COUNTY GOVERNMENT OF KAKAMEGA



DEPARTMENT OF AGRICULTURE, LIVESTOCK, FISHERIES, AND COOPERATIVES

Kakamega County Food Safety policy

2023

FOREWORD

The Constitution of Kenya, 2010 is a progressive constitution that establishes devolution.

Under the Act, Agriculture is a devolved function charged with food security, nutrition,

and food safety. Major strides have been made in developing legislation to address

fundamental issues on food safety.

Food safety is essential for increasing food security which exists when all people have

physical and economic access to sufficient, safe, and nutritious food to meet the dietary

needs and food preferences for active and healthy living. Increasing the supply of safe

and wholesome food reduces the impact of foodborne diseases that cause human

suffering and significant economic losses to the County. Kakamega County Food Safety

Policy has been prepared to enhance coordination of food safety and provide adequate

structures on critical elements and policy directions on food safety.

This Policy was developed through a consultative process involving the community,

national regulatory institutions, County departments and development partners. The main

objective of the policy is to establish a sustainable multi-sectoral food safety system that

is responsive to the food safety challenges in the County. It is my hope that this Policy

shall provide the guidance to the County government on food safety in relation to

coordination and regulation of actors in the food industry while maintaining collaboration

with public and private actors.

Benjamin Ogunyo Andama,

CECM.

Agriculture, Livestock, Fisheries, Cooperatives & Irrigation

iv

ACKNOWLEDGEMENTS

This Policy has been prepared with contribution from technical teams from the

Department of Agriculture, Livestock, Fisheries, Cooperatives & Irrigation and the

Department of Health Services.

We are indebted to the Governor H.E. FCPA Hon. Fernandes Barasa OGW for his

exemplary leadership and goodwill in the process of developing this Policy. Our gratitude

also goes to H.E. the Deputy Governor Hon. Ayub Savula, Members of County

Assembly, County Executive Committee Members in charge of Trade and

Industrialization, Health Services, Chief Officers Dr. Phitalis Masakhwe and Mr. Joshua

Kutekha, County Attorney Madam Vivian Mmbaka and Directors in the sector.

The Department of Agriculture also acknowledges the invaluable technical expertise and

financial support from Micro Enterprise Support Trust (MESPT)/ Agriculture Financing

(AGRIFI), Pest Control Products Board (PCPB), Kenya Bureau of Standards,

Horticulture Crops Directorate, The Kenya Dairy Board, Directorate of Veterinary

Services, Kenya Agricultural and Livestock Research Organization (KALRO) and

Masinde Muliro University of Science and Technology (MMUST).

Finally, we are grateful to former CECMs; CPA Geoffrey Omulayi for Agriculture,

Livestock, Fisheries and Cooperatives, Madam Rachel Okumu, OGW, EGJ of the Public

Service and Administration and Dr. Collins Matemba, of Health Services. I am equally

grateful to Mr. Jeremiah Namunyu and Hillary A. Onjoro the former County Chief

Officers in charge of Agriculture Cooperatives and Irrigation, for their leadership in the

policy development process and coordination of other Departments, in delivering this

important policy document during their tenure in office, without forgetting Dr. George

Mbakaya the County Director of Agriculture and his team; Mr. Titus Omengo, Mr. Jacob

Marinha and Ma Francis Mahama from Department of Anti-altern for the involved

Masimba and Mr. Francis Muhenge from Department of Agriculture, for the invaluable

support and hard work in delivering this document.

Deterripes

Graham Bill Silingi Otieno,

County Chief Officer,

Agriculture

V

TABLE OF CONTENTS

FOREWARD	iv
ACKNOWLEDGEMENT	v
TABLE OF CONTENTS	vi
ABBREVIATIONS AND ACRONYMS	x
DEFINITION OF TERMS	xi
EXECUTIVE SUMMARY	xii
CHAPTER ONE	1
INTRODUCTION	1
1.1. Background	1
1.2. Situational Analysis	1
1.3. Statement of the problem	
1.4. Rationale	3
1.5. Statements of Vision, Mission and Guiding Principles	
1.5.1. Vision	
1.5.2. Mission	5
1.5.3. Guiding Principles	
CHAPTER TWO	
2.1. LEGISLATIVE FRAMEWORK	
2.1.1. Constitution of Kenya, 2010	
2.1.2. Agriculture and Food Authority Act. 2013	5

2.1.3. Animal Disease Act Cap 364	7
2.1.3. Alcoholic Drinks Control Act, 2010	7
2.1.4. Biosafety Act No. 2 Of 2009	8
2.1.5. Crops Act, 2013	8
2.1.6. Competitions Authority Act	8
2.1.7. Consumer Protection Act, 2012	8
2.1.8. Dairy Industry Act Cap 336	8
2.1.9. Food, Drugs and Chemical Substances Act (Cap 254)	8
2.1.10. Fertilizer and Animal Feedstuff Act Cap 345	8
2.1.11. Fisheries Management and Development Act, 2016	8
2.1.12. Health Act, 2017	9
2.1.13. Irrigation Act, 2019	9
2.1.14. Kenya Plant Health Inspectorate Service Act, 2012 (No. 54 Of 2012)	9
2.1.15. Kenya Vision 2030	9
2.1.16. Meat Control Act Cap 356 (Rev. 1980)	9
2.1.17. Kakamega County Health Services Act, 2022	10
2.1.18. Nuclear Regulatory Act, 2019	10
2.1.19. Pest Control Products Act Cap 346	10
2.1.20. Public Health Act Cap 242 (Rev.2002)	10
2.1.21. Standards Act Cap 496	10
2.1.22. Veterinary Surgeons' and Veterinary Para-Professionals (VSVP) Act (No.9 Of 20	911)10

2.1.23. Water Act, 2016 Cap 372	11
2.2. Policies and Strategies	11
2.3. General objective	11
2.3.1 Specific Objectives	11
CHAPTER THREE	12
3.1. POLICY FRAMEWORK	12
3.1.1. Enhance Public Awareness On Food Safety	12
3.1.2. Strengthen systems of traceability in the food value chain	12
3.1.3. Establish a County institutional and regulatory framework on food safety	13
3.1.4. Enhancing food safety financing	14
CHAPTER FOUR	15
4.1. COORDINATION AND IMPLEMENTATION	15
4.1.1. Management, Coordination and Institutional Framework for Implementing the Food	
Safety policy	15
4.1.2 Institutional Framework	15
4.1.3. Regulatory Bodies	17
4.1.4. Research and Training Institutions	17
4.1.5. Non-Governmental Organizations, Development Partners and Agencies	18
4.1.6. Financial Institutions.	18
4.1.8. Implementation of the Policy	19
4.1.9. Resource Mobilization	19
4.1.10. Policy Review	19

CHAPTER FIVE	20
REFERENCES	21

LIST OF ABBREVIATIONS AND ACRONYMS

AGRIFI Agricultural Financing

ATVET Agriculture, Technical, Vocational Education and training

CECM County Executive Committee Member

FBO Food Business Operator

GMP Good Manufacturing Practices

GAP Good Agricultural Practices

HACCP Hazard Analysis Critical Control Point

IEC Information Education and Communication

KDB Kenya Dairy Board

KNBS Kenya Bureau of National Statistics

MESPT Micro Enterprises Support Programme Fund

TVET Technical, Vocational, Education & Training

KALRO Kenya Agricultural and Livestock Research Organization

KEMFRI Kenya Marine and Fisheries Research Institute

KeFS Kenya Fisheries Service

KIRDI Kenya Industrial Research and Development Institute

ATC Agricultural Training Centre

KITI Kenya Industrial Training Institute

KIBT Kenya Institute of Business Training

ICIPE International Centre of Insect Physiology and Ecology

DEFINITION OF TERMS

Food business operator means a person or company who undertakes whether private or public, for profit or not, carrying out any of the activities related to any stage of the food chain

Food means any substance, whether processed or raw, which is intended for human consumption and includes drink, chewing gum and any substance which has been used in manufacture, preparation or treatment of "food" but does not include cosmetics or drugs, or substances used only as drugs.

Food Handler means any person who directly handles packaged or unpacked food, food equipment and utensils or food contact surfaces and it is therefore expected to comply with food hygiene requirements

Food Safety means all measures taken to ensure that food will not cause harm to the consumer when it is produced, prepared or eaten according to its intended use and maintain its nutritive value.

Feed means any single or multiple materials, whether processed or raw, which is intended to be fed directly to food-producing animals.

Hazard means anything microbial, chemical, or physical that causes harm to the consumer

Contaminant means any biological or chemical agent, foreign matter, or other substances not intentionally added to food that may compromise food safety or suitability.

Sanitary and Phyto-sanitary measures theses are quarantine and biosecurity measures which are applied to protect human, animal or plant life or health from risks arising from the introduction, establishment and spread of pests and diseases and from risks arising from additives, toxins and contaminants in food and feed.

EXECUTIVE SUMMARY

The Kenyan food safety control system is multi-sectoral in approach and is embodied in various statutes implemented by various Government ministries, departments and regulatory agencies. The coordination mechanism among these institutions is currently inadequate. This has created inefficiencies in the national and County food safety control system resulting in recurrence of food related hazards, rejections of food shipments by importing countries and other undesirable consequences.

The overall objective of this Policy is to establish and maintain a county, integrated *farm-to-fork* food safety system that harmonizes inter-agency efforts, minimizes inter-agency conflict and overlap. The Policy is intended to facilitate the protection of public safety and food trade in a manner consistent with the World Trade Organization (WTO), SPS and other international requirements.

This Policy Addresses Food Safety concerns in the broad areas of legal and regulatory framework, information, communication, training and education; official control and inspection services; validation, inspection, certification and self-assessment, monitoring epidemiological surveillance data and laboratory services and Emerging and re-emerging food safety concerns. It also highlights institutional framework, mandates and capacities. The County Food Safety policy envisages protecting and promoting consumer health while facilitating the orderly development of the food industries as well as fair practices in food trade.

The County Government will develop a participatory implementation plan for this Policy. Developing this plan will provide an important step towards ensuring that the actions outlined in the Policy are addressed systematically and effectively. This will be achieved through the formalization of the County Food Safety Coordination Committee and establishment of Integrated Food Control System to harmonize operations and enhance coordination. The implementation plan will also embrace performance measures for the actions and initiatives outlined in the Policy, which can then be used to gauge the overall progress towards effective and efficient food safety management system in the County. While this Policy provides for the official food safety control mechanisms, the responsibility of food safety rests with all players along the food chain.

CHAPTER ONE

INTRODUCTION

1.1. Background

Food quality and safety are the totality of characteristics of the food products that bear on their ability to satisfy all legal, customer and consumer requirements (Will et al 2007). Food is considered to be safe if there is reasonable demonstrated certainty that no harm will result from its consumption under anticipated conditions of use. The national food safety and quality system in Kenya is managed by various statutory government agencies under different ministries. The food safety control agencies operate under the Ministries of Agriculture, Livestock, and Fisheries Development; Trade and Industrialization; Environment and Health.

Food and nutrition is a core determinant of human and animal health. The quality of food is greatly affected by presence or absence of microbiological and toxic agents and substances which could practically not be possible to completely eliminate but maintained at levels non-hazardous to human and animal health. Food gets contaminated with injurious substances at any stage of the food chain. Thus, food safety systems at every step of the food chain are helpful tools in ensuring safe practices are followed. The overall goal of this Policy is to improve food safety in the County. Kakamega County has previously reported some incidences of food borne infections, toxicity and zoonosis which could be avoided. However, there are challenges such as traceability and enforcement of standards in food safety that are faced by the County in mitigating these challenges.

1.2. Situational Analysis

Foodborne diseases are a significant cause of morbidity and mortality worldwide. These illnesses account for a global burden of disease comparable to that of <u>tuberculosis</u>, and more than double that of maternal health disorders and deaths (WHO, 2015, GBD, 2017). One in ten people suffers a foodborne illness annually (World Health Organisation WHO, 2015). This global burden of foodborne disease warrants improved efficacy of food safety

management systems (FSMS) throughout the supply chain. While the main contributors to foodborne illness are contaminated raw materials, poor personal hygiene, contaminated equipment, and process failures, they are influenced directly or indirectly by people behaviors. Controlling these risk factors involves FSMS that incorporate good agricultural practices, good hygienic practices, good manufacturing practices, and hazard analysis and critical control point (HACCP) plans as part of safety and quality management systems as the case in Australian horticulture (Premier & Ledger, 2006).

Foodborne diseases are a significant cause of morbidity and mortality worldwide. These illnesses account for a global burden of disease comparable to that of tuberculosis, and more than double that of maternal health disorders and deaths (WHO, 2015, GBD, 2017). One in ten people suffers a foodborne illness annually (World Health Organization WHO, 2015). This global burden of foodborne disease warrants improved efficacy of food safety management systems (FSMS) throughout the supply chain.

While the main contributors to foodborne illness are contaminated raw materials, poor personal hygiene, contaminated equipment, and process failures, they are influenced directly or indirectly by people behaviors. Controlling these risk factors involves FSMS that incorporate good agricultural practices, good hygienic practices, good manufacturing practices, and hazard analysis and critical control point (HACCP) plans as part of safety and quality management systems as the case in Australian horticulture (Premier & Ledger, 2006). The most recent Global Food Safety Initiative (GFSI) Benchmarking Requirements (2020) incorporated FS-culture, driving its development in horticulture standards internationally e.g., Global GAP, Canada GAP, Euro GAP.

The knowledge, attitude, and practices of food handlers are important factors in preventing foodborne illness; Insfran-Rivarola et al. (2020),. Every year, slightly over one-third of the entire population in developing countries is affected by foodborne diseases, (Garcia et al 2005). According to the European Food Safety Authority Scientific *report of EFSA of 2010*, approximately 48.7% of foodborne diseases were associated with the catering at both institutional and food service establishments. Inadequate infrastructure and paucity of food safety knowledge, food service providers have caused a surge in foodborne disease outbreaks (Basch et al., 2015). Many food safety hazards, including pathogens and fungal

toxins, originate on-farm. Addressing food safety at this stage is challenging in low and middle-income countries (LMICs) because farm sizes are typically very small, traceability systems are limited to high-value crops destined for export, and much if not most of the food supply is traded through informal markets. Recently, the COVID-19 pandemic has fostered an increased interest in compliance with FSMS requirements (Benkeblia, 2021; Duda-Chodak et al., 2020; Yetka et al., 2021).

1.3. Statement of the problem

In Kakamega County, a lot of resources have been channeled in the Agricultural sector to boost food production. However, to a considerable extend, the food produced is unsafe for human consumption. This has been evidenced by the rising cases of food borne diseases, increasing health costs to the County and reduced productivity. Weak enforcement of Food laws and regulations, inadequate skills, knowledge and information, inadequate traceability, monitoring, epidemiological surveillance data and laboratory Services, Lack of appropriate infrastructure and inadequate financing for food safety are the main challenges the County faces in the food safety. This has been attributed to inconsistent policy attention, limited investment, weak law enforcement, low consumer awareness and less traceability in the event of food poisoning.

1.4. Rationale

The Constitution of Kenya 2010 guarantees food safety to all the people of Kenya. Food and feed contamination can occur at any level from production, handling, storage, processing, packaging, distribution and preparation. Food systems should thus ensure that food and feed is produced and distributed through a safe process that results in wholesome products fit for human consumption.

Increased demand for food coupled with reduction of arable land and water has led to adoption of technologies of agricultural production and enhanced trade which requires adequate monitoring of biological, chemical and physical food hazards. An inadequate food hazards monitoring system, inspection and testing, of food and food products impact negatively on food quality and safety. Poor coordination and enforcement of existing legislation and standards leads to poor implementation of Policy and legislation by

responsible agencies in food safety control and monitoring activities. This results in frequent outbreak of diseases such as diarrhea, cholera, typhoid and brucellosis in the County.

In relation to the objects, principles and procedures of food laws in Kenya, there are twenty-five statutes in the space of food safety control whose enforcement is not well coordinated. There exist overlaps and duplication of mandates in existing legislations. There is need to strengthen existing institutional capacities, linkages and facilitate public/private sector partnerships. When the various regulatory agencies adopt different measures governing food, these differences undermine Kenya's competitiveness in international food trade and expose citizens to risks of unsafe food, which may also impede the free movement of food internally and externally. Food safety responsibility in Kenya encompasses a variety of portfolios at the national and County levels.

It is therefore necessary to define a distinct national coordination mechanism with capability of safeguarding the food supply in Kenya, and to support the County in implementing comprehensive food safety programmes. There exist no policy or legal framework to establish and maintain an early warning and risk management mechanisms to prevent food hazards and creation of a data bank of food safety issues in the County. There is too much reliance on end product standards and laboratory testing rather than using preventive approaches at all stages of the food value chain.

Empirically, there has been inadequate scientific input and investment in a robust risk management system, with lethargy in upgrading in infrastructure to support risk assessment. Improved risk analysis capacity would mitigate emerging and re-emerging food safety challenges and strengthen mechanisms for validation, inspection, certification and self-assessment of food safety practices along the food chain. There is low public awareness on food safety and control mechanisms, and improving information, education and communication systems would ensure risk reduction, effective recall and traceability from farm to fork. There are inadequate food analysis laboratories in the County and the region. This calls for the strengthening of their capacity to meet national and international food safety requirements. This will in turn contribute to accurate and reliable detection and quantification of contaminants in locally produced and imported foods, thereby enabling

better monitoring and enforcement of food safety requirements. This will result in safer foods for consumers, thereby contributing to decreased mortality and morbidity from food borne illness (linkage to SDG2 and Agenda 2063).

Improving food safety is also a key in achieving Sustainable Development Goals. Government has the responsibility to make food safety a public health priority, and to develop policies and legislative frameworks to achieve this objective. Further, it should establish and ensure implementation of an effective food safety system that would guarantee food producers and suppliers along the whole food chain operate responsibly and supply safe food to consumers. There is need for the County to establish and maintain a rational, integrated farm-to-fork food safety system that harmonizes inter-agency efforts, minimizes inter-agency conflict and overlap, and ensures the protection of public health and safe food trade. The County Government of Kakamega has a responsibility to make food safety a priority, and to develop policies and legislative frameworks to achieve this objective. In this regard, the Kakamega County Food Safety Policy of 2023 will address the gaps and all the emerging issues and align with the constitution 2010.

1.5. Statements of Vision, Mission and Guiding Principles

1.5.1. Vision

To have an advanced food safety and security systems in County, based on the implementation of national and international standards.

1.5.2. Mission

To establish a sustainable multi-sectoral food safety system, aimed at safeguarding human, animal, plant and environmental health that is responsive to the food safety challenges in the County.

1.5.3. Guiding Principles

The guiding principles of this Policy are -

- i. protection of human life and health in all the stages of the food chain;
- ii. protection of consumer interests through fair practices in the food trade;

- iii. promotion of the use of scientific basis and science-based risk analysis for food measures to ensure that food products and services are safe;
- iv. promotion of economic growth and development by promoting fair trade practices and sound food regulatory foundation for domestic and international trade. And
- v. improved efficiency in food safety control

CHAPTER TWO

2.1. LEGISLATIVE FRAMEWORK

The Constitution of Kenya guarantees food safety to all. In addition, several pieces of legislation and policy documents have provided for matters related to food safety. They include:

2.1.1. Constitution of Kenya, 2010

Article 5 provides that any treaty or convention ratified by Kenya shall form part of the laws of Kenya thus making ratified treaties relating to food safety form part of the legislative framework in the country.

Article 43 (1) (c) gives every person the right to be free from hunger and the right to have adequate food of acceptable quality. Article 43 (1) (d) further gives every person the right to clean and safe water in adequate quality,

The Fourth Schedule on the other hand provides for the distribution of functions between the national and County governments.

2.1.2. Agriculture and Food Authority Act, 2013

This Act provides for the establishment of the Agriculture, Fisheries and Food Authority, to make provision for the respective roles of the national and County governments in agriculture excluding livestock and related matters in furtherance of the relevant provisions of the Fourth Schedule to the Constitution.

2.1.3. Animal Disease Act Cap 364

This Act provides for matters relating to animal diseases and control of zoonotic diseases critical to food safety.

2.1.4. Alcoholic Drinks Control Act, 2010

This Act provides for the regulation of the production, sale and consumption of alcoholic drinks.

2.1.5. Biosafety Act No. 2 Of 2009

This Act regulates activities in genetically modified organisms and establishes the National Biosafety Authority.

2.1.6. Crops Act, 2013

The Act mandates the Agriculture and Food Authority to regulate safety of crop and crop product while in the field, crop and crop product while in the licensed warehouses and development of rules for ensuring food safety including handling, transportation, processing and market standards of food crops and crop products.

2.1.7. Competitions Authority Act

This Act protects consumers from unfair and misleading market conduct.

2.1.8. Consumer Protection Act, 2012

This Act provides for the protection of the consumer and prevents unfair trade practices in consumer transaction.

2.1.9. Dairy Industry Act Cap 336

This Act provides for the improvement and control of the dairy industry and its products.

2.1.10. Food, Drugs and Chemical Substances Act (Cap 254)

This Act makes provision for the prevention of adulteration of food, drugs and chemical substances and for matters incidental thereto.

2.1.11. Fertilizer and Animal Feedstuff Act Cap 345

This Act regulates the importation, manufacture and sale of agricultural fertilizers and animal foodstuffs and substances of animal origin intended for the manufacture of such fertilizers and foodstuffs.

2.1.12. Fisheries Management and Development Act, 2016

This Act provides for the conservation, management and development of fisheries and other aquatic resources to enhance the livelihood of communities' dependent on fishing

and to establish the Kenya Fisheries Services. The State Department of Fisheries registers FBOs in the Fisheries Sector in accordance with the Fisheries Management and Development Act (2016), and is responsible for the official control of the safety of fish, fishery products and fish feed. It also issues health certification of fish, fishery products and fish feed.

2.1.13. Health Act, 2017

This Act establishes a unified health system, coordinates the inter-relationship between the national government and county government health systems and provides for regulation of health care service and health care service providers, health products and health technologies.

2.1.14. Irrigation Act, 2019

This Act provides for the development, management and regulation of irrigation and support sustainable food security and socioeconomic development.

2.1.15. Kenya Plant Health Inspectorate Service Act, 2012 (No. 54 Of 2012)

This Act establishes the Kenya Plant Health Inspectorate Service as a regulatory body for the protection of plants, seeds and plant varieties and agricultural produce and for matters incidental thereto.

2.1.16. Kenya Vision 2030

This policy document recognises Agriculture as the main vehicle for contributing to the 10% growth target. Key growth drivers are tourism; increasing value in agriculture; a better and more inclusive wholesale and retail trade sector; manufacturing for the regional market; business process outsourcing and financial services. Under the vision 2030, key flagship projects include establishment of Disease-Free Zones; Fisheries Development and Management; Irrigated Agricultural Programs and Agriculture, Implementation of the Consolidated Agricultural Reform Legislations in reference to Agriculture and Food Authority (AFA) Act 2013;

2.1.17. Meat Control Act Cap 356 (Rev. 1980)

This Act enables control to be exercised over meat and meat products intended for human consumption, and over slaughterhouses and places where such meat is processed and provides for import and export control over such meat and meat products.

2.1.18. Kakamega County Health Services Act, 2022

This Act provides for the control of undertakings that sell food and the promotion of nutritional knowledge and food safety and quality at all levels of the population.

2.1.19. Nuclear Regulatory Act, 2019

This Act provides for the protection of the public and radiation workers from the dangers arising from the use of devices or material capable of producing ionizing radiation. It also provides for making of regulations on radioactivity levels in foodstuff and consumer products.

2.1.20. Pest Control Products Act Cap 346

This Act regulates the importation, exportation, manufacture, distribution and use of products used for the control of pests and of the organic function of plants and animals.

2.1.21. Public Health Act Cap 242 (Rev.2002)

This Act concerns the protection of public health in Kenya and lays down rules relative to, among other things, food hygiene and protection of foodstuffs, the keeping of animals, protection of public water supplies, the prevention and destruction of mosquitos and the abatement of nuisances including nuisances arising from sewerage. The Act also establishes the Central Board of Health and a district health management board in each district.

2.1.22. Standards Act Cap 496

This Act promotes the standardization of the specification of commodities, provides for the standardization of commodities and codes of practice and establishes the Kenya Bureau of Standards.

2.1.23. Veterinary Surgeons' and Veterinary Para-Professionals (VSVP) Act (No.9 Of 2011)

This Act makes provision for the training, registration and licensing of veterinary surgeons and veterinary para-professionals and to provide for matters relating to animal health services and welfare.

2.1.24. Water Act, 2016 Cap 372

This Act provides for the regulation, management and development of water resources, water and sewerage services.

2.2. Policies and Strategies

The National Food Safety Policy 2013.

The National Agricultural Policy.

Livestock Policy, Sessional No 3 of 2020.

Veterinary Policy 2020.

National Fisheries Policy.

National Policy on Prevention and Containment of Antimicrobial Resistance.

Food and Nutrition Security Policy (FNSP) 2011.

Kenya Health Policy.

Animal Identification and Traceability Strategy.

National Water Resources Management Strategy.

2.3. General objective

The overall objective of this Policy is to improve food safety in the County.

2.3.1 Specific Objectives

- i. The specific objectives of this Policy are to –
- ii. enhance public awareness of food safety;
- iii. improve on information, education, and communication (IEC) to stakeholders on food safety;
- iv. strengthen systems of traceability in the food value chain;
- v. establish a County institutional and regulatory framework on food safety; and

vi. enhancing food safety financing.

CHAPTER THREE

3.1. POLICY FRAMEWORK

The County government of Kakamega needs to adopt policy directions in specific areas to respond to food safety. These policies relate to the following areas; public awareness, strengthening of systems of traceability in the food value chain and establishment of the County institutional and regulatory framework on food safety.

3.1.1. Enhance Public Awareness On Food Safety

There is low knowledge, skills, awareness and information amongst all the key players in food value chains in Kakamega County. There is urgent need to enhance public awareness on food safety

The key issue is: -

Inadequate skills, knowledge and information among the food chain stakeholders

Policy Directions

The County Government shall –

identify key stakeholders in the food safety sector and skills gap;

disseminate information on food safety;

build the capacity of stakeholders on skills, knowledge and information on food safety; and strengthen ATVET and other sector institutions to offer effective skills, knowledge and information to stakeholders.

3.1.2. Strengthen systems of traceability in the food value chain

There is inadequate traceability structures and infrastructure for food safety in the County across all food value chains. This limits the County's capacity to identify the critical

control points and employ measures to contain contamination and manage foodborne diseases

Key Issues

- i. Inadequate traceability systems.
- ii. Weak enforcement of existing regulations on traceability.

Policy Directions

The County Government shall –

- i. establish an electronic platform for identification and monitoring food movement across the food value chain;
- ii. organize food value chain actors into self-regulating value chain organizations; and
- iii. collaborate on the enforcement of food safety policies, legislation, regulations on traceability

3.1.3. Establish a County institutional and regulatory framework on food safety

There is lack of institutional, regulatory and legislative framework for food safety in the County. This limits the County's capacity to effectively manage the food safety risks and protect consumers.

Key Issues

- i. The key issues include
- ii. Lack of organized stakeholder platforms on food safety value chains.
- iii. Lack of coordination among County departments and other relevant agencies responsible for food safety.
- iv. Inadequate infrastructure to support quality and standards control in food safety.
- v. Lack of County policies, legislation and regulations on food safety.

Policy Directions

The County Government shall –

- vi. support the establishment of value chain-based platforms to address food safety;
- vii. harmonize and strengthen coordination among County government departments and other relevant agencies responsible for food safety;

- viii. develop and strengthen the existing infrastructure to ensure quality and control in food safety; and
 - ix. develop County legislation and regulations on food safety.

3.1.4. Enhancing food safety financing.

There is a lack of budgetary allocation to finance food safety coordination activities. This limits the County's capacity to implement food safety regulations and coordination. Enhanced financing will improve the implementation of food safety regulations and management.

Key Issues

The key issues include

- i. Lack of budgetary allocation for food safety financing
- ii. Inadequate coordination among partners
- iii. Lack of County policies, legislation and regulations on food safety.

Policy Directions

The County Government shall –

- i. allocate funds in the budget to address food safety;
- ii. harmonize and strengthen coordination among partners in resource mobilization

CHAPTER FOUR

4.1. COORDINATION AND IMPLEMENTATION

4.1.1. Management, Coordination and Institutional Framework for Implementing the Food Safety policy

The adoption of this policy will enable the County to –

- i. bring all institutions and food safety actors together in a unified platform, coordinate food safety activities while safeguarding, facilitating and strengthening each actor's mandate in food safety control. This will eliminate conflicts and overlaps amongst the actors to seal the gaps and inefficiencies in the current food safety control system;
- ii. review all relevant laws and regulations to be in tandem with changing trends in food safety and trade;
- iii. establish a County Food Safety Technical Committee with integrated food safety subcommittees and the Multi-Annual County Control Plan Committee, to harmonize operations and enhance coordination;
- iv. prepare legislation that addresses the application of sanitary and phyto-sanitary measures, Standard Operating Procedure and Good Manufacturing Practices.

4.1.2 Institutional Framework

The following will be the key offices, bodies and institutions involved in matters of food safety in the County.

4.1.2.1. National Government

i. Ministry of Agriculture, Livestock, Fisheries and Co-operatives

The Ministry is among other functions entitled to support agricultural research and promoting technology delivery, regulating the quality control of inputs, produce and products from the agricultural sector and management and control of pests and diseases. The Ministry will support policy development and implementation. The Ministry will also support the County Government in technology dissemination.

ii. Ministry of Health

The Ministry of Health is mandated to support the attainment of the health goals of the people of Kenya by implementing priority interventions including public health. The main point of contact on matters of food safety under the Ministry of Health is the Division of Food Safety and Quality.

4.1.2.2. County Government

i. Office of the Governor

The office shall provide leadership and policy direction.

ii. County Assembly

The County Assembly shall make legislation on food safety and provide oversight to the County Government.

iii. Department Agriculture, Livestock, Fisheries and Co-operatives

The Department shall be the lead player in the implementation of the policy. It shall;

- ➤ formulate of legislation on food policy
- > collaborate with key stakeholders for a holistic and integrated approach to matters of food safety;
- > manage crop pests and diseases, set the agricultural research agenda and sustainability of production resources;
- > manage and disseminate information relation to food safety;
- Formulate and implement strategies to implement national policies on food safety;
- resure adequate budgetary allocation on matters of food safety; and

promote transfer and adoption of modern and cost-effective technology in food safety

iv. Department of Health Services

The Department through the Directorate of Public Health shall;

- > ensure food safety and quality control; and that food shall be handled in safe and sanitary premises.
 - v. Department of Trade, Industrialization and Tourism

The Department shall –

- > promote policies for fair trade practices and consumer protection services; and
- > ensure competitive industrial development through innovation, technology transfer,
- > quality assurance and value addition.

vi. Office of the County Attorney

The Office of the County Attorney shall offer support in the formulation of legislation and regulations on matters of food safety.

4.1.3. Regulatory Bodies

These bodies will be involved in the regulation and promotion of production, manufacturing and standards.

- i. Kenya Bureau of Standards;
- ii. Kenya Plant Health Inspectorate Service;
- iii. Pest Control Products Board;
- iv. Directorate of Veterinary Services;
- v. Kenya Fisheries Services;
- vi. Kenya Marine and Fisheries Research Institute; and
- vii. Kenya Dairy Board.

4.1.4. Research and Training Institutions

The following institutions shall be involved in Research which will assist in technology development and dissemination.

- i. Kenya Agricultural Livestock Research Organization;
- ii. Kenya Medical Research Institute;

- iii. International Centre of Insect Physiology and Ecology;
- iv. Kenya Marine Fisheries Research Institute;
- v. Kenya Industrial Research and Development Institute
- vi. World Agricultural Forum; and
- vii. Tertiary learning institutions.

4.1.5. Non-Governmental Organizations, Development Partners and Agencies

The Non-Governmental Organizations shall provide inputs and farm credit. They shall also assist the County Government in technology dissemination. They shall include the following organizations –

- i. Food and Agriculture Organization (FAO);
- ii. United States Agency for International Development (USAID);
- iii. International Fund for Agricultural Development (IFAD);
- iv. United Kingdom Aid (UK Aid);
- v. Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ);
- vi. Japan International Corporation Agency (JICA);
- vii. Swedish International Development Corporation Agency (SIDA);
- viii. One Acre Fund (Tupande); and
- ix. Anglican Development Services (ADS).

4.1.6. Financial Institutions

The following financial institutions will be instrumental in the development of appropriate food safety financing products –

- i. Agricultural Finance Corporation (AFC); and
- ii. Commercial banking institutions.

4.1.7. Consumer and Producer Organizations

These organizations will be involved in production, traceability and compliance with the set standards. These shall include –

- i. farmers:
- ii. Community Based Organizations (CBOs);
- iii. Food Business Operators (FBOs);
- iv. commodity Interest Groups (CIGs);

- v. food processors, transporters, handlers and manufacturers;
- vi. Kenya Chamber of Commerce and Industry

4.1.8. Implementation of the Policy

The policy shall be implemented by –

- i. adopt a scientific, risk-based participatory approach to food safety that covers the continuum from farm to consumer;
- ii. provide standards and guidance to the food industry that ensure safe food and fair competition;
- iii. provide advice, training and education in nutrition and food safety to all sectors of the society;
- iv. formally profile, register and license the food business operators and Food Based Operators;
- v. establish food safety standards and framework that guides Food Business Operators for self-regulation and evaluation;
- vi. make specific budgetary allocation for food safety and develop strategies for resource mobilization;
- vii. promote education and training in food safety by integrating the same in the Technical Vocational Education and Training (TVET) curriculum; and
- viii. establish a food business operators' platform for self-regulation and evaluation.

4.1.9. Resource Mobilization

The County Government of Kakamega, AGRIFI/MESPT and other partners/stakeholders shall fund the development and implementation of this policy.

The Department of Agriculture, Livestock, Fisheries, Cooperatives, Department of Trade and Industrialization, Department of Health shall set up programs and other development partner shall provide for funds in its annual budgets for Food Safety activities.

4.1.10. Policy Review

The policy shall be reviewed within every three years to keep up to date with emerging issues and strategies.

CHAPTER FIVE

5.0 MONITORING AND EVALUATION

The purpose of M&E is to achieve sufficient and efficient programme performance and provide feedback to the management at the various levels. The County Government through the department of Agriculture, Livestock, Fisheries and, Cooperative shall set up a Monitoring and Evaluation unit, which shall report to the Multi-Annual County Control Plan; MACCP every quarter.

MACCP shall report to the County Food Safety Technical Committee on quarterly basis. The report shall be submitted to the County Assembly once a year.

Challenges in monitoring and evaluation of activities in the County include limited capacity to collect, analyze and disseminate food safety data.

The County shall support development of an M&E framework to provide strategic information and a robust evaluation of programme effects on the population for purposes of improving the system.

REFERENCES

- Basch, C. H., Guerra, L. A., MacDonald, Z., Marte, M., & Basch, C. E. (2015). Glove changing habits in Mobile food vendors in New York City. *Journal of Community Health*, 40(4), 699–701. https://doi.org/10.1007/s10900-014-9987-7
- Benkeblia, N. (2021). In the landscape of sars-cov -2 and fresh fruits and vegetables: The fake and hidden transmission risks. *Journal of Food Safety*, 41(4). https://doi.org/10.1111/jfs.12898
- Bhaskar, S. V. (2017). Foodborne diseases—disease burden. *Food Safety in the 21st Century*, 1–10. https://doi.org/10.1016/b978-0-12-801773-9.00001-7
- Chemeltorit, P., Saavedra, Y. and Gema, J., 2018. Food traceability in the domestic horticulture sector in Kenya: An overview. *Practice brief*, 5.
- Daniel, J.H. *et al.* (2011) "Comprehensive assessment of maize aflatoxin levels in eastern Kenya, 2005–2007," *Environmental Health Perspectives*, 119(12), pp. 1794–1799. Available at: https://doi.org/10.1289/ehp.1003044.
- Duda-Chodak, A., Lukasiewicz, M., Zięć, G., Florkiewicz, A., & Filipiak-Florkiewicz, A. (2020). Covid-19 pandemic and food: Present knowledge, risks, consumers fears and

- safety. *Trends in Food Science & Technology*, 105, 145–160. https://doi.org/10.1016/j.tifs.2020.08.020 Food and Nutritional Security, 2012.
- GARAYOA, R. O. N. C. E. S. V. A. L. L. E. S., CÓRDOBA, M. A. R. Í. A., GARCÍA-JALÓN, I. S. A. B. E. L., SANCHEZ-VILLEGAS, A. L. M. U. D. E. N. A., & VITAS, A. N. A. I. S. A. B. E. L. (2005). Relationship between consumer food safety knowledge and reported behavior among students from Health Sciences in one region of Spain. *Journal of Food Protection*, 68(12), 2631–2636. https://doi.org/10.4315/0362-028x-68.12.2631
- Greger, M. (2007) "The human/animal interface: Emergence and resurgence of Zoonotic Infectious Diseases," *Critical Reviews in Microbiology*, 33(4), pp. 243–299. Available at: https://doi.org/10.1080/10408410701647594.
- Hoffmann, S. *et al.* (2017) "Attribution of global foodborne disease to specific foods: Findings from a World Health Organization Structured expert elicitation," *PLOS ONE*, 12(9). Available at: https://doi.org/10.1371/journal.pone.0183641.
- Hoffmann, V. and Moser, C. (2017) "You get what you pay for: The link between Price and Food Safety in Kenya," *Agricultural Economics*, 48(4), pp. 449–458. Available at: https://doi.org/10.1111/agec.12346.
- Insfran-Rivarola, A., Tlapa, D., Limon-Romero, J., Baez-Lopez, Y., Miranda-Ackerman, M., Arredondo-Soto, K., & Ontiveros, S. (2020). A systematic review and meta-analysis of the effects of food safety and hygiene training on Food Handlers. *Foods*, 9(9), 1169. https://doi.org/10.3390/foods9091169
- Kadenyi, G. (2017). Food Safety: Fresh Fruits and Vegetables in Kenya's Domestic Markets. Hivos Org
- KHIS, (2020). Department of Health Services, County Government of Kakamega National
- Lewis, L., Onsongo, M., Njapau, H., Schurz-Rogers, H., Luber, G., Kieszak, S., Nyamongo, J., Backer, L., Dahiye, A. M., Misore, A., DeCock, K., & Rubin, C.

- (2005). Aflatoxin contamination of commercial maize products during an outbreak of acute aflatoxicosis in Eastern and Central Kenya. *Environmental Health Perspectives*, 113(12), 1763–1767. https://doi.org/10.1289/ehp.7998
- Mutiga, S.K. *et al.* (2014) "Extent and drivers of mycotoxin contamination: Inferences from a survey of Kenyan Maize Mills," *Phytopathology*®, 104(11), pp. 1221–1231. Available at: https://doi.org/10.1094/phyto-01-14-0006-r.
- Mutiga, S.K. *et al.* (2015) "Assessment of aflatoxin and Fumonisin contamination of maize in western Kenya," *Phytopathology*®, 105(9), pp. 1250–1261. Available at: https://doi.org/10.1094/phyto-10-14-0269-r.
- Nyamari, J.A.C.K.I.M., 2013. Evaluation of compliance to food safety standards amongst food handlers in selected hospitals in Kenya. *Unpublished Doctoral thesis. Kenyatta*.
- Odeyemi, O. A., & Bamidele, F. A. (2016). Harnessing the potentials of predictive microbiology in Microbial Food Safety and Quality Research in Nigeria. *Future Science OA*, 2(1). https://doi.org/10.4155/fso.15.91
- Oloo, J. J. A. J. o. F., Agriculture, Nutrition, and Development (2010). Food safety and quality management in Kenya: An overview of the roles played by various stakeholders. **10**.
- Premier, R., & Ledger, S. (2006). Good agricultural practices in Australia and Southeast Asia. *HortTechnology*, *16*(4), 552–555. https://doi.org/10.21273/horttech.16.4.0552
- Tarus, J., Rachuonyo, H., Omega, J., Ochuodho, J. J. A. J. o. E., Science, and Technology (2019). Assessment of aflatoxin levels in indigenous chicken tissues and eggs in Western Kenya. **5**, 59-65.
- Who foodborne diseases regional A 640X640 0 world health organization (no date). Available at: https://apps.who.int/iris/bitstream/handle/10665/327502/WHO-FOS-15.5-eng.pdf (Accessed: December 25, 2022).

- World Health Organization, 2011. FAO/OIE/WHO joint scientific consultation on influenza and other emerging zoonotic diseases at the human-animal interface, 27-29 April, 2010, Verona, Italy: consultation summary 2010.
- World Health Organization, 2015. WHO estimates of the global burden of foodborne diseases: foodborne disease burden epidemiology reference group 2007-2015. World Health Organization.
- Yekta, R., Vahid-Dastjerdi, L., Norouzbeigi, S., & Mortazavian, A. M. (2021). Food products as potential carriers of SARS-COV-2. *Food Control*, *123*, 107754. https://doi.org/10.1016/j.foodcont.2020.107754