change related agriculture projects budgeted for weighed medium followed by low weight equivalent to 49.5%. This shows that there is still an overwhelming number of interventions which are of low relevance. Thus, need for prioritization of climate change within the sector, since it is highly affected by climate change.

The financial year 2013/2014 shows a slightly higher percentage of climate related expenditures. Out of TZS 72 billion budgeted for agriculture climate change, 81% equivalent to TZS 59 billion was intended for medium weight and the remained TZS 13 billion meant for low weight. In comparison with other years, there is a conversing trend of the government to take initiative on climatic change relevance projects. But still, having few high weight relevance budget expenditures means that there were few projects in the agriculture sector which explicitly designed to address climate change. *Table 12* below provides the distribution of climate change related agriculture project according to an estimated scale of relevancy.

Table 12: Climate Related Budget Expenditure in the Agriculture Sector by Weight

Sum of Amount	Extent of Climate change relevant			Grand Total
	high	low	medium	
2009/2010	700,000,000	73,109,886,780	4,722,572,000	78,532,458,780
2010/2011	137,450,000	2,245,673,500	6,358,577,000	8,741,700,500
2011/2012	12,000,000	20,079,935,760	6,977,077,980	27,069,013,740
2012/2013	0	6,813,963,100	40,513,385,500	47,327,348,600
2013/2014	0	13,867,855,600	59,055,149,074	72,923,004,674
Grand Total	849,450,000	116,117,314,740	117,626,761,554	234,593,526,294

4.3.2 Comparing Adaptation and Mitigation Financing on the Agriculture Sector

The analysis of qualified expenditures according to adaptation and mitigation categories was guided by the definition described in Box 1. This exercise was straightforward because definitions are very clear. The expenditure with intent or indicators that overlap between adaptation and mitigation were not divided into adaptation and mitigation, but rather were put under the ‘both’ category.

Based on the relevance of climate change projects in the agriculture sector, the budget is more skewed towards adaptation measures. This is expected as most developing countries, including Tanzania, have put adaptation measures as a priority (NAPA, 2007).

For the year 2013/2014 out of the total agriculture climate relevancy budget, adaptation relevance accounted for 80% of the total budget and there are no projects with mitigation measures explicitly.

Table 13: Budget Allocated for Agriculture Sector by Category Relevance

Sum of Amount	Relevance -climate category: (1=Mitigation, 2=Adaptation, 3=Both)			
Year	Adaptation	Both	Mitigation	Grand Total
2009/2010	7,317,030,000	70,270,428,780	945,000,000	78,532,458,780
2010/2011	6,841,130,900	1,350,569,600	550,000,000	8,741,700,500
2011/2012	25,305,544,340	1,713,469,400	50,000,000	27,069,013,740
2012/2013	31,558,171,200	15,769,177,400	0	47,327,348,600
2013/2014	58,530,149,074	14,392,855,600	0	72,923,004,674
Grand Total	129,552,025,514	103,496,500,780	1,545,000,000	234,593,526,294

4.3.3 Comparing Source of Finance for Agriculture Sector with Climate Relevance

The GBS provides a distinction between sources of funds and hence it was possible to distinguish between the development expenditure that was financed from government coffers and expenditures that were financed by donors. This analysis was to give an indication of donor dependence level when it comes to financing climate change interventions through the national budget.

The study found that, there has been an increase in donor budget allocated for climate change programme for the past five years. The trend has shown an increase of budget allocation for climate agriculture relevancy soon after the 2009 fast start commitments in during COP 15. This resulted into donors' contribution of funds to grow by 109%, from TZS 7.5 billion that was budgeted for 2010/2011 to TZS 15.1 billion for 2011/2012 and further ballooning up to TZS 53.1 billion that is budgeted for 2013/2014.

This indicates that the foreign budget is keen for financing projects that are related to climate change relevance. Out of the total budget for climate change in the agriculture sector during the five years of analysis, more than 82% is sourced from donors with the remaining budget financed through the local source. The government nevertheless is striving to finance the climate agriculture initiative but the analysis revealed that even the portion financed is mainly for fuel, seminars and

meetings for budget expenditures that qualified as climate finance relevant.

This means that, the ministry of agriculture is superficially financing projects that are specifically meant for climate change relevant through the local source of funding. *Table 14* below shows a budgetary allocation by source of funds (Foreign and Local) on climate change relevant projects FY 2009/10 through FY2013/14.

Table 14: Total and Sources of Budget Allocated for Agriculture Sector with Climate Change Relevance from FY2009/10 - 2013/14

Sum of Amount	Source of Finance		
Year	FOREIGN	LOCAL	Grand Total
2009/2010	77,372,408,780	1,160,050,000	78,532,458,780
2010/2011	7,520,431,900	1,221,268,600	8,741,700,500
2011/2012	15,069,950,740	11,999,063,000	27,069,013,740
2012/2013	40,027,348,600	7,300,000,000	47,327,348,600
2013/2014	53,123,744,674	19,799,260,000	72,923,004,674
Grand Total	193,113,884,694	41,479,641,600	234,593,526,294

4.4 Climate Change Finance in the Livestock Sector

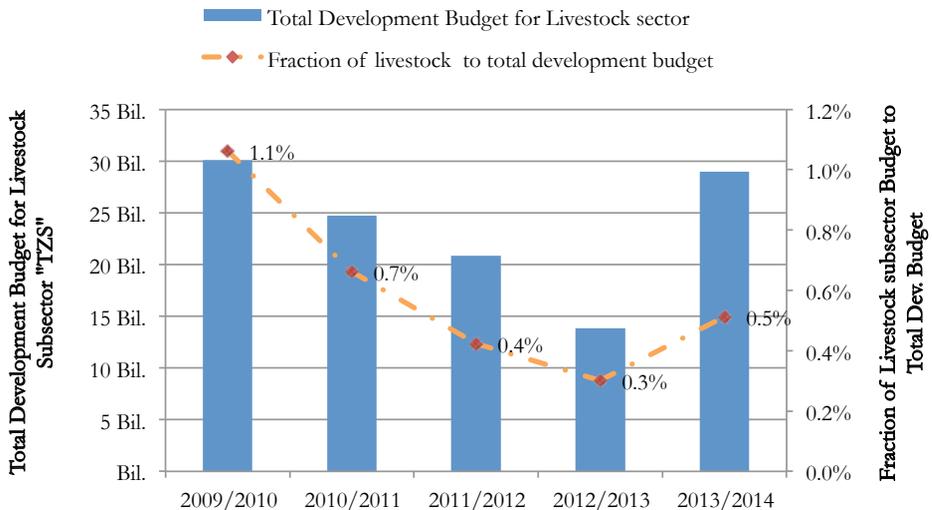
Livestock is among the major agricultural sub-sectors in Tanzania. Out of the 4.9 million agricultural households, about 36% are keeping livestock (Njombe and Msanga, 2006). The industry accounted for 8% to total GDP (NBS, 2014). The livestock sub-sector has strong linkages in the Tanzanian economy as it contributes to national food supply and food security by producing meat, milk, eggs, and hides and skins and also acts as a source of cash income and employment.

Moreover, the livestock sub-sector converts rangelands resources into products suitable for human consumption and is a source of cash incomes and inflation free store of value. The sub-sector provides almost 27% of the Agricultural GDP of which about 40% originates from beef production, 30 percent from Milk production and another 30% from poultry and small stock production (United Republic of Tanzania, 2014).

Despite of the sector being an anchor for economic diversification, the government budget to livestock has been declining dramatically over the last five years.

During the year 2009/2010 the total developmental budget for the livestock subsector was TZS 30 billion, which is 1.1% of the total national development budget (a fraction that is very low compared to similar subsector like agriculture which was 3.3% of the total development budget during the same year). The fraction of livestock budget to total government budget has been an average of 0.6 % (2009-2014), and attained a maximum of 1.1% in FY2009/2010 and a minimum of 0.3% in FY2012/2013. *Figure 7* below shows the total development budget for livestock sector and the fraction to total developmental budget for FY2009/2010 through FY2013/2014.

Figure 7: Total Development Budget For Livestock Sector as a Percentage of Total Development Budgets



Over the last 5 years, the budget allocation for the livestock sector has been declining despite sectors contribution to GDP that shows increasing trends. The trend shows a decrease of nearly 4% until the year 2013/2014 when the total budget allocated increased by 20%.

During the year 2013/2014, the government allocated TZS 68 billion for livestock and fisheries sub-sector. This represents 0.37% of the total budget allocated for 2013/2014 government budget, which is five times lower than what had been allocated for agriculture sub-sector. Out of the total budget allocated for the livestock sector in 2013/2014, only 43% was allocated for development and the remaining 57% for recurrent expenditure.

This implies that the livestock sub-sector and specifically the developmental projects within the sector are not highly prioritized by the government.

The issue of priorities in the livestock sector in Tanzania is not the only challenge for addressing the sector development issues but another issue regards the funds disbursed as per the agreed budget. For the year 2013/2014, out of TZS 29 billion budgeted for developmental projects, it was only TZS 16 billion which represent 55% of the total development budget that was disbursed.

The issue of priorities in the livestock sector in Tanzania is not only the challenge for addressing the sector development issues but another issue regards the funds disbursed as per the agreed budget. For the year 2013/2014, out of TZS 67 billion budgeted for livestock and fisheries sector, it was only TZS 46 billion which is 67% of the total budget expenditures that was disbursed. Further, the trends revealed that not only do the local funds do not fulfill the budgeted amount but also the donor funds. During the year 2013/2014, out of 5.4 billion budgeted for development projects for livestock projects from the donor fund, only 40.2% of the total budget was disbursed, the same proportion that was supposed to be funded by the government.

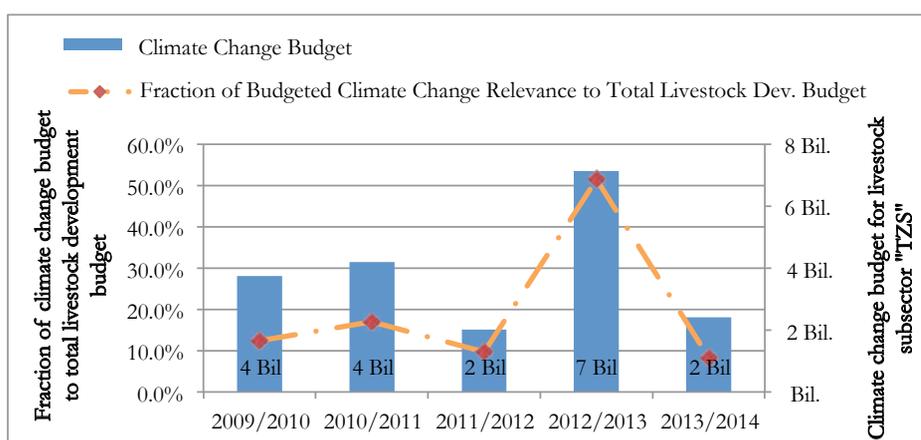
4.4.1 Relevant Climate Change Budget for the Livestock Sector

For the past 5 years (i.e. 2009/2010 to 2013/2014) the ratio of climate change relevance to total budget for ministry of livestock is erratic, reaching an average of 16.1%, with maximum of 51.5% and minimum of 8.3% attained in FY2012/2013

and FY2013/2014 respectively. Even though there was more spending on climate change in FY2012/2013; this could be attributed to outlier¹⁵ effect, but the ministry has done a substantial spending to increase livestock production through the policy initiatives and human capital by enhancing research and training institutions.

Figure 8 below shows the budgetary trend for climate related projects under livestock development projects for FY2009/2010 through FY2013/2014.

Figure 8: Budgetary Trend for Climate related Projects under Livestock Development Budget for FY2009/10-2013/14



4.4.2 Climate Change related Budget in the Livestock Sector by Weight

During the past 5 years (FY2009/2010 through FY2013/2014), more than 78% of the total climate change related projects budget falls under low extent relevance expenditure budget, while 12.5% were budgeted for high extent relevance and the remained 9.3% for medium relevance.

Furthermore, the trends showed that during FY2012/2013 and FY2013/2014 the entire budget allocated for climate relevance for livestock subsector is classified as low relevance. This indicates that, even though livestock subsector is classified as among

¹⁵ The outlier during year 2012/2013 can be contributed to statistical error, since the dataset were filled different thus forced the analysis to rely on sub vote description rather than target description as has been used for other dataset

climate sensitive sectors; almost all of the climate relevant expenditure budgets may have not been primarily intended to address climate change.

Table 15 below shows the extent for climate change relevance budget under livestock development projects for FY2009/2010 through FY2013/2014.

Table 15: Climate related Budget to Livestock Budget for FY 2009/10-2013/14

Sum of Amount	Extent of Climate change relevant			Grand Total
	High	low	medium	
Year				
2009/2010	1,621,800,000	1,433,877,300	1,319,160,000	4,374,837,300
2010/2011	189,450,000	1,006,069,600	159,600,000	1,355,119,600
2011/2012	474,700,000	877,924,000	10,000,000	1,362,624,000
2012/2013		6,140,130,400		6,140,130,400
2013/2014		2,412,156,700		2,412,156,700
Grand Total	2,285,950,000	11,870,158,000	1,488,760,000	15,644,868,000

4.4.3 Comparing Adaptation and Mitigation in Livestock Sector

Excluding the FY2012/2013 budget, which was quoted differently, the average allocated budget for adaptation, was approximately TZS 1.8 billion while the allocation that covered for both relevance (adaptation and mitigation) is TZS 0.5 billion. The trend is triggered by the massive investment in research and planning specific for foreseen upcoming livestock institutions followed by an effective campaign to the adaption of the research results in effective manner.

For example, during the FY2013/2014, the entire fund allocated for climate change relevance for the livestock sector was meant for livestock disease control. This was mainly for the acquisition of specialized equipment and medical supplies and services. *Table 16* below shows a trend for climate change relevant – development budget for livestock and fisheries from FY2009/10 through FY2013/14.

Table 16: Trend for Climate Change Relevant – Development Budget for Livestock and Fisheries from FY2009/10 - FY2013/14.

	Relevance of climate change			Grand Total
	Adaptation	Both	Mitigation	
2009/2010	3,001,707,300	1,373,130,000	-	4,374,837,300
2010/2011	1,355,119,600	-	-	1,355,119,600
2011/2012	566,900,000	795,724,000	-	1,362,624,000
2012/2013	2,213,278,400	3,926,852,000	-	6,140,130,400
2013/2014	2,412,156,700	-	-	2,412,156,700
Grand Total	9,549,162,000	6,095,706,000	-	15,644,868,000
Average	1,833,970,900	542,213,500	-	2,376,184,400

4.4.4 Comparing Source of Finance in Livestock Sector

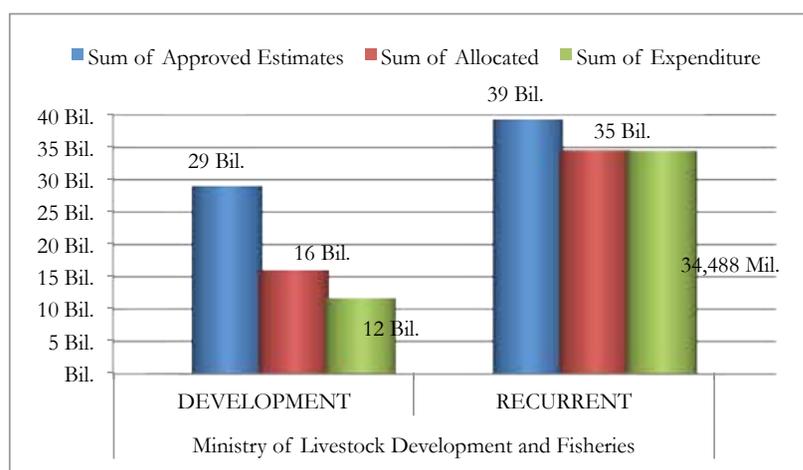
Similar to agriculture sector, recurrent expenditure for the livestock sector is financed through the government fund while development expenditure is financed through both the local and the foreign fund. Out of TZS 64 billion that was budgeted for livestock sector in 2014/2015, approximately 62% was recurrent expenditure and the remaining 38% for development expenditure.

The trend revealed that, budget on livestock subsector for climate change relevance is financed by both the foreign and local source at the ratio of 66:34 by total. Which means, out of the total TZS 15.6 billion budgeted for climate change during the last five years (2009/10-2013/14), foreign sources financed TZS 10.3 billion while TZS 5.3 billion was to be sourced locally. This defines uncertainty for the climate change budget for livestock subsector.

Table 17: Source of Funds for Climate Change Related Livestock Development Budget FY 2009/10 – 2013/14

Sum of Amount	SOURCE OF FUND		
Year	FOREIGN	LOCAL	Grand Total
2009/2010	2,586,067,300	1,788,770,000	4,374,837,300
2010/2011	637,800,000	717,319,600	1,355,119,600
2011/2012	755,324,000	607,300,000	1,362,624,000
2012/2013	4,517,649,400	1,622,481,000	6,140,130,400
2013/2014	1,855,065,700	557,091,000	2,412,156,700
Grand Total	10,351,906,400	5,292,961,600	15,644,868,000

Further to inadequate budget for livestock subsector, the trend revealed a big difference between the approved estimates, the allocated funds and the actual expenditure especially for development budget. For example, during the FY2013/2014, out of the total approved development estimates for livestock and fisheries ministry, only 55% of the total estimate is allocated, representing the low level of priorities with reference to other sector ministry. Additional, there is a big difference between the fund allocated and actual expenditure. *Figure 9* below indicates that only 73% of the total allocated fund was spent out of TZS 16 billion allocated for livestock and fisheries development, which indicates that even a little allocated funds are not spent accordingly, giving rise to speculation regarding delay and bureaucracy with regards to disbursements from the ministry level.

Figure 9: Livestock Budget and Expenditure for 2013/2014

The situation is alarming as it was found that most of the spending of the sector does not explicitly address climate change vulnerability and at the same time the sector's sources of funds are not certain. If this situation is not reversed; the sector is mostly likely to be aggravated by the effects of climate change.

4.5 Climate Change Expenditure from Development Partners/Donors for both Agriculture and Livestock Sectors

In addition to foreign funds that go through GBS; the government receives several bilateral funds in the form of grants or loans which go directly towards identified projects. The analysis of these funds was conducted based on Development Partners Group on Environment (DPG-E) data-source updated in April 2015. This was the only data-source accessed by the study team. Since the database did not have a clear distinction between budget and expenditure, or between GBS and direct project funding, the study team only sorted elements that qualify as climate related and projects that had clear timelines. Hence, the climate relevant budget expenditure for the two sectors was analyzed over the past four years from FY2010 through FY2013 period.

The disbursement schedule below shows a promising trend, moving up from US\$9.7 million that was recorded in FY2010 to US\$34.9 recorded in FY2013. It was realized from the discussion that donor fund budgets have little to do with the ministry priorities but are often determined by the respective donors' priorities within the sector and the historic audit report from the respective agency.

Table 18: Development Partners' Disbursements (2010-2013)

Sum of Disbursements (USD)	Column Labels				
	2010	2011	2012	2013	Grand Total
Row Labels	2010	2011	2012	2013	Grand Total
III.1.a. Agriculture	9,671,956	16,102,749	19,624,142	34,935,945	80,334,793
Australia	33,232	33,232	14,713		81,177
Austria			32,134	12,215	44,348
Belgium	1,691,404	718,710	651,476	713,934	3,775,524
Canada	124,869	3,483,236	309,518	3,408,688	7,326,310
Denmark	298,705				298,705
EU Institutions		91,410	1,465,418	91,410	1,648,238

France	228,405				228,405
Germany		524,267	716,078	629,713	1,870,059
Ireland	5,860,927	8,098,779	8,772,793	8,430,696	31,163,194
Italy		112,347		65,368	177,715
Japan	102,734	1,166,463	2,961,851	16,049,851	20,280,899
Korea	853,432	1,494,116	2,337,830	855,745	5,541,123
Norway	478,247	339,245	1,644,943	2,046,659	4,509,093
Spain		40,945	181,440	44,612	266,996
Switzerland				860,737	860,737
United Kingdom			535,950	1,726,319	2,262,269

4.6 Adaptation and Mitigation on Bilateral Funds

Apart from assessment of the donor fund by agencies, the study went further by exploring the relevance of fund disbursement. The trend revealed that in total, more is spent on adaptation than on mitigation. The relative balance changes year after year with more adaptation spending in 2013 mainly for harvest loss prevention and the development of a small-scale irrigation scheme.

Furthermore, the trend revealed the preference of donors with relevance to climate change. For example, during the year under review; Belgium, United Kingdom and Canada have focused to mitigation measures as compared to other relevance categories while Japan, Ireland and Korea has shown to dedicate most of their fund to adaptation measures compared to other categories.

Table 19: Development Partners' Disbursements by Mitigation, Adaptation and both categories (2010-2013)

Sum of Disbursements (USD)	Relevance of Climate change			
Row Labels	Adaptation	Both	Mitigation	Grand Total
2010	8,983,913	298,705	389,338	9,671,956
2011	3,203,041	11,343,357	1,556,352	16,102,749
2012	14,137,101	3,008,900	2,478,142	19,624,142
2013	21,368,963	11,712,390	1,854,592	34,935,945
Grand Total	47,693,018	26,363,352	6,278,423	80,334,793

Out of the disbursed fund, almost 55% is disbursed direct to the government and 21% for national NGOs while less than 1% is disbursed to universities and research institutions and civil societies.

Table 20: Development Partners' Disbursements by Recipients

Recipient	Sum of Disbursements (USD)
Donor government	6,568,803
International NGOs	5,538,769
Local/Regional NGOs	4,021,555
National NGOs	17,050,517
Non-Governmental Organisations (NGOs) and Civil Society	85,095
Other	239,245
Other Multilateral Institutions	2,293,795
Others	204,116
Public Sector (donor, recipient, other)	10,619
Recipient government	44,044,533
University, college or other teaching institution, research institute or think-tank	277,746
Grand Total	80,334,793

Generally there is reluctance by both the government and donors to finance the livestock sector. This sector has suffered major institutional reforms. There is a lot of overlap with the agriculture sector and in most cases it is marginalized. Livestock used to be part of the agriculture sector but later diverged to form a different sector ministry, however, significant interventions remains with the agriculture sector. This is evidenced at LGA level since the expenditure budgets are still combined.

CHAPTER FIVE

5

5:0 ANALYSIS OF THE FINDINGS AND RECOMMENDATIONS AT THE NATIONAL LEVEL

From both literature review and study findings; the study team identified important issues that need to be addressed to effectively tracking, monitoring climate finance and eventually build climate resilience to agriculture and livestock sectors and beyond.

5.1 Resources Issues:

5.1.1 Climate change-relevant budget expenditures are a relatively small part of the agriculture and livestock sector budgets, especially livestock sector; however the trend is on the rise

From the analysis, it is revealed that there is a sharp absolute growth in climate change relevant budgeting by 54% in FY2013/2014, from TZS 47 billion in FY2012/2013 to TZS 72 billion which change represents almost 25% of the total agriculture budget. On the other side, the ratio of budget allocation for the agriculture sector has remained relatively low, at an average of 2% which is about TZS 276 billion average over the last five years under review.

In contrast; MAFC has developed an Agriculture Climate Resilience Plan (ACRP) 2014-2019 as part of implementation of National Climate Change Strategy (2012). Implementation of the ACRP requires a minimum of USD\$25 million per year (excluding recurrent expenditures) over the next five years in addition to current levels of expenditures related to climate adaptation in the agriculture sector – which is an increase of 22% in climate change expenditures over 2012/2013. The ACRP resource requirement might sound high, but in actual fact it is insignificant compared with the current losses of \$200 million per year due to weather-related risks (MAFC 2014).

Table 21: ACRP Total Cost Estimates

Action Cost		Appraisal		Cost		Funding Sources	
		Priority	US \$	Tshs	GoT	Other	
1A	Increase water use efficiency and water storage on irrigated and rain-fed lands	High	High	60,000,000	126,000,000,000	20%	80%
1B	Improve catchment management in agricultural planning	Low	Medium	3,500,000	7,350,000,000	20%	80%
1C	Adopt sustainable land and water management in agricultural lands to reduce degradation	Medium	High	12,500,000	26,250,000,000	45%	55%
2	Accelerate uptake of climate smart agriculture	Low	High	2,000,000	4,200,000,000	10%	90%
3	Advance risk management to reduce the impact of climate-related shocks	High	High	46,000,000	96,600,000,000	5%	95%
4	Build Knowledge and Systems to Better Target Climate Action	Low	Medium	2,000,000	4,200,000,000	25%	75%
			Total	126,000,000	264,600,000,000	20%	80%

Source: MAFC, 2014

ACRP is a positive step towards sector resilience; however, it's clear that the finance gap is huge. The ACRP source of finance is bank-on "other finance" by 80%. This shows heavy dependence on external finance which unfortunately the findings shows that foreign funds commitments are far from realization, inadequate and unpredictable.

Again, ACRP relies on complementarily from the current level of climate expenditures, which were estimated to increase by 22% in 2012/2013 financial year. But when you look at the bigger picture, the agriculture sector budget grew by an average of only 2% for the past five years under review and the total average budget expenditure was

Tshs 276 billion inclusive of recurrent budget; which is higher than ACRP estimated budget excluding recurrent budget expenditure. And, within MAFC alone, the share of climate expenditures is even lower at only 7% own source revenues as a percent of the total climate spend in the sector (MAFC 2014).

Other MAFC programs, plans and strategies such as Agriculture Sector Development Programme (ASDP -2), Agriculture Sector Development Strategy (ASDS) and Tanzania Agriculture and Food Security Investment Plan (TAFSIP) are hardly fully financed and do not include explicitly climate related interventions, or and in most cases they are of low relevance.

With this climate finance complexity within the two sectors and if the sectors and government continue with business as usual; addressing climate vulnerability and attaining sector resilience will remain to be a wishful thinking.

Recommendations:

Climate finance is highly needed due to the serious challenges to agriculture and livestock sectors, as it is in all other climate sensitive sectors. Therefore, it is imperative that all actors and institutions realize the cost of responding to climatic effect and its implication to people's livelihood; particularly those with limited means. But also, realization of exponential increase of cost for addressing the adversary if business as usual continues.

While appreciating budget constraints and implications of donor dependence, sectors/government need to be innovative in resource mobilization particularly for climate change. The following are some of the ideas on how resource mobilization could be tapped locally:

- i. Consider paradigm shift:** It's a high time now for decision makers, technocrats and key actors to look at climate change beyond environmental context.

Climate change should be looked at as an "economic influence" especially for Tanzania because of her economic development is climate sensitive. Climate change affects economic sensitive sectors such as energy, infrastructure, land, agriculture cum Livestock, tourism and housing; to mention a few.

All these are important sectors in Tanzania plans and strategies; including desired “industrial revolution.”

This approach is important for climate financing and if climate finance is considered as an economic influence, it will be factored in all economic equation at macro, meso and micro levels. As a result, the articulation of climate change will be made from the design, planning, execution and monitoring by all climate prone sectors. This will provide a possibility to utilize the current budget limits as there will be no “parallel plans and strategies” that would need additional finance as it is traditionally being done. The current interventions/activity by climate prone sectors; will only need to be articulated in the context of climate change. This suggestion is beyond a mere “mainstreaming” and “integration” of climate change into plans and budgets.

A great deal of climate intervention will be financed in this way.

- ii. **Increase of National budget to Agriculture, Livestock and other climate sensitive sectors.** Once there is realization that addressing climate change implies strengthening of economic growth; the government will prioritize budget allocations to financing climate related interventions. The government is obliged to increase budget allocation of Agriculture Sector to 10% according to Maputo and Malabo declaration of 2014. The disbursements should be timely, according to climate change priorities and reach the targeted groups; particularly small scale farmers.
- iii. **Innovative local resource mobilization:** This is a responsibility to almost all actors in climate change. MDAs, LGAs, private sector and CSOs could play an important role to mobilize resources locally. For example; consider private sector and communities at various levels as source for climate finance. This has never being explored before in Tanzania, so at the beginning it might be challenging but eventually it might turn out to be an important source for climate finance.
- iv. **Strategically tap international funds:** Once foreign funds are possible to access, it is important that are directed to the most priorities and to interventions that have multiplier effects. Accountability and integrity are vital for making foreign funds work.

Because it involves collective negotiations, the skills to develop projects and technical proposals are imperative. It also require advocacy for developed countries to honor their commitment and not using climate change finance as a conditionality in other areas of cooperation.

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It also require advocacy for developed countries to honor their commitment and not using climate change finance as a conditionality in other areas of cooperation.

5.1.2 Most climate change-relevant budget expenditures for both sectors are of low relevance, meaning that the spending is not addressing “really” climate vulnerability issues hence weakly contributing to Agriculture and Livestock Sectors’ resilience.

The climate related budget and expenditure identified in this study just happened to qualify but when you critically analyze from the objective level, most these were not intentionally planned to address climate vulnerability. This was the case for both agriculture and livestock sectors, but the livestock sector was in a worse situation.

Articulation of mitigation and adaptation interventions in the sector budget is very limited. It shows that it either because of limited awareness and knowledge among ministries’ technocrats or the budgeted guidelines are climate blind. This could also be a reason that mainstreaming climate change into the planning, budgeting, and monitoring processes of agriculture and livestock sectors is relatively new for many sector ministries.

Recommendations: The sectors could consider taking a holistic approach to addressing climate change starting from the designing, planning, budgeting, and monitoring processes of agriculture and livestock sectors. Awareness; capacity building and learning could be a complimentary solution.

5.1.3 Donor dependence: all climate related budget expenditures in the GBS fall under the development budget, and are financed by foreign funds by more than 78%. At the sector level, climate related foreign finance is 82% for agriculture; while livestock was found to be 66% of all climate related budget expenditure. If donor funds are cut, the communities will drastically

feel the effect since agriculture and livestock are mainstay of their livelihood. agricultural produce, forest resources and mineral resources. In addition, the government needs to increase the total share of the budget on the agriculture and livestock sectors; for these are the mainstay of largest community in the country. Furthermore, the country through the designated entity needs to tap the international funding opportunities for climate change financing which the country is eligible to.

Recommendations: There is need to mobilize own resources from various sources including eradication of tax evasion, increase revenue collections from other economic activities including expansion of tax-base at local level e.g. forest resources and mineral resources. In addition, the government needs to increase the total share of the budget on the agriculture and livestock sectors; for these are the mainstay of largest community in the country. Furthermore, the country through the designated entity needs to tap the international funding opportunities for climate change financing which the country is eligible to.

5.2 Process Issues:

5.2.1 Inconsistent definitions, methodology and criteria hence different/contradicting figures for climate finance in the same scope of analysis.

Lack of a common definition of climate finance is among the key challenges to tracking climate finance. Even scholarly works on the subject use a variety of definitions¹⁶ to identify climate finance, with significant implications for questions regarding the quantity and characteristics of this finance¹⁷.

For example, this study adopted a definition that considered practices that directly address climate vulnerability which other studies such as (CCCS, ODI 2014) and (MAFC) 2014 opted for a broader definition that encompasses other development interventions and recurrent finances. As a result, the figures arrived for climate related budget and expenditure differ between this study and the study done by MAFC. While this study estimate total climate related budget expenditure 2012/13

¹⁶ See Appendix I

¹⁷ WRI (2014):Monitoring Climate Finance in Developing Countries; Challenges and Next Steps

for the agriculture sector to increase by 76%; the MAFC 2012/13 estimated that the total climate related expenditure for agriculture increase by 22%.

Recommendation: There is a need for a clear and common definition of climate related finance as a fundamental condition to developing criteria and indicators for tracking climate finance and systems to record information. Unfortunately, Tanzania is like other African country, always waiting for the international community to agree on such definitions. There are very few or non-existence of such proactive attempt. This recommendation might therefore take a long time to be realized unless the government takes a different turn on climate change. This recommendation remains imperative in course of addressing climate vulnerability.

5.2.2 Lack of transparency due to insufficient technical processes and systems to identify and record climate finance receipts and expenditures. This because there is non-existence markers or codes, inconsistent indicators to identify climate change related budget expenditure and actual expenditure/different types of financial data (e.g., by sector, intervention and activity).

Differentiation of climate related budget and expenditure from other budget or expenditure lines or traditional development finance is a challenge and this was observed in all 1 previous¹⁸ attempts to analyze climate related finances in Tanzania. This is the case in all finance mechanisms - and by both a contributor and a recipient.

Since there were no budget codes or markers for both agriculture and livestock sector budgets, the identification of climate related finance was subjective only guided by CV&V criteria developed by African Development Bank (2013).

Again, was a miss-links between budget expenditure and actual expenditure; hence very difficult to reconcile and establish finance gaps by using budget. This was even worse for livestock sector than agriculture sector.

One respondent from VPO-DoE, knowing the concern from previous study, indicated that the government would not (not sure if it meant 'at the moment') establish budget codes for climate change. Rather, they will be integrated in the environment codes. This response shows government consistency in approaching

18 MAFC 2014, CCCS, ODAI 2014, Godlove S. 2012

climate change. In the sense that there is not plan to formulate climate change policy rather; climate change policy issues will be integrated in the current Environment Policy (1997) which is under review during the time of this study. It is not clear what it means by ‘integrating climate budget lines in environment codes’ because climate change is more broader phenomenon than environment.

Generally, it is recognized that developing climate finance markers/codes/indicators is very challenging. This is especially in the case of projects that have multiple objectives (e.g., contributing to both adaptation and mitigation). Indicators are also challenging for cross sectoral projects that include climate-related benefits, but do not primarily focus on climate (for example, projects in the health or agriculture sectors that include an element of integrating climate resilience, but not as a primary objective).

Developing indicators for adaptation finance can be particularly tricky since many projects that enhance adaptive capacity or resilience to climate change may simply be development projects that account for potential climate change impacts in their design; much depends on the context and intent of the project (WRI, 2014). In addition, Tanzania’s sectoral classifications are fairly broad and overlapping, particularly within the agriculture sector.

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Therefore, the current proposition of Tanzania Government to integrate climate finance allocations and spending into environment budget codes, raises a lot of skeptisms on how that is going to be realized.

Recommendation: In as much that there is no international or multilateral consensus on climate finance codes. Still, there is a need to develop national tracking systems. This is because Tanzania is one of the countries that urgently needs climate finance due to its climate change vulnerability and the financial capacity to respond to the effects are limited. To establish accurately what resources are available for building resilience is critical for planning and resource mobilization.

Tanzania could proactive and be a champion for “systematic climate finance records”/“classification system” at regional (AU, EAC, SADC and tripartite EAC-SADC-COMESA) and at international levels.

At national level; the Tanzania government could start small; step-by-step and learn at each stage. For example, could start with a broad “systematic climate finance records” - may consider only whether an activity is identified as being an adaption or mitigation project. A second level of detail could consider mitigation activities by sector—for example, energy, forestry, transport, or manufacturing. A further layer of detail may look at subsectors. For example, energy-sector activities may be subdivided by technology: wind, solar, geothermal, nuclear, and so on. The lesson leant could determine a level of detail that is practical and fits-in national and sector specific policies.

This could be complimented be enhancing technical processes and systems (such as reporting formats and software platforms for storing and sharing information) and mechanisms by integrate climate change. Integrated financial management system (IFMS) is already established in Tanzania, however there are still challenges like only 40% of donor finance is captured; hence improving could help integrating climate change finance into national systems for budgeting, monitoring, and reporting; which is necessary to systematically and consistently track climate finance flows. If enhancement/modification is not possible, then they could opt for an independent or matching standardized climate finance data system. In any case; technical advice will be need for feasible/appropriate option for Tanzanian context.

5.2.3 Inconsistence, inadequate availability of reliable and accurate data from both Sectors – (Agriculture and Livestock) and Development Partners; hence difficulty to track, establish gaps and estimate/forecast adaption and mitigation costs.

It was difficult to determine total climate finance funding for agriculture and livestock climate change-relevant activities based information accessed from both government and donors. It was evident during this study that the publicly available information is limited in many cases, and in most cases it is non-comparable.

This was confirmed by the Agriculture Sector Climate Change Budget Screening (2014) commissioned by MAFC. Even the national aggregate analysis revealed that there is a variance between budgeted amounts and actual outturns in Tanzania, with only about three-quarters of the development budget actually spent in most years. However, the government and donors do not publish detailed outturn data which means that it was not possible to establish climate finance gaps and to confirm where these shortfalls in spending occur (CCCS, ODI 2014).

Recommendation: For the government of Tanzania, the same as what has been recommended in bullet three (3) above. For International donors and development partners, the study recommends that they improve their database to be clear so much so that it is possible to identify climate finance and be able to track them. This will include: approved budget, disbursements and actual expenditure. It could also show whether it is mitigation or adaption and sectors which the activity contribute to. Development Partners could lead a way to establish “Development Partners Climate Finance Markers” for transparency purposes on their side. It should also be possible to see where the funds went and were spent on what.

5.3 Policies and Institutional Arrangements

As per the current institutional arrangement, all climate change related matters are handled under the Vice President’s Office – Division of Environment (VPO - DoE). This also implies that, tapping of International climate change related funds such as the Global Environmental Facility (GEF), Adaptation Funds (AF) etc. and the implementation of activities under such funding falls under this office. The sector ministries can only access funding from VPO upon sending proposals relevant to the

respective window. This implies that, the planned activities in the sector ministries under this study may not be implemented if funds are not accessed. Despite being large sums of money, it is only the VPO through NGOs or research and academic institutions that may be approached which implements climate change related activities in the grass-root.

Furthermore, apart from the National Climate Change Strategy of 2013, the country does not have a stand-alone climate change policy which would act as a framework to guide the sector ministries on how to address climate change issues in the country. Instead, the country is advocating for mainstreaming of climate change issues in planning and programmes/ project formulation by sector ministries and agencies. Unfortunately, many people have tended to treat climate change as synonymous to environmental issues which is quite misleading. In the absence of an overarching policy on climate change, the national responses to climate change challenges remains unclear. This is a conceptually difficult area that merges into mainstreaming development, hence some further attention on this issue would be timely. This would also help to clarify what government expects from international support for climate change-related actions compared to traditional official development assistance received from development partners, many of whom now see themselves having a role to play in supporting the national response to climate change. There is a serious need for change of discourse for the betterment of the country and its sector ministries in addressing climate change related issues across levels and scales.

Recommendations: Just like many other countries in Africa (e.g. Uganda, Ethiopia, Kenya and Rwanda) who are equally faced by threats of climate variability and change, Tanzania needs to have a stand-alone National Climate Change Policy. This will guide the sector ministries to address issues of climate change including tapping out resources from international windows in all sectors as opposed to the current set-up which leaves the climate change matters under the VPO-DoE. Where possible, there could be an establishment of Climate Change Agency or Unit in the Presidents' Office for smooth operationalization of the policy and its associated guidelines.

CHAPTER SIX

6

6.0 LOCAL LEVEL CASES: KONGWA AND KILOSA DISTRICTS

6.1 Planning, Budgeting and Finance Mechanism

6.1.1 Planning and Budgeting Process

As per the current institutional set-up, the Ministry of Regional Administration and Local Government in the Prime Minister's Office (PMO-RALG) is the central government body in charge of overseeing the operations of the LGAs and councils. PMO-RALG provides local government policies and guidelines to be followed by LGAs in the districts and councils.

Sector ministries are responsible for policy guidance, implementation and monitoring of activities in their sectors. They are also responsible for technical backstopping, providing capacity building support to local government staff and are consulted on allocations of resources to local government for their sectors (HakiElimu and Policy Forum, 2008; Yanda, et al 2013).

At the regional level the Regional Secretariat (RS) headed by Regional Administrative Secretary (RAS) acts as a linking body between the central government and LGAs in the districts and councils. It also facilitates dissemination of relevant information and guidelines on planning, budgeting and implementation.

At the LGA level, council directors (District Executive Directors or Municipal Directors) are responsible for overseeing budget formulation and implementation. The local heads of sector departments, the Council Management Team (CMT), provide technical inputs and are responsible for the implementation of their respective sections of the budget.

The council, which is made up of elected ward councilors and local MPs, has a key role in reviewing and approving the proposed budget. Below this there is the Ward

Development Committee (WDC), which is a coordinating body linking the district/ municipal council to the villages, “mitaas” and “sub – villages” below. Members of WDC include the ward councilor, village/mitaa chairpersons and the ward executive officer.

In rural LGAs, each village has a Village Council (VC), whose members are the village and sub-village chairpersons and appointed village leaders. Village and sub-village chairpersons are elected by the village assembly, which consists of person aged 18 years or over, providing the potential for real village democracy. Village assemblies ultimately ‘own’ the village resources in the name of all the people, including land, forests, water ways and other items. They are required by law to meet at least four times per year, although this does not always happen. In urban councils (cities, municipalities and town councils), the closest equivalent to the VC is the Mtaa Committee, which has a coordinating function only. There is also the Mtaa Assembly.

6.1.2 Financial Mechanisms and Control

The Local Government Authorities (LGAs) receives funds from a number of different sources. The vast majority of funding comes in the form of transfers and grants from the central government through a number of different channels, which are *Recurrent block grants, Sector basket funds and subventions, Local government development grants and special development grants*. In addition, a small proportion of LGA funds come from own source revenues through local taxes such as on property, goods and service, business and professional licenses. A very small portion comes from LGA borrowing, and finally, important contributions are made by community members towards the capital cost of new investments, such as classrooms (HakiElimu and Policy Forum, 2008).

Under Local Government Act (1982), LGAs operate their finances within the framework of the following financial instruments: Local Government Finances Act No.9 of 1982 (revised 2000); Local Authority Financial Memorandum 1997; Public Procurement Act No.21 of 2004 and its Regulations of 2005; and The Local Government Authorities Tender Board’s (Establishment and Proceedings) Regulations, 2007.

6.1.3 Policy Framework and District Agriculture/Livestock Programs

Agriculture sector and livestock sub-sector operate within the following policy and program guidelines: Agriculture Policy 1997; Livestock Policy 1997; Irrigation Policy 2010; Community Development Policy; Agricultural Sector Development Strategies (ASDS); and Agriculture Sector Development Programme/District Agriculture Development Plans (ASDP/DADPs).

As per the current architecture, the national Agriculture Sector Development Programme (ASDP), which is implemented in the district through the District Agriculture Development Programmes (DADPs) is the overall guiding programme for the execution of the agriculture and livestock sub-sector related activities. These programmes are funded through the Basket fund; which solicits its funds from both domestic and foreign sources (developmental partners).

The programme started in 2006/07 with the objective of enabling farmers to have better access to and use of agricultural knowledge, technologies, marketing systems and infrastructure, all of which contribute to higher productivity, profitability and farm income. This includes the promotion of private investment based on an improved regulatory and policy environment. In line with the ASDP, the Government and Development Partners are working together in formulating a consolidated set of interventions in support of the ASDP. The study revealed that there are various initiatives and activities that are being implemented that are climate change relevant through this programme. Such climate change related activities, includes the establishment of irrigation schemes and the general livestock sub-sector development programmes through DADPs.

6.2 CLIMATE FINANCING IN TANZANIA: CASE OF KONGWA DISTRICT COUNCIL

6.2.1 Overall Development Budget FY 2009/10 – FY 2013/14

With regard to the overall budgeting, the total development budget over five years (i.e. 2009/2010 to 2013/2014) consecutively was TZS 27 billion. Out of this, it is only 5% that is to be financed through the district's own source and the rest through the government and donor funds. The study revealed that, there has been a dramatic increase on budget as per the service needs per year particularly in the recurrent

expenditure and to some extent to the development services specifically for rural water supply and education sector. During FY2013/2014 the district's total budget was TZS 27.9 billion, comprised of up to TZS 1.5 billion from its own source and TZS 26.4 billion from the government and donor funds. The findings further revealed that there is a big mismatch between the budget and actual expenditure. This is highly attributed to the budget reliance on external fund. For instance, during FY2011/2012, out of the budgeted TZS18.1billion; it is only 80% of the total budget that was met, particularly, for the recurrent expenditure.

The average annual development budget for Kongwa district during the last five years stands at TZS 5.1 billion. The portion for Agriculture and livestock as per development budget stand at 10% which is equal to TZS 500 million annually. This takes-up the fifth position after administration (26%), water (25%), roads (20%), and health (15%). The district project allocation for development agriculture is mainly on irrigation, charco dams and markets; and development of storage facilities.

This indicates that, the district is focused on ensuring production and storage facilities at high ends. Although much has been spent for tangible development projects, the findings revealed that indirect costs are higher than direct cost¹⁹, which necessitates the urgent of the matter to establish a clear distinction on how the approved fund should be utilized. *Figure 10*, below shows the trend of the total development budget for Kongwa district for the FY 2009/10 through FY2013/14. Furthermore, *Figure 11*, shows an example of the proportion of the distribution of the development budget per sector for the year 2013/14; illustrating the priorities within the district.

19 Include per diem, diesel, petrol, conference fee, secretarial services and the alike.

Figure 10: Kongwa District Council Total Development Budget for FY2009/10 – FY2013/14

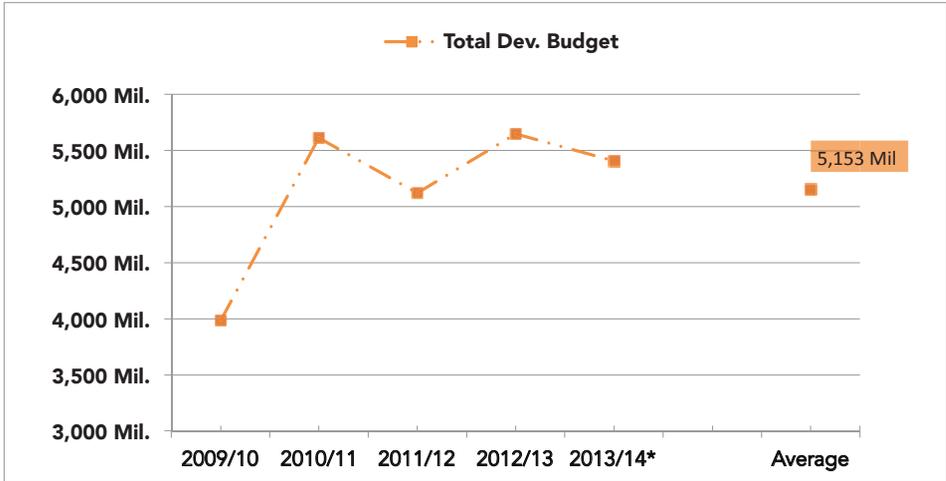
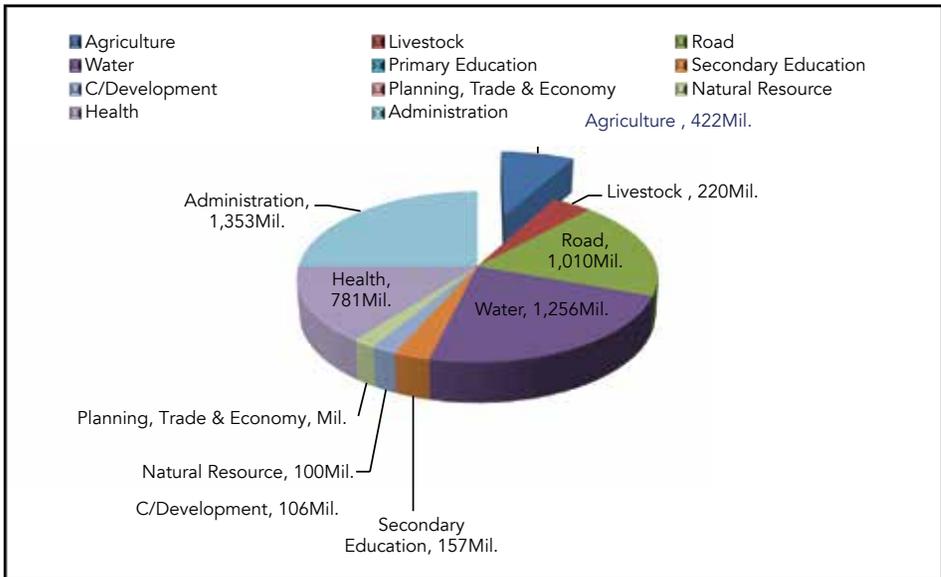


Figure 11: Kongwa District Council Development Budget by sector - 2013/2014



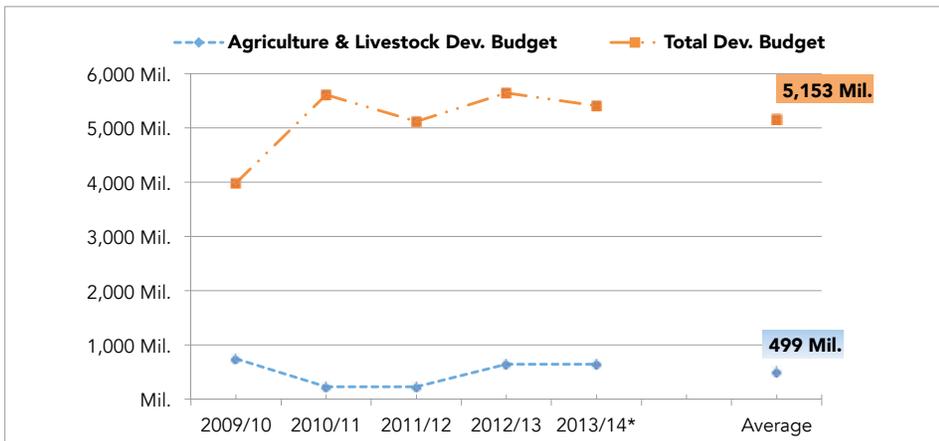
6.2.2 Overall Development Budget for Agriculture and Livestock Sectors

The average annual development budget for Kongwa district on the agriculture and livestock sub-sector during the last five years (2009-10/2013/14) stands at TZS 499 Million. The portion for agriculture and livestock as per development budget stands at 10%, which is equal to TZS 500 million annually. This takes up the fifth position after administration (26%), water (25%), roads (20%), and health (15%).

The district project allocation for development agriculture is mainly on irrigation, charco dams and markets; and development of storage facilities. This indicates that, the district is focused on ensuring production and storage facilities at high ends. Although much has been spent for tangible development projects, but the findings revealed that indirect costs are higher than direct cost which necessitates the urgent of the matter to establish a clear distinction on how the approved fund should be utilized.

Figure 12, below shows the general trend of the proportion of the agriculture sector and livestock sub-sector from the total development budget for Kongwa district for the FY 2009/10 through FY2013/14.

Figure 12: Kongwa District Council Proportion of Agriculture & Livestock Development Budget against the Total Development Budget



6.2.3 Sources of finance for Agriculture Sector and Livestock Sub-sector

As per the reports that informed this study, two main sources of funding were identified. These are local and foreign sources of funding; feeding into the total government budget. Unfortunately, the local sources of funding have been consistently insufficient implying that many planned activities are ending-up being not executed. For instance, in year 2010/2011 nothing was accrued from the local sources.

Apparently, even where resources are accrued then, they are simply very little to implement various activities in the district. For instance, in the years 2011/12 and 2012/13, there was simply an average of TZS 7Millions which are essentially too little to implement serious programmes and activities including climate change related activities in the district. *Table 22* below, shows that total amounts of funding by source for the implementation of agriculture sector in the district from FY 2010/11 through 2013/14.

Table 22: Kongwa District Council Total Amounts of Funds for Agriculture Sector Received by Source 2010/11 – 2013/14

	Local	Foreign	Total Govt. Funds
Agriculture Sector			
2010/2011	-	80,000,000	80,000,000
2011/2012	7,000,000	-	7,000,000
2012/2013	7,908,000	439,696,788	447,604,788
2013/2014	25,026,200	-	25,026,200
Grand Total	39,934,200	519,696,788	559,630,988

6.2.4 Overall budget for Agriculture Vs Climate Change Spending on Agriculture Sector

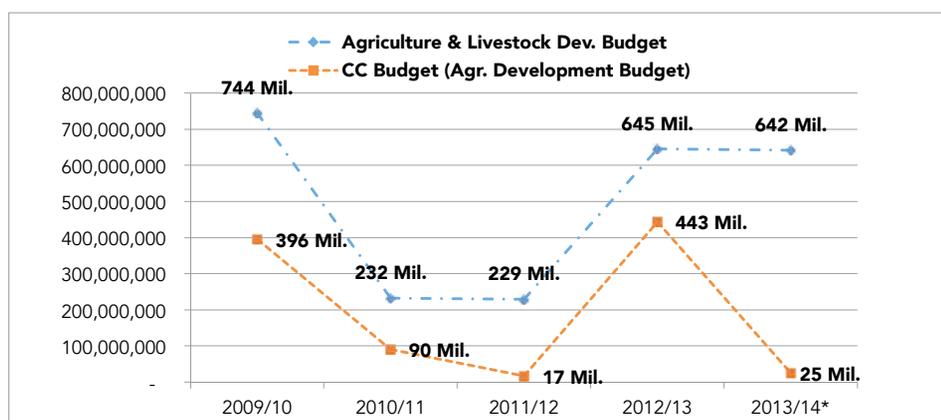
During the five years (i.e. FY2009/20110 through FY2013/2014), a sum of total budget for climate change on agriculture relevant activities was TZS 555.5 million, whereby 94% is sourced through the foreign source and the remaining 6% through the local fund. Out of total budget for five years under consideration, about

80% was budgeted for the FY2012/2013 followed by 14% during FY2010/2011 with the minimum budget during FY2011/2012 by only 1.3%. Most of projects associated with climate change relevant activities on agriculture sector focuses on the developmental aspects as the primary objectives.

For example, this analysis has shown that, much of funds were spent for improving agriculture production schemes, specifically the irrigation infrastructure. These activities aimed at increasing agricultural productivity to enhance the equitable increases in farmers' income, food security and development but on the other hand the projects aimed at building resilience for agriculture and food security systems to challenges related to climate variability and change.

Contextually, this may sound misleading in this analysis and hence calling for specific coding of the climate financing across levels. *Figure 13* below, shows the total amount of funds spent on the climate change relevant activities on agriculture sector and livestock sub-sector in the district from year 2009/2010 through 2013/2014.

Figure 13: Kongwa District Council Amounts of Funds Budgeted for Climate Change Related Activities on Agriculture and Livestock Sub-Sector



6.2.5 Climate Change relevant Activities for Adaptation, Mitigation or in both Categories for the Agriculture Sector

For the five years under this study, the total amount of funds spent for climate change relevant activities amounted to 920.7 Million TZS. Out of these funds, adaptation projects consumed a share of 833.7 Million TZS; equivalent to 90.5%. The study found out that, there were no mitigation-specific projects and activities executed during this period of time. However, the projects and activities that were executed under both adaptation and mitigation categories spent a total of 87 Million TZS; equivalent to 9.5%. This implies that, many of the agricultural related climate change activities implemented in the district are mainly adaptation activities, which translates to the national agenda of prioritizing adaptation initiatives as opposed to mitigation activities. *Table 23* below, shows the total spending of the climate change related activities according to the major classification from FY 2009/10 through 2013/14.

Table 23: Kongwa District Council Amounts of Funds Budgeted for Climate Change related Activities on Agriculture Sector by Category

Budgeted Amounts for Climate Change relevant activities by Category – Agriculture Sector				
Year	Adaptation	Mitigation	Both	Total
2009/2010	365,199,000	-	-	365,199,000
2010/2011		-	80,000,000	80,000,000
2011/2012		-	7,000,000	7,000,000
2012/2013	443,484,788	-	-	443,484,788
2013/2014	25,026,200	-	-	25,026,200
Grand Total	833,709,988	-	87,000,000	920,709,988

6.2.6 Weighting Scale to Climate Change Relevant Activities for Agriculture Sector

As indicated in *Table 24* below, most climate change activities by scale of relevancy implemented during the period under consideration fell under medium scale which totaled TZS 674.5 Million and equivalent to 73.3%.

However, out the 920.7 Million TZS spent during the period under study, TZS 246.1 Million were spent to execute low relevant climate change related activities in the district. The study further revealed out that there were no concrete actions/ activities that would qualify for the highly relevant climate related activities during the whole period under consideration.

This implies that climate change initiatives are not the priority actions to be implemented in Kongwa district. Furthermore, one may wish to conclude that climate change initiatives are not paid much attention during planning for various activities in the district which may be attributed to inadequate awareness on climate change issues.

Table 24: Kongwa District Council Amounts of Funds Budgeted for Climate Change related Activities on Agriculture Sector by Relevance

Climate Change relevant budget for Agriculture Sector by scale of relevancy				
Year	Low	Medium	High	Total
2009/2010	5,000,000	360,199,000	-	365,199,000
2010/2011	-	80,000,000	-	80,000,000
2011/2012	7,000,000	-	-	7,000,000
2012/2013	209,109,788	234,375,000	-	443,484,788
2013/2014	25,026,200	-	-	25,026,200
Grand Total	246,135,988	674,574,000	-	920,709,988

6.2.7 Climate Change Spending on Livestock Sub-Sector

Despite the livestock sector being one of the major sources of income in Kongwa district, less is being spent for climate change related initiatives for the sector which is much affected. For a period considered for this analysis, by total, the district spent only TZS 20 million for climate change relevant activities.

These have been specifically for vaccination and artificial insemination, out of this, much was spent during FY2010/2011 and FY2011/2012 while nothing was spent during FY2013/2014. The trends revealed that, moving forward, climate change relevance for the livestock sector in Kongwa district is given very low consideration.

In other words, holding and branding an activity executed to be named as climate change related on the sector is simply a “nightmare”. This needs to be re-thought so that funds are set aside to execute climate change related activities in the livestock sector; for the sector is and will continue to be hardest hit by the challenges of climate change.

Like in the agriculture sector, the source of finance is inclined towards the foreign source. For example, during the FY2010/2011, the total amount of funding allocated for climate change relevant activities was sourced from donors/foreign (Table 25). This means that most projects that are relevant to climate change are directly proportional to foreign source of finance. As a result, nothing has been spent during FY2013/2014 since the foreign finance under the national perspectives was not realized. Unfortunately, the study team could not establish the sources of funds for the FY2009/10 which amounted to 30.7 Million TZS, which were only reported as part of the implementation report of various activities reported in the FY2011/12.

Table 25: Kongwa District Council Total Amounts of Funds Received for Livestock Sector by source 2010/11 – 2013/2014

	Local	Foreign	Total Govt. Funds
Livestock Sub-Sector			
2010/2011	-	14,109,000	14,109,000
2011/2012	10,000,000	-	10,000,000
2012/2013	-	2,300,000	2,300,000
2013/2014	-	-	-
Grand Total	10,000,000	16,409,000	26,409,000

6.2.8 Climate Change relevant Activities for Adaptation, Mitigation or in both Categories for the Livestock sub-sector

Adaptation expenditure is seen to be dominant at the district level spending for both agriculture and livestock sector, with small portion appearing to contribute to both category. The main activities executed were meant to improve technical skills and extension services to staff and farmers during the FY2011/2012. This category of adaptation spent a total of 35.7 Million equivalent to 70.4% for the FY 2009/10

through 2013/14. Unfortunately, very little money was spent on the livestock sector as opposed to the agriculture sector. This is mainly attributed to having the livestock sector being fused under the ASDP which its main focus is on agriculture sector. Furthermore, this may be attributed to the institutional set-ups in which the two sectors were being merged. *Table 26* below, shows the total amounts of funds received for the execution of various climate change related activities on livestock sub-sector for the FY2009/10 through 2013/14.

Table 26: Kongwa District Council Expenditure for different climate change relevant activities by category for the livestock sector 2009/10 – 2013/2014

Expenditure for Climate Change relevant activities by Category – Livestock sub-sector				
Year	Adaptation	Mitigation	Both	Total
2009/2010	15,766,000	-	15,000,000	30,766,000
2010/2011	10,000,000	-	-	10,000,000
2011/2012	10,000,000	-	-	10,000,000
2012/2013	-	-	-	-
2013/2014	-	-	-	-
Grand Total	35,766,000	-	15,000,000	50,766,000

6.2.9 Weighting Scale to Climate Change Relevant Activities for the Livestock Sub-sector

In terms of total expenditure by relevance, much has been spent on low relevance. A total of TZS 35Millions were spent during the period under consideration. However, it is important to note that nothing was spent during the financial years 2012/13 and 2013/14. This implies that responding to climate change is not the key objective for the activities that are implemented in the district. The study revealed that, there has not been any activity that had concrete actions to addressing climate variability and change. For instance, the objectives of several activities implemented in the district include the improvement of agriculture production schemes through irrigation

infrastructure and improvement of cattle productivity through conducting artificial insemination as well as for human capital development through extension farm development. *Table 27* below, shows the total amounts of funds spent for climate change relevant activities by sector from FY2009/10 through 2013/14.

Table 27: Total expenditure of climate change relevant activities for the livestock sub-sector according to Relevance 2009/10 – 2013/2014

Climate Change relevant budget for Livestock sub-sector by scale of relevancy				
Year	Low	Medium	High	Total
2009/2010	15,000,000	15,766,000	-	30,766,000
2010/2011	10,000,000	-	-	10,000,000
2011/2012	10,000,000	-	-	10,000,000
2012/2013	-	-	-	-
2013/2014	-	-	-	-
Grand Total	35,000,000	15,766,000	-	50,766,000

6.2.9 Analysis of Climate Finance Findings for Kongwa District

6.2.9.1 Impacts of the Climate financing on the Agriculture Sector and Livestock Sub-Sector in the District

The effectiveness of climate finance delivery depends on the linkages that exist between policy formulations processes, the institutional architecture of implementing agencies and the national budgetary system. These interactions are complex and are subject to a wide range of influences, including the international attention given to climate change, which may be significant in terms of possible funding levels for climate change actions. So far, the study revealed that there are very few programmes that are climate change related and that can be considered under this study.

Unfortunately, most of them are treated as developmental projects than climate change related initiatives. This stance may be misleading in making conclusions. Several challenges and obstacles were identified by this study in the face of poor performance of the sectors. Some of the challenges include:-

- a serious mis-match between the set national objectives with those from the district. The study revealed that, planning in the district is done through Opportunities and Obstacles to Development (O&OD) approach. This approach entails a wider community participation planning approach; entailing bottom-up approach in planning process. Unfortunately, the study revealed that, many of the priorities are often affected by the national priorities. Moreover, the way the agriculture sector is placed in the district as per the MTEF, falls under two priorities. These are, (i) improving access, quality and equitable social services delivery and (ii) increasing quantity and quality of social services and infrastructure. This translates that, the sectors are given lesser attention in real terms as opposed to the way things are claimed to be implemented.
- climate variability and change is not taken as a priority in planning process for various activities in the district. This is evidenced from the list of priorities that the council has enumerated to be executed from one year to another. As pointed out earlier, most of the climate change related activities are treated as developmental activities in the district. This is probably attributed to lack of awareness on climate change related issues among policy and decision makers, communities and technocrats across levels within the district. Unfortunately, agriculture and livestock sectors are climate sensitive sectors and hence issues related to climate change needs to be mainstreamed and given a high priority in the planning process for these sectors to lessen the adverse impacts resulting from climate change.
- since the two sectors were once merged for many years in the past, a due attention has not been given for the livestock development in the district. This is may be attributed to lack of a stand-alone operational framework and programmes for the sector. In some cases, the funds for the two sectors were put in the same basket/ pool therefore rendering difficulties to establish the correct amounts of funds for the implementation of livestock/ agriculture related activities in the district. As such, this calls for deliberate efforts to have clear separations of the “modus operandi” in terms of frameworks and funds for the successful implementation of various sector activities in the district.
- very little funding was noted to have been disbursed to the district as opposed

to the budgeted amounts. For instance, during year 2012/13 and 2013/14 the district budgeted to implement the agriculture and livestock activities in the district respectively. But nothing was disbursed for the livestock sector respectively. This has a grave effect in the implementation of the intended activities in the district. This calls for deliberate efforts in either financial mobilization through proposal writing to donors by the district officials or the central government's efforts of increasing its revenue collections for the district.

- Political interference made by “political leaders” especially by some of the councilors which in some cases it affected the implementation of various activities in the district was reported. In this case, some of the activities were not implemented due to the fact that some political leaders would re-direct or halt decisions in favour of their voters' interests.

6.2.9.2 Climate Finance Governance on the Agriculture and livestock Sub-Sector in the District

Delivering public financial resources for climate change-relevant actions depends critically on the strength of the public finance management system. The known weaknesses of the national system will lessen the effectiveness of climate finance delivery until they are addressed. The long-term nature of climate change investments places particular demands on this system. Considerable investments in system strengthening will continue to be required if the level of expenditure highlighted in the climate change implementation strategy is to be achieved and resource an effective national response to climate change.

As per the developmental reports as well as the CAG financial statements reports for four years, district implementation report for the years 2011/12, 2012/13, a district implementation report to the district finance Committee (FY2012), district implementation report covering FY2009 through FY2011 of October 2012, and DADPs for FY2012/13, the district is seen to have fairly very well in as far as financial expenditures are concerned. However, much needs to be done to ensure good governance in handling finances for various projects, most especially in the procurement process that were overstated in the CAG reports. Further to this,

climate change financing needs to be given a due and central attention in planning and execution of various district activities on the agriculture sector and livestock sub-sector.

6.2.9.3 Sustainable Climate Financing in the District

The study has so far revealed that the district's main source of funds for the execution of various programmes and activities solely depends on the budgets allocated by the central government through the GBS. As indicated in the tables and graphs, GBS has only been the main sources of funds. Unless revealed, the information that the study used does not indicate any other sources of funding such as the direct donor funding mechanisms or money generated out of proposal development and solicitation of funds. This implies that little initiatives/ efforts are labored to ensure the sustainability of funding climate change related activities in the district.

Given the nature of the National Agriculture Sector Development Programme (ASDP), which trickles down to the District Agricultural Development Programmes, the indications of having numerous climate change related programmes and initiatives is obvious and will surely be realized. However, deliberate efforts needs to be undertaken so that climate change related initiatives are clearly identified and implemented across levels and scales in Kongwa district.

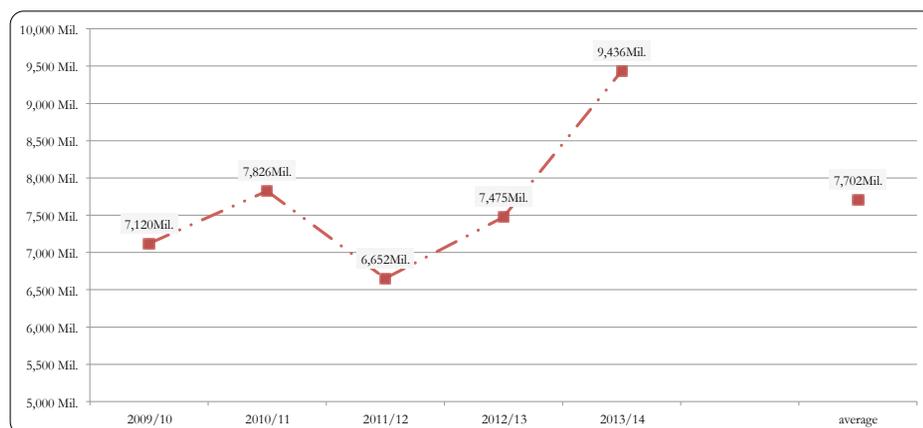
Apparently, the Kongwa district has numerous sources of incomes that may enable the district basket of funds to be "liquid". For instance, the contribution of Kongwa Ranch, The East African Maize Market at Kibaigwa, revenue collected from road tolls etc. may add to the district financing mechanisms through which a portion of it may be dedicated to addressing challenges posed by climate change in the area. However, the study team was informed that there are challenges such as effective collection of revenues, faithfulness among district officials and poor record keeping and management of funds which ought to be addressed for effective resource mobilization and sustainable utilization in addressing climate change related activities in the district.

Furthermore, the study revealed that Individuals/Private sector/ NGOs/CSOs including Faith-Based organisations are undertaking various activities in the district. However, it is difficult to quantify the amounts of funding since various projects are undertaken differently and on individual basis. Communities are also contributing non-financial resources including labour and other materials. As it stands now, the current setting and economic hardships, mobilization of local public financial resources will remain difficult; dependency on external resources and the government funding through GBS will continue to implement some climate change adaptation and mitigation initiatives in the district.

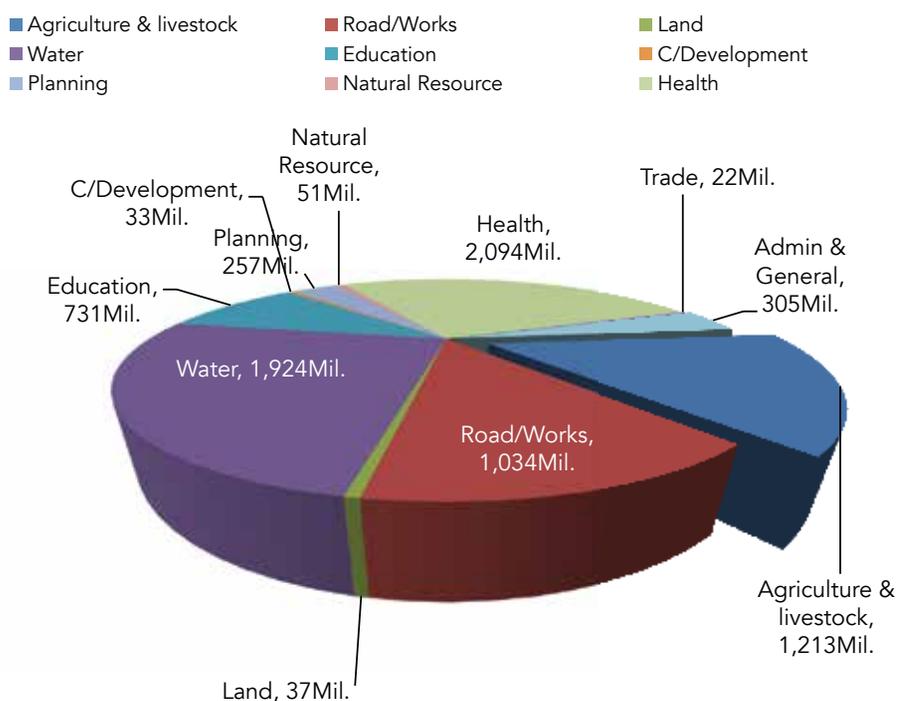
6.3 CASE OF KILOSA DISTRICT COUNCIL

6.3.1 Overall District Development Budget for FY2009/2010 to 2013/2014

Kilosa district council depends on the central government and bilateral institutions for financial support for development budget. During the last five years (i.e. 2009/2010 to 2013/2014), the average annual development budgets stands at TZS 7.7 billion, attained a maximum during FY2013/2014 by 9.4 billion and minimum during FY2011/2012 by 6.6 billion. The trends of the development budget revealed irregular estimates which define a lack of flexibility in fund allocating as per the district priorities and thus the central government can set the budget ceiling irrespective of the district priorities for the last five years as it can be seen in the *Figure 14* below.

Figure 14: Kilosa District Council Development Budget (2009/10-2013/14)

As per sectors budget allocation indicates; health sector received the average amount of TZS 2 billion, which is the highest amount compared with other sector's budgets during the last five years. This indicates that during the period, health sector was given first priority in the budget allocation whereby the agriculture and livestock sub-sector stand on third largest priority at the district after health and water sectors as shown in the *Figure 15* below.

Figure 15: Kilosa District Council Average Sectorial Development Budget

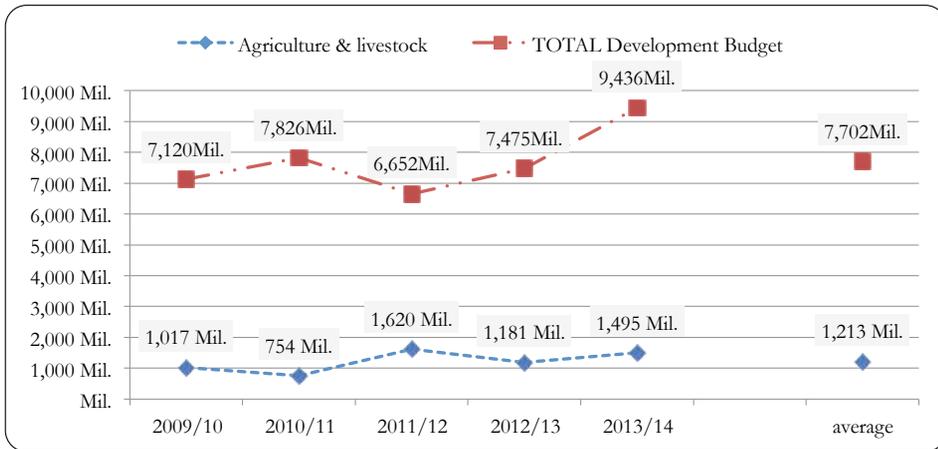
6.3.2 Agriculture and Livestock sub-sector Development Budget for FY 2009/10 to 2013/2014

Analysis of the last five years indicates that the agriculture and livestock sub-sector combined received the total sum of TZS 6 billion which is equivalent to 16% of the total development budget of the district. Despite the sector continuing to be major economy activity in the district, the ratio of the budget allocation remained to be relative low compared to the total budget of the district. Worse enough, review of the budget estimates for agriculture and livestock sub-sector has shown lenient increase of the budget as shown in the *Figure 16* below. This entails for more funds to be allocated for agriculture and livestock sub-sector though there is slight increment which was observed. The indulgent increment of the budget which observed perhaps is mainly due to Maputo declaration of 2003²⁰.

20 Maputo declaration of Agriculture and Food security 2003: An agreement of the government to allocate 10% of the total budget to b agriculture sector

This can also be attributed by the national focused initiatives on the Big Results Now (BRN) which among other things emphasizes on agriculture development especially the irrigation water supply as part of improving and sustaining harvest for small scale farmers. However, in the FY 2011/2012 low total development budget estimates was observed while in the same year there was slight increase of the agriculture and livestock sub-sector development budget as shown in the *Figure 16* below.

Figure 16: Kilosa District Council Development Budget vs. Agriculture and Livestock Budget (2009/10-2013/14)



Apart from fluctuation of the development budget, late disbursement of the agriculture and livestock sub-sector development budget has been observed during the FY 2012/2013. This has led to the implementation of several agriculture and livestock sub-sector development projects being affected during the year, which led to some of them to be carried forward to the next year (2013/2014).

Not only that but also the partial disbursement of funds was observed during the study period. For instance, during the financial year 2013/2014 the district approved a total of TZS 2.3 billion and TZS 0.55 billion for agriculture and livestock development projects respectively. Out of this, 77% and 82% of the total budget for agriculture and livestock were released, which defines the government procedure and bureaucracy that delays disbursement.

Further to proportionality of released fund, the trend revealed a mismatch between the released and spent amount, for example during the FY2013/2014, the district has spent only 58% and 39% of the released fund for the agriculture and livestock development sector in general respectively. This defines the mismatch between the budget allocation and the released amount is not only the hindering factor for sector development but also the proportion of amount spent as per released amount. The district bureaucracy procedures and procurement processes is earmarked to be one of the main factors especially on procurement processes.

6.3.3 Climate Change Relevant Development Budget for the Agriculture Sector:

Based on the analysis of the development budget allocated for climate change relevant projects; results show that over studied period of the FY (2009/10 to 2013/14) a sum of TZS 3.3 billion was allocated to climate change relevant for agriculture sector projects. This is equivalent to 55% of the combined agriculture and livestock sub-sector development budget for the last five years. Out of the stated amount, almost 93% came from foreign source and the remained 7% through the local fund as shown in the *table 28* below.

Table 28: Kilosa District Council Climate Change relevant Budget for Agriculture Sector

Year	Sum of Foreign	Sum of Local	Sum of Total Govt. Funds	Sum of Sum; Local & Foreign Fund
2009/2010	433,488,000	-	371,858,000	433,488,000
2010/2011	362,400,000	-	330,400,000	362,400,000
2011/2012	481,360,000	70,517,000	149,360,000	551,877,000
2012/2013	867,853,371	86,850,000	540,315,871	954,703,371
2013/2014	944,107,000	87,543,000	553,412,500	1,031,650,000
	3,089,208,371	244,910,000	1,945,346,371	3,334,118,371

This shows most of the climate related projects to hinge on foreign fund and very little fund from the local fund are allocated to address climate change issues at the community level. Furthermore, trends of the fund allocated revealed that majority of the selected projects that are associated to climate change relevance are mainly for

irrigation scheme development in Rudewa. Undoubtedly this is due to the national focused initiatives on the Big Results Now (BRN) which among other things emphasizes on agriculture development, especially the irrigation water supply as part of improving and sustaining the harvest for small scale farmers. Small scale projects which intend to reduce the impact of climate change have not been considered for the last five years. This could be because of farmers failed to articulate climate change issues into their priorities.

6.3.4 Climate Change Relevant for Livestock Sub-Sector

For the last five years (2009/10-2013/14) the sector received the sum of TZS 371 million for climate change relevant activities. This is equivalent to 6% of the total combined budget for the agriculture and livestock sub-sector for the district. The analysis discovered that about 62% came from foreign source and the remained 38% though the local fund as shown in table below.

The proportional of climate change livestock as per total livestock development budget for FY2012/2013 and FY2013/2014 is 40% and 1% respectively. This indicates a sharp decline in response to climate change for the livestock sector while there is a drastic increase of the livestock budget by almost 80%. The decline of the climate change relevant for livestock sector might have been propelled by the district effort of destocking livestock as a remedy of conflicts between pastoralists and farmers. It might also be due to the council not having good plans for pastoralist and pastoralist themselves not staying in one place.

Table 29: Kilosa District Council Climate Change Relevant Budget for Livestock Sector

	Year	Sum of Local	Sum of Foreign	Sum of Total Govt. Funds	Sum of Sum; Local & Foreign Fund
Livestock	2009/2010	15,000,000	29,470,000	29,750,000	44,470,000
	2011/2012	-	200,000,000	4,794,000	200,000,000
	2012/2013	100,415,000	-	-	100,415,000
	2013/2014	26,200,000	-	5,850,000	26,200,000
Grand Total		141,615,000	229,470,000	40,394,000	371,085,000

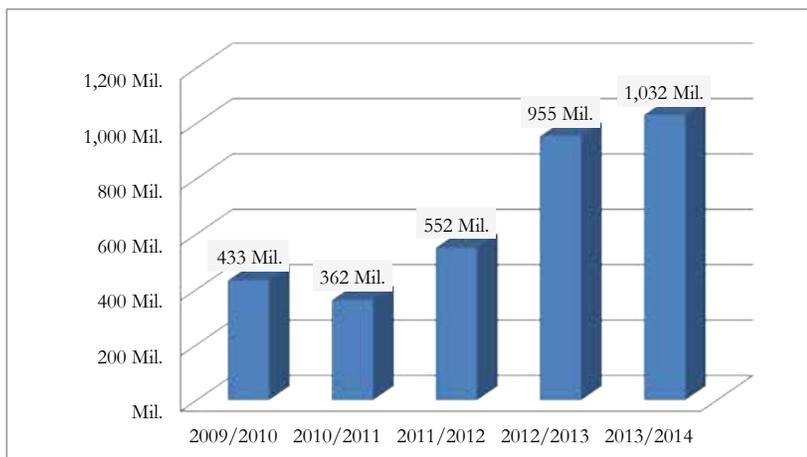
Overall, for the last five years the agriculture sector took big portion of the total combined budget for climate related project than livestock sub-sector. This might be due to non-existence of the specific program for the livestock sector whereby agriculture sector is benefiting from the DADPs which funds most of the climate change related projects for the agriculture sector.

6.3.5 Trend of Climate Change Relevant Budget for Agriculture and Livestock Sectors

Despite the absence of a specific climate change code/vote assigned to, for the past five years there have been conversing trends towards the portion of agriculture and livestock projects devoted for climate change relevant projects. The trend in the agriculture climate development budget shows increases on average of 29% for the last five years (FY2009/2010 through FY2013/2014), with the maximum attained during FY2012/2013 when the budget increment was 73% moved from TZS 552 million to TZS 955 million.

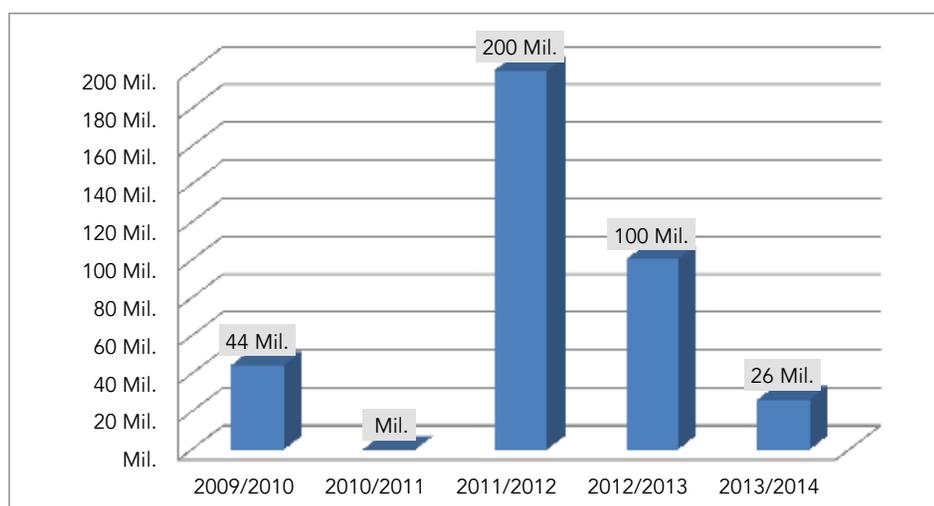
Nevertheless, a FY 2010/2011 analysis observed a fall in budget allocations for climate relevant for agriculture as shown in the *Figure 17* below. This finding is in line with the study conducted by Yanda et.al 2013 which finds out significant increase in the national budget allocation for climate change change-relevant activities. The study revealed that Tanzanian's budget amount for climate change-relevance grew from 392bn in 2009/10 to Tzs 896 bn in 2012/13

Figure 17: Kilosa District Council Trend of Climate Change related Budget for Agriculture Sectors



The trend for climate change related development budget for livestock has shown a randomly movement, attained a maximum during FY2011/2012 with the estimates of TZS 200 million, while there was no estimates observed for the FY2010/2011. In the FY 2011/2012 the maximum attained was due to severe conflict between farmers and pastoralist. In recently years climate change related projects for livestock have shown dramatically decline.

Figure 18: Kilosa District Council Trend of Climate Change related Budget for Livestock Sector



6.3.6 Climate Change Relevant Budget and Expenditure Analysis for Agriculture and Livestock Sectors

Based on the analysis of climate relevant expenditure, results indicate that for the last five years the sum of TZS 411 was spent for climate relevant for agriculture sectors. The relative balance change year-year shows more to be spent during FY2013/2014 and FY2012/2013 by TZS 1 billion and TZS 954 million respectively, that stipulate to 43% and 46% of the total agriculture approved budget respectively. Spending on the side of the livestock sector for the last five years is very small compared to agriculture sector.

For instance, over the studied period it's only sum of TZS 371 million was spent on climate change relevant for the livestock sector. Surprisingly, more than 50% of the budget for climate change relevant for livestock projects was spent during the FY2011/2012, which is attributed to the objective of increasing the livestock product quality and quantity as has been explained by the construction of charco-dam at Mfilisi village.

The trends of climate change relevant expenditure for agriculture and livestock sectors shows a slight increase over the last five year of study. For instance, during the last five years of analysis the increase of the budget spent for climate relevant for agriculture increases by 38%. Furthermore, analysis indicates low spending on climate change relevant for both agriculture and livestock sectors. This could be attributed to either late disbursement of fund or due to failure of articulating climate change relevant projects.

Disbursement of the approved fund remained to be the major challenge reported during the study period. For instance, during the FY 2012/2013 the delaying of fund disbursement was observed. This has led to failure of the implementation of the planned projects and some to be carried forward. For instance, during the FY 2013/2014, funds were not disbursed at all for the agriculture sector, which led to difficulty in implementing some of the projects.

6.3.7 Adaptation versus Mitigation expenditure in Kilosa District

Adaptation and mitigation are the two main categories for the climate change activities. Identification of mitigation and adaptation projects within the MTEF for each of the financial year from 2009/2010 to 2013/2014 was done. Government programmes and activities during the study period were reviewed against their intended impacts, and classified according to whether these impacts are concerned with climate change mitigation, adaptation or both (Adaptation and Mitigation) depending on the activities which are being undertaken as shown in the appendix.

Based on the analysis of climate change relevant budget expenditure for the agriculture and livestock sectors findings show that for the last five years the budget expenditure on climate change relevant activities is skewed more towards adaptation measures. Out of the total climate change expenditure for agriculture and livestock

sectors, adaptation measures consume 88% with only 12% spent for projects with both categories, mainly during FY2011/2012 for canals construction in different villages/wards. This indicates that adaptation measures have been given privilege during the last five years at Kilosa district in such a way that there is no project which is specific for climate change mitigation. Nevertheless, most of the identified adaptation projects are in favor of the medium relevance, with only one project that was meant for high extent relevance during FY2009/2010, to ensure the quality and affordable of seeds by conducting train, field inspection and supervision as shown in the figure below.

This attributes for identification of the project activities with high relevance at the sub-national level to tackle impacts of climate change. To achieve this fully, there needs to be an engagement of stakeholder, experts, academic institution and civil society organizations (CSOs) in Opportunities and Obstacles to Development (O&OD) process for climate change relevant projects at the sub-national level.

Table 30: Climate Relevance and Extent of Relevance

Sum Local & Foreign Fund	Relevance Climate Category		Extent of CC Relevance			Grand Total	
	Year	Adaptation	Both	High	Low		Medium
	2009/2010	423,051,000	54,907,000	15,000,000	44,377,000	418,581,000	477,958,000
	2010/2011		362,400,000		362,400,000		362,400,000
	2011/2012	731,877,000	20,000,000		751,877,000		751,877,000
	2012/2013	1,055,118,371			1,850,000	1,053,268,371	1,055,118,371
	2013/2014	1,057,850,000			29,367,000	1,028,483,000	1,057,850,000
Grand Total		3,267,896,371	437,307,000	15,000,000	1,189,871,000	2,500,332,371	3,705,203,371

The national level study conducted by Yanda et.al found out that 85% of the budget for climate relevant is spent on adaptation and its extent of relevancy is low. The inconsistency of low relevancy at the national level and medium relevancy at sub-national level is brought by the budget analysis used at the sub-national level. At the sub-national level the district budget gives specific intervention of the projects while at the National the budget gives general analysis.

6.3.9 Analysis of the Findings

6.3.9.1 Effectiveness of the climate change related expenditure fund

The effectiveness of climate finance delivery depends on the linkages that exist between policy formulation processes, the institutional architecture of implementing agencies and the national budgetary system . A number of initiatives of developing overarching policy for climate change in Tanzania have been made. However, adhering to policy remains a challenge at the sub-national level. For instance the priorities identified by the community through O&OD approach mostly affected by the guidelines from the national and the ceiling budget. This affects the planning of the district due to the fact that they have to adjust their planning to factor in to the ceiling budget.

Most of the climate change related projects for agriculture and livestock are on adaptation and the extent of relevance is medium, only one project with high relevance to climate changes. Though we have seen a slight increase in funds allocated for climate related projects; most of the projects didn't address the problem of climate change. Therefore, there is a need for advocating and for identifying climate related projects with a high extent of relevance at the sub-national level.

There is no climate change committee at the sub-national level, which has in one way or another led to climate change issues not being fully mainstreamed into district planning and budgeting. The last five years of the study period has shown to be relatively low. This to some extent has failed to reduce vulnerability to climate change impacts of smallholder farmers and pastoralist in the district. Therefore, for a climate change related fund to be effective, coordination of climate related projects and activities into district planning and budgeting should be given priorities.

6.3.9.2 Climate Finance Governance

Climate finance in the Kilosa District council seems to be new phenomenon for community and to local government servants. As a result, climate change issues have not emerged as their priority issue in governance. There were, however, some

governance issues which were observed during the study period. For instance, the late disbursement of funds has been reported during the study period. This has led to failure in implementing of some of the projects. During the study period we have not by hundred percent observed rule of law to be practiced. Community priorities they are not taken into the board due to ceiling budget and guidelines from the national level. MTEF preaches on bottom up approach in planning but practically it is top down approach that is being implemented. Farmers and pastoralists have made complains regarding on the transparency of feedback for the projects. Councilors frequently do not provide feedback to the community regarding the amount spent on a project versus the amount budgeted.

6.3.9.3 Sustainability of climate funding

The sustainability of climate funding depends on the strategies that are in place. There are a number of overarching policies for climate change initiated in the country. The government is trying to mainstream climate change issues into the Mid Term Expenditure framework and so far five ministries are in the process of mainstreaming climate change into their plans and strategies.

There is also a need for establishing a strategy of allocating more funds for climate change related projects from the own source. This is because foreign funding is the one mostly used in climate change relevant activities. The consequence of depending on foreign funding is that at some junctures donors can delay the disbursement of funds. Therefore, the establishment of national fund is one of the things this report is advocating for. There are some countries which have already established their national fund for climate change related projects such as China, Bangladesh, Thailand, Brazil Indonesia, Ecuador, Guyana, and Maldives.

Overall, a fund for climate change related projects shows an increasing trend over the last five years of this study. However, climate change related projects for the two sectors are insignificant compared to the total combined development budget for agriculture and livestock sub-sector. This necessitates a call for establishing the cost of climate change for the sustainability of climate funding at the sub-national level where the majority of farmers and pastoralists are located.

6.4 Overall Conclusions and Recommendations at the District Level

6.4.1 *Recommendations for Kongwa District*

Based on the analysis contained within this report, the study team offers the following recommendations to Kongwa District Council, believing that these will improve the effective delivery of climate finance in the district.

However, the implementation of these recommendation depends on broader participation and the way they will be translated and absorbed by the district without conflicting with the rules, regulations and state of art of normal running of government activities. These include:-

- Climate change-relevant expenditure is not recognised through specific coding of expenditure within the national budget, making it very difficult to identify such expenditures in Kongwa district. Most climate change-relevant expenditures identified by the study team is concentrated in low-relevance projects, implying that tackling climate change is not a concrete action of the objective of the expenditure but somehow a related activity. In this case, there is need to mainstream issues of climate change at a fore front during planning and implementation of various programmes and activities in the district and where possible separate climate change related activities from the developmental activities.
- Climate change finance information, focusing initially on medium relevant government programmes, should be compiled and shared with various stakeholders in the district for uptake. In addition to this, capacity building and awareness raising on climate change issues is required among technocrats, policy and decision makers in the district. This will in-turn help them to effectively plan, integrate and implement climate change related activities in the district. Awareness raising and technical support relating to climate change (causes, impacts, and adaptation/mitigation options) should be provided to these actors.
- Data seems to lack consistency. The study team noted that, the documents that were reviewed under this study do not show consistency significantly. This may

lead to over-generalisation, yielding wrong results and hence misrepresentation and ill conclusions of facts about the district. It is therefore important that data are securely kept, consistent and made available upon request from time to time for logical analyses and conclusions.

- There is need to separate between the finances that are committed to agriculture sector and those aimed for livestock sub -sector especially now that there are two stand-alone ministries at national level. Otherwise, assessments will always continue being difficult and leading to mixed quantities during the budgeting and spending leading to wrong conclusions.
- Incentives should be created for the inclusion of climate change related activities within the District Development Plans. Adequate financial resources and technical support should then be provided for their implementation. For instance, very little can be implemented and achieved by the district which has on been allocated with 7Million TZS. As it stands now, all climate change related initiatives are treated as developmental activities which is somewhat confusing and misleading.
- For the analysis to be complete, internationally supported ‘off-budget’ projects related to climate change should be identified and recorded (including those carried out by government agencies, Individuals, NGOs and other project implementers) in the district. So far, this is lacking in the documents that were reviewed under this study probably leading to wrong conclusions of the total actual amounts of funds dedicated to implement climate change related programmes and activities in the district.

6.4.2 Recommendations for Kilosa District

Based on the analysis contained within this report, the study team offers the following recommendations to Kilosa District Council; believing these will improve the effective delivery of climate finance in the district.

However, the implementation of these recommendation depend on broader participation and the way they will be translated and absorbed by the district without conflicting with the rules, regulations and state of art of normal running of government activities. These include:-

- There is great need of mainstreaming climate finance into MTEF of the district so as climate change related budget for agriculture and livestock sectors to be embraced. To achieve this we suggest establishing climate change committee at the sub-national which will act as focal point of making sure climate change related projects have been mainstreamed into the planning and budgeting of the district. . There should be on going capacity building and awareness creation on mainstreaming climate change issues into DADPs and MTEF.
- Awareness needs to be raised with regards to climate change so that farmers may be able to articulate climate change issues during the planning and budgeting session. Sensitization of climate change issues should be done both to communities and LGAs officers
- There is no cost established on climate change at the sub-national level. The fact is that it was difficult to track climate finance because there was no cost established climate change. Therefore it is difficult to recommend amount needed to address climate change. Vulnerability assessment should be done so as to establish climate change cost at the sub-national level.
- Transparent dissemination of information is highly advocated by this report. Easy access of information and improvement of data storage in one way or another will help to improve the transparency of the funds allocated for a certain project at the sub-national level.
- Capacity building of the planning department on climate change issues is highly needed.
- Coordination of the private sector and civil society organizations working on climate change issues at the district level is highly advocated by this report. During the study period it was difficult to track some of the climate related project undertaking by CSOs due to the report and documents not reflecting on the progress and implementation reports of the district.

- Priorities raised by farmers and pastoralist mostly don't articulate climate change issues into planning and budgeting. Approach used to identify priorities needs to be improved in such a way it accommodate climate change issues into the board.

OVERALL CONCLUSIONS OF THE STUDY

Tanzania, and particularly the agriculture and livestock sectors, can garner multiple benefits from transparency and accurate information about climate finance. In the way that comprehensible budget expenditure and actual expenditure can help decision makers in the sectors to identify gaps, improve planning and execution; mobilize and allocate funds for climate change activities.

Climate finance information can also assist sectors by drawing on lessons from the use of different financial instruments and developing strategies and policies that aim to expand finance for climate change. It will allow the government, through GBS, and projects to allocate and spend funds where it mostly needed and be able to track it for accountability. It will also allow for the cross-checking of donor support reported by Development Partners/Donors. Thus, promoting transparency, completeness, and accuracy, and help build confidence to the public that their government on one side and development partners on the other side are meeting their obligations and commitment respectively.

This study has highlighted the fact that much remains unknown about climate finance delivery at the national and sub-national levels and further empirical research will be needed to guide the development of mechanisms for climate financing tracking. First, little is known about the factors that influence the flow of climate finance through existing international and national climate funds and climate financing mechanisms. National policies that put emphasis on such funds as the source of funding for climate change action may therefore have difficulties in ensuring effective financing of their policy responses if access to this source of funding is not improved.

Second, given the fact that there is no coding for climate change-relevant expenditure in the current public finance management system, continuous research to re-test and re-affirm the criteria adopted in this study would provide useful empirical guidance for policy making and implementation in this area. Third, the present gap in the data on financing for climate change, delivered by traditional development partners,

calls for an empirical study of relevant aid flows to determine the level of current commitments, actual disbursements and likely trends for future funding. Finally, this study conducted as part of this assignment only provide a glimpse into the unfinished business of designing appropriate policy response and climate finance delivery and tracking at the national and sub-national level. An in-depth study that builds on this preliminary analysis to improve understanding of the implications of the current financing architecture for climate change response at this level is essential for the full implementation of the national climate change strategy and other programmes and plans offered by the country.

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ANNEXES

Climate Finance Defined

	Multilateral Organizations	The multilateral development banks (MDBs)
<p>A narrow definition of climate finance might include finance that supports discrete climate activities, but excludes activities in which climate considerations are mainstreamed into traditional development assistance through a “climate-proofing” process.</p> <p>A broader definition might include some or all of the finance toward any development project that includes climate benefits.</p>	<p>UNFCCC does not define or establish criteria for climate finance.</p> <p>Organization for Economic Co-operation and Development (OECD)’s Development Assistance Committee (DAC) has developed definitions and criteria in its climate change mitigation and adaptation “Rio Markers” – the coding system that the DAC uses to track the ODA that targets climate change adaptation and mitigation.</p>	<p>including the African Development Bank, the Asian Development Bank, the European Bank for Reconstruction and Development, the European Investment Bank, the Inter-American Development Bank, the World Bank, and the International Finance Corporation—have developed a joint approach to tracking adaptation and mitigation finance in which they identify a set of criteria for adaptation and categories for mitigation</p>
<p>However; the application of both the OECD DAC system and the MDB system is affected by limitations and complexities (WRI, 2014):</p>		

Sum of Disbursements (USD)	2010	2011	2012	2013	Grand Total
Row Labels					
Sustainable agro-systems and environmental research and management and support of the quality of agricultural and animal health products					228,405
228,405					
Access to services supporting companies	487,428				487,428
ACTION PROGRAMME TO INCREASE SMALLHOLDER INCOME THROUGH IMPROVED QUALITY AND MARKET ACCESS OF COTTON PRODUCED IN TANZANIA		13,317	705,753	13,317	732,386
Agricultural Growth Corridor Programme				24,571	24,571
Assessing research priorities for blue water use in food production in southern and eastern Africa			14,713		14,713
Canadian International Food Security Research Fund - Phase 2 / Fonds canadien de recherche sur la sécurité alimentaire internationale - phase 2		280,907		280,907	561,813
CAPACITY BUILDING FOR CIVIL SOCIETY SECTOR - Government & Civil Soc general - Strategic Partnership for Development Sector - East Africa - Fair Trade and Ethical Trade-Agricultural extension GOV-Governance-HUNGER-Hunger related Activities			353,770		353,770
Caritas Australia ANCP Partnership	33,232	33,232			66,464
Construction of a Training Center of rural development				65,368	65,368
Construction of an farm-building with stables and training center for aspiring young farmers in Vikindu		27,253			27,253
Consultant agriculture / MoU Yara and MFA	2,832				2,832
Consumers benefiting from sustainable agricultural products	70,496				70,496
Continuation of Comprehensive Village Based Natural Resource Management and Sustainable Agriculture Project		91,630	87,404	96,256	275,289
Dar es Salaam Agricultural Growth Corridor	309,975				309,975
Dispatch of Volunteers		17,574			17,574
Empowering farmers organisations for livelihood improvement and sust.agric. development in semi-arid central and s...		288,515			288,515

Sum of Disbursements (USD)	2010	2011	2012	2013	Grand Total
Row Labels					
Empowering farmers organisations for livelihood improvement and sustainable agricultural development in semi-arid central areas			280,591		280,591
Empowering farmers organisations for livelihood improvement and sustainable agricultural development in semi-arid central areas, continuation				13,277	13,277
Enhancing Food and Economic Security / Amélioration de la sécurité alimentaire et économique			37,280	50,320	87,600
Enhancing rural communities towards economic empowerment and food security in Semi-Arid Highlands of TZA				147,902	147,902
Exploring Urban-rural	14,240	14,240			28,480
Farmers influencing decision-making	148,339				148,339
FED/2012/294-478-CALL FOR PROPOSALS GUIDELINES PREPARATION & PROJECT PROPOSALS E			86,674		86,674
Final evaluation of MIP 2007-2010		78,093		78,093	156,187
Food Security, Adequate Care and Environment (Tanzania and Malawi)	102,058	161,182	8,507	59,124	330,871
GLOBAL HUNGER INITIATIVES - Agriculture and Increase smallholder food prod - Agriculture Civil Society - Agriculture-CABI-Plantwise & Good Seed Initiative-Agricultural education/training/AGR-Agriculture-CLIM-Climate adaptation and change			899,743		899,743
GLOBAL HUNGER INITIATIVES - Agriculture funding for Plantwise initiative		464,684			464,684
GLOBAL HUNGER INITIATIVES - Funding for Good Seed initiative - support		464,684		464,684	929,368
Grain Post-Harvest Loss Prevention GPLP				828,097	828,097
Improvement of food security conditions and social-productive development of 1,000 families in the District of Simajiro (Manyara Region), TANZ				3,666	3,666
Improvement of food security conditions and socio-economic development for 1500 families in Tanzania.		40,945		40,945	81,891
Improvement of the pasture land and introduction of environmentally sustainable practices		52,558			52,558

Sum of Disbursements (USD)	2010	2011	2012	2013	Grand Total
Row Labels	537,444				537,444
Improving food security and living conditions by strengthening farming and tourism - Northern Tanzania (phase II)			181,440		181,440
Improving the conditions of food security and socio-economic development of 1500 families in Tanzania			672,991		672,991
INCREASING COMPETITIVENESS OF SMALLHOLDERS COFFEE GROWERS IN TANZANIA				79,660	79,660
Integrated community Development program		72,098			72,098
Integrated rural and sustainable agriculture for small farmer groups with emphasis on women's economic empowerment, Diocese of Mbeya			44,344	47,796	92,141
Integrated rural and sustainable agriculture for small farmer groups with emphasis on women's economic empowerment, Diocese of Mbeya			64,267	42,618	106,886
Integrated rural development and women social and economic empowerment in Songea Archdiocese		60,484	63,964	56,028	180,475
Integrated Rural Development Programme in Njombe Diocese	841,660	1,456,790	2,301,493	855,745	5,455,688
Integrated Rural Development Project in Morogoro			55,270	73,686	128,956
Integrated Rural Family Development Programme in 20 sub-villages of Ngara District					
Integrated sustainable development with emphasis on organic agriculture for small scale farmer groups, Mafia Island			72,680	40,494	113,174
Irrigation and Agricultural Development for Senior Government Officials (Southeast Asia)			24,426		24,426
Land for Equity and Transparency Framework				64,316	64,316
Managing Risk, Reducing Vulnerability and Enhancing Productivity under a Changing Climate	5,310	5,310			10,619
National Lottery - strengthening food security and income through better use of natural resources		44,572			44,572
NATURE-Biochar, Tanzania		110,338	164,778	232,941	508,057

Sum of Disbursements (USD)	2010	2011	2012	2013	Grand Total
Row Labels					
NATURE-BRITA: Building Rural Income Through Farmers' Associations			754,785	621,176	1,375,961
NGO cofinance: Support for small scale farmers to promote organic farming in Morogoro			32,134	12,215	44,348
Organisation of target groups into democratic and autonomous structures	190,471				190,471
Oxfam : Food Security for Tanzanian Farmers			535,950	758,684	1,294,633
Peace Corps, FK Norway, personnel exchange			8,751		8,751
Plant Variety Protection and DUS Testing	11,772	19,752	11,911		43,435
Small Scale Irrigation Development Project					
Southern Agricultural Growth Corridor II - (SAGCOT) Investment Blueprint	165,440	228,907	286,699	11,568,690	11,568,690
Storage And Proper Post Harvest Improvements				710,980	710,980
Strengthening Local Agricultural Innovation Systems in Tanzania and Malawi	3,262	3,262			6,523
Strengthening Smallholders through MVIWATA				32,640	32,640
Support to Southern Agricultural Growth Corridor Centre				167,767	167,767
Sustainable agricultural value chains	174,422				174,422
Sustainable Market-led Agriculture and Resource Management / Agriculture durable axée sur les marchés et gestion des ressources		3,015,201		3,015,201	6,030,402
Tanzania - target group ibetter organized in democratic and independent organizations		261,931			261,931
Tanzania Agricultural Partnership programI addedum			429,930		429,930
TANZANIA CLEARING A/C - Agriculture general - Agriculture Sector Development Programme-ASDP - Improve efficiency in resource allocation & utilize-Agricultural policy and administrative management IAGR-Agriculture-ZZ-NOT ANALYSED			5,719,794		5,719,794
TANZANIA CLEARING A/C - Agriculture general - Mtandao wa Vikundi vya Wakulima wa Tanzania - Strengthen,lobby &dvocacy capacity of farmers to-Agricultural development IAGR-Agriculture-ZZ-NOT ANALYSED			514,139		514,139
TANZANIA CLEARING A/C - Agriculture general - Technoserve - Devsustainable high quality cocoa valuechain & inc-Agricultural development IAGR-Agriculture-ZZ-NOT ANALYSED			1,285,347		1,285,347

Sum of Disbursements (USD)	2010	2011	2012	2013	Grand Total
Row Labels	5,860,927				5,860,927
TANZANIA CLEARING A/C - Agriculture, forestry and fish - Agriculture Sector Dev Program - Agriculture Sect Devpmnt					
TANZANIA CLEARING A/C - Dev sustainable high quality cocoa value chain		1,327,669		1,327,669	2,655,337
TANZANIA CLEARING A/C - Enhance farmer's access to & use of knowledge & re		5,310,674		5,310,674	10,621,349
TANZANIA CLEARING A/C - increase incomes from oilseeds of 120k small farm				265,534	265,534
TANZANIA CLEARING A/C - Reduce poverty&vulnerability & enhance livelihood		531,067		531,067	1,062,135
TANZANIA CLEARING A/C - Strengthen,lobby &dvocacy capacity of farmers to				531,067	531,067
Tanzanie - Le groupe cible a d'une manière durable et intégrée accès aux services adéquats, adaptés et qualitatifs				423,010	423,010
Tanzanie - Le groupe cible a d'une manière durable et intégrée accès aux services adéquats, adaptés et qualitatifs			375,508		375,508
Tanzanie - Le groupe cible a d'une manière durable et intégrée accès aux services adéquats, adaptés et qualitatifs		412,207			412,207
Tanzanie - Le groupe cible est mieux organisés dans des organisations démocratiques et indépendantes			275,968		275,968
Tanzanie - Le groupe cible est mieux organisé dans des organisations démocratiques et indépendantes				290,924	290,924
TAP Addendum III				1,182,375	1,182,375
TC AGGREGATED ACTIVITIES	102,734	1,166,463	2,961,851	4,481,161	8,712,209
Three Years Programme of Sustainable Agriculture in Iringa Diocese		11,541	47,558	31,997	91,095
To protect the African environment		32,536			32,536
Urban-Rural Interdependence and the Impact of Climate Change in Malawi and Tanzania		3,135	23,409	3,135	29,679
VECO learning from development pipelines	82,804				82,804
(blank)	298,705		240,322		539,028
Grand Total	9,671,956	16,102,749	19,624,142	34,935,945	80,334,793

For Kongwa District

Year	Cost Centre	Target Description	Activity	GFC Code Description	Local	Foreign	Total Govt. Funds	Extent of CC Relevance	Relevance Climate Category
2010/2011	Agriculture	To improve agriculture production schemes by June 2013	To construct irrigation scheme at Tubugwe village by June 2011 Construction of vegetable shed at Kibaigwa by June 2011 To construct one irrigation Dam at Ilwaga village by June 2011	Irrigation improvement & Other structures Pre-Feasibility Studies	-	80,000,000	80,000,000	Medium	Both
2011/2012	Agriculture	To improve agriculture production schemes by June 2014	To improve technical skills and extension services to staff and farmers through establishment of FFS for crop and livestock production by June 2012	Diesel Per diems – Domestic Agricultural Chemical Fertilizers	7,000,000	-	7,000,000	Low	Both
2012/2013	Agriculture	To improve agriculture production schemes by June 2015	To improve crop production through purchase of improved Sorghum seeds to 2 villages (Mautya and Msingisa) by June 2013 Training of farmers, agents, agribusiness and processors and good farming and marketing practices by June 2013	Petrol Diesel Per diems – Domestic Seeds Agricultural Chemical Food and Refreshments Office Consumables Petrol Diesel Training Allowances Training Materials Per diems - Domestic	7,908,000	17,821,788	21,609,788	Low	Adaptation
2012/2013	Agriculture	To improve agriculture production schemes through irrigation by June 2015	Construction of headworks and lining of main canal (MC) at Chamkoroma irrigation scheme by June 2013	Civil Works	-	234,375,000	234,375,000	Medium	Adaptation

2012/2013	Agriculture	To improve agriculture production schemes through irrigation by June 2015	Rehabilitation of intake and lining of Main canal (MC), Tertiary canal (TC) and Secondary canal (SC) at Banyibanyi irrigation scheme by June 2013	Civil Works	-	187,500,000	187,500,000	Low	Adaptation
2013/2014	Agriculture	Agriculture production and irrigation schemes improved by June 2016	To facilitate sorghum seed multiplication by June 2014 To facilitate production through Block Farming by June 2014	Petrol Diesel Seeds Agricultural Chemical Petrol Diesel Per diems – Domestic Seeds	25,026,200	-	25,026,200	Low	Adaptation
2010/2011	Livestock	Livestock development promoted and sustained by June 2013	Vaccination of 114,763 cattle against CBPP, BQ, RABIES ANTHRAX and RVF To conduct artificial insemination to 1,000 cows nu June 2011	Extra-Duty Petrol Diesel Vaccines Per diems – Domestic Cold Room Units Veterinary Equipment Livestock	-	14,109,000	10,000,000	Low	Adaptation
2011/2012	Livestock	Livestock development promoted and sustain by June 2012	Vaccination of 115,000 Cattle against CBPP, BQ, RABIES, ANTHRAX and RVF by June 2012, Improving cattle productivity through conducting Artificial Insemination and improved bulls by June 2012	Extra-Duty Petrol Diesel Vaccines Per diems – Domestic Veterinary Equipment Petrol Diesel Livestock	10,000,000	-	10,000,000	Low	Adaptation
2012/2013	Livestock	Livestock development promoted and sustain by June 2013	Improving cattle productivity through conducting Artificial Insemination by June 2013	Agricultural Implementation	-	2,300,000	-	Low	Adaptation

For Kilosa District

Year	Cost Centre	Target Description	Local	Foreign	Sum; Local & Foreign Fund	Total Govt. Funds	Extent of CC Relevance	Relevance of Climate Category)
2009/2010	Agriculture	Irrigation structures are improved in 7 schemes by 2012	-	363,581,000	363,581,000	342,341,000	Medium	Adaptation
2009/2010	Agriculture	Quality and affordable seeds are available in 34 villages by the year 2012	-	15,000,000	15,000,000	9,750,000	High	Adaptation
2009/2010	Agriculture	Processing of food produces are added market value in 5 crop by 2012	-	10,000,000	10,000,000	10,000,000	Low	Adaptation
2009/2010	Livestock	Pasture improved in 2 livestock keepers villages by 2012	-	10,000,000	10,000,000	4,750,000	Low	Adaptation
2009/2010	Livestock	Livestock accessibility to water point enabled at Chogoli village construct two charco-dams by the year 2012	15,000,000	-	15,000,000	15,000,000	Medium	Adaptation
2009/2010	Livestock	Cattle deep is rehabilitated at Rubeho to reduce livestock diseases by 2012	-	9,470,000	9,470,000	-	Low	Adaptation
2011/2012	Livestock	Livestock mortality rate reduced from 65% to 35% through veterinary services delivery by 2013	0	30000000	30,000,000	0	Low	Adaptation
2011/2012	Agriculture	Food and Cash crop production increased, maize from 2tn to 6m/ha; rise from 2tn to 6m/ha ginger from 6tn to 10m/ha, Onion from 9tn to 15tn/ha by year 2013	70,517,000	481,360,000	551,877,000	149,360,000	Low	Adaptation
2011/2012	Livestock	Livestock product quality and quantity increased from 40 to 80% by 2013	-	150,000,000	150,000,000	-	Low	Adaptation
2012/2013	Agriculture	Conducive working environment is achieved in delivery of goods and services in agricultural sector by year 2015	1,850,000	-	1,850,000	-	Low	Adaptation

2012/2013	Agriculture	Food and cash crops production increased (maize from 2 tons to 6 tons, rice 2 tons to 6 tons and onion 9 tons to 15 tons per ha. By June 2015)	85,000,000	464,728,371	549,728,371	540,315,871	Medium	Adaptation
2012/2013	Agriculture	Food and cash crops production increased (maize from 2 tons to 6 tons, rice 2 tons to 6 tons and onion 9 tons to 15 tons per ha. By June 2015)	-	403,125,000	403,125,000	-	Medium	Adaptation
2012/2013	Livestock	Livestock product quality and quantity increased from 40% to 80% by 2015	100,415,000	-	100,415,000	-	Medium	Adaptation
2013/2014	Livestock	Livestock mortality rate reduced from 65% to 35% sector in Kilosa District by year 2016,	4,434,000	-	4,434,000	-	Low	Adaptation
2013/2014	Livestock	Delivery of extension services achieved by 80% in Livestock and Fisheries sector in Kilosa District by year 2016	14,066,000	-	14,066,000	-	Low	Adaptation
2013/2014	Agriculture	Food and cash crop production increased: maize from 2 tons to 4 tons per hectare; rice from 2 tons to 6 tons over hectare by year 2016	85,176,000	90,000	85,266,000	-	Medium	Adaptation
2013/2014	Agriculture	Conducive working environment to 99 staffs for Kilosa District ensured by June 2016 food and cash crop production increased: maize from 2 tons to 4 tons per hectare; rice from 2 tons to 6 tons over hectare by year 2016	2,367,000	800,000	3,167,000	-	Low	Adaptation
2013/2014	Agriculture	Food and cash crop production increased: maize from 2 tons to 4 tons per hectare; rice from 2 tons to 6 tons over hectare by year 2016	-	540,092,000	540,092,000	409,412,500	Medium	Adaptation
2013/2014	Agriculture	Food and cash crop production increased: maize from 2 tons to 4 tons per hectare; rice from 2 tons to 6 tons over hectare by year 2016	-	403,125,000	403,125,000	144,000,000	Medium	Adaptation
2013/2014	Livestock	Hides and skin quality and quantity increased from 40% to 80% in Kilosa District by year 2016	7,700,000	-	7,700,000	5,850,000	Low	Adaptation
2009/2010	Agriculture	Land use plan promoted in 15 villages by 2012	-	10,000,000	10,000,000	720,000	Low	Both

2009/2010	Agriculture	550 farmers acquired improved agriculture technology through construction of 3 WARC by the end of 2012	-	4,907,000	4,907,000	4,907,000	Low	Both
2009/2010	Agriculture	120 farmer field school established by the end of the year 2012Smooth running of agriculture extension activities ensured by 2012	-	30,000,000	30,000,000	4,140,000	Medium	Both
2009/2010	Livestock	Artificial insemination done to 159 indigenous cattle by June 2012	-	10,000,000	10,000,000	10,000,000	Medium	Both
2010/2011	Agriculture	Skill and knowledge transfer on crop and animal husbandry practices to farmers, livestock keepers by 2013	-	50,400,000	50,400,000	50,400,000	Low	Both
2010/2011	Agriculture	Food and cash crops production increased, maize from 2 tonnes to 5 tonnes per ha. Rice from 2 tonnes to 7 tonnes and ginger from 6 tonnes to 10 tonnes/ha by the year 2013	-	312,000,000	312,000,000	280,000,000	Low	Both
2011/2012	Livestock	Appropriate technology transferred to farmers enhanced by 2011, 3Livestock mortality rate reduced from 65% to 35% through veterinary services delivery by 2013	-	20,000,000	20,000,000	4,794,000	Low	Both

