



# Note

## Assessing Climate Adaptation in Agriculture: Setting the EAC scene and remaining needs

By Yasmine Ismail

### Summary

EAC negotiators are engaged in negotiations under the UNFCCC that have implications for agriculture and agro-processing, especially under the Koronivia Joint Work on Agriculture. The information from the ground may help them in advancing their negotiating agenda, as appropriate, with concrete examples and stories. This note will seek to give an overview of the current methods and approaches for assessing adaptation, adaptation co-benefits and resilience to climate change, in the agriculture sector in EAC countries. It will look at the existing (or not) government strategies and on the ground initiatives, to measure/track how farmers, agro business, communities are adapting to climate change, before discussing what the governments and their UNFCCC negotiators may do to go beyond what is already in place in their country/region.

## Introduction

Tracking adaptation progress at country level is increasingly recognized as an important element of climate change adaptation. The Paris Agreement, adopted in 2015, stresses the need to monitor and learn from adaptation actions through periodic stocktaking. Therefore, it is a relatively recent field, yet rapidly expanding as several initiatives, guidelines and frameworks have been launched at the national and global level.

It was found that assessing the economic, environmental and social costs, as well as benefits of adaptation plays a particularly critical role in informing the planning & monitoring stage of the adaptation process. The assessment of costs and benefits informs planners about when and where to act and how to prioritize and allocate scarce financial and technological resources, while considering the main purpose and core objectives of the adaptation options to be assessed.

In practice, objectives of adaptation include the following options: 1/ Minimize or avoid all or only part of the expected or observed impacts; 2/ Return levels of human well-being to pre-climate change levels; and 3/ Maintain current levels of risk or as a minimum reduce them cost-effectively within agreed budgets or pre-defined acceptable levels. In other words, planners should set suitable objectives knowing that trade-offs will need to be made between adopting all possible measures, and living with the risks.

Therefore the adaptation process objectives and relevant assessment strategies vary between regions, countries and communities. And they also vary from

a sector of activity to another.

An earlier note issued by CUTS International has emphasized how agriculture sector is pivotal to the economy of EAC member states, yet the most vulnerable to impacts of Climate Change. It also outlined the most significant adaptation strategies and policies currently adopted and implemented by the governments of EAC member countries, as well as by International organisations, NGOs and businesses in the agriculture sector.

This note will aim to add to the picture by outlining some of the existing government methods and approaches for assessing adaptation, adaptation co-benefits<sup>1</sup> and resilience to climate change, in the agriculture sector among EAC member countries. It will also look into initiatives on the ground implemented by farmers, agro businesses, communities to assess their adaptation, whether they represent their own initiatives, or are supported by international organizations and NGOs programmes. It will then present areas where more support and effort from the Governments and their UNFCCC negotiators can be most useful.

## Setting the scene: Governments' Approaches to Assessing Adaptation

As mentioned before the need to track adaptation processes and outcomes at the national level has been growing recently in the context of the global stocktaking exercise under the UNFCCC and more recently the Paris Agreement. This exercise requires countries to submit and periodically update adaptation communications to the United Nations Framework Convention on Climate Change (UNFCCC) as a component of or in conjunction

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<sup>1</sup> Co-beneficial approaches to climate change adaptation are those that also promote positive outcomes in other areas, such as air quality and health, economic prosperity and resource efficiency.

For example, improving agricultural land management practices could lead to reduced erosion/siltation and carbon sequestration.

with other communications or documents, including national adaptation plans (NAPs) and nationally determined contributions (NDCs). These submissions may also cover national adaptation tracking frameworks to assess whether implemented adaptation actions have contributed towards the objectives of reducing vulnerability, enhancing adaptive capacity and increasing resilience at national, subnational and local levels.

Below are some examples of national adaptation tracking frameworks, policies and tools that are deployed by EAC member countries in the agriculture sector.

## Rwanda

Rwanda has developed the Climate Change Vulnerability Index Report published every five years. This report provides a comprehensive data-driven picture of climate change challenges facing the country using 37 indicators of vulnerability, exposure and sensitivity to climate change as well as its adaptive capacity. It includes data from a survey conducted with the cooperation of 2400 households across the country, analysed at the district and provincial levels which gives it statistical significance sufficient to feed in robust assessments.

Rwanda Environment Management Authority (REMA) also conducted an assessment on Climate Change Technology Need (TNA). The TNA development process included institutional arrangements, extensive stakeholder consultations, prioritization of sectors, barrier/market analysis and Technology Action Plans (TAP) with agriculture and energy as priority sectors. The TNA revealed that the top five technologies (in descending order) prioritized for climate change adaptation in Agriculture are: 1/Seed and grain storage; 2/Agro forestry; 3/Radical terraces; 4/Drip irrigation; 5/Rainwater harvesting.

## Tanzania

The government of Tanzania has put in place several national policies and strategies that relate to climate change adaptation and specifically for adaptation in agriculture sector.

The development of these policies and strategies took into consideration a set of criteria that included: level or degree of adverse effects of climate change; poverty reduction to enhance adaptive capacity (co-benefits); cost-effectiveness; improvement of the livelihood of the rural communities (co-benefits); vulnerable groups in the communities; cost of the project; complementarity to national goals and objectives; and locally driven criteria (country driven). Those enable stakeholders to identify and choose agriculture specific action options to strengthen resilience to climate change and generate additional benefits such as increasing agricultural productivity and communities' income and livelihood; improve food security, nutrition and health; and promote sustainable development.

A challenge is the lack of information about the continuous/ regular (or not) tracking of those indicators, and the M&E methods used.

## Kenya

Kenya enjoys a myriad of climate change policy frameworks. Particularly the Climate Smart Agriculture Strategy (CSAS) (2017- 2026) and its Implementation Framework (2018-2027) highlighting the national priorities and adaptation measures to be undertaken in the agriculture sector . Kenya developed also the Agriculture Sector Growth and Transformation Strategy which incorporates a component on environmental resilience. These plans provide a an overall framework for policies to address climate change issues, but they do not specifically incorporate

methodologies for assessing adaptation, adaptation co-benefits or resilience.

Kenya's 2019 submission to the Konorovia Joint Work on Agriculture Committee under UNFCCC points to this gap and highlights the need for methodologies for reviewing the adequacy and effectiveness of adaptation, including inter alia, frameworks and systems used for monitoring adaptation efforts, and approaches to assessing the effectiveness of adaptation plans and actions. In fact, a number methods for measuring daptation do exist, however they are project based and mostly done by donors under their Monitoring and Evaluation activities. The government-driven CSA project seeks to implement tracking attempts to address this gap through a sort of a peer accountability mechanism where members of the implementing consortia are required to disclose and be transparent on their interventions.

## **Uganda**

Under the 4-year Uganda National Climate Change Communications Strategy, the Government has initiated the Standard National Climate Change Indicators which aims to help track the integration of climate change adaptation and mitigation measures across the country's development programs. This strategy will also ensure that climate information is consistently and widely shared throughout Uganda. However, it seems that not much progress has been publicly communicated/reported yet.

## **Assessment initiatives by international organisations, NGOs and/or farmers and agro-businesses**

Beyond government policies and frameworks in place. Some international organisations and NGOs developed and are implementing various projects in the region to support farmers and agro-businesses on the ground efforts to monitor and assess the impact of their adaptation actions. Below are some promising examples.

### **Tanzania**

In Tanzania, International Organisations and local NGOs have been actively engaging with farmers communities and agro-businesses, developing climate change adaptation and resilience projects, but also projects and sub-projects that conduct assessments and/or supports local actors learning to assess their actions.

The approach and methods applied under the CARE Tanzania and FORUMCC funded projects provide a framework for communities and stakeholders to analyse vulnerability and capacity to adapt to climate change and build resilience to disasters at the community level. While Gender Climate Vulnerability and Capacity Assessment (CVCA and G-CVCA provides the same framework with particular focus on social dynamics and specifically gender. It also provides guidance and tools for participatory research, analysis and learning. The results then are used to plan collective action on adaptation, or to lobby local government or NGOs for appropriate interventions.

Another example is the Climate Change and Development Learning Platform, introduced by Irish Aid and International Institute for Environment and Development (IIED). It aims to

facilitate assessing adaptation actions through sharing of information and lessons between stakeholders. Those experiences seek to inform decisions when designing programmes to address climate change with a particular focus on integrating climate change into development plannings, adopting climate-smart technologies particularly in agriculture, better targeting social protection systems to address climate vulnerability, developing smallholder household sustainable energy systems and addressing gender equality.

## Kenya

In Kenya also, there are many climate change adaptation projects targeting the agriculture sector implemented in partnership with donors to support farmers communities adaptation efforts, as well as local NGOs and local communities and agro-businesses initiatives. These include monitoring and evaluations tools to assess implemented adaptation actions. Some examples include Care international which tracks its adaptation projects through M&E tools and other institutional strategies like 'social analysis in action', 'health community scorecard' tool and 'gender marker'. Kirinyaga county has put in place a methodology to track implementation of its agricultural projects including those on climate change. At the community level, Mazingira Champions intends to track achievement of 10% forest cover through sourcing for information from schools and churches.

## The Challenges Ahead

Despite the myriad of climate change adaptation strategies, action plans and local projects targeting the agriculture sector in the region, measuring adaptation, adaptation co-benefits and resilience remains a major challenge for many reasons. The following are the most common among EAC member States:

1. The vast amounts of available funding go primarily to adaptation initiatives, so not enough or very little financial and technical support is being provided for establishing monitoring and assessment policies and mechanisms.
2. The existing assessment efforts are taking place on a project by project basis and in an isolated matter
3. Existing assessment efforts are mostly conducted by donors using their own monitoring and evaluation frameworks and assessment indicators and not many ensure knowledge is shared and passed to local implementers and agro-communities to build their capacities on methodologies for tracking the implementation of adaptation actions and co-benefits.
4. Difficulties in accessing accurate data and information in a timely manner and the lack of access to the technologies needed for processing some of the gathered data and information.

## The Way Forward: Recommendations to Governments and UNFCCC Negotiators

After, consultations with various stakeholders in the agriculture sectors of mentioned countries, including Government representatives, International Organisations and Donors, NGOs, as well as farmers, the below are actions were identified as most useful to be pursued by governments and UNFCCC negotiators:

1. Stocktake existing methods and approaches of assessing adaptation across the various projects implemented at the national and local level and evaluate their efficacy in tracking adaptation

- progress at different scales, in an attempt to create synergies and generate comprehensive approaches and methods, but also to identify gaps, challenges, opportunities and options associated with those methodologies.
2. Ensure the alignment of various mandatory reports (including indicators) to UNFCCC like National Communication Reports, National Adaptation Plans so that their results can inform the new mechanisms and reports provided in the Paris rulebook like Global stock-take, revision of Nationally Determined contributions, Measuring, Reporting and Verification (MRV).
  3. Regularly undertake voluntary reporting under the Sustainable Development Goals (SDG) framework, as it can be considered as an indirect co-benefits measurement tool, as SDG reporting covers a wide range of indicators across all sectors including agriculture.
  4. Emphasize the need for serious funding of the adaptation actions in agriculture sector. Particularly also the need for a deliberate funding for developing adaptation tracking tools and assessment indicators, that include providing the technology needed if unavailable and building the capacities of local stakeholders to ensure knowledge is transferred and efficiently applied.
  5. Consider the participation of representatives of private sector agro-processors among country delegation to attend climate negotiations and working groups. This will allow them to be exposed to other countries experiences, peer to peer learning and thus building their capacities in technical areas, including assessing adaptation and adaptation co-benefits.
  6. Capitalise on Governments efforts to ensure data availability & dissemination, and promote transparency and knowledge sharing.



## CUTS International, Geneva

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