



POLICYADVISORY NOTE

Climate Smart Agriculture Policy Advocacy - Tanzania

Climate change is not a future reality; its impacts are already felt by the current generation. In view of the climate change challenges – both adaptation and mitigation – faced by the agricultural sector, bold actions are needed within the next decade. We therefore need urgent and transformative actions, embraced by all stakeholders.

On the 4th of June 2018, the Economic & Social Research Foundation (ESRF), as the Tanzania node hosting institution of the Food Agriculture and Natural Resources Policy Analysis Network (FANRPAN), with funding from CARE International, held a Climate Smart Agriculture National Policy Dialogue.

The aim of the National Policy Dialogue was to bring together state and non-state stakeholders to review elements included in the work of the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation to jointly address issues related to agriculture. The dialogue thus

builds on the United Nations Conference on Climate Change held between 30th April and 10th May 2018 in Bonn Germany.

The Fifth Assessment of the Intergovernmental Panel on Climate Change (IPCC) has shown that global Climate change is already damaging crops and undermining food production capacity in much of the world, particularly in poorer countries (IPCC 2014). Research has also shown that climate change will continue to affect food security, nutrition and well-being in several ways: changing rainfall patterns, changing weather patterns, increasing spread of disease and decreased availability of arable land.

In the efforts of addressing challenges posed by climate change on the agriculture sector, Tanzania developed the Tanzania Climate Smart Agriculture programme with the aim of having an agricultural sector that sustainably increases productivity, enhances climate

resilience and ensure food security for the country. This programme is made of six programmatic result areas. They are: *improved productivity and incomes among farmers, building resilience and the associated mitigation co-benefits, value addition integration, research for development and innovations, improving and sustaining agricultural advisory services and improved institutional coordination among actors.*

It is also important to note that, Tanzania recently launched its Second Agriculture Sector Development Programme (ASDP II) in which Climate Smart Agricultural practices and Technologies will be implemented for enhanced agricultural productivity in the verge of climate change and quest for country's development. However, there are some issues that requires policy and decision makers to enforce on CSA for improved agricultural productivity and enhanced food security as well as adapting to and mitigating climate change challenges.

Priorities for the Agricultural Development

In this context, climate-smart agriculture (CSA) becomes vital from a food security and developmental perspective.

Methods and approaches for assessing adaptation, adaptation co-benefits and resilience

For adaptation to be successful, it should ideally be undertaken within a comprehensive and iterative process of social, institutional and organizational learning and change. Assessing the costs and benefits of adaptation options is an important part of this process, assisting adaptation planners and practitioners to identify the most appropriate interventions for reducing vulnerability, enhancing adaptive capacity and building resilience.

Soil Health Improved soil carbon, soil health and soil fertility under grassland and cropland as well as integrated systems, including water management

Soil carbon – the “carbon beneath our feet” – could help mitigate significant greenhouse gas emissions, while also supporting food production and adaptation to climate change. There is need to incentivise African farmers to manage. In addition, there is need for increased investment in soil rehabilitation in line with the Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods, acknowledging that smallholders are already investing significantly in agricultural development and

the sustainable management of soils. In this context, agribusiness can play a facilitating role for increased incomes and job creation.

Improved nutrient use and manure management towards sustainable and resilient agricultural systems

Farmers require increased access to inorganic fertilizers and improved seeds as well as support to increase organic inputs from numerous sources, including nitrogen-fixing trees and manure compost. An opportunity exists to meet those future food security needs while using nitrogen (N) fertilizers efficiently. Efficient use of N fertilizers requires combining balanced and appropriate nutrient inputs with good agronomic practices, such as the use of improved, high-yielding varieties that are adapted to local conditions and needs, application and recycling of available organic matter, water harvesting and irrigation under drought stress conditions, and lime application on soils with acidity-related problems.

Improved livestock management systems

The interactions between crops and livestock can be managed to contribute to environmentally sustainable intensification, diversification and risk management. There is relatively little information on how these interactions may be affected by changes in climate and climate variability. This is a serious gap, because these interactions may offer some buffering capacity to help smallholders adapt to climate change.

Socioeconomic and food security dimensions of climate change in the agricultural sector

It is the poor who first bear the brunt of climate change impacts and at the same time have little or no capacity to withstand or adapt to climate change. Therefore, adaptation must be development oriented to achieve Sustainable Development Goals (SDGs) number one (1), in particular, to eradicate extreme poverty for all people.

Key Messages and Recommendations

The Climate Smart Agriculture National Policy Dialogue came up with the following key recommendations:

Call for effective dissemination of early warning systems and climate information according to different agro-ecological zones for enhanced agricultural productivity

- Current experiences indicate that agricultural interventions implemented in the country consider farmers to be homogeneous irrespective of their differences in need, the type of crops they grow and their agro-ecological zones.
- Many farmers, especially smallholder farmers whose agricultural production is rain-fed, have inadequate information on early warning systems and access to weather information.
- As such, there is need to enhance effective dissemination of early warning systems and climate information according to agro-ecological zones for enhanced agricultural productivity.

Call for reduced agricultural investment costs through subsidies for easy adoption of Climate Smart Agriculture practices and technologies

- Trends have shown that, agriculture activities requires huge investment costs. Effective adoption of CSA practices and technologies will certainly require additional resources including finance, technology and capacity development.
- As such, there is need for the government to consider increased budgetary allocations including consideration of subsidies for easy adoption of CSA practices and technologies for enhanced agricultural productivity and food security in the country.

Call for an integrated, Multi-sectoral and Multi-stakeholders' engagement approach in the implementation of Climate Smart Agricultural practices and technologies

- Although the implementation of CSA follows a multi-sector approach, there is still a challenge of harmonisation and

effective coordination among stakeholders, including the government ministries, private sector and other actors.

- There is therefore, a need to ensure that relevant stakeholders are brought on board for adoption of CSA practices and technologies to warrant higher agricultural productivity and food security in the country.

Call for improved access to markets and value addition of agricultural produces for enhanced food security through adoption of Climate Smart Agricultural practices

- Access to reliable markets with fair prices among farmers is still a challenge. This discourages farmers in increasing their productivity.
- On the other hand, realities have shown that farmers produce low quality agricultural produce leading to low prices or losses and subsequently low incomes.
- As such, there is a need for deliberate efforts that encourage value addition of products to raise farmers' incomes.

Call for effective knowledge generation, management and dissemination through platforms for awareness raising and uptake of Climate Smart Agriculture practices and technologies

- Awareness and understanding of the CSA practices and technologies through evidence-based research information is still low among actors in the country including policy and decision makers.
- On the other hand, there is a lot of CSA related information in different academic and research institutions that is not widely shared among actors.
- It is therefore, imperative that a series of dialogues on CSA are held through platforms for information sharing and awareness raising among actors across scales and levels.