POLICY BRIEF

ON

FOOD FLOW LANDSCAPE ASSESSMENT

FOR THE BMZ GROW ENRICH PROJECT

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ACRONYMS

AfCFTA	African Continental Free Trade Area
ARC	African Risk Capacity
ASALs	Arid and Semi-Arid Lands
ASDP	Agriculture Sector Development Program
ASTGS	Agriculture Sector Transformation and Growth Strategy
AU	African Union
AUDA-NEPAD	African Union Development Agency- New Partnership for Africa's Development
BMZ	Federal Ministry for Economic Cooperation and Development of Germany
CAADP	Comprehensive Africa Agriculture Development Programme
COMESA	Common Market for Eastern and Southern Africa
CSOs	Civil Society Organisations
DAP	Diammonium Phosphate
DRC	The Democratic Republic of Congo
EAC	East African Community
ELRP	Emergency Locust Response Program
ENRICH	Enhancing Nutrition Services to Improve Maternal and Child Health
FAO	Food and Agriculture Organization
FSRP	Food Systems Resilience Program
GEWE	AU Strategy on Gender Equality and Women's Empowerment
IGAD	Intergovernmental Authority on Development
KDHS	Kenya Demographic Health Survey (
LAPSSET	Lamu Port-South Sudan-Ethiopia Transport
NAP	National Adaptation Programme of Action
NGOs	Non- Governmental Organizations
OSBP	One-Stop Border Posts
PPP	Public Private Partnership
RATIN	Regional Agricultural Trade Intelligence Network
REC	Regional Economic Communities
SPS	Sanitary & Phytosanitary
UN	United Nations

CHAPTER ONE: INTRODUCTION AND BACKGROUND

1.1 BACKGROUND

The BMZ Grow Enrich Project, funded by the German Federal Ministry for Economic Cooperation and Development (BMZ) and implemented by World Vision ~~International~~ in partnership with Anglican Development Services – North Rift Region (ADS- NRR)~~,~~ The Puntland Minority Women's Development Organisation (PMWDO) and Kivulini Women's Rights Organisation, addresses food insecurity and malnutrition in Kenya, Somalia, and Tanzania. This Food Flow Landscape Assessment was conducted to explore the complexities of food systems, supply chains, and value chains across these countries, focusing on vulnerabilities, policy gaps, and opportunities for improving food security. The study findings aim to support the implementation of the African Union's Common Position on Food Systems Transformation and inform regional and national strategies for sustainable and inclusive development.

1.2 GEOGRAPHIC SCOPE OF ASSESSMENT

The Food Flow Landscape Assessment covered **Kenya, Somalia**, and **Tanzania** specifically **Elgeyo Marakwet County, Nuugal Region and Shinyanga District** respectively. It analysed production, supply chains, processing, and trade while identifying vulnerabilities and cross-border food flows. This geographic scope provided insights into local and regional food systems, addressing infrastructure gaps, trade barriers, and sustainability challenges.

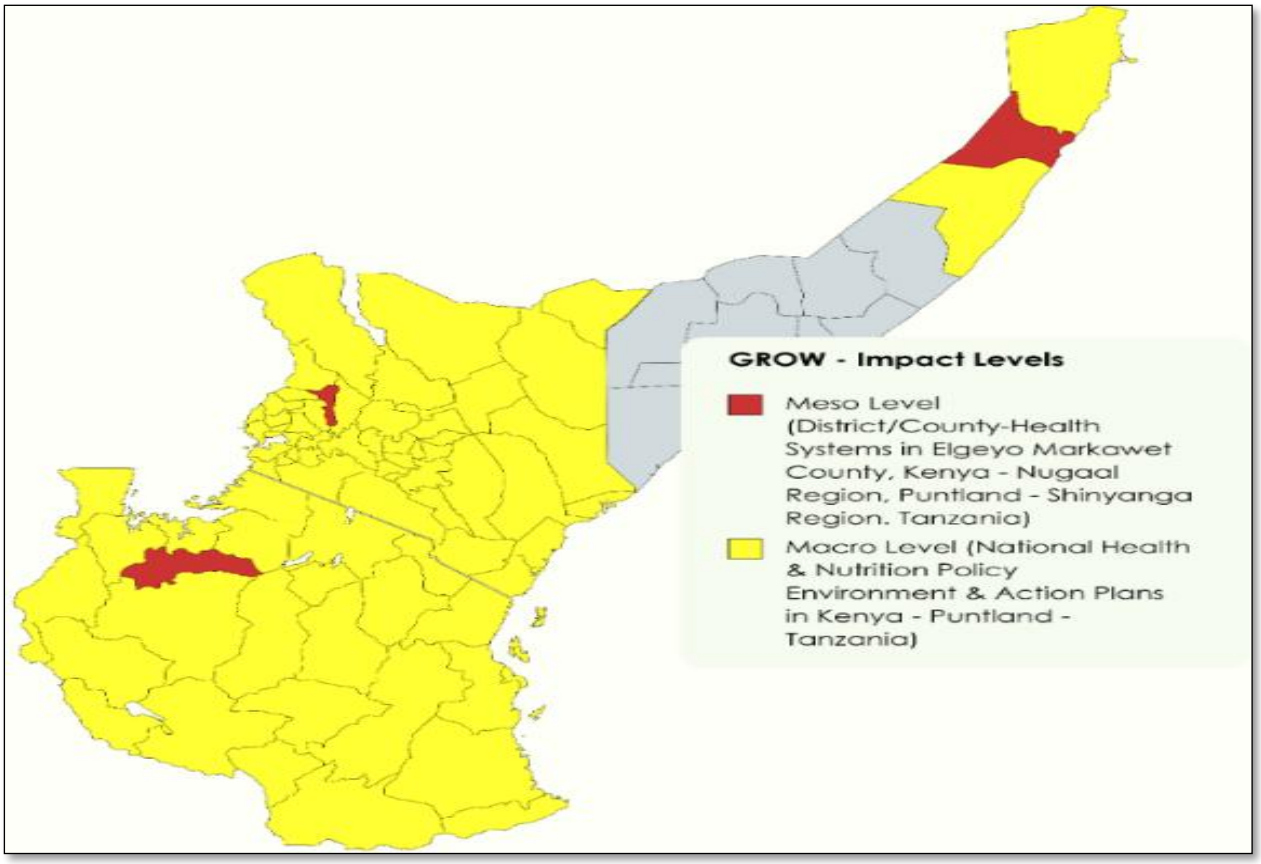

Figure 1: Grow ENRICH Impact Level and Target Areas

1.3 PURPOSE AND OBJECTIVE OF THE POLICY BRIEF

The policy brief identifies vulnerabilities, weaknesses, and strengths in food systems to contribute insights for the IGAD food and nutrition policy review and the **Comprehensive Africa Agriculture Development Programme (**CAADP) Biennial Review process. The brief also highlights policy recommendations based on the assessment findings, tailored to support the IGAD region within the broader AU framework on food systems transformation.

CHAPTER TWO: SITUATIONAL ASSESSMENT OF FOOD SYSTEMS

2.1 CONTEXT OF FOOD SYSTEMS IN AFRICA

AFRICAN UNION COMMON POSITION ON FOOD SYSTEMS

Africa's food systems face multifaceted challenges, including climate change, rapid population growth, socio-economic disparities, and weak governance. At the continental level, frameworks such as **the Comprehensive Africa Agriculture Development Programme (CAADP)** [1] and the **Africa Union Common Position on Food Systems** [2] aim to address these challenges by promoting sustainable, inclusive, and resilient agricultural practices. Equally important, since its inception, CAADP has evolved through various commitments including the Maputo Declaration (2003), and the Malabo Declaration (2014).

The most recent policy shift is outlined in the Kampala Declaration on CAADP (2023- 2033), adopted during the **Africa Fertilizer and Soil Health Summit in Uganda (2023)**[3]**,** underscores the need for integrated Agri- food systems that enhance productivity, address inefficiencies across food chains and improve soil health and fertiliser use. Moreover, this declaration emphasises inclusivity, resilience, and sustainability to safeguard future food security while enhancing regional trade under the **African Continental Free Trade Area (AfCFTA)** framework.

Additionally, the **AU Food Safety Strategy for Africa (2022-2036)**[4] complements CAADP's goals by focusing on food safety as a critical factor in agricultural transformation and trade. Addressing the high burden of foodborne illnesses and compliance with **Sanitary and Phytosanitary (SPS)** standards is vital for achieving the aspirations of the Kampala Declaration and the broader objectives of the African Union's Agenda 2063.

2.2 FOOD SYSTEMS IN EAST AFRICAN COMMUNITY

2.2.1 EAST AFRICA COMMUNITY

In East Africa, regional efforts to strengthen food systems are guided by the East African Community's (EAC) Agricultural Sector Development Strategy and the Food Systems Resilience Program (FSRP) supported by The Intergovernmental Authority on Development (IGAD)[5] and the World Bank[6]. In

[1] Comprehensive Africa Agriculture Development Programme (CAADP). (2024). *CAADP Strategy and Action Plan 2026–2035*. African Union Commission.
[2] African Union Development Agency- New Partnership for Africa's Development (AUDA- NEPAD). 2021. *Africa Union Common Position on Food Systems.* Retrieved from:
3 African Union (2025)
4 Food Safety Strategy for Africa: 2022 - 2036. AU-IBAR
[5] IGAD. (2024). *Food Systems Resilience Program for East and Horn of Africa*
[6] World Bank. (2023). *Strengthening Food Systems for Resilience*

2024, IGAD adopted the Regional Food and Nutrition Security Strategy (2025-2034) that aims to strengthen emergency response and recovery mechanisms, enhance capacity for disaster preparedness and agricultural trade, and promote gender-inclusive approaches while empowering vulnerable populations, particularly women and youth[7].

These initiatives focus on improving market access, integrating climate-smart practices, and addressing infrastructure gaps owing to East Africa's heavy reliance on rain-fed agriculture which exacerbates vulnerability to climate variability, threatening food security and rural livelihoods. Programs like these are crucial to promoting trade under the African Continental Free Trade Area (AfCFTA), which seeks to boost intra-regional agricultural commerce[8].

Policies aim to align with the AfCFTA to facilitate regional trade while addressing food system vulnerabilities. Key interventions include investments in rural road networks, support for smallholder farmers, and the integration of technology to optimize supply chains. However, dependency on rain-fed agriculture and challenges in cross-border trade regulations remain significant barriers.

2.2.2 FOOD SYSTEMS IN KENYA

Kenya, a regional economic hub in East Africa, relies heavily on agriculture, which contributes about 30% of GDP and employs over 70% of the rural population. Despite its agricultural potential, challenges like climate change, high production costs, and limited infrastructure hinder food security and market efficiency. Women's roles in food systems, though significant, are often undermined by systemic inequities in resource distribution and decision-making. Addressing these disparities, alongside strengthening infrastructure and adopting innovative agricultural technologies, remains a critical focus for the Kenyan government.

National policies like the Agricultural Sector Transformation and Growth Strategy (ASTGS) focus on improving rural infrastructure and supporting smallholder farmers. Programs like the Emergency Locust Response Program (ELRP) focus on mitigating the impacts of climate-induced shocks, while investments in biofortified crops and agro-processing aim to enhance productivity and nutrition. Kenya's participation in the AfCFTA and regional trade agreements has bolstered cross-border trade, yet inefficiencies in transportation and market access hinder competitiveness.

2.2.3 FOOD SYSTEMS IN SOMALIA

Somalia's food systems are among the most vulnerable in East Africa, largely due to prolonged conflict, weak governance and climate shocks. These factors disrupt supply chains and limit market access, resulting in acute food insecurity. The lack of infrastructure and reliable data remains a significant barrier to policy and program implementation. The majority of people in Somalia rely heavily on livestock, which constitutes the primary source of livelihood and export revenue, yet it is highly vulnerable to recurrent droughts and limited grazing resources.

[7] IGAD (2024). *The Regional Food and Nutrition Security Strategy (2025-2034)*

[8] World Bank. Centre for Coordination of Agricultural Research and Development for Southern Africa (CCARDESA). (2024). *Food Systems Resilience Program for Eastern and Southern Africa*

Key policy frameworks, such as the Puntland Development Plan[9] and Somalia's National Adaptation Programme of Action (NAP)[10], emphasize resilience-building through improved water management, the promotion of drought-resistant crops, and the strengthening of livestock and fishing sectors. Implementing these strategies is critical to addressing systemic vulnerabilities and enhancing food security in the region.

2.2.3 FOOD SYSTEMS IN TANZANIA

In Tanzania, it is estimated that over 20% of the population is suffering from severe acute food insecurity[11] the food system is transitioning with initiatives like Kilimo Kwanza[12] and the Agricultural Sector Development Program (ASDP) emphasize irrigation, agro-processing, and climate-smart practices, but reliance on rain-fed agriculture[13] remains a significant limitation to productivity[14]. The country is a surplus producer of staple cereals and pulses and exports significant quantities of these commodities to neighbouring countries including Kenya, Uganda, Rwanda, Burundi, Malawi, Zambia, and the Democratic Republic of Congo(DRC).

Tanzania faces significant food insecurity due to erratic rainfall, prolonged dry spells, and pests like Fall Armyworm, high food prices, and limited casual labour opportunities, which restrict food access for vulnerable households[15]. Addressing these challenges requires interventions such as releasing subsidized food reserves, promoting climate-smart agriculture, improving irrigation systems, and diversifying livelihoods to strengthen food systems and build resilience[16].

[9] Puntland State of Somalia. (2020). *Five Year Puntland Development Plan-3: Progressive, Resilient, and Secure Puntland State of Somalia*. Puntland State of Somalia.
[10] Republic of Somalia. (2022). *Somalia's National Adaptation Plan (NAP) Framework.* Republic of Somalia.
[11] The United Republic of Tanzania. (2020). *Comprehensive Food Security and Nutrition Assessment Report.* Tanzania Food Security and Nutrition Analysis System Team.
[12] Tanzania CAADP Compact. (2024). *Agricultural Development in Tanzania*
[13] African Union Development Agency- New Partnership for Africa's Development (AUDA- NEPAD). 2021. *Africa Union Common Position on Food Systems.*
[14] Tanzania CAADP Compact. (2024). *Agricultural Development in Tanzania*
[15] The United Republic of Tanzania. (2020). *Comprehensive Food Security and Nutrition Assessment Report.* Tanzania Food Security and Nutrition Analysis System Team.
[16] Ibid. (2020)

CHAPTER THREE: KEY ISSUES AND CHALLENGES AFFECTING FOOD SYSTEMS

Below is a summary of the key issues affecting food systems in Kenya, Tanzania and Somalia based on the Food Flow Landscape Assessment for the Grow ENRICH Project conducted to examine the food flow, supply, and value chain. The assessment uncovered patterns, vulnerabilities, and areas for potential improvement;

3.1 SUPPLY CHAIN CHALLENGES

3.1.1 KENYA

Input and Supply

- ***Affordability of Inputs:*** The cost of agricultural inputs like seeds, fertilizers, pesticides, and machinery is a significant barrier to smallholder farmers in Kenya. High prices often make it difficult for farmers, especially those with limited financial resources, to purchase these essential items. This is evidenced by the 94.4% of the producers who reported that they experience challenges in access to farm inputs during the assessment.
- ***Inconsistent Supply of Inputs:*** There are issues with the consistent availability of high-quality agricultural inputs in rural areas, particularly in remote regions. This leads to periods when farmers are unable to obtain essential inputs at critical planting or harvesting times.
- ***Counterfeit and Substandard Inputs:*** The market is flooded with counterfeit, expired, or substandard inputs such as fake seeds, ineffective pesticides, and poor-quality fertilizers. These inputs not only fail to deliver expected results but also reduce farmers' productivity and degrade soil health over time.

Food Production

- ***Dependency on Rainfed Agriculture:*** A large portion of Kenya's agriculture is dependent on rainfed systems, making the sector vulnerable to climate change and erratic rainfall patterns. While Kenya has introduced irrigation policies to improve food production, implementation has been slow and uneven, and many smallholder farmers still lack access to reliable irrigation systems.
- ***Inaccessibility to Credit:*** Access to finance is a significant barrier to food production in Kenya. Smallholder farmers often lack the collateral to access loans, and many financial institutions view agriculture as a high-risk sector. This limits farmers' ability to invest in high-quality inputs, modern equipment, and infrastructure.

Food Transportation

- ***Poor Road Infrastructure:*** Food producers and transporters in Kenya emphasized that poor infrastructure, particularly roads, impedes the transportation of farm produce and access to services. During the rainy season, inaccessible farm roads force communities to hire manual labour to transport goods, which increases costs.
- ***Insufficient Public Transport and Logistics Systems:*** In rural areas, farmers may have limited access to affordable and reliable transportation options to move their produce to market. Smallholder farmers often rely on local transporters, but the availability of trucks or other vehicles can be limited, especially during peak harvest periods when demand for transport services is high.

Food Processing

- ***Low Investment in Technology:*** The adoption of modern processing technologies, automation, and packaging solutions is limited due to high upfront costs, lack of access to finance, and limited technical expertise. Many food processing companies in Kenya rely on outdated equipment and labour-intensive methods, reducing their productivity, efficiency, and competitiveness
- ***Competition from Imports:*** Imported processed foods, often at lower prices, can undermine the competitiveness of local processors. The influx of cheaper, imported processed foods into the Kenyan market can make it difficult for local food processors to compete on price, particularly when production costs are high due to inefficient infrastructure and inputs
- ***High Cost of Energy:*** The availability of clean energy, the cost of fuel and electricity has been on the rise over the last two years. The fluctuating electricity prices and power outages significantly impact the ability to maintain cooling processes, affecting the quality and safety of products, such as milk and fruits

Food Marketing

- ***Poor Market Access:*** The distance between production areas and key markets poses a significant challenge for food producers. Many producers are located far from major markets, which increases transportation costs and delays the delivery of fresh produce. Inadequate nearby open-air markets limits the reach of local vendors, compelling producers to travel to other markets in neighbouring regions and this increases their operational costs.
- ***Market Monopoly and Cartels:*** The food marketing sector in Kenya is often characterized by a few dominant players, including large distributors and retail chains. These large companies can control food prices, limit competition, and dictate the terms of trade. The existence of cartels or monopolies reduces the market access of smaller producers, limiting their ability to compete fairly.

Food Consumption

- ***Affordability of Nutritious:*** Nutritious foods, such as fruits, vegetables, dairy products, and lean meats, are often more expensive than staple foods like maize, rice, and wheat. For many Kenyans, especially those in lower-income brackets, these nutritious options are out of reach. The high cost of production, limited supply, and transportation issues contribute to higher prices.

- ***Traditional Diet Preferences:*** In many Kenyan communities, traditional diets are heavily reliant on staple foods such as maize, beans, rice, and potatoes. While these foods are energy-dense, they often lack essential nutrients like vitamins, minerals, and proteins. Changing dietary habits to include more diverse, nutritious foods can be difficult due to long-standing cultural preferences and food customs.

Food Waste and Disposal

- ***Post-Harvest Losses in Agriculture:*** Local farmers in Kenya experience significant post-harvest losses due to inadequate storage and handling facilities. Without access to modern techniques like solar dryers or cold storage, perishable crops are lost at the farm level, contributing to food waste before it even reaches the consumer market.

Food Sector Financing

- ***Inadequate Budgetary Allocation:*** The budgetary allocation to the agriculture sector is approximately 3%, with combined public investments at the national and the county level, falling short of the 10% targeted in the Kampala Declaration. Low budgetary allocations, low private sector investments and poor credit availability restrict the overall development of the sector and hampers the provision of adequate, safe and diverse food to the population[17].

3.1.2 SOMALIA

Input and Supply

- ***High Costs of Inputs:*** The cost of essential agricultural inputs like seeds, fertilizers, pesticides, and machinery is high in Somalia. This makes it difficult for small-scale farmers to invest in improving their yields or adopting modern farming techniques. 84.2% of the producers engaged during the assessment reported facing challenges in acquiring inputs due to high costs.
- ***Lack of Quality Inputs:*** There is often a lack of access to high-quality seeds, modern fertilizers, and pest control products. Farmers in Somalia rely on imported inputs, which are often expensive and difficult to access in remote areas. Low-quality seeds and inputs can lead to poor crop yields and increased vulnerability to pests and diseases.

Food Production

- ***Over-reliance on Livestock:*** Somalia's food production is highly dependent on livestock, especially camels, goats, and sheep. While livestock is a vital source of income and food, this over-reliance makes the region vulnerable to diseases, droughts, and poor market access. When livestock is affected by disease or drought, food security can be severely impacted.
- ***Droughts and Erratic Weather*:** Somalia is highly vulnerable to climate change, with frequent and severe droughts being one of the most significant challenges. These droughts lead to water shortages, reduced crop yields, and the loss of livestock, which undermines the region's ability to produce enough food. Erratic rainfall patterns make it difficult to predict planting and harvest times, further exacerbating food insecurity.

[17] FAO, European Union and CIRAD. 2023

Food Transportation

- ***Poor Infrastructure*:** Poor infrastructure, particularly roads, hinders the transportation of farm produce and access to services. Many local roads connecting the markets and farmers in Somalia are impassable, especially during wet seasons when heavy rains are experienced. This makes the transportation of farm products difficult. As a result, farmers keep their produce and this leads to spoilage of the farm products.
- ***Violence and Security Concerns:*** Security concerns in different areas within Somalia, particularly those affected by armed groups pose a barrier to food transportation to and from the local communities. Transporters reported that the vulnerability to attacks forces them to avoid roads and regions prone to frequent attacks for fear of their lives and loss of the goods being supplied. This instability limits the delivery of food, primarily affecting rural areas.

Food Processing:

- ***Disrupted Supply Chains:*** Due to insecurity, many food processing facilities face disruptions in their supply chains, making it difficult to consistently source raw materials, such as agricultural produce or livestock products. This instability often leads to delays in production and limited output.
- ***Lack of Technical Skills and Expertise:*** There is a shortage of skilled workers in the food processing sector. Many food processors lack access to training and development opportunities, resulting in a workforce that is not adequately equipped to operate modern processing equipment or apply best practices in food safety, quality control, and innovation.

Food Marketing

- ***Fragmented Market Systems:*** The food market in Somalia is fragmented, with limited coordination between producers, processors, and retailers. As a result, food producers often struggle to access larger, more profitable markets, either locally or internationally. This fragmentation can lead to inefficiencies in the supply chain, affecting product availability and pricing.
- ***Dependence on Informal Markets:*** Many food transactions in Somalia take place in informal markets, which lack formal structures and regulation. This reliance on informal markets limits access to more organized retail channels, where producers can achieve higher prices and more consistent sales. The absence of regulated markets also means that food safety and quality standards are often overlooked, leading to potential risks for consumers.

Food Consumption

- ***Inflation and Currency Fluctuation*:** Inflation has caused a loss of value of the local currency (Somali shilling) against the dollar. The exchange rate significantly dropped as a result of different factors including the decreased acceptance of the Somali shilling in favour of the US dollar. The decline in the value of the local currency has led to an increase in the prices of imported foods, including rice, sugar, and vegetable oil and this has made their accessibility difficult.[18]

18 FSNAU-Quarterly-Brief-May-2021.pdf

- ***Low Household Income:*** The majority of people in Somalia live in poverty, with limited access to stable income sources. Most households depend on subsistence farming or pastoralism, which offers limited financial resources. Low income levels hinder the ability of families to purchase nutrient-rich foods, forcing them to prioritize more affordable, but less nutritious, staples like rice, pasta, and bread.

Food Waste/Disposal

- ***Absence of Landfills or Waste Processing Facilities:*** There is a lack of proper landfills or waste processing facilities for managing both organic and inorganic waste in Somalia. This makes it difficult to dispose of food waste in a controlled and sanitary manner. Without dedicated sites for waste management or composting, food waste often piles up in urban centres or rural areas, leading to pollution and potential health risks.
- ***Traditional Practices and Poor Food Storage:*** In many parts of Somalia, food is traditionally stored without adequate refrigeration or preservation methods. Due to the absence of cold storage facilities and modern food preservation techniques, food items like vegetables, fruits, and dairy products spoil quickly. This results in significant food wastage at the household, market, and distribution levels.

Food Sector Financing

- ***Inadequate Budgetary Allocation:*** While there have been commendable efforts towards agriculture financing, majorly by external development partners in Somalia, the country is yet to meet the 10% targeted in the Kampala Declaration.

3.1.3 TANZANIA

Input and Supply

- ***Limited Access to Quality Seeds:*** The availability of high-quality, improved seeds is a challenge in many rural areas in Tanzania. Farmers often rely on saved seeds from previous harvests, which can result in lower yields and susceptibility to pests and diseases. Access to certified seeds is limited, and many farmers are unaware of the benefits of using improved varieties for better yields. 89.8% of the producers during the assessment reported that they have challenges in accessing farm inputs due to limited access of quality inputs.

Food Production

- ***Unsecure Land Tenure:*** Land tenure insecurity remains a significant challenge for many Tanzanian farmers, especially smallholders. The absence of formal land ownership documents, disputes over land boundaries, and unclear land rights discourage long-term investment in land improvement, irrigation systems, and soil conservation. As a result, farmers are less likely to adopt sustainable farming practices that require long-term commitment.
- ***Inadequate Agricultural Extension Services:*** Many farmers in Tanzania lack access to quality agricultural extension services that would provide them with information about modern farming techniques, pest control, disease management, and sustainable farming practices. Extension workers, who are supposed to provide this support, are often few in number and poorly resourced, leading to a knowledge gap among farmers.

Food Transportation

- ***Limited Access to Roads:*** Poor road infrastructure in rural areas of Tanzania makes it difficult for farmers to transport their produce to markets. This often leads to post-harvest losses, as farmers may be unable to sell their crops before they spoil. Lack of efficient transportation also increases the cost of inputs and market access, making food production less profitable.

Food Processing

- ***Inadequate Preservation Facilities;*** Logistical inefficiencies also play a crucial role in disrupting the agricultural supply chain. Lack of proper storage facilities, including cold storage, leads to high levels of post-harvest losses. Farmers often have limited options for preserving the quality of their produce, which affects their ability to sell their goods at favourable prices or even maintain the viability of their produce until it reaches the market.
- ***Insufficient Value Addition;*** Tanzania has limited facilities for value addition, particularly in rural areas where most agricultural production takes place. Most agricultural products are sold as raw materials, which fetch lower prices than processed goods. Challenges in promoting value-addition processes such as milling, drying, and packaging reduces the potential income for farmers and limits the economic benefits of agricultural activities.

Food Marketing

- ***Market Dynamics;*** Market dynamics contribute to supply chain disruptions through fluctuating demand and price volatility. Smallholder farmers, who make up a large portion of Tanzania's agricultural sector, often face difficulties in predicting market demand, leading to either oversupply or shortages of key commodities. The global market fluctuations unexpectedly affect local prices, making it difficult for farmers to plan and invest in their production cycles.
- ***Lack of Market Infrastructure:*** Many rural areas and secondary towns lack proper market infrastructure, such as designated marketplaces, retail outlets, or food processing facilities. Inadequate market facilities lead to inefficiencies in food distribution and can discourage traders and consumers from participating in the food supply chain.

Food Consumption

- ***Limited Purchasing Power:*** A significant proportion of Tanzania's population lives below the poverty line. Low-income households often struggle to afford a diverse and balanced diet. They may rely on staple foods like maize, rice, and cassava, which are often not sufficient in terms of nutritional value**.**
- ***Limited Dietary Diversity:*** Many Tanzanians, particularly in rural areas, consume diets that are heavily reliant on a few staple crops such as maize, rice, and cassava. These foods provide calories but often lack the necessary vitamins, minerals, and proteins to support a healthy and balanced diet.

Food Waste/Disposal

- ***Inadequate Infrastructure****;* One of the primary sources of supply chain disruption in Tanzania is the inadequate infrastructure, particularly in rural areas where the majority of farming

occurs. This not only delays the transport of agricultural goods but also increases the risk of spoilage, particularly for perishable products like fruits and vegetables.

- ***Waste Disposal Management:*** Inadequate infrastructure and technology tailored to waste treatment and recycling is a primary challenge in managing agricultural waste in Tanzania. Many small-scale farmers and processors lack access to the facilities necessary to convert waste into valuable by-products, such as compost or biogas. These results to continued reliance on traditional disposal methods that are harmful to the environment.

Food Sector Financing

- ***Agriculture and Food Sector Financing:*** Inadequate budget allocation and disbursement is still a persistent challenge that subsequently affects the agriculture and food sector's growth and transformation. For the past four consecutive years, there has been a significant increase in the agriculture sector budget allocation. The share of the agriculture sector budget against the total national budget declined from 5.3% in 2016/17 to 1.6% in 2020/21 but gradually increased to 3.9% in 2024/25[19].

3.4 BIOFORTIFICATION IN FOOD SUPPLY CHAINS

3.4.1 REGIONAL CONTEXT

The AU Common Position on Food Systems highlights the need to promote biofortification of staple foods and industrial fortification of complementary foods to deliver better diets for all[20]. The AU recognizes that biofortification has the potential to reduce demands on national health budgets and to contribute to national development, by improving the overall health and well-being of the population and their ability to contribute to economic development.

The AU Upscaling Biofortification in Africa: A Roadmap 2020 provides guidelines for the implementation of biofortification strategies for AU Member States (MS). These strategies are essential for achieving the national food and nutrition targets as detailed in the domestication of the Kampala Commitments of 2023-2033 and forms part of the documents that will be included in the Framework for Biofortification in Africa consequent to the Continental Declaration by the African Union[21].

The EAC Food Fortification Strategy is a collective initiative developed by the EAC member states to address micronutrient deficiencies in the region through the fortification of commonly consumed staple foods[22]. The recently adopted IGAD Regional Food and Nutrition Security Strategy (2025-2034) doesn't explicitly mention food fortification but it underscores the importance of comprehensive nutrition interventions, which may include fortification efforts[23].

Key issues at regional level on food fortification include inadequate funding to scale up fortification programs, including the setting up of infrastructure for monitoring and quality control, ensuring that manufacturers adhere to fortification standards and regulations can be a challenge, especially in informal markets and poor domestication of regional food strategies and policies on fortification by

[19] Policy Forum : *Post Budget Analysis for Financial Year 2024 to 2025*
[20] The AU Common Position on Food Systems
[21] AU Upscaling Biofortification in Africa: A Roadmap 2020
[22] EAC
[23] IGAD Regional Food and Nutrition Security Strategy (2025-2034)

member states. Institutions mandated to monitor and evaluate the progress of food fortification regionally also have limited capacity and resources to execute their mandate.

3.4.2 KENYA

Kenya has mandatory food fortification regulation and quality standard for salt, wheat flour, maize f lour, and edible oils and fats production. Under the Kenyan law, fortification of wheat flour, maize meal, fats, and oils has been made mandatory through the amendment of the Food, Drugs, and Chemical Substances Act of the Laws of Kenya CAP 254.

The Kenya National Food Fortification Strategic Plan 2018-2022 was geared towards increasing industry and market compliance and household intake of key micronutrients through enhancing coordination, advocacy, production capacity, consumer awareness, and monitoring and evaluation of the fortification programme[24]. However, food fortification in Kenya is still coupled by the following challenges;

- Slow adoption of fortification by small and medium scale millers. Although the law requires all industries producing the selected food vehicle to fortify, not all of them are fortifying. Small and medium scale maize millers encounter difficulties in accessing appropriate fortification technologies. Most of the equipment is imported and there are no local fabricators for specific parts of equipment except in few cases.
- Small and medium scale industries – particularly in maize milling – have inadequate knowledge and skills for implementing food fortification. However, the small and medium scale industries have a large consumer base. The law provides only for fortification of packaged flour, yet most of the small industries do not package their flour.
- Weak enforcement of the standards and regulations. The law requires all industries producing the selected food vehicles to fortify regardless of the operational and logistical capacity of the industries. However, enforcement of the law has been weak, which has led to low levels of compliance. As well, there are unfortified food brands on the markets that are competing with fortified brands.
- Low consumer awareness and demand for fortified food. Inadequate consumer knowledge and awareness on fortified foods is one of the core constraints facing food fortification. Consumers generally do not understand what the food fortification logo communicates, and they do not associate the food fortification logo with improved nutrient content.
- Inadequate government financing of fortification programme. There is limited funding from the government to plan and implement food fortification in Kenya. Activities and food fortification programmes are largely financed by development partners. The inadequate public financing for fortification activities has made food fortification more of a donor-driven project than a national government programme.
- Limited involvement of County government in market inspection and surveillance. County governments' participation in market monitoring has been limited to salt iodization but has not been extended to flours and oil/fats. Fortification has largely been the national government

[24] Kenya National Food Fortification Strategic Plan 2018-2022

agenda with limited or no devolved units. Counties also have weak capacity for undertaking sampling, testing and analyzing fortified foods at the moment[25].

3.4.3 SOMALIA

Food fortification initiatives in Somalia was guided by the National Food Fortification Strategic Plan 2019-2024 whose objective was to improve nutritional status of people in Somalia, by combating micronutrient deficiencies through national food fortification for accelerated socioeconomic development. Lack of enabling basic structures together with other underlying constraints informed the development of the food fortification strategy[26]. However, despite having a strategy in place, food fortification in Somalia is still a challenge due to various factors highlighted below;

- Limited government resource allocation for general nutrition programmes and food fortification programme. Nutrition activities in Somalia are mainly implemented by humanitarian organizations.
- Limited milling and fortification infrastructure. Small and medium scale maize millers encounter difficulties in accessing appropriate fortification technologies. Most of the equipment is imported. There are few local fabricators for specific parts of equipment. Their daily production of less than 20MT cannot serve the entire population.
- Low capacity of food fortification. Small and medium scale industries – particularly in maize milling, have inadequate knowledge and skills for implementing food fortification. However, the same industries have a large consumer base. The law provides only for fortification of packaged flour, yet most of the small industries do not package their flour.
- Inadequate knowledge amongst the population on micronutrients. There is low community awareness on the benefits of consumption of fortified food. There is need to overcome misconceptions associated with consumption of fortified foods. A common belief is that fortified food is meant for sick and poor people.
- Preference by the people in Somalia is to consume imported food as opposed to home grown food. There is need to demystify the thought that consuming imported food is more sophisticated.
- Farmers in Somalia are still using traditional farming methods; while adoption of modern agricultural practices and farming technologies is limited.
- Food fortification might render staple foods more expensive. Industries may increase prices of fortified food due to cost of production, processing and fortification technology.
- Lack of technical capacity of local industries on food fortification. The few industries in Somalia are medium and small scale, hence lack adequate capacity to fortify and package food.

3.4.4 TANZANIA

In Tanzania, food fortification, both industrial and home based, has been adopted as an approach to reach a large sector of the population through existing food delivery systems. The National Action Plan for the Provision of Vitamins and Minerals to the Tanzanian Population (URT, 2016) through the Enrichment of Staple Foods is operational and coordinated through the National Food Fortification

[25] Kenya National Food Fortification Strategic Plan 2018-2022
[26] Somalia National Food Fortification Strategic Plan 2019-2024

Alliance (NFFA). The National Biofortification Guidelines 2020 were also developed to contribute to national efforts to reduce nutritional deficiencies as a significant public health problem among vulnerable groups[27]. Despite these strategic frameworks in place, food fortification in Tanzania is hindered by;

- Limited Access to Bio-Fortified Seeds. The main challenge hindering the production of bio-fortified crops in the community is the limited availability of seeds. While there have been efforts to introduce bio-fortified crops like sweet potatoes and yellow maize, the distribution has been insufficient. This adoption rates to remain low, with only a few people practising bio-fortified farming.
- Inadequate Coordination of Biofortification Efforts. Despite efforts from the government of Tanzania to promote biofortification, systemic challenges such as fragmented supply chains, limited farmer access to financial resources and inadequate market linkages hinder full scale adoption of biofortification.[28]
- Lack of Awareness and Education. Many Tanzanians are not fully aware of the benefits of food fortification. There is underutilization of fortified foods by many households in the rural areas due to the fact that most of them utilize food produced and processed locally. Public education and awareness campaigns are limited, which hinders the acceptance and demand for fortified foods.
- Economic Constraints. Food fortification programs often require investments in infrastructure, training, and quality control, which can be costly for manufacturers, particularly small and medium-sized enterprises. The added costs of fortification could make the final products more expensive, reducing accessibility for lower-income populations. High prices of some of fortified foods example table salt causes low-income households not able to purchase them.
- Limited Access to Fortification Ingredients. A key barrier is the availability and affordability of fortification ingredients like vitamins and minerals. These ingredients can be expensive, and the supply chain is often unreliable, especially in rural areas. This limits the ability of local producers to fortify food consistently.
- Infrastructural and Technological Constraints. Small-scale food producers may lack the necessary technology and infrastructure for effective food fortification. This includes mixing technologies, storage conditions, and the ability to test the effectiveness of the fortification process, which can result in ineffective fortification or inconsistent product quality.
- Cultural and Dietary Preferences. There is sometimes resistance to consuming fortified foods because people may not see the need or may have cultural preferences that limit the acceptance of fortified foods. Some fortified foods may alter the taste, color, or texture of traditional staples, which could hinder their adoption[29].

3.5 GENDER ISSUES ACROSS FOOD FLOW SYSTEMS

3.5.1 KENYA

Participation in Decision Making: Women have more decision-making power on matters like household dietary consumption, types of inputs to be utilized on the farm and where to sell the

[27] Tanzania National Biofortification Guidelines 2020
[28] AU (2022)
[29] Tanzania National Biofortification Guidelines 2020

produce. However, women have little decision-making power on matters like types of crops to be planted on the farm, amount of produce to be sold and utilization of income generated from the sale of farm produce. While women contribute significantly to agricultural labour, their voices are rarely heard in policy discussions or strategic planning forums.

Access to Resources: Articles 40 and 60 (f) of the Constitution of Kenya (2010) and the National Land Policy of 2009 aims to protect women's land rights by promoting women's participation in land-related decisions. Despite these existing legal frameworks to promote property and land ownership among women in Kenya, more than 70% of women in Kenya do not own any kind of land. The 2022 Kenya Demographic Health Survey (KDHS) report reveals that 75% and 93% of women do not own agricultural and non-agricultural land[30].

Social and Cultural Norms: Socio-cultural norms strongly influence gender dynamics within food systems, often restricting women's participation and agency. Patriarchal practices are particularly entrenched in rural areas where societal expectations confine women to roles deemed less economically significant, such as planting and weeding. For example, male dominance in decision-making extends to land ownership, with cultural norms favouring men in inheritance. This denies women control over resources critical for farming and limits their economic independence.

3.5.2 TANZANIA

Participation in Decision Making: Just like the case for Kenya, women in Tanzania are often excluded from leadership roles in cooperatives, farmer associations, and policy-making bodies, which hinders the development of inclusive agricultural strategies. Other key factors affecting women's participation in decision-making cited were lack of confidence to express their opinions, traditional and cultural norms which exclude them from economic decisions, limited economic freedom that affects women's influence in household and community decisions.

Access to Resources: While Tanzanian law officially grants equal land rights to both men and women, in practice, women often face significant challenges in accessing and owning land due to deeply rooted customary practices that discriminate against them and this affects their ability to secure loans. Limited access to processing technologies and financial resources often leaves women reliant on traditional methods, which are time-consuming and less efficient. For instance, women involved in rice farming often lack access to modern milling equipment, resulting in lower-quality products that fetch reduced market prices.

Social and Cultural Norms: Cultural norms play a pervasive role in shaping women's participation in the food system, often relegating them to tasks perceived as extensions of domestic work. Social expectations position women as labourers for food production while men oversee commercial operations, including trade and income management. Women's activities, such as weeding, harvesting, and carrying produce to market, are undervalued compared to men's roles in transportation or negotiating contracts for cash crops.

[30] KIPPRA : Promoting Land Ownership Among Women in Kenya

3.5.3 SOMALIA

Participation in Decision Making: Key factors limiting women's decision-making power in comparison to men include patriarchal and cultural norms which are particularly resistant to women's participation in decision-making. While women primarily engage in subsistence farming to support household needs, men often dominate decision-making on cultivation, sale of cash crops and control of the income generated.

Access to Resources: The position of women with regards to land and property ownership has been weakened by both conflict and the ensuing reconstruction process and breakdowns in social stability and law and order, and have compromised traditional and customary laws for women, their social support systems and their access to land and property. Without land ownership, women are also excluded from accessing formal credit or financial services, as land often serves as collateral.

Social and Cultural Norms: Deep-rooted cultural norms restrict women's mobility and access to resources, significantly affecting their roles in the food system. Their labour is typically confined to household food production or subsistence farming, where they face barriers such as minimal land ownership and lack of recognition for their contributions. Clan-based systems also perpetuate gender disparities, favouring male members in resource distribution and market opportunities.

3.6 CROSS BORDER ISSUES ACROSS FOOD FLOW SYSTEMS

- Countries like Tanzania occasionally impose export bans on staples like maize and rice during domestic shortages, disrupting regional food supply chains. This reduces the availability of food in importing countries like Kenya and encourages smuggling, leading to loss of revenue. An example is when Tanzania banned maize exports in 2022 to ensure local food security.
- Inconsistent application of sanitary and phytosanitary (SPS) measures, lengthy customs procedures, and arbitrary roadblocks hinder smooth trade and delays at border points increase transportation costs. Traders resort to informal routes, reducing trade transparency. An example is Kenya-Tanzania disputes over milk and sugar imports due to SPS compliance disagreements.
- Despite regional agreements like the EAC Common Market Protocol, some countries impose taxes on food imports, especially during shortages. This increases food prices for consumers and discourages formal trade. An example is Somalia levies inconsistent import tariffs due to weak governance.
- Inadequate roads, railways, and ports increase logistical costs for food trade. Hence landlocked regions face higher food prices and perishable goods like fruits and vegetables experience losses during transit. For example, Somalia's limited road infrastructure hampers food imports from Kenya.
- Insufficient cold storage and warehouses lead to post-harvest losses, especially for perishables. This limits trade in high-value food products and increases food scarcity during lean periods. For example, Tanzania lacks adequate grain storage facilities near its borders with Kenya.
- Inadequate facilities at border points delay clearance of food shipments. Hence traders face long queues and higher costs and it encourages informal trade, bypassing regulatory checks. E.g. The Kenya-Somalia border at Mandera lacks a fully operational customs office.

- Armed conflicts, banditry, and piracy disrupt food transportation. Traders, therefore, incur higher costs for security measures and some routes become inaccessible, reducing market access. An example is insecurity in Somalia limits cross-border food trade with Kenya.
- Diplomatic disputes between neighbouring countries negatively affects trade policies. This leads to periodic trade bans or restrictions on certain goods and reduces investor confidence in regional trade. For example, Kenya and Tanzania have had disputes over sugar and dairy products.
- Women, who dominate the informal food trade, face harassment and lack access to formal trade systems. This limits the economic potential of women traders and reinforces reliance on informal trade networks. This is seen among female traders at the Kenya-Tanzania border where they report frequent harassment by officials.

CHAPTER FOUR: POLICY RECOMMENDATIONS

4.1 AFRICAN UNION

- Support implementation of the CAADP by lobbying Member States to allocate 10% of their budgets to agriculture as stipulated in the Kampala Declaration.
- Lobby Member States to prioritize budget allocations for biofortification and nutrition-sensitive agriculture interventions for national adoption and sustainability.
- Support the AU Department of Health, Humanitarian Affairs, and Social Development to conduct regional dialogue forums to discuss food security issues in East Africa with a special focus on biofortification, gender and cross-border food flow
- Facilitate the development of biofortification national guidelines, the registration, certification and production of biofortified seeds or cuttings to allow for private and public sector multiplication and distribution.
- Work with Member States in developing effective delivery strategies to provide poor smallholder producers, both women and men, knowledge of, and access to biofortified crops, and promote their adoption and in-home consumption.
- Support harmonization of trade policies and frameworks such as the EAC, Common Market for Eastern and Southern Africa (COMESA), and AfCFTA to promote tariff-free or reduced-tariff trade for agricultural commodities.
- The AU Department of Health, Humanitarian Affairs, and Social Development to support harmonization of SPS across borders to minimize delays and disputes over food quality and safety through establishing regional SPS laboratories and investing in capacity-building for border officials.
- Enhance continental accountability for food systems transformation through the CAADP biennial review mechanism and agricultural joint sector reviews.
- Strengthen regional food reserves by scaling up the AUs African Risk Capacity (ARC) Initiative and integrate it with national food security strategies.
- Review progress of AU Ministers in charge of Agriculture, Trade and Finance in East Africa towards putting in place trade facilitation measures.

- The AU through the Agriculture and Food Security Division to partner with regional organizations and financial institutions which facilitate access to quality seeds, fertilizers, and offer affordable financing options for smallholder farmers
- Review the implementation of the AU strategy on Gender Equality and Women's Empowerment (GEWE) 2018-2028 and ensure programs focusing on women in agriculture are prioritized and financed.
- AU State Summit on Energy to prioritize legislation and policy reforms aimed at reducing cost of energy and lobby member states of adopt alternative cheap energy options for agriculture.
- The AU to develop a regional food fortification strategy to provide guidelines and framework on how member states can promote biofortification in food systems

4.2 REGIONAL ECONOMIC BLOCKS (REC)

- Prioritize key issues on biofortification, gender, cross border food flows during the development the EAC Food and Nutrition Strategy and implementation of IGAD Regional Food and Nutrition Security Strategy (2025–2034).
- Lobby Member States to align their food security and nutrition strategies with the IGAD Regional Food and Nutrition Security Strategy (2025–2034) and the newly developed EAC Food and Nutrition Strategy.
- The EAC to harmonize sanitary and phytosanitary (SPS) measures to address issues on lengthy customs procedures, and arbitrary roadblocks that hinder smooth trade and delays at border points that increase transportation costs.
- Prioritize programs that focus on empowering smallholder farmers through training, financing, and market linkages increases food supply for cross-border trade during implementation of the IGAD Regional Food and Nutrition Security Strategy (2025–2034).
- Promote legislation and implementation of gender-sensitive trade policies and create women-only trade zones at borders through strengthening the EAC Women in Cross-Border Trade Program.
- Facilitate dialogue through IGAD and EAC spaces to strengthen political stability and cooperation by enhancing arbitration mechanisms within RECs to address trade conflicts.
- Strengthen the Regional Agricultural Trade Intelligence Network (RATIN) by expanding digital literacy and access to mobile technology among rural traders.
- IGAD and EAC to establish storage facilities through promote public-private partnerships (PPPs) to develop storage facilities at key border points.
- The EAC and IGAD to strengthen E-Customs and Border Automation through enhancing the roll out e-customs systems at all major border points and train officials on their use.
- EAC and IGAD to lobby Partner States to accelerate the timely access of fertilizers by farmers so as to increase the level of use of fertilizer from the current average of 8 kilograms per hectare to an average of at least 50 kilograms per hectare committed under the Abuja Fertilizer Summit.

- IGAD and EAC to strengthen farmer cooperatives to enhance collective bargaining power and reduce transaction costs by providing training on cooperative management and market linkages and facilitating partnerships between cooperatives and regional buyers.
- EAC and COMESA to improve Policy Coordination and Dispute Resolution by establishing trade facilitation committees which will address cross border disputes.
- EAC and IGAD to develop platforms to connect producers, traders, and buyers across borders through supporting the development of mobile-based apps for market price tracking and logistics coordination and integrating platforms with government and regional trade monitoring systems.
- Strengthen the implementation of the EAC Agriculture and Rural Development Strategy through investing in feeder roads in rural areas to connect farmers to markets.
- EAC and IGAD to work with Partner States towards upgrading the Lamu Port-South Sudan-Ethiopia Transport (LAPSSET) Corridor to facilitate regional trade.
- The EAC to establish an independent arbitration mechanism to address the diplomatic disputes between neighbouring countries that negatively affect trade policies.
- Promote the empowerment, participation and inclusion of women in agriculture during the implementation of the IGAD Gender Equality Strategy 2023-2030 and EAC Gender Policy.
- EAC and IGAD to implement gender-sensitive trade policies and provide legal support for women who face harassment at informal border trading points.
- Enhance regional cooperation on security through IGAD and EAC initiatives to address armed conflicts, banditry, and piracy that disrupt food transportation.
- EAC and IGAD to establish and modernize One-Stop Border Posts (OSBPs) to facilitate timely clearance of food shipments at border points.
- EAC and COMESA to simplify and align tax regimes within trade blocs to address challenges in taxation of food imports.

4.3 COUNTRY GOVERNMENTS

4.3.1 KENYA

- Lobby the Ministry of Agriculture and Livestock Development and County Governments to improve access to high-quality seeds, fertilizers, and pesticides can boost agricultural output. Government subsidies, partnerships with agro-dealers, and the promotion of agro-inputs through extension services can improve farmers' access to these resources.
- Lobby the Ministry of Agriculture and Livestock Development , County Governments and Private Sector to provide support to small-scale farmers in terms of financing, access to land, training, and agricultural insurance will help improve their resilience and production capacity
- Lobby the Ministry of Agriculture and Livestock Development, County Governments to reduce market intermediaries between producers and consumers to ensure that farmers receive fair prices for their produce and that consumer's benefit from lower food costs.
- Lobby the Ministry of Agriculture and Livestock Development, County Governments and Private Sector to expand access to affordable credit and financial services for farmers by stablishing agricultural credit schemes and micro-financing institutions targeting smallholder farmers can support food sector growth.
- Lobby the Ministry of Agriculture and Livestock Development, Ministry of Health and County Governments to encourage the consumption of diverse and nutritious foods is key to improving

public health. Government campaigns and education programs should focus on the benefits of incorporating vegetables, fruits, legumes, and animal proteins into diets.

- Lobby the Ministry of Agriculture and Livestock Development, Ministry of Health and County Governments to encourage food fortification through the development of a new food fortification strategy.
- Lobby the National Treasury and Ministry of Agriculture to institutionalize gender-responsive budgeting by earmarking at least 10% of agricultural funding for programs targeting women farmers. This funding should support access to credit, training programs, and subsidized inputs to enhance women's productivity and market participation
- Lobby the Ministry of Roads and Transport in partnership with development partners to invest in rural road infrastructure including roads, electricity, schools, and healthcare, will improve the livelihoods of rural populations and enable better food production, distribution, and consumption.

4.3.2 SOMALIA

- Lobby the Ministry of Agriculture and Irrigation to provide seeds, fertilizers and farm inputs at subsidized prices for local farmers in rural setups.
- Lobby the Ministry of Agriculture and Irrigation to enhance coordination efforts of all actors across the food value chain from production, transporters, processors, food manufacturers and traders.
- Ministries incharge of Energy to identify pathways of reducing and standardizing energy costs and adopt strategic cost management and alternative energy solutions to reduce operational costs in the food sector.
- Lobby the Ministry of Agriculture and Irrigation to facilitate the adoption of proper and locally available technologies across the food value chain should be encouraged to promote proper storage, processing and marketing of food products.
- Lobby the Ministry of Agriculture and Irrigation to invest in effective delivery strategies to provide poor smallholder producers, both women and men, knowledge of, and access to biofortified crops, and promote their adoption and in-home consumption.
- Lobby the Ministry of Public Works, Reconstruction and Housing in partnership with development partners to facilitate the construction and rehabilitation of local markets, processing and storage facilities in rural setups
- Lobby the parliament of Somalia to promote legislative reforms to strengthen women's land rights, coupled with awareness campaigns to challenge discriminatory cultural norms.
- Lobby the Ministry of Agriculture and Irrigation to invest in community land-sharing schemes that could provide women with temporary access to land and enable them to participate more effectively in agriculture.
- Lobby the Ministry of Agriculture and Irrigation to invest in data gathering and reporting systems to evaluate the effectiveness of all interventions aimed at improving agriculture, health and nutrition.
- Lobby the Ministry of Agriculture and Irrigation invest in capacity-building for women in food systems governance through **s**upporting leadership training and cooperative participation for women. They should also collaborate with microfinance institutions to provide tailored

financial products for women farmers and improve national data systems to track gender disparities in agriculture.

- Lobby the Ministry of Agriculture and Irrigation to increase awareness campaigns and training programs to educate farmers and consumers about the benefits of biofortified crops. There is also need to promote women's involvement in biofortification through targeted initiatives that address cultural barriers and provide access to agricultural resources, training and decision-making opportunities
- Lobby the Ministry of Agriculture and Irrigation to strengthen partnerships with international organizations is recommended to improve access to drought- tolerant and nutrient- rich seeds.
- Lobby the Ministry of Agriculture and Irrigation to develop new strategies and guidelines on food fortification. A review exercise to assess the outcome, challenges and recommendations of Somalia previous fortification strategies should commence and new strategies developed in partnership with key actors across the food supply chain.

4.3.3 TANZANIA

- Lobby the Ministry of Agriculture, Food Security and Cooperatives to provide targeted subsidies on essential inputs like seeds, fertilizers, and pesticides to make them more affordable for smallholder farmers, particularly those in remote areas.
- Lobby the Ministry of Agriculture, Food Security and Cooperatives to establish partnerships between the government, private sector, and agricultural research institutions to develop high-quality, region-specific seeds and fertilizers. This will ensure that inputs meet the needs of local climates and soils.
- Lobby the Ministry of Agriculture, Food Security and Cooperatives to adopt and promote climate-smart agriculture practices across the sector to enhance productivity and environmental sustainability. This includes the use of drought-resistant crop varieties, improved water management techniques, and soil conservation practices.
- Lobby the Ministry of Agriculture, Food Security and Cooperatives to optimize cereal diversity and promote micronutrient-rich foods by promoting the consumption of a wider variety of fruits and vegetables, especially those rich in Vitamin A, and dark green leafy vegetables. Educational campaigns and agricultural support can increase availability.
- Lobby the Ministry of Agriculture, Food Security and Cooperatives to encourage research and development of biofortified varieties of staple crops by encouraging agricultural research institutes (e.g., Tanzania Agricultural Research Institute, TARI) to collaborate with international research organizations like HarvestPlus to develop and disseminate biofortified seeds and planting materials.
- Lobby the Ministry of Agriculture, Food Security and Cooperatives to develop programs like use of farm-to-market digital platforms that connect farmers directly with buyers, including processors, retailers, and exporters, to improve market access and reduce the layers of intermediaries.
- Lobby the Ministry of Works, Transport and Communications to prioritize the development and maintenance of critical infrastructure such as roads, irrigation systems, and storage

facilities. Improved roads will facilitate easier and more cost-effective transport of agricultural products, reducing post-harvest losses and helping farmers reach broader markets.

- Lobby the Ministry of Agriculture, Food Security and Cooperatives to develop crop zones based on soil types to optimize agricultural productivity and suggested constructing water storage structures like pans and check dams to address water scarcity. Additionally, the promotion of value addition and improved marketing strategies would help farmers fetch better prices for their products.
- Lobby the Ministry of Agriculture, Food Security and Cooperatives and parliament to implement and legislate land reforms that provide clear and secure land tenure for farmers, particularly women and smallholders, to encourage investment in long-term agricultural activities.
- Lobby the Ministry of Agriculture, Food Security and Cooperatives to develop a National Fortification Strategy that includes clear targets, timelines, and resources for fortification programs. This strategy should align with broader public health and nutrition goals, including efforts to reduce stunting and anemia.

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