

National Consultation on Food Loss and Waste Management for Productivity Gains, Food security, Nutrition, and Climate Resilient Agri-Food Value Chains in Malawi



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**Report on the National Consultation on Food Loss and Waste Management for
Productivity Gains, Food Security, Nutrition, and Climate Resilient Agri-Food Value
Chains in Malawi**

Date of meeting: June 3, 2024

Venue: IFPRI Malawi Office, Area 14

Centre for Agricultural Research and Development (CARD)

Lilongwe University of Agriculture and Natural Resources (LUANAR)

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1 INTRODUCTION

1.1 Background

The Centre for Agricultural Research and Development (CARD), in collaboration with the International Food Policy Research Institute (IFPRI), held the **National Consultation on Food Loss and Waste Management for Productivity Gains, Food Security, Nutrition, and Climate Resilient Agri-Food Value Chains in Malawi** on June 3, 2024, in Lilongwe, Malawi. In attendance were experts from various sectors including the public sector, private sector, academia (LUANAR), CGIAR, and development partners, among others. The full list of participants is presented in the Annex.

1.2 Workshop Objectives

The main objective of the Consultation Workshop was to engage key experts and stakeholders on the development of a multisectoral collaborative process for integrating FLW to national climate policy and priorities for implementing FLW measures, by examining current policies, strategies, and programs related to Food Loss and Waste (FLW) in Malawi as they relate to productivity, food security, nutrition, and climate action outcomes across various agri-value chains. Discussions revolved around the role of Government MDAs and the private sector in FLW Management, research and innovation on FLW Management, as well as identification of research and implementation gaps and how these can be fed into the Nationally Determined Contributions (NDCs) in Malawi. The Consultation Workshop serves as a foundational step for further developing the evidence base on FLW in local supply chains and identifying strategic investments to reduce FLW around agri-food systems, thereby informing Malawi's NDCs. The workshop was overly moderated by Dr. Innocent Pangapanga, who is the Director of the Centre for Agricultural research and Development (CARD) at the Lilongwe University of Agriculture and Natural Resources (LUANAR).

2 OFFICIAL OPENING

2.1 Opening remarks – Dr Suresh Babu

- In his opening remarks, Dr Suresh Babu discussed the work that IFPRI does in Malawi, which includes supporting food security and climate change policy decision-making and evidence-based policy implementation with the support of existing systems on the ground. He further emphasized the importance of IFPRI's collaboration with other organizations in Malawi, including CARD-LUANAR.

3 MAIN PRESENTATIONS

3.1 Introduction to CACCI - Suresh Babu

As an introduction to the upcoming project, Dr Suresh Babu indicated the need for national consultations aimed at determining how food systems in Malawi can benefit from reducing food loss and waste, and how this can be tracked and reported to the National Planning Commission (NPC) for implementation. Dr Babu then presented the work being carried out internationally under the Comprehensive Action for Climate Change Initiative (CACCI) on reducing food loss and waste as a pathway to climate action and GHG reduction, which was launched at the global COP27. CACCI is implemented across continents including Africa, Latin America, Asia, Europe, and America, and works with IIDs in developing climate resilience plans that from which outputs such as policy briefs and other knowledge material are produced and lead into policymaking. Other CACCI projects revolve around Methane assessment from crop production-based systems, livestock production, as well as food processing and transportation. Technologies such as biodigesters are also used to generate energy for efficient cooking, thereby reducing GHGs.

In Malawi, little is known about food loss and waste at different value chain nodes. In addition, measurement of GHGs from food loss and waste has not yet begun. Therefore, there is need for coordinated action and for interventions to be multifaceted by bringing in a range of actors including farmers, consumers, government stakeholders, the private sector, and researchers. As Malawi is currently in the process of updating NDCs, this consultation meeting serves as a starting point through which questions such as the following can be addressed:

- What are the various ways agriculture can reduce the carbon footprint?
- How can these strategies be operationalized and scaled up?
- How do we connect the FLW research to climate change in Malawi?
- What data do we need?
- How can the Malawi food system reduce food loss and waste? How can this be tracked and fed into the NDCs?
- How can we help the NDCs and National Development Plans with the information accumulated?
- How can FLW be quantified at each point in different value chains?
- What is the role of the private sector in addressing FLW in Malawi?
- Importance of monitoring, tracking and reporting, not just for FLW but also overall NDC implementation.

3.2 Setting the stage around FLW - Dr Innocent Pangapanga

To open up the discussions, Dr Pangapanga made a presentation capturing the current status of FLW globally, regionally (in sub-Saharan Africa), and specifically in Malawi. Food systems are a major cause of climate change, land use change, natural resource depletion and degradation, pollution, and biodiversity loss. Human population and income growth projections suggest that the environmental effects of our food systems could be 50–90% greater in 2050 compared to 2010. FLW has become a worldwide concern in recent years and is widely identified as a key barrier to global sustainability due to its adverse impacts on food security, human health, natural resources, and the environment. Malawi has a higher rate of food loss across the supply chain than the world average, with farmers typically losing between 15 to 50 percent of their yields to pests and decay. Some of the drivers of FLW in Malawi include poor farming practices such as monocropping that become conduits for pests and diseases, use of traditional storage facilities, and limited agro-processing of agricultural produce. Efforts in addressing FLW in Malawi have been made, such as USAID-funded initiatives like the PICS bags. However, these are scanty and have mainly focused on maize. In addition, when the fertilizer subsidy programme was starting, there was a component on waste loss management. However, this was later removed.

Therefore, for Malawi, the following discussion questions were proposed:

- Does Malawi have policies or strategies in place to address issues of FLW and maximize opportunities existing across the agri-value chains? How could they be enhanced?
- Does the country have particular investments aimed at reducing food loss and wastes related to various agri-food systems value chains?
- Is the agro-processing industry or off-takers or related technologies ready for innovativeness and movement around reducing FLW in Malawi?
- Are the NDCs responsive of FLW as a contributor to global warming or emissions: climate action pathway?
- Is the national data monitoring and tracking system for FLW developed or envisioned?
- Apart from maize, which other value chains should Malawi focus on in reducing FLW?

4 DISCUSSIONS, QUESTIONS AND COMMENTS

During the subsequent discussions, panellists highlighted issues related to measurement and quantification of FLW, availability of markets, private sector participation, policy formulation, technology and innovation, and stakeholder collaboration.

4.1 Measurement and quantification of FLW

4.1.1 National Statistical Office (NSO) - Sautso Wachepa

Quantification of FLW is not straightforward and there is need to develop specific methodologies for measurement and quantification of FLW in Malawi using value chain-specific methods. There has been considerable focus on the maize value chain, and so the country must explore other value chains including livestock so as to develop focused and effective interventions.

One major challenge is the poor availability and measurement of data on FLW. What methodologies for measurement (subjective vs objective; household vs industry; of the total organic waste, how much is food waste?).

The National Statistical Office (NSO) collects data on post-harvest losses (PHL) through the Integrated Household Surveys, whereby households are asked to quantify loss due to factors such as poor storage, rotting, pests, and diseases. Households are further asked the major reasons for the loss, what measures they put in place to prevent or reduce the losses, and effectiveness of the measures.

Another source of data is the African Postharvest Losses Information System (APHLIS), which is the foremost international effort to collect, analyse, and disseminate data on postharvest losses of cereal grains in sub-Saharan Africa.

4.2 Markets and private sector participation

4.2.1 Tradeline Cooperation - Calvin Kamchacha

A lot of the focus has been on quantity lost but this has not been effectively translated into value, and much of the discussion on FLW has been focusing on food security and not commercialization. For the private sector, motivation largely rests on value. We therefore need to assess food loss and waste as a result of market failure in specific value chains and estimate market demand for produce.

Market and value chain factors are crucial. Farmers in Malawi produce without knowledge of whether a market for the produce exists and as a result a lot of surplus goes to waste. This is exacerbated by poor storage and transportation infrastructure. One key gap is the disjointed supply chain, with storage being the key constraint.

4.3 Policy formulation and implementation

4.3.1 Ministry of Agriculture - Boyd Mwafulirwa

National dialogue from the government on challenges related to FLW and food systems has brought out issues such as:

- Food loss due to fall army worm, pests and diseases, and use of unsustainable cropping practices. Food wastage also remains high due to preparation of more than what is actually required.

- Several policies and strategies address FLW in Malawi. These include the Food System Strategy and Investment Plan, National Agriculture Policy (under review), National Agriculture Investment Plan, and Climate Change Policy, among others. There have also been some outreach activities such as the First National Commemoration of the Reduction of Food Loss and Waste in Malawi, which took place under the theme “Zero Food Loss and Waste in the Face of Climate Change”. The event took place on 28 May 2024, and its main aim was to raise awareness, foster collaboration, and promote sustainable food management practices to enhance food security across Malawi. This was a collaborative event by the Ministry of Agriculture and LUANAR.

4.3.2 Environmental Affairs Department - Bruno Kamanga

The Climate Change policy has pillars on adaptation and mitigation. However, most interventions promoted are on adaptation rather than mitigation. Therefore, there still remains a challenge in minimizing emissions. Being party to the UNFCCC, Malawi partly incorporates FLW in its policy. Nevertheless, this is in the general context of agriculture, looking at household waste as a whole and not FLW specifically. Major challenges include lack of infrastructure and data.

4.4 Research and Innovation

4.4.1 Department for Agriculture Research Services (DARS) – Dr. Singano

The Department for Agriculture Research Services (DARS) is a regulatory body that is in charge of controlling pesticide influx into the country under the Plant Protection Commodity Group. This is aimed at reducing losses from pesticides and ensuring that only legal pesticides are used in the country.

DARS also works on developing technologies aimed at reducing FLW. These include Bio-control agents, hermetic storage facilities especially for grains, and breeding of varieties that are resistant to pests and diseases.

In addition, DARS is involved in assessing methodologies for measuring FLW from farm to fork, especially for grains. They provide data to the African Postharvest Losses Information System (APHLIS).

4.4.2 Lilongwe University of Agriculture and Natural Resources (LUANAR) – Dr. Kasapila

LUANAR conducts research on value addition in aquaculture, roots and tubers, legumes, aflatoxin, as well as fruits and vegetables value chains to address issues of FLW. Some of the initiatives include agro-processing of fruits into juices, and production of briquettes from groundnuts heavily affected by aflatoxin.

However, challenges in research include:

- Lack of funding (how can we address issues of FLW without financing?)
- Poor linkages and coordination by stakeholders
- Poor dissemination of results
- Low commercialization of products

4.5 The Role of USAID – Erik Sito

Noting that “If we sort out food loss and waste, we can feed all the hungry people in the world”, USAID indicated that they have many activities to provide resources and support to the agriculture sector and other sectors in Malawi, that can be used to address issues of FLW. Policies exist, but the challenge is implementation. Some technologies exist, but dissemination is a challenge.

Coordination, collaboration is key in addressing these challenges. For instance, the private sector is the linkage between research and users. These are responsible for scaling up technologies. In addition, Feed the Future Innovation Lab works on food systems for nutrition. It would therefore be great to connect with them.

5 ACTION POINTS AND RECOMMENDATIONS

- Collaboration and coordination among multisectoral national stakeholders (both public and private sectors, community leaders, and farmers) is of utmost urgency in the process for integrating FLW to national climate policy and priorities for implementing FLW measures. This rests on the multifaceted nature of FLW, which is driven by, and has impacts on various sectors including health, agriculture, food security, natural resources, and the environment. In addition, it is essential to develop a strategic workplan that is multisectoral.
- Malawi has policies that incorporate FLW. However, these need to be translated into action and implementation.
- Market development and promotion of commercialization of agricultural produce is crucial in reducing FLW in Malawi. There is need to localize operations of big private sector players while creating an enabling environment for business.
- Need to ensure that policies protect and encourage local farmers to delve into agro-processing and value addition in an effort to reduce FLW.
- There is need to create efficiency in the entire value chain through investments in storage and transportation infrastructure such as refrigerated trucks, solar power, and storage facilities.
- Existing policies and NDCs need to be critically examined in terms of their incorporation of climate issues, food security, and food systems, and determine where FLW comes in. FLW can be included as an indicator in the NDCs that are currently being updated.
- Issues of FLW cannot be addressed without financing. Need budgets for activities such as dissemination of technologies and products, research, capacity building, and awareness campaigns.
- Need to develop value-chain specific methodologies for measuring FLW.
- More studies need to be carried out on measurement of emissions from food waste and loss.
- Promotion of indigenous knowledge and technologies to prolong shelf life of products.

6 WAY FORWARD

An 18-month project on FLW is funded by the USAID-Comprehensive Action for Climate Change Initiative (CACCI). CACCI has identified a broad set of activities which will be refined based on national consultations. Local partners will be identified to collaborate with on the following activities. Engaging local partners will enable CACCI to build in country capacity and knowledge base on food loss and waste related to national climate agendas. Activities to be undertaken include the following:

- Identify major farm to market linkages and determine food loss and waste sources through interviews with government officials, farmer associations, distribution centres and associated stakeholders.
- Map major farm to market supply chains, including distribution centres, agricultural production areas, and major market end points.
- Estimate emissions from farm to market supply chains and estimate corresponding emission reduction potential from farm to market supply chains
- Estimate economic losses due to food loss and waste in the farm to market supply chain, and social and economic impacts on women, smallholder farmers and marginalized communities in the supply chain.
- Assess current food security related policies for mitigating food loss and waste and identify opportunities to strengthen policy frameworks to reduce food loss and waste.
- Develop a monitoring and reporting system for tracking food loss and waste supply chains, including measurable indicators using national and regional data
- Identify infrastructural and technological investment needs for reducing food loss and waste in the farm to market supply chains; estimate costs of new investments; and shed light on financing towards the investment priorities.
- Develop a road map for strengthening food loss and waste as part of national climate agendas and propose entry points or content for incorporation of food loss and waste interventions to the next NDC revision.

7 ANNEX

List of Participants

	Name	Institution	Position	Gender	Contacts
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