

KISUMU COUNTY AGRI-NUTRITION IMPLEMENTATION STRATEGY

2023-2027



Citation

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FOREWORD

The Kisumu County Agri-Nutrition Implementation Strategy (CANIS) has been developed at a time when the world, Kenya, and Kisumu are experiencing challenges to adequate, safe, and nutritious food for their populations. The exploration and use of opportunities for and the benefits of the strategy's implementation are therefore essential. The agri-nutrition sector affects everyone. It is little wonder that discussions about safe and nutritious foods, genetically modified foods, issues about fertilizer, smart farming, food and nutrition security are being addressed in various forums organised by United Nations, African Union, East African Community, and at the country level. At national and county levels, food and nutrition issues are prioritised under the Fourth Medium Term Plan (MTP 2023-2027) of Kenya Vision 2030 and the Big 4 Agenda, with particular emphasis and focus on increased productivity, irrigation, expansion, and expanded markets.

Kisumu County has achieved certain milestones in the agri-nutrition sector, in close coordination with its partners. Some plans in this sector were not initially well outlined or adequately funded. However, in 2022, support for the implementation of agri-nutrition activities by both the county government and partners has been realised and, subsequently, the reason why this document has been positioned as a resource document in the preparation of the County Integrated Development Plan III.

The county has trained multi-sectoral nutrition champions from all sub-counties. There has subsequently been an increased yield in green leafy vegetables. Modern and city households are embracing kitchen gardening, and county government is implementing several other projects, including the Dairy Development Centre. To achieve full benefits, this document provides guidance for rearranging and coordinating key state and nonstate actors to achieve accelerated benefits for all.

The development of this document would not have been possible without the financial and technical support from USAID Advancing Nutrition. As we begin the implementation of the five-year Kisumu CANIS, we hope our partners will provide the necessary support due. As we begin the implementation of the Third County Integrated Development Plan (2023-2027), I call on every stakeholder to get more involved. This is our strategy and, henceforth, for us to realise the gains, all residents, private sector partners, civil society organisations, and both levels of government must be committed to achieving the results.

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The Department of Agriculture, Fisheries, Livestock Development, and Irrigation acknowledges with great satisfaction the efforts by the Technical Working Group that worked tirelessly to ensure that the CANIS was prepared within short and strict timelines. This strategy document is viable for the achievement of our development agenda in the proposed implementation period. Special thanks go to USAID Advancing Nutrition and the implementing partner, Save the Children, for their technical and financial support in facilitating the formulation process through a multi-sectoral approach with the relevant Multi-sectorial Nutrition (MSN) departments. Special mention and recognition to Dr. Emily Teshome, Nutrition Sensitive Advisor, who led the process for the CANIS development and provided technical support; Joyce Nyaboga, Capacity Strengthening Advisor, for coordination and technical support; and Phinhas Otieno and Rodgers Ochieng, county technical coordinators, for coordinating all county-based meetings. We extend our appreciation to Peter Milo, Chief of Party, and USAID Advancing Nutrition for the leadership and fostering collaborations between the National Ministry of Agriculture and Livestock Development (MOALD) and Kisumu County on policy and technical support towards nutrition sensitive agriculture (NSA).

We thank the county leadership, led by County Agri-Nutrition Officer, Mrs. Rose Achieng, with the overall guidance of the CECM Agriculture, Fisheries, Livestock Development, and Irrigation, Mr. Kenneth Onyango, for their technical input and coordination. We extend our appreciation to Madam Jane Wambugu, Baraka Some and Njeri Kabaji who facilitated National Ministry of Agriculture and Livestock Development (MOALD)-Agrinutrition Unit technical support through dissemination of the national ANIS and customisation of CANIS. This ensured linkages and coherence of policies across levels of government.

We also cannot forget the contributions from key members of the Food and Nutrition Technical Working Groups, specifically the members of the committee represented by various departments and areas like, the national government's Departments of Social Protection, Health, and Agriculture; county government's Departments of Health, Water, Education, and Agriculture; Budget and Planning Department staff; and civil society and private sector organization representatives for their significant inputs during the collection of information and preparation of this document. The working group members conducted thorough data collection, reporting, stakeholder and public participation and validation, and compilation to form a complete document. It is through every stakeholder's input that we now have a guiding document for the next five years worthy of implementation. We

encourage further cooperation as we implement the strategy to ensure timely interventions and monitoring during this process.

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ACRONYMS

ANIS Agri-Nutrition Implementation Strategy

CANIS County Agri-Nutrition Implementation Strategy

CECM County Executive Committee Member

CGK County Government of Kisumu

CNAP County Nutrition Action Plan

CSA climate smart agriculture

FAO Food and Agriculture Organization of the United Nations

Ha Hectares

KALRO Kenya Agriculture Livestock Research Organization

KNBS Kenya National Bureau of Statistics

M&E monitoring and evaluation

MSN multi-sectoral nutrition

NSA nutrition-sensitive agriculture

TWG Technical working group

UNICEF United Nation Children's Fund

USAID U.S. Agency for International Development

WHO World Health Organization

GLOSSARY

Farmer

A person who works on, owns, and operates an agricultural enterprise that cultivates lands or crops, or raises animals, including livestock and fish.

Household

A household may be either (1) a one-person household, that is, a person who makes provision for his or her own food or other essentials for living without combining with any other person to form part of a multi-person household, or (2) a multi-person household, that is, a group of two or more people living together who make common provision for food or other essentials for living. The people in the group may pool their incomes and have a common budget to a greater or lesser extent. They may be related or unrelated people or a combination of both, as defined by the Food and Agriculture Organization of the United Nations (Nguyen 2018).

Food Security

A situation that exists when all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious foods that meets their dietary needs and food preferences for an active and healthy life.

Food Systems

The UN Food and Agricultural Organization (FAO, 2018) <u>describes food systems</u> as "Food systems encompass the entire range of actors and their interlinked value-adding activities involved in the production, aggregation, processing, distribution, consumption and disposal of food products that originate from agriculture, forestry or fisheries, and parts of the broader economic, societal and natural environments in which they are embedded. The food system is composed of sub-systems (e.g. farming system, waste management system, input supply system, etc.) and interacts with other key systems (e.g. energy system, trade system, health system, etc.)

Nutrition-Sensitive Agriculture

According to FAO's definition, this is an approach that seeks to ensure the production of a variety of affordable, nutritious, culturally appropriate, and safe foods of adequate quantity and quality to meet the dietary requirements of populations in a sustainable manner. The recognition that addressing nutrition requires acting at all stages of the food chain—from production, processing, and retail to consumption—has led to a broader focus, which encompasses the entire food system.

Nutrition-Sensitive Interventions and Programs

As defined by the Lancet, these are interventions or programs that address the underlying determinants of foetal and child nutrition and development: food security; adequate caregiving resources at maternal, household, and community levels; and access to health services and a safe and hygienic environment (Ruel, Marie T et al..2013). These programs incorporate specific nutrition goals and actions. Nutrition-sensitive programs can serve as delivery platforms for nutrition-specific interventions, potentially increasing their scale, coverage, and effectiveness. Examples of nutrition-sensitive programs and interventions are agriculture and food security, social safety nets, etc.

Malnutrition

An abnormal physiological condition caused by inadequate, unbalanced, or excessive consumption of macronutrients and/or micronutrients. Malnutrition includes under nutrition, over nutrition, and micronutrient deficiencies (WHO, 2021) (WHO 2017).

Food Resilience

This is the ability of a household to keep within a certain level of well-being (i.e., being food secure) by withstanding shocks and stresses. This definition implicitly considers both (exante) actions that reduce the risk of households becoming food insecure and (ex-post) actions that help households cope after a crisis occurs (Wagshgertner, L., 2009)

Vulnerable Population

With respect to determining targets for the strategic food reserve coverage, this population is defined as the 1.3 million chronically food insecure Kenyans in arid and semi-arid land areas, and the approximately 4 million Kenyans in need of government support to be food secure during emergencies (e.g., droughts) based on historical data. For this population, the assumed per capita consumption of maize is 114 kilograms per annum.

Climate Smart Agriculture (CSA)

CSA is an approach that helps guide actions needed to transform and reorient agricultural systems to effectively support development and ensure food security in a changing climate. CSA aims to achieve three main objectives: sustainably increasing agricultural productivity and incomes; adapting and building resilience to climate change; and reducing and/or removing greenhouse gas emissions, where possible.

PREAMBLE

The Kisumu County Agri-Nutrition Implementation Strategy (CANIS) offers clear guidance on strategic interventions for decision makers, both public and private, at county and community levels for implementing nutrition-sensitive programs. One of the sustainable approaches to food and nutrition security is through an integrated food systems approach that enhances the exploitation of end-to-end and farm-to plate-methods. This strategy aims to reduce malnutrition through efficient, inclusive, resilient, and sustainable agri-food systems. The main purpose of this strategy is to build, maintain and sustain linkages for sustained reductions in malnutrition levels through coordinated actions by state and non-state actors, and empowering communities for the production of adequate, safe, and nutritious foods. This strategy will be implemented by the Department of Agriculture, Fisheries, Livestock, and Irrigation in the County Government of Kisumu.

The strategy aligns and anchors with the Government of Kenya's Fourth Medium Term Plan (MTP 2023–2027) of Kenya Vision 2030, with attention to food security and irrigation; to Sustainable Development Goals 2, 3, and 12 that focus on zero hunger, good health and well-being, responsible consumption, and production. Although this document is customised from the Kenya Agri-Nutrition Implementation Strategy 2020–2025, the Kisumu CANIS will be implemented from 2023 to 2027, with a mid-term review in 2025.

To achieve its nutrition outcomes, this strategy has adopted the six focus areas from the Kenya Agri-Nutrition Implementation Strategy (ANIS) and has reformulated them as seven focus areas to suit the context of the county. The seven focus areas are: (1) leadership, governance, and coordination; (2) strengthen service delivery systems and structures for the provision of equitable and quality nutrition-sensitive agriculture (NSA) interventions; (3) increase the availability, accessibility, and consumption of safe, diverse, and nutritious foods at all stages of the food chain; (4) community empowerment to engage in viable county agri-nutrition initiatives; (5) advocacy, communication, and mobilisation; (6) harness resources through public-private initiatives to support NSA interventions; and (7) monitoring, evaluation, and knowledge management of agri-nutrition interventions.

The CANIS sections covered in this strategy are: introduction, contextual background, rationale for its development, policy alignment and guiding principles, focus areas for interventions, multi-sectoral approach to its implementation, monitoring and evaluation (M&E), and the costed implementation framework.

The development of the CANIS was spearheaded by the County Agri-Nutrition Unit in the Department of Agriculture, Livestock, Fisheries, and Irrigation with support from USAID Advancing Nutrition, multi-sectoral nutrition platform and other relevant departments, the private sector, implementing partners, and academia. The strategy development steps included a situation analysis through a literature review, sector specific working groups, individual consultations, and a validation workshop.



SECTION 1.0: INTRODUCTION

Background Information

Kisumu County is among the 47 devolved governments. The county is located on the shores of Lake Victoria and serves as the main commercial and transport hub for the Western part of Kenya and the East African region (Figure 1). It covers an area of 2,085.9 square kilometres with 563 kilometres under water, representing 0.36 percent of the total land area. The county's strategic position serves as a gateway for Kenya into the rest of the African Great Lakes region. It has eight (8) sub-counties, namely, Nyando, Kadibo, Nyakach, Muhoroni, Kisumu East, Kisumu Central, Kisumu West, and Seme, and 35 wards. The arable land is 1342 square kilometres. Average annual rainfall is 725 millimetres. The major economic activities include crop farming, fishing, trade, and livestock rearing.



Figure 1. Map of Kisumu County

Population and Demographic Data

The population of Kisumu County is 1,155,174, of which 49 percent are male and 51 percent are female. The county population was projected to increase to 655,724 males and 691,063 females by 2021 (Kenya National Bureau of Statistics [KNBS] 2019). Kisumu is both a rural and urban county, with about 700,000 residing in the rural areas and 400,000 in urban and peri-urban areas. The urban population is projected to grow to 455,932 by 2027 and to 512,510 by 2030 [KNBS] 2019). This growth is expected to exert pressure on agricultural production for food and nutrition secure households.

1.1 Contextual Background for the Agri-Nutrition Strategy

The formulation of the ANIS is anchored in global initiatives, such as Sustainable Development Goal 2 on attaining zero hunger by 2030, and the 2014 Malabo Declaration by heads of state committing to enhance a 10 percent investment in agriculture, ending hunger, malnutrition, and reduced poverty by 2025. The Government of Kenya is committed to improving the health and nutrition well-being of its citizens, as articulated in the Constitution of Kenya 2010 Article 43(1), Vision 2030 economic and social pillars, and the Medium Term Plan IV, all of which provide for the right to food and nutrition, stating that, 'every person has the right to be free from hunger and to have adequate food of acceptable quality.' Agriculture is among the devolved functions. The County Government of Kisumu has made a commitment to revitalise agriculture and food security, and is keen on intergovernmental actions enhancing the realisation of adequate, safe, and nutritious food for all Kenyans. Food and nutrition security, together with the need for achieving universal health coverage, are in the County of Kisumu Governor's manifesto 2022-2027.

The CANIS is informed by the National Food and Nutrition Security Policy 2011, Kenya National Nutrition Action Plan (2018-2022), and the Kenya Agri-Nutrition Implementation Strategy (2020-2025), which are its guiding policy documents. This is expected to help the county realise quick wins that require a multi-sectoral approach, as stipulated in key result area number 10 from the County Nutrition Action Plan (CNAP), whose focus is to scale up nutrition in agriculture. In addition to the CNAP, the CANIS seeks to complement the projects proposed as drivers of the third County Integrated Development Plan (2023-2027).

1.2 Overview of Food and Nutrition Situation

Malnutrition is the underlying cause of about 45 percent of child mortality, especially in low- and middle-income countries (Black et al. 2013). It has also been associated with longterm impacts on cognitive and behavioural problems that can last for generations, affecting education, social status, and future economic productivity. In all its forms, malnutrition has significant direct and indirect costs for individuals, families, and entire nations, with an impact on the global economy estimated to be as high as US\$3.5 trillion per year or US\$500 per individual (Fanzo J. H., 2018)

According to the 2022 Kenya Demographic and Health Survey, 18 percent of children (ages 5-59 months) are stunted due to chronic undernourishment, which remains a serious national development concern. The rate of wasted children stands at 5 percent, whereas 10.1 percent are underweight. In Kisumu County, 9 percent of children ages 5-59 months are stunted, 4.9 percent are wasted, and 3.5 percent are underweight (KNBS and ICF 2022.The Kenya Stepwise Survey for Non-Communicable Diseases Risk Factors 2015 report showed that 28 percent of Kenyans ages 18-69 years were either overweight or obese, with the percentage being significantly higher in women (38.5%) than in men (17.5%) (Ministry of Health, KBNS, WHO 2015). This increases the risk of diet-related non-communicable diseases, such as diabetes, heart disease, hypertension, and gout. Moreover, the Cost of Hunger in Africa Kenya survey done in 2019 estimated the cost of child undernutrition at about Kenyan shillings 373.9 billion (6.9% of gross domestic product), mainly incurred through the effects of malnutrition on worker productivity, costs related to the treatment of malnutrition, and costs to the education sector due to class/grade repetition. The 2013 Lancet Series on Maternal and Child Nutrition highlighted the need for a concerted multisectoral effort to achieve global targets for reducing undernutrition (Black et al. 2013)

In Kisumu County, the quality of diets in women and children does not meet the minimum acceptable standards of WHO and UNICEF. According to 2021 Kenya Health Information System data, 40 percent of pregnant women attending antenatal clinics were anaemic, whereas only 44 percent of children received the recommended diet, and 80 percent consumed a diet deficient in iron. In addition, preliminary 2021 data from the Child Health and Mortality Prevention Surveillance Network program indicated that severe acute malnutrition significantly contributed to a substantial proportion of under-five deaths (Blau, D. M., Baillie *et al.*.2021). The county is food insecure, with a food poverty index of 47 percent (KNBS 2014). Food production in the county is not diversified. Poor diets are due to several factors: low adoption of new technologies in agriculture, limited access to affordable credit, high costs of agricultural inputs, unregulated marketing systems, poor access to markets, and low access to information. Moreover, agro-processing and value addition have not been adopted.

Good nutrition in a child's early years is essential for cognitive development. Ensuring that children are well fed, healthy, and able to learn is essential to the effectiveness of an education system. The main goal of the School Meals program is to support the county government's effort toward the attainment of Universal Primary Education and Education For All. The School Meals program has become a significant strategy for reaching marginalised groups, especially girls in Kisumu County. However, the budget allocation for the school feeding program is not adequate and provides for only rice and oil, which does not meet the dietary requirements.

Poverty is one of the underlying causes of malnutrition. With the urban poverty rate being at 70 percent, coupled with increasing household food insecurity, and an unemployment rate of more than 50 percent, Kisumu's agri-nutrition sector is in dire need of progressive and responsive initiatives to mitigate the scourge of malnutrition. Kisumu is among the counties with the highest dependency ratio, at 87 percent, according to the 2019 *Labour Force Report*. Coupled with high HIV prevalence in the region, this breeds a precarious

scenario, predisposing the general population to both immediate and underlying causes of malnutrition.

Social protection interventions can directly contribute to improved diets by providing food and cash transfers that encourage the use of health services and/or enable households to access food, items for personal and household hygiene, and clean water. However, there is minimal linkage of social protection programs being implemented with nutrition. Addressing malnutrition requires a multi-sectoral and multidisciplinary approach to achieve good nutrition outcomes (Acosta and Fanzo 2012). The sectoral nutrition interventions in place have so far been vertical, with minimal integration. Devolution has brought new opportunities at the county level that will require focused technical coordination to optimise gains to improve the nutrition and food security status of Kisumu county residents. Therefore, the implementation of this CANIS seeks to streamline the coordination of agri-nutrition activities in the county to achieve good health for the populace.

1.3 Overview of the Agriculture Situation

Kisumu County has the potential to produce sufficient food for its population. Although 62.1 percent of households depend on farming as a source of income, most of the agricultural activities are practiced on small parcels due to the household density of 107.8 square kilometres. The sector supports the livelihood of more than 80 percent of the residents. It has 149,983 farm families that engage in the production of crops, livestock, and fish (Kisumu County Agriculture Department Annual Report 2021-2022)

1.3.1 Crop Production

The county's total area under food crops (maize, beans, rice, sorghum, green grams, sweet potatoes, cassava, tomatoes, cowpeas, kales, and groundnuts) is estimated at 107,335 hectares (Ha), with 3,443 Ha under horticulture during the long rains and 5,985 Ha under rice production. The area under cash crops is approximately 45,309 Ha, with sugarcane covering the largest area at 44,988 Ha. Sugarcane growing is mainly done in Muhoroni Sub-County, covering approximately 43,700 Ha and employing 14,585 farmers directly (Kisumu County Agriculture Department Annual Report 2021-2022)

1.3.2 Livestock Production

The main livestock breeds in the county are dairy cattle, beef cattle, pigs, goats, sheep, poultry, rabbits, and beekeeping. Many dairy animals are found in the higher and cooler parts of the county, which are mainly found in Kisumu West, Muhoroni, and Nyakach Sub-Counties. The most common dairy cattle breeds found in the county are Ayrshire, Friesian, Guernsey, and their crosses. The county also has a large number of indigenous cattle breeds, with low productivity mostly caused by in-breeding and poor husbandry. Breeding services are costly for the average farmer, who resorts to using communal bulls for breeding as opposed to artificial insemination using superior bull semen.

Red meat is sourced from cattle, goats, and sheep, with the populous Zebu breed being the primary source of beef in the county. The small East African meat goat chevon breed dominates the county whereas sheep rearing, a source of mutton, is very popular in the local community. Most sheep are predominantly cross-bred among the red Maasai, Blackhead Persian (Somali), and the Dorper sheep breeds.

Chicken production is one of the most important economic activities for small-scale farmers in the county, reared in subsistence or commercial systems of production for white meat and eggs. Apart from livestock, the county is rich in wild bee colonies, which provide immense potential for beekeeping and honey production to improve immunity according to Kisumu County Agriculture Department Annual Report 2021-2022.

1.3.3 Fish Production

Fisheries are among the blue economy sector that are critical in aiding the country to achieve Vision 2030. Kisumu County is one of the important riparian counties of Lake Victoria, with 35 beach management units, 366 cages, and 2,300 ponds. The main species targeted for economic purposes are Nile perch, tilapia, and freshwater sardines (omena). The total production from capture fisheries is 2,064 tonnes and 122 tonnes from culture fisheries. Due to the declining capture fisheries on the lake, the county government is strengthening the establishment of aquaculture (fish farming) initiatives. This is reducing the pressure on the wild fisheries resources and enhancing the gap in per capita fish consumption, currently at 4 kilograms against the global level of 21 kilograms per year. Several technologies, like recirculating aquaculture systems and raised ponds, are being promoted (Kisumu County Agriculture Department Annual Report 2021-2022)

1.3.4 Agricultural Extension and Information Services

The ratio of extension workers to farmers in the county is at best 1:3,700 compared with the desired level of 1:4000 recommended by FAO (FAO,2013). This has constrained delivery of extension services, with the consequence of few farmers reached, contributing to low adoption of agricultural technologies and practices. Within the period of implementation from 2023-2027, the strategy of the Department of Agriculture, Livestock, Fisheries, and Irrigation requires the employment of about 50 Agri - nutrition officers.

The county hosts the Maseno Agricultural Training Centre, which serves as the training centre for farmers and those interested in farming enterprises. The Centre has a

multiplication centre, agro-processing unit, and demonstration plots for various agricultural enterprises. The Kenya Agriculture and Livestock Research Organization (KALRO) also has demonstration plots for various agricultural and livestock produce.

1.4 Rationale for Agri-Nutrition Strategy

The Constitution of Kenya 2010 Article 43(1) provides for the right to food, stating that every person has the right to be free from hunger and to have adequate food of acceptable quality (nutrition). Agriculture is fully devolved; therefore, the legal instruments for programming in agri-nutrition rest squarely with the county governments.

Currently in Kisumu County, there is no existing agri-nutrition policy and framework and, therefore, minimal budgetary allocation to support agri-nutrition. In view of the Kenya National ANIS, there is need to customise the national strategy to our local context. The current food insecurity situation indicates that 71.3 percent of Kisumu residents are food insecure. Of them, 45 percent are severely food insecure and 26.3 percent are moderately food insecure (Otieno Opiyo and Gaya Agong 2023).

Despite progress seen in the County Nutrition Action Plan (2021–2023) indicating an improvement in undernutrition status, glaring gaps still exist, as evidenced by more than 55 percent of children not consuming the required minimum acceptable diet and another 80 percent consuming a diet deficient in iron. In addition, vitamin A and zinc supplementation stand at 43.3 percent and 1.5 percent, respectively, in the county (Kisumu County Nutrition Action Plan (2021–2023). This presents the Department of Agriculture with an opportunity to increase the production of vegetables, orange-fleshed sweet potato varieties, and nuts and oil seeds to take care of vitamin A and zinc deficiencies.

Whereas the Kenya Climate Smart Agriculture Project and Aquaculture Business Development Program have been promoting indigenous poultry and fish production per household, the above nutrition-sensitive gaps present an opportunity for the CANIS to align programs and activities with the Third County Integrated Development Plan (2023-2027) and Annual Work Plan (2023/2024) for increased budgetary allocation in line with the above indicators.

Due to the prevailing economic conditions, production has been commercialised at the expense of meeting household nutritional needs. This has contributed to prevailing malnutrition cases in the county, requiring the need for the strategy to help reduce malnutrition cases by sensitizing people on nutrition-sensitive and nutritive specific agriculture.

The benefits of implementing nutrition-sensitive programs are to:

- Contribute to a healthy well-nourished people.
- Enhance agricultural transformation to grow the economy and alleviate poverty.
- Contribute to higher growth of the agricultural sector.
- Enhance partnerships between state and non-state actors to leverage resources for addressing food insecurity issues.

1.5 Scope

This strategy seeks to contribute to improving coordination and providing technical guidance on using nutrition-sensitive agricultural interventions in addressing the underlying and basic causes of malnutrition. The strategy addresses both nutrition-sensitive interventions and the enabling environment, as follows:

Nutrition-Sensitive Interventions

- i. Promote dietary diversity through increased food production, nutrition-sensitive research, and post-harvest infrastructure.
- ii. Contribute to improved nutrition through an enhanced healthy institutional feeding program, social protection, and women's empowerment.

Enabling Environment Interventions

- i. Customise the National Food and Nutrition Security Act and align production to its legal provisions.
- ii. Promote and legislate farm inputs subsidies legislations to promote local production in the county.
- iii. Strengthen existing markets and establish more infrastructure to mitigate against post-harvest losses.
- iv. Institutionalise food safety and quality control mechanisms within the markets to promote food safety.

1.6 Guiding Principles for the Government's Commitments to Agri-Nutrition Programming

The core values and guiding principles have been committed by the government to ensure the effective delivery of agri-nutrition programming. For effective implementation and coordination, the following principles will guide programming:

- Ethics
- Professionalism
- Equity
- Integrity
- Accountability
- Partnership

- Innovativeness
- Collaboration
- Quality
- Efficiency
- Sustainability
- Risk management

The national government has developed the policies and laws that guide the sector. These policies and laws have been committed in the County departmental budgets, with the Ministry of Health taking the lead and the Ministry of Agriculture, Livestock, Fisheries and Co-operatives having a complementary budget for the same. Some policies that guide this sector nationally are:

- a. Kenya Food and Nutrition Security Policy (2017–2022)
- b. Kenya Food and Nutrition Implementation Framework (2017)
- c. National School Meals and Nutrition Strategy (2017–2022)
- d. Kenya Health Policy (2012–2030)
- e. Kenya Food Composition Table Policy Brief 2018
- f. Medium Term Plan III (2018-2022) and Medium Term Plan IV (2023-2028)
- g. Big 4 Agenda Plan, which was derived from the Medium Term Plan
- h. Vision 2030
- i. Food and Nutrition Security Action Plan by the East African Community (2018–2023)
- j. Malabo Declaration on nutrition security (2014)

The County Government of Kisumu, through the County Integrated Development Plans II and III, has identified and budgeted for nutrition programs by giving them a larger focus. This was complemented through its adoption of the Annual Development Plans and County Fiscal Strategy Paper.

Additional efforts were made by the County Government of Kisumu to collaborate with USAID Advancing Nutrition, FAO, and other civil society organisations in Kisumu to aid in tackling nutrition and food insecurity. The multi-sectoral approach led to the development of the Kisumu County Nutrition Action Plan. Other policies and plans in this merged sector have been the development of the Kisumu County Blue Economy Policy and the Kisumu Youth Agri-Business Strategy.

1.7 Goal and Broad Objectives of the CANIS

To contribute to the sustainable reduction of high malnutrition levels through coordinated nutrition-sensitive agriculture (NSA) actions by state and non-state actors, and empower communities to produce and consume adequate, safe, diverse, and nutritious foods.

Broad Objectives

- 1. Promote leadership, governance, and coordination for agri-nutrition activities in the county.
- 2. Strengthen service delivery systems and structures for the provision of equitable and quality NSA interventions.
- 3. Increase the availability, accessibility, and consumption of safe, diverse, and nutritious foods at all stages of the food chain.
- 4. Harness resources through public-private initiatives to support NSA interventions.
- 5. Enhance and strengthen advocacy and communication efforts to the community, stakeholders, and prospective partners.
- 6. Promote community empowerment to engage in viable NSA initiatives.
- 7. Monitor, evaluate, and manage knowledge of NSA interventions.



SECTION 2.0: **AGRI-NUTRITION** IMPLEMENTATION STRATEGY FOCUS AREAS

There are seven focus areas that support the implementation of the Kisumu County agrinutrition programs. They focus on the overall food system—from production to consumption—offering appropriate solutions to malnutrition and food insecurity. This section provides a brief background on each focus area followed by the strategic objectives and the specific objectives of interventions.

FOCUS AREA 1:

Leadership, Governance, and Coordination

An enabling environment for NSA consists of commitments and capacities across a range of dimensions by state, county, and non-state actors, such as policies and legal frameworks; mobilisation of human and financial resources; partnerships and linkages among actors; and evidence-based decision making. The County of Kisumu, through the Departments of Agriculture, Livestock, and Fisheries, Education, Social Protection, Water, and Health, and using a multi-sectoral approach, has prioritised the reduction of chronic food insecurity and malnutrition. Due to the multi-faceted nature of food security and nutrition, there is a need for institutional coordination structures to be set up to fill the existing gaps.

Food and nutrition interventions are anchored in various policies and legal documents. However, NSA interventions were hampered by a weak policy and institutional framework among the actors. This has led to poor prioritisation and coordination of NSA interventions at county and community levels. Opportunities thus exist to strengthen NSA through improved capacities in policy development and programming.

Decision makers require knowledge and skills on how agriculture affects nutrition outcomes. The implementation of this strategy will facilitate appropriate linkages for better coordination, planning, communication, advocacy, collaboration, and mutual accountability for actors to ensure greater coherence, desired momentum, and synergy of all NSA interventions.

Strategic Objective

Strengthen leadership, governance, and coordination of NSA programming at the county level.

Specific Objectives

1. Improve regulatory requirements and the policy environment for the implementation of NSA interventions.

Activities

- Review existing policies with the view of strengthening and aligning them with existing programs.
- Support planning, budgeting, and resource allocation for the implementation of NSA at the county level.

2. Provide a mechanism for promoting multi-sectoral coordination and collaboration for effective and efficient NSA interventions by all state and non-state actors.

Activities

- Institutionalise a multi-sectoral agri-nutrition working group and framework at the county and sub-county levels and link to the multi-sectoral nutrition (MSN) forums.
- Conduct periodic training to strengthen multi-sectoral coordination of stakeholders at county and sub-county levels.
- Conduct quarterly MSN meetings at county and sub-county levels to give information on progress and provide feedback on agri-nutrition activities.

Strategic Outcomes

- 1. Improved regulatory requirements and policy environment for NSA programming across all levels of government.
- 2. Increased planning and resource allocation for the implementation of NSA at all levels of operations.
- 3. Multi-sectoral coordination, governance, and accountability framework for NSA established and functional.

FOCUS AREA 2:

Strengthen Service Delivery Systems and Structures for the Provision of Equitable and Quality NSA Interventions

Making food and agriculture interventions that are nutrition-sensitive requires significant shifts in perspective and approaches. The extension officers, social workers, health practitioners, and other service providers at community and primary producer levels have inadequate resources to implement nutrition-sensitive programs. To address this gap, providing the available workforce with operational tools, like the nutrition scorecard, MSN scorecard, and financial tracking tool, is crucial. The workforce should be equipped with knowledge and skills to integrate nutrition objectives in their work; lobby for resources and employment of agri-nutrition/extension staff and nutritionists at the sub-county and ward levels; and apply more sustainable extension approaches, such as the farmer field school models and use of sector-wise nutrition champions.

Strengthening coordination structures that bring all relevant sectors together, including crops, livestock, fisheries, health, forestry, water, roads, social protection, women, youth, and vulnerable groups, will lead to increased resources and support for agri-nutrition programming. Moreover, the integration of digital information technology and innovation are essential for the dissemination of information, data collection, and storage, and for the creation of awareness through local radio stations and social media.

Strategic Objective

Enhance the equitable provision and use of county agri-nutrition extension and advisory services for a well-nourished population.

Specific Objectives

1. Increase efficient access to information on food systems for policymakers, implementing officers, and the community through an established digital agrinutrition extension platform at county and sub-county levels.

Activities

- i. Create awareness and disseminate agri-nutrition information using local media.
- ii. Digitise information and data on the food system.
- 2. Provide support to increase the capacity of agriculture extension workers, livestock production officers, and fishery officers on agri-nutrition for increased production of safe, diversified, and nutritious foods.

Activities

- i. Conduct a training needs assessment on agri-nutrition for the agriculture extension workers, livestock production officers, and fisheries officers.
- ii. Undertake refresher training for agriculture extension workers, livestock production officers, and fishery officers on agri-nutrition.
- Create and operationalise forums and structures at county, sub-county, and community levels to engage various change agents for agri-nutrition interventions.

Activities

- i. Strengthen and operationalise the already established MSN structures at all levels.
- 4. Maintain a skilled and competent public and private county agri-nutrition workforce to provide leadership and support for nutrition-sensitive activities at all levels of operations in the county.

Activities

- Conduct capacity building for agri-nutrition service providers (public and private).
- ii. Submit a request for recruitment of 50 agri-nutrition technical staff to the County Public Service Board.

5. Strengthen market system service models in value chains for reliable, efficient, and responsive access to affordable, safe, diversified, and nutritious foods.

Activities

- i. Conduct market information sourcing using various platforms.
- ii. Sensitise farmers on the various market information platforms as per their value chains.
- iii. Train various actors in the market system on products quality, safety, storage, and nutritional properties.

Strategic Outcomes

- 1. Increased and efficient access to digital agri-nutrition information on food systems for policymakers, implementing officers, and the community.
- 2. Increased capacity of agriculture extension workers and other service providers on agri-nutrition and food systems for increased production of safe, diversified, and nutritious foods.
- 3. Skilled and competent public and private agri-nutrition workforce and multisectoral technical working group (TWG) maintained to provide leadership support for nutrition-sensitive activities at all levels of operation.
- 4. Increased access to reliable, efficient, and responsive markets for affordable, safe, nutritious, and diverse foods.

FOCUS AREA 3:

Increase the Availability, Accessibility, and Consumption of Safe, Diverse, and Nutritious Foods at All Stages of the Food Chain

This focus area seeks to increase access to and consumption of nutritious foods through a food systems approach that focuses on actions that improve diversified food production; safe and effective application of pesticides and fertilizers; post-harvest management; and processing, distribution, market retail, and consumption. This focus area covers actions for all key sectors: crops, livestock, fisheries, irrigation, water, agro-forestry, industries, marketing systems, appropriate technologies, and the consumers.

Food access through agricultural production directly influences nutrition through three main pathways. They are: (1) diversified food production, which can affect food availability for household consumption and the market; (2) household income expenditure on food and non-food items; and (3) women's empowerment, which affects income, caring capacity and practices, and female energy expenditure. Although the county has been pivotal in promoting production, majority of the farmers only produce for consumption with less for the local market. There are a wide range of barriers (inadequate information on nutrition, poverty, heath-related complications, poor infrastructure) that hinder access to and adequate consumption of nutritious, safe, and diverse foods. Despite the challenges involved in food production, foods locally produced by smallholder farmers can provide a sustainable food and nutrition security solution to support early childhood development feeding programs and sustain local market systems for communities, local traders, and other actors along the supply chain. This focus area also seeks to support private smallholder processors to comply with food safety standards that guarantee quality along the entire food value chain.

Kisumu County has two regional warehouses: National Cereals and Produce Board and Railways that aid in the handling and storage of cereals. There are designated market centres in urban and rural areas, street and road vendors, holding grounds for livestock, beach management units, and fish handlers that ensure that production, distribution, storage, and processing are efficient.

Strategic Objective

Increase the availability, accessibility, and consumption of affordable, safe, diverse, and nutritious foods at all stages of the food chain.

Specific Objectives

1. Enhance access to quality and quantity farm inputs for optimum diversified food production.

Activities

- i. Recruit, register, and validate farmers for the input subsidy program.
- ii. Identify beneficiaries for the quality inputs for crops, livestock, fish, and veterinary services.
- iii. Make requisitions for various farm inputs.
- iv. Procure and distribute the farm inputs to the identified beneficiaries.
- 2. Improve diverse food production methodologies and increase consumption of safe and nutrient-dense diverse foods.

Activities

- Sensitise farmers on the production and safe consumption of different food types.
- ii. Establish farmer business schools and provide technical support on nutritionsensitive interventions.

3. Improve post-harvest handling, processing technologies, and food marketing systems to ensure access to safe and nutrient-dense diverse foods.

Activities

- i. Conduct targeted sensitisation of selected youth, women's, and self-help groups on best post-harvest handling technologies.
- ii. Supervise the technical team that will conduct maintenance of the existing postharvest handling infrastructures.
- iii. Procure new and maintain existing post-harvest handling infrastructures in liaison with the users.

Strategic Outcomes

- 1. Improved quality and quantity of farm inputs provided to the farmers/producers for optimum diversified food production.
- 2. Increased production and consumption of safe and nutrient-dense diverse foods.
- 3. Strengthened and sustainable food processing practices, preservation, storage techniques, and marketing systems.
- 4. Increased use and adoption of digital information technology, innovations, and creation of awareness for access to locally produced nutrient-dense foods.

FOCUS AREAS 4:

Community Empowerment to Engage in Viable County Agri-Nutrition Initiatives

This focus area aims to increase the capacity of local communities to sustainably manage and use available resources to enhance food production, consumption, value addition, and marketing of adequate, safe, diverse, and nutrient-rich food products and nonconventional foods. Although communities have great potential, they often lack the requisite capacities to translate available resources into viable nutrient-dense foods at household and community levels. Most production and consumption food systems register high post-harvest losses, ill-informed value addition initiatives, inadequate access to markets, and limited dietary diversity, thereby escalating malnutrition. Empowerment also involves creating public awareness on the nutrition value of diverse, safe, and nutritious foods to enable community members to make informed choices about their diet and food consumption to cover their nutritional needs. This will ensure community ownership and sustainability of the county agri-nutrition interventions. The multi-sectoral approach will include the involvement of community-based groups, like women's groups, faith-based groups, youth groups, beach management units, community-based organisations, and other development agencies in the community.

Strategic Objective

Build the capacity of communities to engage in the production and consumption of safe, diverse, nutrient-dense food products.

Specific Objectives

1. Strengthen and operationalise community-level structures for county agrinutrition interventions.

Activities

- i. Establish ward and village agri-nutrition centres to act as training and demonstration centres.
- ii. Sensitise nutrition champions, community leaders, and other NSA actors on agrinutrition activities.
- iii. Lobby and advocate for inclusive financial and insurance services to support community-based organisations on food production.

Strategic Outcomes

- 1. Established, strengthened, and operationalised community-based structures for sustainable agri-nutrition interventions.
- 2. Strengthened capacities of local community structures to engage in viable county agri-nutrition interventions.
- 3. Inclusive financial and insurance services promoted for sustainable food production.
- 4. Community health volunteers are linked with nutrition champions
- 5. Village agri-nutrition centres/model farms are established (training on modern farming, value addition, and marketing).

FOCUS AREA 5:

Advocacy, Communication, and Mobilisation for Strengthening Agri-Nutrition Interventions

Kisumu faces a triple burden of malnutrition: undernutrition, overnutrition, and micronutrient deficiencies, which negatively influence the economic and social development. To address the immediate and the underlying causes of malnutrition, it is

vital to support efforts for the implementation of nutrition-specific and nutrition-sensitive interventions, respectively. Agriculture and other food security interventions address nutrition-sensitive interventions. However, there are financial challenges that affect the departments responsible for nutrition-sensitive programs. There is a need for nutrition advocacy and awareness to increase resources for managing malnutrition from a nutritionsensitive intervention approach. The various advocacy approaches should target both the public and private sectors. This will address nutrition security and contribute to averting the persistent malnutrition that exists in the county.

For effective coordination and implementation of the agri-nutrition and NSA objectives, key initiatives that help with sensitisation and awareness creation in the general population and among partners need to be undertaken. By embracing a multi-sectoral approach, the county community has devised operational strategies for capacity building of key nutrition champions and other leaders who continuously undergo retraining and sensitisation. This enhances sense of ownership and contributes to significant achievements of this Strategy. The mobilisation of all key partners will also assist in cohesive activities that contribute to the success of the strategy.

Strategic Objectives

Enhance advocacy and communication efforts with the community, stakeholders, and prospective partners.

Specific Objectives

1. Enhance county communication efforts to reach the community with sensitisation and awareness raising through media and other platforms.

Activities

- i Activate call centres.
- ii. Develop and disseminate key messages using county and local media platforms.
- 2. Strengthen advocacy efforts with the intention of improving legislation, policy, and structures.

Activities

- i. Conduct refresher training for decision makers on new/emerging policies.
- Lobby for enactment of policies and financial support.
- 3. Enhance mobilisation efforts to create synergy and coordination with all state and non-state actors for effective implementation of the strategy.

Activities

- i. Establish and hold consultative meetings with agri-nutrition players.
- ii. Conduct exchange visits for learning.

Strategic Outcomes

- 1. An informed population who takes ownership and promotes agri-nutrition efforts and initiatives.
- 2. Effective, relevant, viable, implementable, and structural laws, policies, and aligned projects that promote agri-nutrition and food safety, set standards, and relevant laws of the land.
- 3. A well-coordinated and organised team that works together to attain the overall objectives.

FOCUS AREA 6

Harness Resources through Public-Private Initiatives to Support NSA Interventions

To achieve sustainable agri-nutrition initiatives, both the public and private sectors play a major role in food quality, safety, and supply value chain through: capacity building, policy development, inputs provision, business development services, product innovations, information and communication technology solutions, and provision of market information and channels. Engaging the public and private sectors aims at leveraging their financial resources, technical capacities, research, and knowledge and skills base.

The 2011 Food and Nutrition Security Policy, the subsequent Kenya ANIS (2020–2025), and the Kenya Nutrition Action Plan (2018–2022) envision stronger collaboration and strengthened public-private partnerships that will also provide opportunities to leverage resources and widen coverage of interventions across the country. The CNAP's (2020–2023) mission is to reduce all forms of malnutrition in Kisumu county using well-coordinated multi-sectoral and community-centred approaches for optimal health and nutrition of county population and for the county's economic growth.

Unfortunately, there is no existing public-private partnership in Kisumu County that focuses on agri-nutrition interventions.

Strategic Objective

Enhance ownership and sustainability of NSA initiatives through engagement, participation, resource mobilisation, and investments by the public and private sectors for improved food and nutrition security.

Specific Objectives

1. Enhance the active participation of the public and private sectors in NSA initiatives.

Activities

- Sensitise the public and private sectors on agri-nutrition interventions in areas of engagement.
- Lobby for the County Government of Kisumu to give private sector players subsidies, incentives, and waivers for the setup and operation of food processing firms.

2. Enhance capacity building, resource mobilisation, and investments by the public and private sectors in the implementation of efficient NSA.

Activities

- Monitor, evaluate, and backstop private sector entities on the entire value chain.
- ii. Jointly lobby with the private sector through periodic meetings on how to create a pool fund to implement agri-nutrition interventions.

Strategic Outcomes

- 1. Mobilised private and public sectors engaged to deliver efficient NSA initiatives, research, and knowledge management for the promotion of safe and diverse foods.
- 2. Increased capacity, resource mobilisation, and investments by the private and public sectors in the implementation of efficient NSA interventions.
- 3. Promotion and efficient delivery of private and public sector-led business development services.

FOCUS AREA 7:

Monitoring, Evaluation, and Knowledge Management of Agri-Nutrition Interventions

This focus area seeks to establish mechanisms to collect and analyse food production information on all indicators covering the focus areas of the CANIS. This mechanism will effectively stimulate active participation of stakeholders to ensure improved planning,

implementation, and timely reporting on progress toward the achievement of the CANIS' goal.

The development of objectively verifiable indicators and performance targets will be guided by a common results framework in the implementation matrix. For effective monitoring toward the achievement of the common goal, there is a set of performance indicators for each of the seven focus areas, as provided in the multi-sectoral implementation plan.

The knowledge and information generated from the M&E mechanisms will be shared with the various stakeholders to inform future county agri-nutrition programming.

Strategic Objective

Build an effective M&E system to track and assess implementation performance of the CANIS at all levels of the county.

Specific Objectives

Establish and enhance county agri-nutrition knowledge management at all levels of operation.

Activities

- i. Adapt the Kenya ANIS monitoring and reporting system for county agri-nutrition interventions.
- ii. Interlink the Kenya ANIS monitoring and reporting system to the MSN scorecard and financial tracking tool.

2. Establish and strengthen the research and education section to inform agrinutrition policy and provide evidence for programming and improving practice.

Activities

- i. Conduct a mid-term review of the CANIS in 2025 and an end-line review in 2027.
- ii. Partner with KALRO and other research institutions to establish and promote the demonstration of innovations and agro-ecological technologies in agri-nutrition.

Strategic Outcomes

- 1. M&E system for county agri-nutrition interventions is adopted.
- 2. County agri-nutrition digital information and knowledge are developed and shared.
- 3. County agri-nutrition evidence-based policy, programming, and practice are enhanced.
- 4. Results and resources are tracked using the MSN scorecard and financial tracking tool.



SECTION 3.0:
MULTI-SECTORAL INSTITUTIONAL
COLLABORATION FOR
AGRI-NUTRITION PROGRAMMING

3.1 Agri-Nutrition Technical Working Group

The Ministry of Agriculture, Livestock, Fisheries and Co-operatives created the Agri-Nutrition Unit in the State Department for Crop Development and Agricultural Research at the national level with the mandate of mainstreaming nutrition in agriculture programs. The Ministry is also committed to upholding and supporting the food and nutrition linkages with TWGs in the country, a mission that is shared with the County Government of Kisumu. However, a gap exists at the county level in Kisumu and the formation of an agrinutrition working group is necessary to take care of the county and sub-county levels of operation.

Cognizant of the fact that agri-nutrition contributes to the reduction of malnutrition, the implementation of the CANIS will be spearheaded by the county agri-nutrition TWG. The working group will work in liaison with the County Agriculture Steering Committee, the Water, Sanitation, and Hygiene forum, and the Food Liaison Advisory Group. This agri-nutrition platform will spearhead and discuss proposed recommendations, activities, and priorities, as outlined in the Kisumu County MSN joint action plan, for the smooth implementation of agri-nutrition activities at the county level.

The TWG will support the actions mandated by the county Food and Nutrition Security Council according to the coordination structure proposed in the Food and Nutrition Security Policy (2011). The TWG will be responsible for planning, coordinating, and ensuring implementation actions to support NSA programs in the county.

The county agri-nutrition TWG will be responsible for programming affairs. A focal officer from the Department of Agriculture will be appointed to lead and support capacity and coordination efforts of the program. The focal person will establish and convene a county agri-nutrition secretariat that is multi-sectoral and multidisciplinary. The secretariat will develop the terms of references that will guide stakeholders on how to run the affairs of the group. The terms of reference will define the objectives of the group, membership, roles of members, potential group leaders, activities, venues, agenda, and times of meetings. The secretariat will work in collaboration with the sub-county and national TWG linkages. All actions of the secretariat will lead to achieving the results of NSA priorities. A review of the agri-nutrition TWG activities will be done annually, and any adjustments made accordingly.

SECTION 4: AGRI-NUTRITION IMPLEMENTATION PLAN

						Total Target 2022/ 2023/ 2024/ 2025/ 2026/ 2022/		Timelines a	nd Budget										
Focus Area	Strategic Objective	Activities	Outputs	Indicators	Baseline Indicator		2022/ 2023				2026/ 2027	2022/ 2023	2023/ 2024	2024/ 2025	2025/ 2026	2026/ 2027	Total Budget	Lead Department	Supporting Partner(s)
1. Leadership, Governance, and Coordination	Strengthen leadership, advocacy, governance, and coordination of NSA programming	Review existing policies with the view to strengthening and aligning them with existing programs	Policies reviewed and harmonized to align them to existing programs	Number of policies and plans reviewed	4	20	4	4	4	4	4	1,000,000	1,000,000	3,000,000	0	2,000,000	7,000,000	Agriculture	
	at the county level	Support planning, budgeting, and resource allocation for the implementation of NSA at the county level	NSA implementati on at the county level supported	A working NSA document with budgets and resources	0	1	1	1	0	0	0	2,000,000	2,000,000				4,000,000	Agriculture	
		Institutionalize a multi-sectoral agri-nutrition working group and framework at the county and sub-county levels and link them to the MSN forums	county and	A functioning agri-nutrition working group	0	1	1	1	1	1	1	500,000	500,000	500,000	500,000	500,000	2,500,000	Agriculture	
		Conduct quarterly MSN meetings at county and sub- county levels to give information on progress and provide feedback on agri-nutrition activities	MSN quarterly meetings held	Number of MSN meetings held	0	20	4	4	4	4	4	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	5,000,000	Agriculture	
		Conduct periodic training to strengthen the multi-sectoral coordination of stakeholders at county and subcounty levels	Training sessions held to strengthen the coordination	Number of training sessions conducted to strengthen coordination at county and sub-county levels	0	10	2	2	2	2	2	500,000	500,000	500,000	500,000	500,000	2,500,000	County Attorney, Department of Agriculture	
2. Strengthen Service Delivery Systems and Structures for the Provision of Equitable and Quality Nutrition	Enhance equitable provision and use of county agri-nutrition extension and advisory services for a	Create awareness and disseminate agri-nutrition information using local media (i.e., local radio stations and public participation for a	agri-nutrition information disseminated	Number of agri-nutrition awareness information materials disseminated	0	20	4	4	4	4	4	400,000	400,000	400,000	400,000	400,000	2,000,000	Department of Public Communicati ons, Department of Health, Department of Agriculture	

							Timeli	nes and	Targets	;		Timelines a	nd Budget						
Focus Area	Strategic Objective	Activities	Outputs	Indicators	Baseline Indicator	Total Target	2022/ 2023	1	2024/ 2025	1	2026/ 2027	2022/ 2023	2023/ 2024	2024/ 2025	2025/ 2026	2026/ 2027	Total Budget	Lead Department	Supporting Partner(s)
Sensitive Agriculture Interventions	well-nourished population	Digitize information and data on the food system.	Digitized information and data on the food system	Functional digital food system	0	1	0	1	0	0	0	0	200,000			0	200,000	Department of Public Participation, Department of Health, Department of Agriculture	
		Conduct a training needs assessment on agri-nutrition for the agriculture extension workers, livestock production officers, and fishery officers on agri-nutrition	Agri-nutrition service providers capacity enhanced	Number of agri-nutrition providers who have their capacity increased	0	10	2	2	2	2	2	0	1,000,000	1,000,000	1,000,000	1,000,000	4,000,000	Agriculture, Health	
		Undertake refresher training for agriculture extension workers, livestock production officers, and fishery officers on agri-nutrition	Farmers sensitized on various market systems	Informed farmers on various market systems	0	20	4	4	4	4	4	0	2,000,000	1,000,000	0	1,000,000	4,000,000	Agriculture	
		Information sourcing on various market system service models	Information sourced on various market system models	Information available on market system models	0	5	1	1	1	1	1	750,000	750,000	750,000	750,000	500,000	4,000,000	Agriculture	
		Strengthen and operationalize the already established MSN structures at all levels	MSN structures at all levels strengthened	Number of levels of MSN structures	3 (National, County and Commun ity)	15	3	3	3	3	3	500,000	500,000	500,000	500,000	500,000	2,500,000	Department of Agriculture	
		Capacity building of agri-nutrition service providers (public and private)	Agri-nutrition staff trained	Number of new agri- nutrition staff trained	3	20	0	20	0	20	0	0	200,000	0	200,000	0	400,000	Department of Agriculture	
		Request recruitment of 50 agri-nutrition technical staff to the County Public Service Board	Agri-nutrition staff recruited and appointed	Number of new agri- nutrition staff recruited	9	49	8	8	8	8	8	5,760,000	6,048,000	6,350,000	6,667,920	7,001,316	25,779,236	Department of Agriculture	
		Information sourcing on various market information platforms	Type of information sourced	Number of farmers informed of the new information	8	9	0	2	2	2	2	0	20,000	20,000	20,000	20,000	80,000	Department of Agriculture	
		Sensitization of farmers on various market information platforms as per their value chains	Number of farmers sensitized	Number of farmers using the market information platforms	1000	5000	0	1000	1000	1000	1000	0	300,000	300,000	300,000	300,000	1,200,000	Department of Agriculture	

	Charles at a				B !'	-	Timeli	nes and	Targets	;		Timelines a	nd Budget				-		G
Focus Area	Strategic Objective	Activities	Outputs	Indicators	Baseline Indicator	Total Target	2022/ 2023	2023/ 2024	2024/ 2025	2025/ 2026	2026/ 2027	2022/ 2023	2023/ 2024	2024/ 2025	2025/ 2026	2026/ 2027	Total Budget	Lead Department	Supporting Partner(s)
		Train various actors along the market system on products quality, safety storage, and nutritional properties	Number of actors trained	Number of actors applying safety and nutritional information	100	500	100	100	100	100	100	0	250,000	0	250,000	0	500,000	Department of Agriculture	
3. Increase the Availability, Accessibility, and Consumption	Increase the availability, accessibility, and consumption of	Recruit, register, and validate farmers for the input subsidy program	Beneficiaries identified	Number of beneficiaries identified	1000	5000	1000	1000	1000	1000	1000	9000000	9720000	10497600	11337408	12244400.64	52,799,408.64	Department of Agriculture	
of Safe, Diverse, and Nutritious Foods at All Stages of the Food Chain	affordable, safe, diverse, and nutritious foods at all stages of the food chain	Identify beneficiaries for quality inputs in crops, livestock, fish, and veterinary services	Farm inputs available	Amount and number of farm inputs	5	5	1	1	1	1	1	10,000,000	10,000,000	10,000,000	20,000,000	10,000,000	60,000,000	Department of Agriculture, IT, Health, Physical Planning	
		Make requisitions for various farm inputs	Farm inputs requested and distributed	Number of local service orders	1000	5000	1000	1000	1000	1000	1000	100,000	400,000	550,000	550,000	550,000	1,650,000	Department of Environment, Department of Health and Agriculture	
		Procure and distribute the farm inputs to the identified beneficiaries	Farmers who are sensitized	Number of beneficiaries who received the farm inputs	0	12	2	2	2	2	2	500,000	500,000	500,000	500,000	500,000	2,500,000	Department of Agriculture	
		Sensitize farmers on the production and safe consumption of different food types	Farmers who are sensitized	Number of demo plots established	0	35	7	7	7	7	7	600,000	600,000	600,000	600,000	600,000	3,000,000	Department of Agriculture	
		Establish farmer business schools and provide technical support on nutrition sensitive interventions	business schools	Number of farmer business schools that get technical support	0	5	1	1	1	1	1	0	2,000,000	1,500,000	1,000,000	500,000	5,000,000	Social Protection	
		Targeted sensitization of selected youth, women's, and self-help groups on best post- harvest handling technologies	Youth and women's groups sensitized	Number of youth and women's groups sensitized	0	5	1	1	1	0	1	500,000	500,000	500,000	0	500,000	2,000,000	Social Protection	
		Supervision of the technical team that will conduct maintenance of	Post-harvest handling infrastructure maintained by a technical team	Infrastructure s well maintained	0	5	1	1	1	1	1	140,000	140,000	70,000	70,000	70,000	490,000	Department of Agriculture	

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Focus Area	Strategic Objective	Activities	Outputs	Indicators	Baseline Indicator	Total Target	2022/ 2023	2023/ 2024	2024/ 2025		2026/ 2027	2022/ 2023	2023/ 2024	2024/ 2025	2025/ 2026	2026/ 2027	Total Budget	Lead Department	Supporting Partner(s)
		Procure new and maintain existing post-harvest handling infrastructures in liaison with the users	New post- harvest infrastructure procured	Post-harvest equipment available to work	0	5	1	1	1	1	1	1,000,000	3,000,000	1,000,000	1,000,000	1,000,000	7,000,000	Department of ICT, Agriculture	
4. Community Empowerment to Engage in Viable County Agri-Nutrition Initiatives	communities to engage in the production and consumption of safe, diverse,	Establish ward and village agri- nutrition centres to act as training and demonstration centres	Ward and village agri- nutrition centres established	Number of ward and village agri- nutrition centres	0	70	10	20	20	20	0	100,000	200,000	200,000	200,000	0	700,000	Department of Governance and Civil Service, Department of Agriculture	
	nutrient-dense food products	Sensitize nutrition champions, community leaders, and other NSA actors on agri-nutrition activities	Number sensitized	Number of agri-nutrition champions	1	50	0	10	20	20	0	0	100,000	200,000	200,000	0	500,000	Department of Agriculture, Health	
		Lobby and advocate for inclusive financial and insurance services to support community- based organizations on food production	Nutrition champions trained and engaged with clear workplans and objectives	Number of nutrition champions engaged	0	140	70	0	70	0	0	1,000,000	0	1000000	0	0	0	Department of Agriculture, Health	
5. Advocacy, Communicatio n, and Mobilization for	Enhance and strengthen advocacy and communication efforts with the	Activation of call centres	Platform and linkages created	Functioning platforms for linkages	0	1	0	0	0	0	0	0	3,000,000	0	0	0	300,000	Department of Information, Department of Agriculture	
Strengthening Agri-Nutrition Interventions	community, stakeholders, and prospective partners	Develop and disseminate key messages using the county and local media platforms	County staff and organization strengthened	Capacitated staff able to push for advocacy	0	5	1	1	1	1	1	1,000,000	1,000,000	1,000,000	500,000	500,000	4,000,000	Health, Information, Agriculture	
		Conduct refresher training for to decision makers on new/emerging policies	Informed population on agri-nutrition content	Functioning social media platforms	1	3	0	1	1	0	1	0	10,000	10,000	0	10,000	30,000	Department of Agriculture	
		Lobby for enactment of policies and financial support	Policy or bill established	Number of policies formulated	0	1	0	1	0	0	0	0	600,000	0	0	0	600,000	Department of Governance, Department of Agriculture	
		Establish and hold consultative meetings with agri-nutrition players	Number of meetings	Meetings	1	10	2	2	2	2	2	0	40,000	40,000	40,000	40,000	160,000	Department of Agriculture	
		Conduct exchange visits for learning	Number of exchange visits	Information learned	1	6	0	2	0	2	0	20,000	0	20,000	0	20,000	60,000	Department of Agriculture	

					B l'a	T. A. I	Timeli	nes and	Targets	;		Timelines a	nd Budget					1 1	G
Focus Area	Strategic Objective	Activities	Outputs	Indicators	Baseline Indicator	Total Target	2022/ 2023	2023/ 2024		2025/ 2026	2026/ 2027	2022/ 2023	2023/ 2024	2024/ 2025	2025/ 2026	2026/ 2027	Total Budget	Lead Department	Supporting Partner(s)
6. Harness Resources through Public-Private Initiatives to Support NSA Interventions	Enhance ownership and sustainability of NSA initiatives through engagement, participation,	Sensitization of public and private sectors on agri-nutrition interventions in areas of engagement	Private sector engagements on agri- nutrition	An informed private sector community	0	20	4	4	4	4	4	500,000	500,000	500,000	500,000	500,000	2,500,000	Health, Information, Agriculture	
	resource mobilization, and investments by the public and private sectors for improved food and nutrition security	Lobby for the County Government of Kisumu to give private sector players subsidies, incentives, and waivers for the setup and operation of food processing firms	Private sector players receiving waivers and incentives	Cost of setup and operation of food processing firms reduced	0	5	1	1	1	1	1	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	30,000,000	Finance, Agriculture, Trade	
		Monitor, evaluate, and backstop the private sector entities on the entire food value chain		A regulated private sector that conforms	0	20	4	4	4	4	4	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	5,000,000	Agriculture, Trade, Health	
		Jointly lobby with the private sector through periodic meetings on how to create a pool fund to implement agri- nutrition interventions	created with the help of	Agri-nutrition interventions well funded	0	1	1	1	1	1	1	500,000	500000	500,000	500000	500000	2,500,000	Trade, Finance, and Agriculture	
7. Monitoring, Evaluation, and Knowledge Management of Agri- Nutrition Interventions	Build an effective monitoring and evaluation system to track and assess implementation performance of the CANIS at all levels in the county	Adapt the ANIS monitoring and reporting system for county agrinutrition interventions	ANIS M&E system adopted	County agri- nutrition interventions effectively implemented	0	1	0	1	0	0	0	0	300,000	0	0	0	300,000	County Assembly of Kisumu, County Attorney, Department of Agriculture	
		Interlink the ANIS M& E system to the MSN scorecard and financial tracking tool	system linked to the MSN scorecard	An effective and coordinated system	0	1	0	0	1	0	1	0	300000	0	0	0	300,000	Department of Monitoring and Evaluation, Department of Agriculture	
		Conduct a mid- term review of the CANIS in 2025	Mid-term review report (2025) and end-term evaluation report (2027)	Number of documents	0	1	0	1	0	0	0	0	3,000,000	0	0	0	3,000,000	Department of Agriculture	

	Charles and a				B I'm .	T. 1.1	Timeli	nes and	Targets	;		Timelines a	nd Budget						.
Focus Area	Strategic Objective	Activities	Outputs	Indicators	Baseline Indicator			2023/ 2024			2026/ 2027	2022/ 2023	2023/ 2024	2024/ 2025	2025/ 2026	2026/ 2027	Total Budget	Lead Department	Supporting Partner(s)
		KALRO and other research institutions to	innovations and technologies by	New technologies innovated		5	1	1	1	1	1	1000000	1,000,000	1,000,000	1,000,000	1,000,000	5,000,000	Agriculture	

SECTION 5: MONITORING AND EVALUATION FOR THE AGRI-NUTRITION PROGRAM

Monitoring and Evaluation (outputs and indicators) are included in the implementation plan in Section 4 (Annex 1). The Kisumu CANIS will use the Annex 2 template to track and monitor performance of the indicators implemented by the various actors at specific times.

Stakeholder	Reporting Date (dd/mm/YY)	Policy Objective	Strategic Outcome	Expected Output	Output Indicator for the Implementing Year	Achieved Output Indicator	Total Funds Used	Means of Verification	Trading Outcome Indicator

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SECTION 6: APPENDICES

This section may include the following Annexes and any other information as deemed necessary

Annex 1: Agri-Nutrition Implementation Plan

Annex 2: Performance monitoring and reporting tool (Excel worksheet-link)

ANNEX 3. LIST OF CONTRIBUTORS TO THE CANIS

Names	Department	Cadre
Dr Paul Omanga	CGK – Agriculture	Former Chief Officer for Agriculture, Irrigation, Livestock and Fisheries
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Dorcas Adhiambo	CGK – Health	Sub-County Nutrition Coordinator
Daniel Owino Wamunga	CGK – Agriculture	Agro Processing Officer
Joseph Amoke	CGK – Fisheries	Senior Fisheries Officer
David Simiyu	CGK – Agriculture	Principal Agriculture Officer
Thaddeus Ouko	CGK – Agriculture	Principal Agriculture Officer
Winnie Atieno	Kidogo	Nutritionist
Ruth Okoth	Jiupachi-Community- based organisation	Social Worker
Cynthia Odour	Kisumu Urban Apostolate Program-PANDPIERI	Nutritionist
Henry Okello	CGK – Water	County Director Water
Rael Mwando	CGK – Health	County Nutrition Coordinator
Rose Achieng	CGK – Agriculture	Agri-nutrition Officer
Benta Oballa	CGK – Agriculture	Agri-nutrition Officer
Jeffrey Bonyo	CGK – Agriculture	Agriculture Officer
Rose Onyango	CGK – Agriculture	Agri-business Development Officer
Susan Adhiambo	CGK – Agriculture	County Director Fisheries
Joyce Omondi	CGK – Agriculture	Assistant Director of Agriculture
Adar Micheal	CGK – Education	Director Early Childhood Education
Lorraine H Anyango	CGK – Health	County Principal Communication Officer
George Abwajo	GulfHub/County Budget	Director Economic Forum
Joyce Nyaboga	USAID Advancing Nutrition	Capacity Strengthening Advisor
Phinhas Otieno	USAID Advancing Nutrition	County Technical Coordinator
Rodgers Ochieng	USAID Advancing Nutrition	County Technical Coordinator
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Disclaimer:

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