REPUBLIC OF KENYA

MINISTRY OF AGRICULTURE AND LIVESTOCK DEVELOPMENT

STATE DEPARTMENT FOR AGRICULTURE

NATIONAL PHYTOSANITARY POLICY

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NATIONAL PHYTOSANITARY POLICY

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FOREWORD

Agriculture is crucial to Kenya's food security, economy and social development. This is demonstrated in the positive correlation between growth in the agricultural sector and that of the national economy. In the agriculture sector, crop production contributes greatly to the economy, with horticultural products valued at KShs. 165.7 billion, accounting for 24.8 percent of the total domestic exports in 2021 while industrial products such as tea valued at KShs. 130.9 billion accounted for 19.6 percent of the total domestic exports in the same period (KNBS, 2022). The Government has consequently outlined the key role the sector will continue to play in the agricultural sector in the Kenya Vision 2030 and the Agricultural Sector Transformation and Growth Strategy (ASTGS). The strategies outlined in these documents aim at accelerating the growth of the agricultural sector in order to improve the standard of living of Kenyans as well as substantially improving their food and nutritional security.

Crops and plants in the wild, in Kenya and world over are increasingly faced with the challenge of plant pests which impact production and biodiversity. All countries, including Kenya have put in place phytosanitary systems to minimize introduction and spread of plant pest into their territories. The task of protecting Kenya's agriculture and environment against the introduction and spread of new pests is however becoming increasingly challenging. This is due to increased international trade in plants, plant products and other articles that act as a pathway of plant pests and increased international travel that hastens movement of goods and people. In the recent years there have been several incursions of new pests in our country that have had devastating effects on crop production and environment. New pests can also result in stricter and more expensive phytosanitary measures, interceptions of exported plants and plant products in international markets and loss of the markets leading to a decline in foreign exchange. Stringent market requirements have hampered the export of a number of Kenya's produce due to inability to meet Phytosanitary requirements.

In view of the foregoing, the need for an integrated phytosanitary system is of national strategic interest. The Ministry of Agriculture and Livestock Development and County Governments in collaboration with other stakeholders, has therefore taken the initiative to formulate this National Phytosanitary Policy. The Policy will not only provide a road map for the creation of an enabling environment for the protection of Kenya's plant resources but will also provide an effective phytosanitary system and framework to facilitate fair and safe competitive international trade.

This policy evaluates the current phytosanitary system, its strength as well as identifies the issues that hinder implementation of an effective phytosanitary system. It further proposes policy interventions which are benchmarked on international best practices are envisaged to contribute to: sustainable development, provide opportunities for wealth creation through income generation and enhanced competitiveness of Kenya's agriculture. This policy will direct efforts by all actors to strengthen the phytosanitary system and regulatory framework, promote safe trade in plants, plant products and other articles and develop capacity for effective implementation of the Phytosanitary system in Kenya.

The development of this National Phytosanitary Policy is therefore very timely and a key milestone in the sector. All efforts should therefore be made to effectively implement the identified strategic action points.

In developing this policy, the Ministry benefited immensely from contributions of various stakeholders, particularly the expertise of the National Phytosanitary Policy Committee members. I wish to thank individuals, government institutions, local and international organizations, who participated in the various consultative fora whose invaluable input contributed to the development of this National Phytosanitary Policy. I also wish to recognize the immense contribution of the KEPHIS board of directors and staff in formulation of this policy.

Hon. Mithika Linturi
Cabinet Secretary
Ministry of Agriculture and Livestock Development

PREFACE

The Strategic objective for the Ministry of Agriculture and Livestock Development is to create an enabling environment for agricultural development thereby increasing productivity and outputs in the sector; enhancing national food security; improving market access, facilitating safe trade; and strengthening institutional capacity.

In its Agricultural Sector Transformation and Growth Strategy the Ministry has recognized that the threats to Kenya's food and nutrition security will continue and will be compounded by challenges such as pests and diseases like Fall Armyworm and Maize Lethal Necrosis Disease (MLND) among other emerging pests and diseases. We also recognize that international trade and movement of plants and plant products, while being fundamental in supplementing availability of adequate food and contributing to economic empowerment, increases the threat of introduction of pests and diseases.

In recent years, Phytosanitary related challenges have become more complex mainly due to increased movement of agricultural produce and regulated articles like conveyance vessels, soil and water from one country to another that are a pathway for the movement of plant pests; increase in movement of people who carry with them plants and plant products; climate change compounding the spread of pests to new areas where pests would previously not thrive and resistance to pesticides; shortage of highly qualified plant pest experts; porous borders; inadequate capacity and financial constraints.

To prevent introduction of plant pests into the country and to facilitate safe trade in plants and plant products, the need to have a robust phytosanitary system in place cannot be overemphasized. The National Phytosanitary Policy is therefore Kenya's outline of the interventions to be implemented in order to create an enabling environment for safe trade in plants and plant products. Phytosanitary

import regulations safeguard against introduction of foreign injurious pests and noxious weeds which are detrimental to agriculture and food security while an effective phytosanitary export regulatory system ensures that Kenya's exports meet international market requirements.

This policy will therefore provide a framework for enhancing phytosanitary controls, strengthening of the regulatory environment and the phytosanitary institutional capacity and coordination.

Dr. Kiprono Ronoh Paul
Principal Secretary, State Department for Agriculture
Ministry of Agriculture and Livestock Development

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ACRONYMS

AFA	Agriculture and Food Authority
ASTGS	Agricultural Sector Growth and Transformation Strategy
AU-IAPSC	Inter-African Phytosanitary Council of African Union
CPHERC	County Plant Health Emergency Response Committee
COG	Council of Governors
COK	Constitution of Kenya
COMESA	Common Market for Eastern and Southern Africa
COPE	Center of Phytosanitary Excellence
EAC	East Africa Community
ICT	Information Communication and Technology
IGAD	Intergovernmental Authority on Development
IPPC	International Plant Protection Convention
ISPM	International Standard for Phytosanitary Measures
KALRO	Kenya Agricultural and Livestock Research Organization
KEFRI	Kenya Forestry Research Institute
KEPHIS	Kenya Plant Health Inspectorate Service
MDA	Ministries, Departments, and Agencies
NPHERC	National Plant Health Emergency Response Committee
NBA	National Biosafety Authority
NPPO	National Plant Protection Organization
NSA	Non-State Actor
PCPB	Pest Control Products Board
PFA	Pest Free Areas
PRA	Pest Risk Analysis
SDG	Sustainable Development Goals
SPS	Sanitary and Phytosanitary
WTO	World Trade organization

GLOSSARY

Term	Definition
Commodity	A type of plant, plant product, or other article being moved for trade or other purpose.
Consignment	A quantity of plants, plant products or other articles being moved from one country to another and covered, when required, by a single phytosanitary certificate (a consignment may be composed of one or more commodities or lots).
Containment	Application of phytosanitary measures in and around an infested area to prevent spread of a pest.
Control	Suppression, containment, or eradication of a pest population.
Emergency measure	A phytosanitary measure established as a matter of urgency in a new or unexpected phytosanitary situation. An emergency measure may or may not be a provisional measure.
Eradication	Application of phytosanitary measures to eliminate a pest and disease from an area.
Establishment	Perpetuation, for the foreseeable future, of a pest and disease within an area after entry.
Incursion	An isolated population of a pest recently detected in an area, not known to be established, but expected to survive for the immediate future.
Inspection	Official visual examination of plants, plant products or other regulated articles to determine if pests are present or to determine compliance with phytosanitary regulations.
International Standard for Phytosanitary Measures	An international standard adopted by the Conference of Food Agricultural Office, the Interim Commission on Phytosanitary Measures, or the Commission on Phytosanitary Measures, established under the International Plant Protection Convention (IPPC).

Term	Definition
National Plant Protection Organization	Official service established by a government to discharge the functions specified by the IPPC.
Pathway	Any means that allows the entry or spread of a pest.
Pest	Means insect pest, disease and weeds.
Pest risk analysis	The process of evaluating biological or other scientific and economic evidence to determine whether an organism is a pest, whether it should be regulated, and the strength of any phytosanitary measures to be taken against it.
Phytosanitary certification	Use of phytosanitary procedures leading to the issue of a phytosanitary certificate or equivalent and includes nursery certification and all forms of import export certification.
Phytosanitary system	Encompasses means and methods for prevention of introduction, establishment and spread of plant pests within the country and for international trade. Elements of a phytosanitary system include;- pest risk analysis, border control and management, surveillance and pest reporting, early warning and response, quarantine and invasive species containment, pest diagnosis and identification, pest management, phytosanitary and organic certification systems among others.
Quarantine	Official confinement of regulated articles for observation and research or for further inspection, testing or treatment.
Regulated article	Any plant, plant product, storage place, packaging, conveyance, container, soil and any other organism, object or material capable of harboring or spreading pests, deemed to require phytosanitary measures, particularly where international transportation is involved.
Surveillance	An official process which collects and records data on pest presence or absence by survey, monitoring or other procedures.
Treatment	Official procedure for the killing, inactivation, or removal of pests, or for rendering pests infertile or for rendering plants or plant products incapable of germination, growth, or further reproduction.

EXECUTIVE SUMMARY

The National Phytosanitary Policy is the Ministry's outline of the interventions to be implemented in order to create an enabling environment for plant health in agricultural production and safe trade in plants and plant products. An effective phytosanitary system provides mechanisms for prevention of introduction, spread and establishment of foreign injurious pests and noxious weeds. It also provides a phytosanitary assurance system for plants and plant products exported from Kenya thereby meeting international market requirements.

In recent years, phytosanitary-related challenges have become more complex mainly due to increased movement of agricultural produce and regulated articles from one country to another that are a pathway for the movement of plant pests and increased movement of people who carry with them plants and plant products. Recent introductions of pests such as the Maize Lethal Necrotic Disease (MLN), False Codling Moth, and Fall Army Worm and re-emergence of pests such as Desert locust have warranted considerable resource allocation from Government for their official control. The impacts of plant pests are widespread and affect agriculture, the environment and society in general. Some of these pests have the capacity to directly damage the agricultural crops, natural environment, and social amenities. Economic costs of pest eradication and long-term pest control options are normally borne by taxpayers, farmers and ultimately the produce consumers. Such costs often negatively impact on the produce availability and the international competitiveness of Kenya's produce. Rural communities are also adversely impacted due to loss of earnings from lower yields or destruction of crops due to pests.

Other challenges include climate change, which has compounded the spread of pests and resistance to pesticides; shortage of highly qualified plant pest experts; difficulties to have proper control at border points and existence of porous borders; and financial constraints on account of low resources put at the disposal of the various phytosanitary services. The policy identifies issues that hinder the development of an efficient and effective plant health system and provides guidance for the revision of the existing legal framework, building of institutional capacity, import regulatory and export certification systems.

In addition, the policy provides a roadmap for the strengthening of pest risk analysis, pest diagnostic systems, surveillance and pest reporting, early warning, and rapid response systems. Domestic quarantine, pest management, phytosanitary research, and other cross cutting issues will also be enhanced. This will ensure that the phytosanitary management system for Kenya operates in compliance with national and international plant health obligations and responsibilities in support of trade, food security and sustainable resource management.

The policy will also enhance Kenya's compliance to international agreements to which it is signatory such as the World Trade Organization sanitary and phytosanitary (WTO-SPS) agreement which allows countries to set their own standards to protect their economy or environment from damage due to the entry, establishment or spread of pests of plants by providing for aligning of the plant health laws to these provisions. Further, the policy provides for Kenya's enhanced participation in standards-setting and harmonization in international standards-setting bodies to which it is a signatory to and has ratified.

This policy will further provide a framework for enhancing phytosanitary controls, strengthening of the regulatory environment and the phytosanitary institutional capacity and coordination.

1 CHAPTER Introduction

1.1. Background

Agriculture is core to Kenya's national economic growth and development. The sector contributes to food and nutrition security for the country's growing population with over 80% of the 47.6 million Kenyans deriving their livelihoods directly or indirectly from agriculture. It contributed about 23% of total Gross Domestic Product (Economic Survey, 2021) and an additional 27% through linkages to other sectors such as manufacturing, distribution, and services. The sector accounts for 57.5% of total employment and about 70% of the rural population employment (Kenya Economic Report, 2020).

The protection of Kenya's agriculture against endemic and foreign pests, promotion of safe trade and protection of the environment, are central in ensuring that the sector continues to develop and make its contribution to the national economy. This is implemented through a phytosanitary system which is key in improving productivity and product quality, facilitating enterprise diversification and reduction of production costs. Kenya in its Agricultural Policy, 2021, has identified pests as key challenges to agricultural production and provided for development of regulatory procedures for the management of pests.

Crop production is threatened by pests with the Food and Agriculture Organization (FAO) estimating that invasive pests are damaging as much as 40% of all food crops globally each year. Increased global trade, travels, climate change and agricultural intensification have led to several pest incursions. Kenya has been faced with pest incursions in the recent past which have culminated in devastating impact on agriculture, biodiversity, the economy and international trade. These pest incursions are a major threat to food security, expensive to control and are a barrier to international market access.

In addition, effective implementation of phytosanitary measures in Kenya continues to be hampered by inadequate phytosanitary systems; inadequate human and infrastructural capacity and resourcing; weak legal framework and overlapping mandates and other emerging issues. Weak phytosanitary systems

have contributed to increased crop loss during production and post-harvest thus impacting food security. Further this has also led to reduced access to international trade particularly in horticultural produce.

The protection of agriculture at both country and regional levels requires a coordinated phytosanitary capacity development approach. Kenya therefore needs to create an effective and inclusive phytosanitary system through strengthening of institutional capacity, diagnostic potential, legal framework, pest surveillance and reporting, rapid response and pest containment, border control, and increased public education and awareness. There is also need for improvement in market access strategies through application of various phytosanitary measures and capacity building of phytosanitary players for enhanced compliance.

1.2. History of Phytosanitary System in Kenya

In Kenya, plant health and phytosanitary regulation started in 1923 where import inspections were undertaken at the Port of Mombasa by the Chief Grader. Quarantine services in East Africa commenced in 1931 at Amani in Tanzania. The Plant Protection Act, CAP 324 was commenced in 1937 to serve as the principal legal framework on plant health and phytosanitary matters and implemented by the Ministry responsible for Agriculture.

The plant health regulatory environment was enhanced in 1951 with the formation of the East African Plant Quarantine Station situated in Muguga. After the breakup of the East African Community in 1977, each country established their own plant health and phytosanitary systems. In Kenya, Ministry responsible for Agriculture took over the functions of the East African Plant Quarantines Station which were subsequently taken over by Kenya Agricultural Research Institute (KARI) whereas export inspections were undertaken by the Ministry of Agriculture and Livestock Development. The Kenya Plant Health Inspectorate Service (KEPHIS) was established under the State Corporations Act through the Legal Notice 305 of 1996. The Legal Notice consolidated the roles undertaken by KARI and the Ministry responsible for Agriculture and made KEPHIS responsible for phytosanitary issues in Kenya. The KEPHIS Act number 54 of 2012 enhanced the phytosanitary operations in Kenya as it established KEPHIS under its own principal law as a regulatory body for the protection of plants.

To support phytosanitary and trade, Kenya has signed and ratified a number of conventions, treaties and agreements including: the International Plant Convection (IPPC) in 1974, the World Trade Organization Sanitary and Phytosanitary (WTO-SPS) agreement in 1995, Phytosanitary Convention for Africa in 1967, The WTO-Trade Facilitation Agreement in 2014, and the African Continental Free Trade Agreement (AfCFTA). Further Kenya is a member of different regional blocks including Common Market for Eastern and Southern Africa (COMESA), East African Community (EAC), Intergovernmental Authority on Development (IGAD), Inter-African Phytosanitary Council of African Union (AU-IAPSC). Through these conventions, treaties, agreements and memberships, Kenya has become the leader in phytosanitary matters and strives to facilitate trade regionally and internationally.

With the promulgation of the new constitution, The Constitution of Kenya, 2010 which provides for devolution of agriculture and distinct functions of the two levels of government where the County Governments are responsible for crop husbandry and disease control, plant protection has been enhanced. The county agriculture extension departments have been instrumental in farmer awareness creation on new and invasive pest introductions. Whenever the country has had new pest incursions that require emergency measures, the relevant national government emergency committees organize a Training of Trainers (ToT) for the county staff. The national emergency committees also develop information and pest management kits for dissemination to farmers for dissemination to farmers by the ToT. The county agricultural officers also support national government staff in the pest surveillance within their areas of jurisdiction.

Over the years the phytosanitary system in Kenya has evolved and improved thereby contributing to growth in horticultural exports from Kenya, amounting to 158.1 billion Kenyan shillings ($1.39 billion) in 2021 (Kenya National Bureau of Statistics, 2022). There has also been significant investment in phytosanitary systems especially in laboratories, Information Communication and Technology (ICT) infrastructure and online certification. Kenya has been appointed as the COMESA regional reference laboratory for plant health, in recognition of the lead role that the country plays in plant health in the region. Kenya also hosts the Centre of Phytosanitary Excellence (COPE) offering phytosanitary training in the region.

1.3. Rationale for the National Phytosanitary Policy

Plant health and phytosanitary regulation plays a key role in enhancing productivity, transforming agriculture and promoting food and nurtirtion security. The Constitution of Kenya, 2010 in recognizing the importance of food security, provides that every person has a right to be free from hunger and to have adequate food of acceptable quality. Additionally, the Fourth Schedule of the Constitution also provides for the devolution of agriculture Kenya and giving counties the role of pest and disease management.

Further the government through its economic blue print, Vision 2030 has instituted measures towards achieving a food-secure and prosperous nation, increase farming household's incomes and a high quality of life to all its citizens which cannot be achieved without plant health assurance. As a result, the Ministry of Agriculture and Livestock Development (MOALD) developed a number of strategies including the Agricultural Sector Development Strategy (ASDS) 2010-2020, the Agricultural Sector Transformation and Growth Strategy (ASTGS) 2019-2029 and Kenya Climate Smart Agriculture Strategy - 2017-2026. The strategies are aimed to sustainably transform and modernize the agricultural sector thereby increasing productivity and income growth; enhancing food and nutrition security and equity, promoting environmental sustainability, adapting to climate change and building resilience of agricultural systems while minimizing emissions. These efforts support the realization of the Sustainable Development Goal (SDG) number two on zero hunger.

Kenya has over the years developed a phytosanitary system which is key in protecting against the introduction of plant pests, promoting safe trade in plant and plant products and contributing to the country's food security. That notwithstanding, Kenya continues to face pest incursions which have devastating impact on agriculture, livelihoods, biodiversity, the economy and international trade. The risk of further introduction of pests is compounded by globalization and trade liberalization which have led to increased movement of goods and people across the world increasing the probability of plant pests being carried in the goods traded.

Kenya is a leading exporter of flowers and vegetables in Sub-Sahara Africa. Continued access to international markets is challenged with frequent changes in phytosanitary market requirements. Consequently, the phytosanitary systems are strained, the levels of non-compliance increase, risking loss of these markets. Further, sustained compliance and ease of trade require modern technological

equipment and electronic systems which are expensive to procure and maintain.

Climate change has had a significant impact on plant health, forestry, and environment through the actual and potential expansion of pest distribution, increased intensity and changes in pest epidemiology and life cycle. Due to its impact, plant pests that ravage economically important crops will continue to spread becoming more destructive and posing an increased threat to food security and environment. It is thus important to enhance the phytosanitary systems to encompass climate change mitigation and adaptation strategies.

Inadequate funding to support human, infrastructural and technical capacities for the phytosanitary systems have affected the implementation of phytosanitary activities in Kenya. Development partner support has reduced as a result of elevation of Kenya to a developed nation status. The evolving roles of the public and private sectors together with the devolution of agriculture to the County Governments have affected coordination of the implementation of activities related to phytosanitary.

Kenya has operated without a National Phytosanitary Policy despite phytosanitary playing a key role in transforming agriculture, enhancing productivity, and promoting food and nutrition security. Although the agriculture policy identifies pests and diseases as one of the challenges that affect the crops, livestock and fisheries subsectors and reduce agriculture's contribution to the economy and provides that the government shall develop regulatory procedures for management of pests and their early warning systems, phytosanitary matters touching on trade of plants and plant products were not adequately provided for. Notwithstanding the policy gap, the Plant Protection Act and the KEPHIS Act are the principal laws which are currently providing guidance on the implementation of the national, regional, and international phytosanitary provisions. Nonetheless, the Plant Protection Act is not updated to current international best practices. Kenya also has other laws that make provisions on plant health. These laws provide overlapping functions to the institutions involved, where institutions operate independently based on their mandates leading to duplication and occasionally contradicting each other.

It is therefore incumbent for the government to develop a National Phytosanitary Policy to guide in the implementation and evolution of the phytosanitary system and to provide for plant protection for enhanced crop productivity, protection of our environment against incursion of pests and promotion of safe trade.

The policy aims to provide a roadmap for creating an effective and inclusive phytosanitary system to mitigate against prevention of introduction of exotic pests

while facilitating trade of plants and plant products. Further, it is envisaged that the policy will provide a guidance for enhancing diagnostic capacity, development of a comprehensive pest surveillance network, improvement in rapid and emergency response measures, enhancement of pest containment measures establishment of pest free areas and improved border control and management. The policy will also provide for a facilitative legal and regulatory framework, increased institutional capacity, enhanced sector institutions communication and coordination and increased public education and awareness. These are needed in view of the dangers posed by pest incursion to the entire Kenyan economy whose mainstay is agriculture.

Additionally, the policy aims to provide for better coordination of implementation of the fragmented legal and regulatory framework among sector institutions for improved synergies, effective and efficient service delivery to stakeholders. This policy will achieve a strategic objective of securing existing and emerging markets by giving confidence to our trading partners on Kenya's ability to handle phytosanitary risks in our production systems and value chains and demonstrated capacity to fulfill stringent export market requirements across the globe.

1.4. Objectives of the National Phytosanitary Policy

General Policy Objective

The broad objective of this policy is to create an effective framework for protecting Kenya's agriculture and environment from plant pests, and to promote safe trade in plants and plant products.

Specific Policy Objectives

The policy will be guided by the following specific objectives:

a) Strengthen the phytosanitary system for effective pest risk mitigation and management.

b) Strengthen the regulatory framework for phytosanitary systems to prevent introduction and spread of pests and promote safe trade.

c) Develop mechanisms for coordination, information sharing and partnerships in phytosanitary systems.

d) Support the development and operation of an effective phytosanitary system through adequate resourcing, infrastructural and human capacity building.

e) Create an effective mechanism for responding to cross cutting and emerging issues mitigating their impact on phytosanitary systems.

f) Strengthen County governments' plant health systems for effective response to pest incursions and pest management.

g) Enhance safe trade in plants and plant products.


PLEASE
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ALL PLANT
MATERIALS

2 CHAPTER Phytosanitary System

Situational Analysis

An effective phytosanitary system world over consists majorly of robust pest risk analysis, surveillance and pest reporting, early warning and response, border control, quarantine and containment, pest diagnosis and identification, certification processes and management frameworks that are in line with the basic phytosanitary principles.

Kenya has a developing phytosanitary system aimed at prevention of the introduction, establishment and spread of pests that may move naturally or that are associated with trade in plants, plant products and other regulated articles - that include beneficial organisms, bio-fertilizers, soil inoculants, soil conditioners, bio-stimulants and organic fertilizers and other regulated articles such as soil, vessels, conveyances and used motor vehicles.

The emergence of new pest incursions in recent years in Kenya have cast aspersions on the phytosanitary system in Kenya leading to a significant negative impact on food and nutrition security, loss of biodiversity, trade competitiveness and livelihoods. Kenya's export trade also continues to experience challenges occasioned by stringent phytosanitary measures, renegotiations and scrutiny that results from pest incursions. As such, establishing a robust and strong national phytosanitary system is of national strategic importance.

2.1. Pest Risk Analysis, Border Control and Management, Surveillance and Pest Reporting, Early Warning and Response

Kenya conducts Pest Risk Analysis (PRA) to determine risks associated with import pathways, pests and changes in policy. Limited access to PRA information, inadequate number of qualified personnel and ineffective institutional partnerships have always been a challenge in enabling Kenya to conduct science-based risk assessments for most regulated pests and pathways. Kenya has also embraced the regulation of biological control agents and related articles to enhance risk management. Currently risk assessment for biological products is handled through an ad hoc committee that is not entrenched in law.

Kenya has designated points of entry and exit where phytosanitary inspections are conducted. Procedures for One Stop Border Point clearance of plant materials have been established and harmonized with those of other official agencies with responsibilities at the border points. Similarly, due to porous borders, unauthorized plants, plant products and regulated articles enter the country thereby increasing the risk of introduction of quarantine pests. This problem is compounded by the inadequate resources and capacity for phytosanitary inspectors to seal loopholes and to undertake offshore inspections. Besides, there is inadequate infrastructure to treat non complying commodities, and conveyances to reduce impacts or risks of introduction to acceptable levels.

Kenya has a surveillance system that facilitates detection, delimiting and monitoring of pests that provides scientific and technical justification for declaration of status of pests. The system supports early pest detection, emergency pest response operations and pest reporting. Plant health laboratories are key support systems for surveillance operations together with various surveillance infrastructure. However, surveillance in Kenya is poorly funded, uncoordinated and largely provided on a fragmented basis by the relevant institutions charged with this mandate. There is also under-utilization of community and passive surveillance mechanisms as well as inadequate nationally agreed standards and plans for the collection of surveillance data.

In times of pest emergencies, Kenya has previously developed ad hoc committees to guide on the administration and response. The committees are poorly coordinated and underfunded. Consequently, there is a weak early warning, inadequate modelling and emergency response system during pest outbreaks. There is also a lack of coordinated public monitoring network to support detection and reporting of new pest incursions. Further, there is need to enhance response to migratory and invasive pests and weeds which have an effect on food and nutrition security.

2.2. Pest Diagnosis and Identification

Kenya has made strides in equipping modern diagnostic facilities to undertake accurate, reliable and timely identification of various plant pests. These facilities ascribe to the IPPC pest diagnosis and International Organization for Standardization (ISO) standards. The diagnosis framework supports surveillance, farmer advisory programs and acts as a regional reference. There is however a need for continuous capacity improvement through staff training, equipment purchase and repair, adoption of new test methods as well as the development of proficiency testing operations with other international plant health laboratories.

2.3. Quarantine Mechanism and Containment Measures for Plant Pests

Kenya has a designated plant quarantine facility for holding high risk plant materials and regulated articles. The National Plant Protection Organization (NPPO) further provides for the management and supervision of quarantine and bio-containment facilities owned by other government agencies and private entities. Similarly, certification of propagation material in designated quarantine sites for compliance to certain export markets has been on the increase. Domestic or internal quarantine mechanism is provided for through official declaration of infested or infected areas and prohibition in the use of infected land.

Despite the existence of quarantine and containment mechanisms, Kenya has previously experienced several pest incursions including invasive species and noxious weeds that have had negative impacts on biodiversity, agriculture and livelihoods. Enforcement of quarantine and containment measures have been inadequate. This is further compounded by weak regional cooperation and lack of public awareness.

2.4. Registration of Pesticides and Biological Control Agents

Kenya has developed a legal framework for pesticide and bio-pesticide registration based on international best practice. This has led to commercialization and availability of a variety of products for plant pest management in Kenya. However, this legal framework does not make adequate provisions for timely registration and approval in cases of pest emergencies. Challenges are experienced when there are new pest incursions requiring quick interventions and is more pronounced during pest emergency situations in the country.

Inadequate availability of registered products to control pests especially on minor crops has led to use of inappropriate pesticides resulting to food safety concerns, and barriers to international trade such as notification of non-compliance. The challenge is further compounded by the failure of users to comply with provisions and guidelines specified on pesticide labels which have led to increased pest resistance and upsurge of previously manageable pests.

Furthermore, production and commercialization of bio-pesticides is hampered by costly registration processes and inadequate production, distribution and storage infrastructure. The situation is aggravated by lack of awareness to the public and proliferation of adulterated products.

2.5. Phytosanitary and Organic Certification Mechanisms

The NPPO in collaboration with other government bodies and the private sector undertake various certifications to enhance compliance to markets internally and internationally. The certification entails inspection and audit of farms, facilities and conveyances such as treatment, pack houses, storage houses, ships, vehicles and trucks. Certification may also require creation of Pest Free Areas (PFAs) and Pest Free Places of Production (PFPPs) for purposes of managing pests, especially those of quarantine concern to various trading partners.

Phytosanitary certification in Kenya currently faces challenges occasioned by limited infrastructure such as treatment and storage facilities. This is further compounded by inadequate capacity for compliance to market requirements. Creation of PFAs/ PFPPs requires huge financial and technical investments which the NPPO does not meet.

Currently, organic certification is not under official control in Kenya. The private sector actors train farmers in organic value chains and undertake private certification. Trading partners are now seeking government certification for organically certified foods to access their markets. There is therefore a need for the development of official control structures for organic certification to facilitate this shift.

Policy Constraint

The phytosanitary system in Kenya does not provide sufficient mitigation against introduction and management of plant pests.

Policy Statement

The Government in collaboration with relevant stakeholders will establish and strengthen a national phytosanitary system for effective pest risk mitigation and management.

Policy Interventions

The National Government will:

(a) Strengthen resourcing and coordination of pest risk analysis, border control and management, pest surveillance and reporting, early warning and response and pest diagnostics and identification.

(b) Enhance enforcement of quarantine measures to mitigate the introduction, establishment and spread of plant pests.

(c) In collaboration with the private sector, facilitate timely registration and approval of pest control products for minor crops and during emergency situations.

(d) Establish a system of official controls to provide for certification of organically produced plant products.

(e) Promote establishment and certification of quarantine, bio-containment and other related facilities and infrastructure for the application of phytosanitary measures.

The County Governments will:

(a) Undertake pest surveillance, reporting, early warning, rapid response and management.

(b) Promote technology transfer, adoption and use of sustainable integrated pest management strategies and Good Agricultural Practice (GAP).

(a) Support development of plant health capacity for pest diagnosis and identification.

(b) In collaboration with the private sector, establish facilities and related infrastructure for the application of phytosanitary measures.

The National and County Governments will:

(a) Establish and maintain Pest Free Areas (PFAs), Pest Free Places of Production (PFPPs) and Areas of Low Pest Prevalence (ALPPs).

(b) Enhance and implement enforcement of containment measures to mitigate the introduction, establishment and spread of plant pests into new areas within the country.

3 CHAPTER Facilitation of Trade in Plants and Plant Products

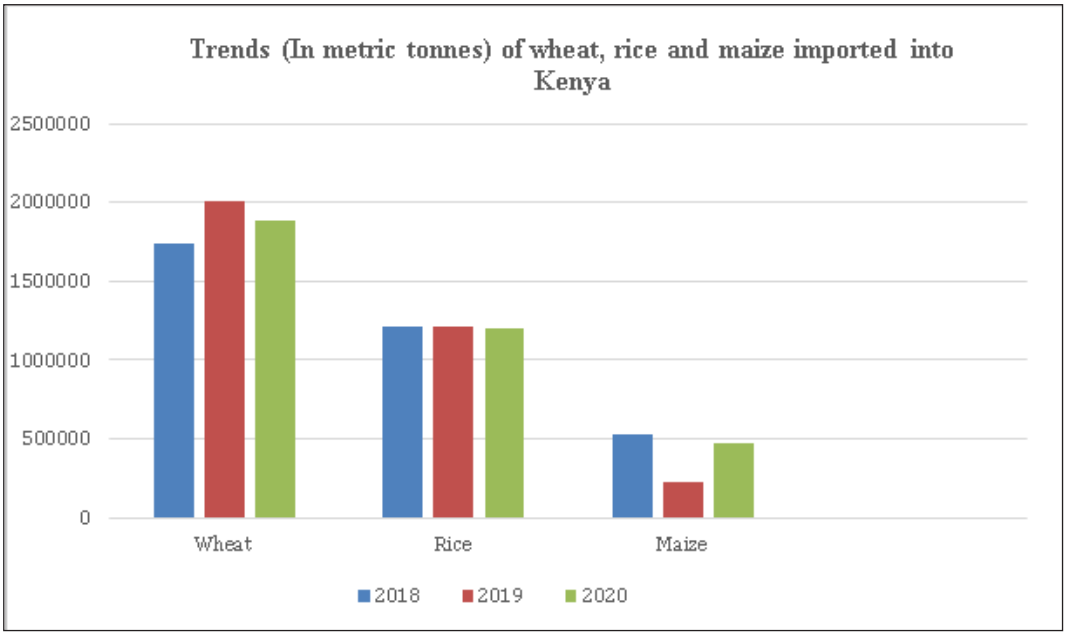
Introduction

Kenya trades internationally in the import and export of plants, plant products and various regulated articles. International treaties and conventions together with the Kenyan statutes obligate the country to implement phytosanitary standards to protect its agriculture and the environment from harmful pests. Moreover, Kenya is obligated to comply with market specific phytosanitary standards in order to access foreign markets. Besides international trade, there is vibrant internal trade within Kenyan borders which also involves movement of plants, plant products and regulated articles.

3.1. Import Regulation

Situational Analysis

Kenya imports plants, plant products and regulated articles from various countries globally. Some of the plant products include seeds, fresh or dried fruits, grains including wheat, sorghum and rice among others. Imports have generally been on the rise in the last few years as illustrated in the graph below with Kenya importing 1,883,439 tons of wheat, 1,203,142 tons of rice and 472,761 tons of maize in the year 2020.



(Source: KEPHIS import data 2017-2020)

Importation is regulated under the Plant Protection Act, CAP 324, import requirements and negotiated bilateral agreements. Import regulation is critical in safe guarding against the introduction of regulated pests, some of which are invasive and a threat to Kenya's agriculture and the environment. Imports under permit are of low risk thus issued with a plant import permit stipulating the conditions of importation. High risk materials are maintained in quarantine facilities where they are monitored or tested before release. Prohibited articles are considered of high risk and are not allowed entry into Kenya. Non- complying consignments are intercepted at port of entry and appropriate notification issued to countries of origin. Any change of phytosanitary requirements are duly notified to trading partners through the laid down international platforms. Consignments on transit are monitored to ensure they are not opened so as not to introduce pests within the borders of Kenya.

Imports of plants, plant products and regulated articles into Kenya and those on transit into the region, have increased tremendously in the recent years due to the growing demands in propagation materials, human consumption, animal feed and industrial use. The increase in importation and transit poses a great risk in the introduction and spread of new and/or invasive pests including prohibited materials. Besides, there has been numerous interceptions of un authorized plant

and products as part of passenger luggage/baggage. In order to reduce the risks associated with high imports volumes, Kenya requires a vibrant import regulatory framework that eliminates presence of harmful pests in imported consignments.

Policy Constraint

There is a weak import regulatory system in Kenya that does not adequately safeguard against the introduction of plant pests.

Policy Statement

The Government will strengthen the import regulatory system for the prevention of introduction of quarantine and invasive plant pests in Kenya.

Policy Interventions

The National Government will:

(a) Strengthen border and entry-point phytosanitary inspections and certification to prevent introduction of quarantine and invasive plant pests.

(b) Enforce post entry quarantine measures.

(c) Enhance the enforcement of phytosanitary measures for consignments on transit and transshipment.

(d) Institute and operationalize risk-based inspection and notification of non-compliance to the countries of origin.

(e) Promote trade facilitation in cross border trade including publication of regulatory information, cooperation with other border and cross border agencies and support the operationalization of One Stop Border Posts (OSBP).

(f) Promote regional harmonization of phytosanitary procedures.

The County Governments will:

Enhance awareness and sensitization of farmers, border communities and the general public on the official plant and plant products import procedures.

3.2. Export Regulation

Situational Analysis

Kenya is a major exporter of fresh horticultural produce, tea and coffee globally. Tea exported from Kenya has increased over the last 5 years from 467032.9 Tons in 2017 to 557351 in 2021 and commands about 35% of the total market share for fresh produce in the European Union. According to Horticultural Crop Directorate (HCD) statistics, in 2020 the floriculture industry alone earned Kenya Shillings 107.5 billion in foreign exchange accounting for 74% of the total horticulture sub sector while the other value chains including fruits, herbs, spices and vegetables contributed 36%.

Kenya's agricultural export dominance globally is constantly under threat. Export to foreign markets is faced with challenges of quarantine pests and pesticide residues being detected in exported consignments and frequent changes in market requirements. Kenya has also not been able to expand her market base to the level desired beyond the traditional markets due to challenges faced during the exchange of technical information required by trading partners for risk analysis and grant of market access.

Growth in foreign market base requires that Kenya institutes phytosanitary standards that will enhance sustainability. Increase in the cases of non-compliances threaten the loss of these markets as a result of interceptions, bans and related costs slapped on exporters.

Policy Constraint

The export regulatory system is inadequate to support compliance to market requirements and respond to emerging issues.

Policy Statement

The National Government will strengthen the export regulatory system to support compliance to export market requirements.

Policy Interventions

The National Government will:

(a) Strengthen export regulatory system for enhanced compliance to international market requirements.

(b) Enhance collaboration, communication and linkages in the exchange of phytosanitary technical information aimed at opening and maintaining markets.

(c) Enhance export certification for plant products.

(d) Promote investment in phytosanitary compliance for the export market.

(e) Promote mechanisms for self-regulation along various value chains.

The County Governments will:

(a) Promote investment in processes that reduce phytosanitary risk and enhance compliance.

(b) Build capacity of farmers and private sector players at county level on compliance to market requirements.

3.3 Domestic Containment and Management of Plant Pests

Situational Analysis

The domestic movement for plants, plant products and regulated articles in Kenya has grown over the years due to increased trade. The growth has led to the introduction, establishment and spread of pests into areas and regions where they never occurred. This poses a threat to food security and the general well-being of Kenya's economy. Pest management is done at individual farm levels and supported through government extension services and the private sector. In case of pest emergencies, farmers report to agricultural offices at the Counties and the information is relayed to the National government.

Coordination mechanism during pest emergencies is undertaken through an ad hoc multi-institutional framework which in most cases is curtailed by budgetary

constraints. There are no clear guidelines to deter the spread of regulated pests as result of movement of plants, plant products and regulated articles from infected/ infested to non-infested /non-infected areas. Internal containment framework is not in place to help in the management of pest outbreaks. There are also no proper guidelines on the disposal of waste plant materials and debris in local markets that lead to increased multiplication and spread of pests.

Policy Constraint

The domestic market regulatory system for the containment and management of pests in Kenya is inadequate.

Policy Statement

The Government will strengthen, enhance, and promote the implementation of measures that will prevent the spread of pests in Kenya.

Policy Interventions

The National and County Governments will:

(a) Strengthen internal containment mechanisms for regulated materials.

(b) Implement and promote sustainable and safe pest management strategies.

(c) Establish mechanisms for safe movement and disposal of agricultural plant materials.

(d) Institute and operationalize emergency response and reporting structure for pest emergencies at national and county levels.

4 CHAPTER Policy, Legal and Institutional Framework

4.1. Policy and Legal Framework

Situational Analysis

Phytosanitary matters in Kenya are governed by various policies and laws. Some of the laws are outdated and no longer provide a robust regulatory environment for the prevention of introduction, establishment and spread of plant pests. They do not provide for some critical phytosanitary measures such as surveillance, pest risk analysis and equivalence.

The laws are also not alive to the Constitution of Kenya, 2010 which provides for devolution, where functions of the two levels of government are distinct. As per the Constitution of Kenya, 2010, the National Government in the agricultural sector is mainly responsible for policy, regulation of services, and capacity development, while the County Governments are responsible for crop and animal husbandry, livestock sale yards, county abattoirs, plant and animal disease control, fisheries, animal control and welfare. Further, the policies and laws on phytosanitary issues also provide overlapping functions to the institutions involved in phytosanitary systems. Some of the areas where there are overlaps include pest management in infected areas, regulation of appropriate seeds and planting materials for export and import as well as the control of crop pests and eradication of noxious and invasive weeds. Additionally, although some mandates are clearly provided for such as the eradication of noxious and invasive weeds it largely remains unmanaged.

In Kenya, the institutions that handle phytosanitary issues operate independently based on their mandates leading to duplication and occasionally contradicting each other.

Kenya is signatory to a number of international and regional conventions and agreements. However, there is ineffective participation in joint activities including standard setting fora and low level of domestication and alignment of our laws to internationally adopted phytosanitary standards.

The international conventions and agreements and national policies, laws that support phytosanitary in Kenya are expounded in sections 4.1.1, 4.1.2, 4.1.3 and 4.2.

4.1.1. International Conventions and Agreements

(a) **World Trade Organization Sanitary and Phytosanitary Agreement**

The World Trade Organization on the Application of Sanitary and Phytosanitary Standards is concerned with plant health and international trade, besides animal health and human health. Kenya is signatory to the World Trade Organization (WTO)-Sanitary and Phytosanitary (SPS) Agreement. The agreement allows countries to set their own standards to protect their economy or environment from damage due to the entry, establishment or spread of pests of plants. The agreement encourages contracting parties to use international standards, guidelines, and recommendations, where they exist, when developing their SPS. It also recognizes the International Plant Protection Convention (IPPC) as the only international standard setting body for plant health which coordinates development of International Standards for Phytosanitary Measures.

(b) **World Trade Organization Agreement on Trade Facilitation (WTO-TFA)**

The World Trade Organization Trade Facilitation Agreement is concerned with expediting movement, release and clearance of goods and improved cooperation between customs and other authorities.

(c) **The International Plant Protection Convention**

Kenya is a contracting party to the International Plant Protection Convention (IPPC). The convention is an international treaty whose purpose is to secure common and effective action to prevent the spread and introduction of pests of plants and plant products, and to promote appropriate measures for their control while facilitating fair and safe trade. The Convention also provides for the protection of natural flora and plant products.

4.1.2. Regional Conventions and Agreements

(a) **Phyto-sanitary Convention for Africa**

The Convention was adopted in 1967 and Kenya has been implementing it since 7th May, 1974. The convention was first reviewed in 1997. The Treaty obliges State Parties to take measures of quarantine, certification and inspection or such other measures as may be considered necessary in respect of any living organisms, animal, plants, plant material, seeds, soil, compost or packing material (including containers) and any other article the importation

of which is considered to constitute a threat to agriculture in any part of Africa, to minimize threats to the agricultural industry. Implementation of the Convention helps minimize the introduction and spread of diseases.

(b) **The African Continental Free Trade Agreement**

The African Continental Free Trade Agreement (AfCFTA) which Kenya has ratified entered into force in the year 2019. AfCFTA creates a single market for goods, services, facilitated by movement of persons in order to deepen the economic integration of the African continent and provides for adoption of measures by any State Party that are necessary to protect plant, human and animal life/health.

(c) **The Common Market for Eastern and Southern Africa Sanitary and Phytosanitary Regulations**

Phytosanitary matters in Kenya are aligned to the Common Market for Eastern and Southern Africa (COMESA) Sanitary and Phytosanitary (SPS) Regulations which it adopted in 2009. These regulations set out principles and create mechanisms for cooperation in the implementation of SPS measures by Member States. In the area of plant health, the aim of the regulations is to ensure the protection of plant health and life from risks arising from pests, diseases and disease-causing organisms. The regulations also ensure that the application of SPS measures does not unnecessarily hinder trade in food and agricultural products in the Common Market.

(d) **The East African Community Sanitary and Phytosanitary Protocol**

The East African Community (EAC) Sanitary and Phytosanitary (SPS) Protocol ratified by Kenya in 2015 aims to promote trade in food and agricultural commodities within the community and between the community and other trading partners. The protocol also aims to promote the implementation of the principles on harmonization, equivalence, regionalization, transparency, and risk assessment in the application of SPS measures within the community.

4.1.3. National Policies and Laws

(a) **The Constitution of Kenya, 2010**

The Constitution of Kenya promulgated in 2010 recognizes the importance of the agriculture sector as a contributor to achieving the rights of the citizens. In Article 43 (c) under the Bill of Rights, the Constitution explicitly protects the

right to food for all persons. Article 60 provides for sustainable and productive management of land resources and sound conservation and protection of ecologically sensitive areas. The Constitution in Part 2 of the Fourth Schedule allocates plant and animal disease control to the County Governments as one of its functions.

(b) **Agricultural Policy, 2021**

The Agricultural Policy was formulated in line with relevant provisions of the Constitution and provides a clear road map to the realization of Vision 2030 agricultural goals and targets. The policy identifies pests among other factors that reduce the crops, livestock and fisheries sub-sector contribution to the economy and improvement of livelihoods. It proposes development of strategies for joint early warning systems for disaster preparedness and control of pests and regulatory procedures for management of pests.

(c) **Seed Policy, 2010**

The National Seed policy is the Ministry's outline of policy interventions to be pursued in order to address constraints in the seed sub sector and to improve its performance and contribution towards improved agricultural productivity. The policy identifies diseases as a challenge in seed quality control.

(d) **The Kenya Plant Health Inspectorate Service Act, No. 54 of 2012**

The Kenya Plant Health Inspectorate Service (KEPHIS) Act, established KEPHIS as a regulatory body for the protection of plants, seeds and plant varieties and agricultural produce. Section 5(b) of this Act provides that the Service shall administer and enforce phytosanitary measures. The Act provides that the Service shall be responsible for administering the Plant Protection Act, CAP 324 and the Seeds and Plant Varieties Act, Cap 326.

(e) **The Plant Protection Act, CAP 324**

The Plant Protection Act, CAP 324 makes provision for the prevention of the introduction, establishment and spread of pests destructive to plants. This is the principal law in phytosanitary matters. It was last reviewed in 1972 and not in tandem with the current phytosanitary developments.

(f) **The Seeds and Plant Varieties Act, Cap 326**

The Seeds and Plant varieties Act, Cap 326 is central to the seed industry as it is the main Act which provides for seed certification in Kenya. The Act provides

that regulations for the prevention of spread of disease by the sale of seed and treatment of seed for the control of plant disease may be made by the Minister.

(g) **The Crops Act No. 16 of 2013**

The Crops Act provides for the growth and development of agricultural crops. The Crops Act also provides for pest management in infected areas in Section 31. Similarly, Section 40 2 (c) and (e) of the same Act provides for development of regulations on appropriate seeds and planting materials for export and import as well as the control of crop pests. Section 12 (g) provides that the Agriculture Food Authority (AFA) puts in place programmes for growers and dealers to implement measures for pest control.

(h) **The Pest Control Products Act, CAP 346**

The Pest Control Products Act provides for the establishment of the Pest Control Products Board (PCPB) which regulates the importation, manufacture, distribution, use and disposal of pest control products. The functions of the PCPB include assessing pest control products and recommending the registration of pest control products. The subsidiary legislation from the Act are fundamental in phytosanitary treatment because they strengthen the existing compliance requirements and enhance efficacy of local phytosanitary-related data.

(i) **The Biosafety Act No. 2 of 2009**

The Biosafety Act (2009) was enacted to regulate research and commercial activities involving Genetically Modified Organisms with a view to ensuring safety of human and animal health and provision of an adequate level of protection of the environment. It also provides for co-ordination of biotechnology and biosafety issues in the country.

(j) **The Environmental Management and Coordination Act, 2015**

The Environmental Management and Coordination Act (EMCA), is the framework law on environmental management and conservation. The Act provides for establishment of the Authority which is to exercise general supervision and co-ordination over all matters relating to the environment and to be the principal instrument of Government in the implementation of all policies relating to the environment.

(k) **Forest Conservation and Management Act, 2016.**

The Forest Conservation and Management Act, 2016 provides for the development and sustainable management, including conservation and rational utilization of all forest resources for the socio-economic development of Kenya and for connected purposes. In its offenses section, the Act prescribes a penalty to any person who, in any forest area introduces any exotic genetic material or invasive plants without authority from the forest manager.

(l) **The Wildlife (Conservation and Management) Act No. 47 of 2013**

The Wildlife (Conservation and Management) Act provides for formulation of policies regarding the conservation, management, and utilization of all types of fauna and flora, conduct and co-ordinate research activities in the field of wildlife conservation and management. The Act also provides for threatened species as specified in the Fourth Schedule or declared as such under any other written law or specified in Appendices of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

(m) **The Tea Act No. 23 of 2020**

The Tea Act provides for the regulation, development and promotion of the tea industry. The Act also provides that the Cabinet Secretary may, in consultation with the Tea Board, make Regulations to provide for control of pests.

Policy Constraint

The Plant Protection Act, Cap 324 is outdated, not aligned to the Constitution of Kenya, 2010, international best practice and is inadequate in addressing the plant health challenges. There are also other laws providing for pest management that enable several institutions to undertake similar functions resulting in poor implementation.

Policy Statement

The Government will review legislation on phytosanitary matters to strengthen the regulatory framework for phytosanitary systems.

Policy Interventions

The National Government will:

(a) Review the Plant Protection Act Cap 324 and other related laws to strengthen the regulatory environment and align to the Constitution of Kenya, 2010, international and regional conventions/treaties/agreements and international best practice.

(b) Harmonize legislation on phytosanitary matters with the aim of streamlining service delivery and related costs.

(c) Strengthen Kenya's participation in regional and international phytosanitary fora including standard setting and harmonization to represent Kenya's interests.

The County Governments will:

(a) Review existing county legislation to align with the reviewed phytosanitary legislation framework.

(b) Develop phytosanitary policy implementation framework.

4.2. Phytosanitary Institutional Framework

Situational Analysis

In Kenya, Phytosanitary measures are administered and executed by both National and County Government, various actors including policy organs, regulators, funding agencies, implementers, enablers and beneficiaries. As per the CoK, 2010, the National Government in the agricultural sector is mainly responsible for policy, regulation of services, and capacity development, while the County Governments are responsible for crop and animal husbandry, livestock sale yards, county abattoirs, plant and animal disease control, fisheries, animal control and welfare. Other phytosanitary support institutions include non-governmental organizations, associations and networks, regional and international research organization, development partners, academia and private sector. The institutions that handle phytosanitary issues operate independently based on their mandates leading to duplication and occasionally contradicting each other. The institutions are outlined below.

4.2.1. Line Ministries

(a) **Ministry of Agriculture and Livestock Development**

The Ministry is responsible for the formulation, implementation and monitoring of agricultural legislations, regulations, policies and capacity building of stakeholders. It is the primary implementer of the phytosanitary system in Kenya and has put in place measures to reduce crop losses occasioned by migratory pests, invasive weeds, emerging pests and mycotoxins among others. The Ministry has delegated some of its responsibilities to various agencies for effective execution of its mandate.

(b) **Ministry of Trade, Investments and Industry**

The role of the Ministry includes services that strengthen the trade objectives of the phytosanitary system such as coordination of regional trade agreements. In addition, the Ministry also provides trade negotiations and advisory services, enforcement of international trade laws, regulations, and agreements related to phytosanitary.

(c) **Ministry of Environment and Forestry**

This Ministry is responsible for facilitation of good governance in the protection, restoration, conservation, development and management of the environment and natural resources for equitable and sustainable development. Phytosanitary systems go beyond crop protection into protection of forests, biodiversity and environment.

4.2.2. Departments and Agencies

(a) **Kenya Plant Health Inspectorate Service**

Kenya Plant Health Inspectorate Service (KEPHIS) regulates all matters relating to plant protection, import and export of plants and plant materials, enforcement of sanitary and phytosanitary measures, undertake plant quarantine control, seeds certification, plant varieties protection as well as monitor quality and plant protection products residues in plant products.

(b) **Agriculture and Food Authority**

Agriculture and Food Authority (AFA) is responsible for the implementation of the Crops Act, 2013. It conducts farmer-training programs aimed at increasing their knowledge on production technologies and on market potentials and prospects among other mandates.

(c) **Tea Board of Kenya**

The Tea Board of Kenya is responsible for development, regulation and promotion of tea sub-sector through licensing tea manufacturing factories, coordinate prioritization of research on tea, register growers, buyers, brokers, packers, management agents and any other person dealing in tea and promote Kenya tea in both local and international markets.

(d) **Agricultural Finance Corporation**

The Agricultural Finance Corporation (AFC) is a Development Finance Institution wholly owned by the Government of Kenya. AFC is entrusted with the mandate of assisting in the development of agriculture and agricultural industries by making loans, and providing managerial and technical assistance to the loan beneficiaries.

(e) **Pest Control Products Board**

The mandate of the Board is to regulate the importation, exportation, manufacture, distribution and use of products used for the control of pests and of the organic function of plants and animals.

(f) **Kenya Forestry Research Institute**

Kenya Forestry Research Institute (KEFRI) supports Kenya's phytosanitary efforts by undertaking research and providing technologies and information for sustainable management, conservation and development of forests, trees on farm and allied natural resources.

(g) **Kenya Agricultural and Livestock Research Organization**

Kenya Agricultural Research Organization (KALRO) is a corporate body created under the Kenya Agricultural and Livestock Research Act of 2013 to establish suitable legal and institutional framework for coordination of agricultural research in Kenya. By Promoting, streamlining, coordinating, and regulating research in crops, as well as expediting equitable access to research information, resources and technology and promote the application of the research findings in Kenya, KALRO promotes the goals of this National Phytosanitary Policy.

(h) **Agricultural Development Corporation**

Agricultural Development Corporation (ADC) was established under the Act of Parliament Cap 444 of 1986 with the mandate of promoting the

production of Kenya's essential agricultural inputs and undertaking such activities as the Corporation may decide from time to time so as to develop agricultural production in specific fields of production. It is a critical player in the phytosanitary system through its bulk production of certified seeds.

(i) **National Biosafety Authority**

The National Biosafety Authority (NBA) exercises general supervision and control over the transfer, handling and use of genetically modified organisms. The NBA implements the Cartagena Protocol on Biosafety in order to address safety for the environment and human health in relation to modern biotechnology.

(j) **The National Environment Management Authority**

National Environment Management Authority (NEMA) is charged with the implementation of all policies relating to the environment, and to exercise general supervision and coordination over all matters relating to the environment. In consultation with the lead agencies, NEMA is empowered to develop regulations, prescribe measures and standards and, issue guidelines for the management and conservation of natural resources and the environment.

(k) **National Museums of Kenya**

National Museums of Kenya provides agricultural pests identification.

(l) **Kenya Forest Service**

Kenya Forest Service is responsible for enhancement of development, conservation and management of Kenya's forest resources base in all public forests, and assist County Governments to develop and manage forest resources on community and private lands for the equitable benefit of present and future generations.

(m) **Kenya Wildlife Service**

The Kenya Wildlife Service conserves and manages Kenya's wildlife for the Kenyan people and the world through the conservation and management of national parks, wildlife conservation areas, and sanctuaries under its jurisdiction.

4.2.3. County Governments

The Constitution of Kenya, 2010 provides for legal and institutional arrangements and assigns different roles to the National and County Governments as stipulated in the Fourth Schedule. The Constitution provides for County Governments to be responsible for plant disease control, which for the phytosanitary sector would include the following: promoting the adoption of good agricultural practices, pest surveillance, early warning, and response on pest-outbreaks. Individual counties develop policies, legislations, strategies and plans to guide actualization of their mandate as outlined in the constitution.

4.2.4. Non-State Actors

The government at the national and county level will collaborate and partner with Non-State Actors (NSAs) to mobilize citizens and resources, disseminate the policy, and participate in capacity building for both citizens and duty bearers. The NSAs will also collaborate with the government in public participation and civic education processes and mobilizing the citizens to participate in diverse aspects of the phytosanitary policy.

(a) **Non-Governmental Organizations and Community Based Organizations**

Non-Governmental Organizations and Community Based Organization provide trainings on phytosanitary matters. They support actors in the agriculture sector with resources including finances that enhance compliance to phytosanitary requirements.

(b) **Producer Organizations, Associations and Networks**

Major associations and networks in the phytosanitary space include those dealing with planting material, fresh produce, cereals, seeds, flowers, agrochemicals, among others. They play a critical role of organizing, registering, advocating, and lobbying on behalf of their members. They have a great impact in phytosanitary measures through capacity building of members on compliance to standards, marketing as well as public awareness/sensitization.

(c) **Development Partners**

Development partners provide funding for various programs that enhance phytosanitary capacity and compliance to standards. Some also foster collaborations that enhance phytosanitary capacity and compliance to standards.

(d) **Private Sector**

The private sector provides specific services that support compliance to phytosanitary standards. For example, they provide testing and fumigation services. Those operating in Kenya include Crop Nutrition Laboratories, SGS Laboratories and Control Union.

(e) **Tertiary and other Support Institutions**

The tertiary institutions include public and private universities and other education providers that offer training and support research in phytosanitary areas. Other support institutions also offer support to phytosanitary systems through capacity building, consultancy, and research among others.

4.2.5. Regional and International Organizations/ Organs

There are regional and international organizations undertaking phytosanitary and related activities in the country. They have regional and international mandates and offer opportunities for enhancing phytosanitary systems in Kenya including capacity development, surveillance, risk analysis, diagnostics and pest identification, development of standards and protocols.

(a) **Food and Agriculture Organization**

The Food and Agriculture Organization (FAO) is a specialized agency of the United Nations that leads international efforts to defeat hunger. Its goal is to achieve food security for all and make that people have regular access to enough high-quality food to lead active, healthy lives. It supports strengthening of institutional capacities at national, county and community level for early warning, preparedness and rapid response to threats and crises including plant pests.

(b) **Commission on Phytosanitary Measures (CPM)**

The Commission on Phytosanitary Measures (CPM) is IPPCs governing body. In particular, the CPM, reviews the state of plant protection around the world, identifies action to control the spread of pests into new areas, develops and adopts international standards for phytosanitary measures, establishes rules and procedures for resolving disputes, adopts guidelines for the recognition of regional plant protection organizations; and cooperates

with international organizations on matters covered by the Convention. Kenya is represented at the CPM and committees and participates in the standard setting activities.

(c) **Inter-African Phytosanitary Council of African Union (AU-IAPSC)**

The Inter-Africa Phytosanitary Council is a specialized technical office of the African Union (AU) Department of Rural Economy and Agriculture, mandated to coordinate and provide support to the protection of plant resources for the welfare and economic development of the Member States of the African Union.

(d) **Intergovernmental Authority on Development**

Kenya is a founding member of the Intergovernmental Authority on Development (IGAD) that was created in 1996 to mitigate the effects of the recurring severe droughts and other natural disasters that resulted in widespread famine, ecological degradation and economic hardship in the region. IGAD is a key player in the management of migratory pests and developed a regional sanitary and phytosanitary strategy and action plan, which proposes strategic intervention to improve trade and market access while ensuring protection of human health, protection and enhancement of health and safety of plants and animals.

(e) **Common Market for Eastern and Southern Africa**

The Common Market for Eastern and Southern Africa (COMESA) is a regional economic community in Africa with twenty-one member states whose objective is strengthening cooperation in agricultural development, adoption of a common agricultural policy, and enhancement of regional food sufficiency, export of agricultural commodities and co-ordination of their policies regarding the establishment of agro-industries.

(f) **East Africa Community**

The East African Community is an intergovernmental organization composed of seven countries in the African Great Lakes region in East Africa. It offers a coordination function within the region in an effort to harmonize phytosanitary systems and capacity development in the region.

Policy Constraint

There is poor synergy and lack of complementarity between phytosanitary support institutions leading to ineffective phytosanitary systems.

Policy Statement

The Government will develop mechanisms for coordination, information sharing, and foster partnerships.

Policy Interventions

The National Government will:

(a) Support multi-sectoral and multi-institutional technical working groups

(b) Support development of phytosanitary information repository and sharing.

The County Governments will:

(a) Coordinate plant health matters at the county level.

(b) Support private sector actors involved in phytosanitary matters.

The National and County Governments will:

(a) Develop a coordination mechanism and framework for institutional partnerships and infrastructure sharing.

(b) Strengthen collaborations and partnerships among stakeholders to enhance pest management at County and country level.

CHAPTER 5 Phytosanitary Capacity in Kenya

Situational Analysis

Phytosanitary capacity comprises infrastructural capacity, human resource and the financial resources. This capacity supports the ability to successfully implement plant health activities in Kenya by various institutions.

5.1. Infrastructural Capacity

Kenya has a developing infrastructure to support plant health issues in the country. The national infrastructure includes plant health laboratories, quarantine, treatment, fumigation and inspection facilities, tools and equipment that undertake activities related to plant health. This infrastructure is held by different players such as the regulatory, research and academic institutions, international research organizations and the private sector. The service has fairly adequate diagnostic laboratories which are accredited. The laboratories utilize modern pest diagnostic techniques and are equipped with modern equipment. The laboratory is also the designated as regional reference laboratory for plant health COMESA. Other organizations in the research, academia and private sectors have laboratories and other infrastructure, which support implementation of plant health activities.

The combined capacity of these institutions is however inadequate, few and not equitably distributed across the country. This then leads to inability for timely and efficient response to the growing demand for phytosanitary services and support. The equipment in these facilities is aging and technological advancement has rendered some of them obsolete. Other than the service laboratory, very few laboratories are certified or accredited against national, regional and international certification standards or accreditation schemes and have limited diagnostic method development and validation capacity. Lack of field based rapid and inexpensive diagnostic facilities to facilitate quick and reliable diagnostics is also limiting.

5.2. Human Capacity

The plant health sector in Kenya has diverse experts in different disciplines who are housed in different institutions in the public and private sector. These professionals perform their activities as guided by their respective mandates. The current basic education system in the formative years provides the building blocks in general agriculture to prepare pupils for phytosanitary/plant health courses at tertiary level. Training in plant health and phytosanitary is currently provided as courses at tertiary level such as plant pathology, crop protection, general agriculture, horticulture, biological sciences delivered through units like phytosanitary regulation, weed science, nematology, bacteriology, entomology and virology. KEPHIS hosts the Centre of Phytosanitary Excellence (COPE) in Africa, which offers tailor made specialized phytosanitary courses. Sharing, awareness, education, exchanging and disseminating of knowledge and technologies is undertaken through workshops, seminars and media sponsored by the Government, non-state actors and the private sector. The private sector associations support various industries through certification schemes and training.

However, despite the existing human resource capacity, the numbers of professionals in plant health needed to adequately offer support and services to the crop production sector is limited due to understaffing and inequitable distribution. Poor succession management in human resource in the public sector at National and County Governments has manifested in an aging workforce presenting challenges in continuity in effective service delivery, loss of institutional memory and poor knowledge management. There is limited collaboration of these professionals in the industry on various spheres touching on plant health. This has led to fragmented, uncoordinated and unstructured professional development especially in the public sector.

Further, there is inadequate skill set to meet the country's ability to respond to the dynamic phytosanitary needs. Phytosanitary requirements are country specific and unique such that they require targeted awareness creation. Plant health matters are further complicated by new pest incursions, new diagnostic protocols, new standards among others that require a robust responsive capacity building system. There is inadequate capacity building and awareness creation for farmers on phytosanitary matters for compliance to market requirements.

5.3. Resourcing for Phytosanitary Systems

Through the national exchequer, the National and County Governments resource the phytosanitary activities in agriculture. Incentives to the industry in form of subsidies, rebates and tax holidays have been extended to some facets in the sector. The development partners complement the government efforts through projects that include infrastructural and human capacity building. The private sector invests in facilities that support phytosanitary activities like production and treatment facilities. The private sector associations support various industries through certification schemes and training.

Government funding and resource allocation for phytosanitary services has continued to reduce. As a result, human resource, operations and infrastructure allocations to plant health are not prioritized. For instance, the exchequer allocation to the NPPO has declined from Ksh 470 Million a decade ago to slightly over KSh 100 Million in the recent past, greatly hampering infrastructural, human resource and operations. The institutions have had to rely on development partners to improve its infrastructure and build human capacity. This has however reduced because of Kenya's elevation to middle income economy. The cost of equipment purchase and repair is high making it challenging to access and maintain modern technologies. At the county level, agriculture and consequently phytosanitary services are not adequately resourced. There is therefore a need for increased resources to support phytosanitary systems in operational resources.

Policy Constraint

There is inadequate and inequitably distributed infrastructure to support effective delivery of phytosanitary services. There are also insufficient staffing levels and skills in the plant health sector hampering the delivery of services for enhanced agricultural production. In addition, there are inadequate financial resources to support the development of systems and effective operations of plant health matters.

Policy Statement

The Government will support capacity development for effective mitigation against the introduction, establishment and spread of pests.

Policy Interventions

The National Government will:

(a) Strengthen the human resource capacity for improved delivery of phytosanitary services including entrenching phytosanitary courses in the education system at tertiary levels.

(b) Mainstream continuous professional development and succession management and establish centers of excellence to train national, regional and international plant health practitioners.

(c) Undertake capacity building of county staff, farmers and private sector actors.

(d) Develop and improve phytosanitary infrastructure including development of public and private laboratories, phytosanitary treatment and inspection facilities and associated infrastructure; and systems of proper maintenance of facilities.

The County Governments will:

(a) Develop and improve phytosanitary infrastructure along value chains including development of public and private laboratories, phytosanitary treatment and inspection facilities and associated infrastructure at county level.

The National and County Governments in collaboration with other stakeholders will:

(a) Provide sufficient funding and develop mechanisms for sustenance of phytosanitary systems and adequately implement plant health matters at county and country level.

(b) Undertake awareness creation, training, and knowledge dissemination on plant health matters to the National and County Governments technical staff, farmers and private sector actors and develop a framework for sharing information between actors.

6 CHAPTER Cross Cutting and Emerging Issues

The cross-cutting and emerging issues adversely affect plant health if not mitigated. Identified cross cutting and emerging issues include phytosanitary research and knowledge management, Information Communication and Technology (ICT) in phytosanitary systems, climate change effects on plant health and external shocks.

Situational Analysis

6.1. Phytosanitary Research and Knowledge Management

Phytosanitary research is conducted to provide scientific information for pest management and justification for phytosanitary measures. Research to support plant health covers the phytosanitary system, trade, legal and institutional frameworks and capacity. In Kenya, the NPPO conducts phytosanitary research; however, the bulk of phytosanitary research is conducted by agricultural research institutions and universities supported by various Plant Health Laboratories.

Phytosanitary research is currently limited, understaffed, underfunded and information is not easily accessible to stakeholders. The current approach to phytosanitary research is service-oriented with minimal focus on generating new knowledge and embracing bio-technological advancements that can overcome emerging challenges and enhance market access. In addition, there is inadequate involvement of the private sector, limited protection of intellectual property rights for innovations and limited collaboration among the phytosanitary research actors despite their complementary capacity. There is no system of uptake of research products, sharing of research findings and repository. Therefore, there is a need to streamline, rationalize, and establish an efficient phytosanitary research system that harnesses and utilizes existing scientific, human, and physical capacity.

6.2. Information Communication Technology in Phytosanitary Systems

Kenya recognizes the potential and embraces the use of data and ICT-technologies in agriculture as it has reduced the cost of doing business. The plant health sector through the various ministries, departments and agencies have implemented various ICT initiatives and systems to enhance efficiency in service delivery, knowledge dissemination, data collection, analysis and sharing. Various ICT approaches and ICT-enabled services, such as e-phyto, have been exploited to improve automation to pass relevant information, enhance access to phytosanitary services, hasten decision making, improved accuracy in pest management. However, the cost of developing, obtaining infrastructure and upgrading and maintaining the systems is high leading to reduced uptake of the system. The need for specialized devices, poor internet connectivity and extra cost to access the information hampers the adoption of ICT by plant health stakeholders. Capitalizing new emerging technologies in the field of plant protection is important to meet new challenges in plant health management. ICT system incompatibilities and poor integration between Kenya and its trading partners have on occasion affected trade in commodities. Capacity for ICT and response time in adjusting and integrating systems is therefore critical in efficient delivery of phytosanitary services.

6.3. Climate Change Effects on Plant Health

Global, regional and national frameworks have established as climate change poses significant challenges for plant health, through the actual and potential expansion of pest distribution and intensity, and changes in pest epidemiology and life cycle. Climate change impacts on plant pests and pest vectors also threaten the international trading system, as international trade provides a pathway for plant pests and pest vectors to spread into new areas of the world.

Globally, the IPPC desires that the impacts of climate change on plant health and the safe trade of plants and plant products are evaluated, especially in relation to pest risk assessment and pest risk management issues, and phytosanitary issues are represented and highlighted within the international climate change debate by 2030. Nationally, all ministries, departments and agencies are expected to integrate climate change adaptation and mitigation measures in all government planning and development objectives as provided for by the Kenya National Climate Change Response Strategy (NCCRS, 2010). Kenya therefore needs to invest in robust surveillance, monitoring and pest forecasting systems because pest and

plant distribution, pest epidemiology and pest impacts may change considerably as a result of climate change. Further, to reduce potential negative impacts of Long-term climatic changes, it is imperative to strengthen phytosanitary activities for building plant health stakeholders' resilience and adaptive capacity.

6.4. Effects of phytosanitary measures on Biodiversity

During pest management, inappropriate and excessive use of pesticides results in contamination of air, soils and water sources contributing to loss of biodiversity including destruction of beneficial organisms. Introduction of new pests, especially those invasive in nature may also affect populations of native species leading to loss of biodiversity.

6.5. External Shocks

Enhancing food and nutritional security has re-emerged as a critical national goal as demonstrated by the government's blue prints like the Vision 2030 and ASTGS. In the wake of the recent global pandemics, food and economic crises, the increasing frequency of unpredictable weather patterns, and growing linkages between agricultural commodities, energy, and financial markets there has been amplified constraints in the phytosanitary sector. Further, high reliance on food imports makes Kenya particularly vulnerable to external shocks due to disruption in global supply chains forcing her to source from non-traditional suppliers thus exposing the country to new or undiscovered pests.

Policy Constraints

There is no framework to provide for focused phytosanitary research and knowledge management to respond to plant health needs and emergencies. There is also inadequate exploitation of the potential of ICT in the phytosanitary system. Further, climate change has presented new challenges in the management of pests and therefore affecting trade. In addition, the country's capacity to withstand external phytosanitary related shocks is weak.

Policy Statement

The Government will put in place mechanisms to minimize adverse effects of and rapidly respond to cross cutting and emerging issues in plant health.

Policy Interventions

The National Government will:

(a) Develop a mechanism for prioritization of research and innovation and enhance capacity to respond to phytosanitary issues including plant health emergency situations.

(b) Strengthen ICT systems that support phytosanitary in line with emerging trends, risks and demands.

The County Governments will:

(a) support protection of intellectual property rights for innovations related to plant health from the County.

(b) Embrace adoption and use of phytosanitary ICT systems in line with emerging trends, risks and demands.

(c) Develop and improve mechanisms for mitigation and resilience to emerging issues related to climate change and external shocks.

The National and County Governments will:

(a) Support research and innovation to respond to phytosanitary issues including emergency situations.

(b) Establish a structured mechanism for utilization, uptake, technology transfer for dissemination and feedback of phytosanitary research outputs.

(c) Establish a structured mechanism for mitigation and resilience to climate change.

(d) Develop a robust rapid response system for emerging issues and external shocks.

(e) Collaborate with development partners, private sector players and other stakeholders in addressing cross cutting and emerging issues.

7 CHAPTER Policy Implementation

7.1. Introduction

The implementation of the policy interventions will be undertaken by various stakeholders and actors at the national and county levels as guided by the Phytosanitary Coordination Framework. These actors will include both state and non-state actors. State actors will comprise the two levels of Government and shall include relevant Ministries Departments and Agencies (MDAs) at the National level and the agriculture and relevant departments at the county level. Non-state actors will comprise of farmers, Non-Governmental Organizations and Community Based Organizations; producer organizations, associations and networks; regional and international research organization; development partners; private sector and private tertiary academic and research institutions among others.

Successful implementation and realization of the Phytosanitary Policy will require effective coordination of key industry stakeholders to focus effort towards realization of policy objectives. Further fostering collaboration and partnerships for effective and efficient utilization of resources and synergy; mobilization of adequate resources for undertaking of specific policy interventions and for funding coordination of overall policy implementation; development and implementation of a monitoring and evaluation and; and a communication strategy for effective information, knowledge management, reporting and sharing will be required.

7.2. Coordination of Policy Implementation

7.2.1. Policy Implementation Coordination Framework

The phytosanitary Coordination Framework shall be linked to the agriculture sector inter-governmental framework (Joint Agricultural Sector Steering Committee, County Agricultural Sector Steering Committee and the National Sanitary and Phytosanitary Committee (NSPSC)) (See Fig. 1) and comprise of the following organs;

(a) **National Phytosanitary Steering Committee**

The National Phytosanitary Steering Committee shall be responsible for overall oversight and coordination of the implementation and advising the Cabinet secretary on Phytosanitary Policy. The chairperson of the Steering Committee will be the Principal Secretary responsible for crop development or his representative. Other members will include representatives from the Service; Kenya Plant Health Protection Fund, Council of Governors (CoG), representatives of relevant stakeholders, development partners; and the chairperson of the National Plant Health Emergency Response Committees (NPHERC).

(b) **County Phytosanitary Steering Committee**

The County Phytosanitary Steering Committee shall be responsible for overall oversight and coordination of the implementation and advising the CECM for Agriculture on Phytosanitary matters in the county. The chairperson of the Steering Committee will be the Director for the Department for Agriculture. Other members will include the representative of the Service; representatives of relevant stakeholders and the chairperson of the County Plant Health Emergency Response Committees (CPHERC).

(c) **Phytosanitary Secretariat**

The Phytosanitary Secretariat shall be domiciled at the Service and shall be responsible for secretariat duties, communication and facilitation within the coordination mechanism.

(d) **National and County Plant Health Emergency Response Committees**

National and County Plant Health Emergency Response Committees (NPHERC and CPHERC) shall be established in law in the Plant Health Statute and shall be responsible for coordination of National and County Plant Health Emergency Response initiatives at the National and county level respectively. CPHERC's will further be responsible for reporting and liaising with the NPHERC where national pest emergency response is required. The membership of NPHERC will comprise representatives of the Ministry, the Service, the Kenya Plant Health Protection Fund among others. The membership of the response committee at the county level will comprise representatives of the agriculture department, the Service, relevant heads of government departments at the county level and other relevant private sector players.

(e) **Kenya Plant Health Protection Fund**

A fund shall be established under relevant law to promote, protect and support innovations and best practices in plant health and plant protection at the national and county level. The management of the national and county fund shall vest with the Service and the County Governments respectively.

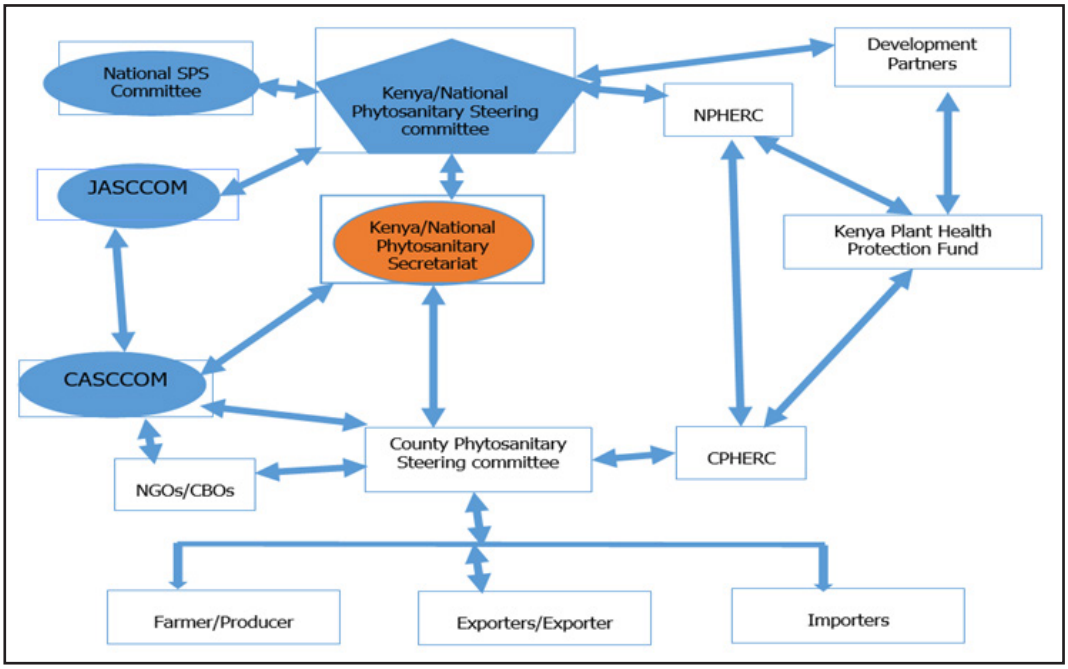


Fig. 1: Policy Implementation Coordination Framework

7.2.2. Collaboration and Partnership

(a) **National and County Governments and Departments**

Government Ministries, Department and Agencies will continue to facilitate the private sector by promoting enabling environment through regulation, development and service provision in line with their respective mandates. The Ministry of Agriculture and Livestock Development will be responsible for accounting for overall policy implementation. The Ministry Trade, Investments and Industry and the Ministry of Environment and Forestry will continue undertaking their respective roles in line with their mandates.

(b) **The Kenya Plant Health Inspectorate Service and other Public Agencies**

The Kenya Plant Health Inspectorate Service and other key public agencies

in Agriculture including the Agriculture and Food Authority, Kenya Bureau of Standards will discharge their respective mandates and work with the National and County Governments and private sector actors. Collaboration and partnership will be enhanced through synergy in approaches between the Service and other public agencies.

(c) **Non-State Actors**

Non-state actors will enhance efficiency and effectiveness in undertaking phytosanitary and phyto-related responsibilities by the producers of various agricultural commodities. All other non-state actors along the various commodity supply chains undertake collaboration and partnership in marketing of agricultural commodities and provision of related services. For effective provision of services related to phytosanitary such as quality assurance, linking producers to markets and capacity building is critical.

(d) **Development Partners**

The development partners may support technical and development cooperation; resource mobilization and funding for National Phytosanitary Policy implementation and programmes and supporting capacity building of stakeholders.

7.3. Resource Mobilization

Successful implementation of this National Phytosanitary Policy will require adequate and reliable funding for implementation of policy interventions and policy coordination by both levels of government with the support of financial institutions, development partners, and the private sector. Committing and use of financial resources for specific policy interventions will be the obligation of the various actors in accordance with the roles and responsibilities assigned in the policy implementation matrix (See Annex 1). State actors' financial commitment and expenditure will draw from Government allocations at both levels and will focus on creation of an enabling environment through regulation, capacity enhancement and coordination.

Partnership with bilateral and multi-lateral development partners in mobilizing financial support for phytosanitary capacity enhancement for technical and infrastructural development such as laboratories and diagnostic facilities will be pursued. In addition, incentives to promote and enhance private sector capacity in improving phytosanitary systems will be prioritized.

7.4. Monitoring, Evaluation and Reporting

For successful implementation of the National Phytosanitary Policy, a monitoring and evaluation (M&E) framework will be developed as an integral component to ensure the policy objectives are achieved in a cost effective, coordinated, and harmonized approach at both the national and county levels. The Ministry in charge of Agriculture in collaboration with the County Governments, relevant implementing Ministries, Departments and Agencies (MDAs), private sector and other stakeholders will develop an M&E framework for tracking and assessing key results areas under the policy.

The M&E framework is expected to be consistent with the National Integrated Monitoring and Evaluation Systems and have clear terms of reference for relevant stakeholders in data collection and reporting at all levels. The responsible institutions will include the Ministry, the Service, the County Governments and the organs under the coordination framework.

7.5. Communication Framework

Successful implementation of the National Phytosanitary Policy will depend greatly on sound, effective and efficient communication system. The Ministry responsible for agriculture will develop a communication framework for implementation of the policy. The framework will facilitate an effective information flow between the National and County Governments, within the National Government, among County Governments, between both levels of government and the private sector, farmers, the public, media and other stakeholders in phytosanitary sector. Efficient communication will afford opportunities for public dialogue and knowledge sharing for decision making and evidence-based planning at all levels.

7.6. Policy Review

This policy shall be reviewed after ten years or as need arises.

ANNEXES

Annex 1: Summary of Policy Interventions and Implementation Strategies

Policy intervention	Lead/ Responsible institutions	Expected outputs/ outcomes	Timeline
Thematic area: Phytosanitary systems			
Specific policy objective: Strengthen the phytosanitary system for effective pest risk mitigation and management.			
National level			
Strengthen coordination and resourcing functions on pest risk analysis, border control and management, pest surveillance and reporting, early warning and response and pest diagnostics and identification.	MOALD, KEPHIS, KALRO, KEFRI, Donor partners	National phytosanitary coordination and resourcing functions on pest risk analysis, border control and management, pest surveillance and reporting, early warning and response strengthened	Medium term (3-7 years)
Enhance enforcement of quarantine measures to mitigate the introduction, establishment and spread of plant pests	KEPHIS, Crop Protection and Food Safety Directorate-MOALD	Quarantine measures enforced	Continuous

Policy intervention	Lead/ Responsible institutions	Expected outputs/ outcomes	Timeline
In collaboration with the private sector, facilitate timely registration and approval of pest control products for minor crops and during emergency situations.	MOALD, KEPHIS, PCPB, AAK, Private sector actors	Timely registration Availability of pest control products	Continuous
Establish a system of official controls to provide for certification of organically produced plant products	MOALD, KEPHIS, KOAN, KIOF, Private sector actors,	Official controls established	Medium term (3-7 years)
Promote establishment and certification of quarantine, bio-containment and other related facilities and infrastructure for the application of phytosanitary measures.	MOALD, KEPHIS, Private sector actors,	Facilities and related infrastructure established	Medium term (3-7 years)
County level			
Undertake pest surveillance, reporting, early warning, rapid response and management	Department responsible for agriculture, farmers, private sector actors	Pest surveillance, reporting, early warning, rapid response and management undertaken	Continuous

Policy intervention	Lead/ Responsible institutions	Expected outputs/ outcomes	Timeline
Promote technology transfer, adoption and use of sustainable integrated pest management strategies and Good Agricultural Practice (GAP).	Department responsible for agriculture, farmers, private sector actors	Technology adopted and utilized	Continuous
Support development of plant health capacity for pest diagnosis and identification	Department responsible for agriculture, farmers, private sector actors	Pest diagnosis and identification capacity developed	Long term (7-10 years)
In collaboration with the private sector, establish facilities and related infrastructure for the application of phytosanitary measures	Department responsible for agriculture, farmers, farmer associations, private sector actors	Facilities and related infrastructure established	Long term (7-10 years)
National and County Governments			
Establish and maintain Pest Free Areas (PFAs), Pest Free Places of Production (PFPPs) and Areas of Low Pest Prevalence (ALPPs).	MOALD, KEPHIS, Department responsible for agriculture, private sector actors , farmers	Pest Free Areas (PFAs), Pest Free Places of Production (PFPPs) and Areas of Low Pest Prevalence (ALPPs) established	Medium term (3-7 years) Long term (7-10 years) Continuous

Policy intervention	Lead/ Responsible institutions	Expected outputs/ outcomes	Timeline
Enhance and implement enforcement of containment measures to mitigate the introduction, establishment and spread of plant pests into new areas within the country	MOALD, KEPHIS, Department responsible for agriculture, private sector actors , farmers	Containment measures enforcement enhanced and implemented	Medium term (3-7 years) Long term (7-10 years) Continuous

Policy intervention	Lead/ Responsible institutions	Expected outputs/outcomes	Timeline **Short term (≤3 years)** **Medium term (3-7 years)** **Long term (7-10 years)** **Continuous**
Thematic area: Trade and Economy			
Specific policy objectives : 1. Create an effective import regulatory framework for the protection of Kenya's agriculture and environment from introduction and spread of pests and promote safe trade. 2. Strengthen the export regulatory framework for compliance to export market requirements and promote safe trade. 3. Develop and enhance phytosanitary measures to prevent establishment and spread of plant pests.			
1. Import regulation			
National Government			
Strengthen border and entry-point phytosanitary inspections and certification to prevent introduction of quarantine and invasive plant pests.	MOALD, KEPHIS, KRA, Kenya Police, KPA, NIS, KENTRADE, private sector actors (Importers, Exporters)	Border and entry-point inspections and certification strengthened	Continuous

Policy intervention	Lead/ Responsible institutions	Expected outputs/outcomes	Timeline Short term (≤3 years) Medium term (3-7 years) Long term (7-10 years) Continuous
Enforce post entry quarantine measures.	MOALD, KEPHIS, private sector actors	Post entry quarantine measures enforced	Continuous
Enhance the enforcement of phytosanitary measures for consignments on transit and transshipment.	KEPHIS	Enforcement Phytosanitary measures for consignments on transit and transshipment enhanced	Short term (≤3 years)
Institute and operationalize risk-based inspection and notification of non-compliance to the countries of origin	MOALD, KEPHIS, KRA, Kentrade, KPA, NIS, Kenya Police, Ministry of Trade, Investment and Industry	Risk based inspection instituted and operationalized and notification of non-compliance undertaken	Continuous
Promote trade facilitation in cross border trade including publication of regulatory information, cooperation with other border and cross border agencies and support the operationalization of One Stop Border Posts (OSBP).	MOALD, KEPHIS, KRA, Kenya Police, KPA, NIS, KENTRADE, private sector actors (Importers, Exporters)	Trade facilitation promoted	Continuous
Promote regional harmonization of phytosanitary procedures	MOALD, KEPHIS, KRA, Kentrade, Ministry of Trade, Investment and Industry	Phytosanitary procedures regionally harmonized	Continuous

Policy intervention	Lead/ Responsible institutions	Expected outputs/outcomes	Timeline Short term (≤3 years) Medium term (3-7 years) Long term (7-10 years) Continuous
County level			
Enhance awareness and sensitization of farmers, border communities and the general public on the official plant and plant products import procedures	Department responsible for agriculture, Department responsible for trade, KEPHIS, private sector actors, farmer associations	Understanding of plant import procedures enhanced	Continuous
Export regulation:			
National level			
Strengthen export regulatory system for enhanced compliance to international market requirements.	MOALD, KEPHIS, KRA, Kentrade, KPA, NIS, Kenya Police, Ministry of Trade, Investment and Industry, KEPROBA	Export regulatory system strengthened	Continuous
Enhance collaboration, communication and linkages in the exchange of phytosanitary technical information aimed at opening and maintaining markets	MOALD, KEPHIS, KRA, Kentrade, KPA, NIS, Kenya Police, Ministry of Trade, Investment and Industry , Ministry of Foreign affairs, KEPROBA	Collaboration, communication and linkages with international market enhanced	Continuous

Policy intervention	Lead/ Responsible institutions	Expected outputs/outcomes	Timeline Short term (≤3 years) Medium term (3-7 years) Long term (7-10 years) Continuous
Enhance export certification for plant products	MOALD, KEPHIS, KRA, Kentrade, KPA, NIS, Kenya Police, Ministry of Trade, Investment and Industry, Ministry of Foreign affairs, KEPROBA	export certification enhanced	Continuous
Promote investment in phytosanitary compliance for the export market	MOALD, KEPHIS, AFA, Kentrade, Ministry of Trade, Investment and Industry, Ministry of Foreign affairs, KEPROBA	Investment in phytosanitary compliance	Medium term (3-7 years)
Promote mechanisms for self-regulation along various value chains	MOALD, KEPHIS, AFA, Kentrade, Ministry of Trade, Investment and Industry, Ministry of Foreign affairs, KEPROBA	Mechanisms for self-regulation promoted	Continuous

Policy intervention	Lead/ Responsible institutions	Expected outputs/outcomes	Timeline Short term (≤3 years) Medium term (3-7 years) Long term (7-10 years) Continuous
County level			
Promote investment in processes that reduce phytosanitary risk and enhance compliance.	Department responsible for agriculture, Department responsible for trade, private sector actors, farmer associations	Investment in phytosanitary compliance	Long term (7-10 years) Continuous
Build capacity of farmers and private sector players at county level on compliance to market requirements.	Department responsible for agriculture, private sector actors, farmer associations	phytosanitary capacity to county farmers and private sector players enhanced	Continuous
Domestic containment and management of plant pests			
National and County Government			
Strengthen internal containment mechanisms for regulated materials.	MOALD, KEPHIS, County Department responsible for agriculture, Department responsible for trade, NIS, Kenya Police, private sector actors, farmer associations	Internal containment mechanisms strengthened	Short term (≤3 years)

Policy intervention	Lead/ Responsible institutions	Expected outputs/outcomes	Timeline Short term (≤3 years) Medium term (3-7 years) Long term (7-10 years) Continuous
Implement and promote sustainable and safe pest management strategies in the county and country	MOALD, KEPHIS, County Department responsible for agriculture, AAK, private sector actors, farmer associations	Sustainable and safe pest management strategies adopted	Continuous
Establish mechanisms for safe movement and disposal of agricultural plant materials.	MOALD, KEPHIS, County Department responsible for agriculture, Department responsible for environment, private sector actors, farmer associations,	Mechanisms for safe movement and disposal of agricultural plant materials developed	Long term (7-10 years)
Institute and operationalize emergency response and reporting structure for pest emergencies at national and county levels.	MOALD, KEPHIS, County Department responsible for agriculture, NIS, National Youth Service, Kenya Police, private sector actors, farmer associations	Emergency response and reporting structure for pest emergencies instituted and operationalized.	Medium term (3-7 years)

Policy intervention	Lead/ Responsible institutions	Expected outputs/ outcomes	Timeline Short term (≤3 years) Medium term (3-7 years) Long term (7-10 years) Continuous
Thematic area: Policy, Legal and Institutional Framework			
Specific policy objectives : 1. Strengthen the regulatory framework for phytosanitary systems. 2. Develop mechanisms for coordination, information sharing and partnerships in phytosanitary systems.			
1. Policy and legal Framework			
National level			
Review the Plant Protection Act Cap 324 and other related laws to strengthen the regulatory environment and align to the Constitution of Kenya, 2010, international and regional conventions/ agreements and international best practice	MOALD, KEPHIS, Attorney General office, Parliament	Reviewed plant protection Act	Short term (≤3 years)
Harmonize legislations on phytosanitary matters with the aim of streamlining service delivery and related costs.	MOALD, KEPHIS, Attorney General office, Parliament, private sector actors	Reviewed phytosanitary related legislations	Medium term (3-7 years)
Strengthen Kenya's participation in regional and international phytosanitary fora including standard setting and harmonization to represent Kenya's interests.	MOALD, The Ministry of Trade, Investment and Industry, KEPHIS, Parliament, private sector actors	Participation at international phytosanitary for a strengthened	Continuous

Policy intervention	Lead/ Responsible institutions	Expected outputs/ outcomes	Timeline Short term (≤3 years) Medium term (3-7 years) Long term (7-10 years) Continuous
County level			
Review existing county legislation to align with the reviewed phytosanitary legislation framework.	County Department responsible for agriculture, County Assembly	Reviewed County legislation	Continuous
Develop phytosanitary policy implementation framework.	County Department responsible for agriculture, County Assembly	Reviewed County legislation	Continuous
2. Phytosanitary Institutional framework			
National level			
Support multi-sectoral technical working groups	MOALD	Technical working groups reports	Short term (≤3 years)
Support development of phytosanitary information repository and sharing.	MOALD, KEPHIS	Phytosanitary Repository developed	Long term (7-10 years)
County level			
Coordinate plant health matters at the county level.	County Department responsible for agriculture,	Coordination Mechanism in place	Continuous
Support private sector actors involved in phytosanitary matters	County Department responsible for agriculture,	County phytosanitary systems enhanced	Continuous

Policy intervention	Lead/ Responsible institutions	Expected outputs/ outcomes	Timeline Short term (≤3 years) Medium term (3-7 years) Long term (7-10 years) Continuous
National and County Governments			
Develop a coordination mechanism and framework for institutional partnerships and infrastructure sharing.	MOALD, County Department responsible for agriculture,	Coordination mechanism in place	Medium term (3-7 years)
Strengthen collaborations and partnerships among stakeholders to enhance pest management at County and country level.	County Department responsible for agriculture	Collaborations and partnerships developed	Continuous

Policy intervention	Lead/ Responsible institutions	Expected outputs/ outcomes	Timeline: Short term (≤3 years) Medium term (3-7 years) Long term (7-10 years) Continuous
Thematic area: Phytosanitary capacity in Kenya			
Specific policy objectives : Support the development and operation of an effective phytosanitary system through adequate resourcing, infrastructural and human capacity building			
National level			
Strengthen the human resource capacity for improved delivery of phytosanitary services including entrenching phytosanitary courses in the education system at tertiary level	MOALD, Min of Education, Science and Technology	Phytosanitary courses entrenched at tertiary levels Mainstreamed professional development system	Short term (≤3 years) Continuous
Mainstream continuous professional development and succession management and establish centers of excellence to train national, regional and international plant health practitioners.	MOALD, Min of Education, Science and Technology KEPHIS	Centres of excellence established	Short term (≤3 years) Continuous
Undertake capacity building of county staff, farmers and private sector actors	MOALD, Min of Education, Science and Technology	County staff, farmers and private sector actors trained	Continuous

Policy intervention	Lead/ Responsible institutions	Expected outputs/ outcomes	Timeline: Short term (≤3 years) Medium term (3-7 years) Long term (7-10 years) Continuous
Develop and improve phytosanitary infrastructure including development of public and private laboratories, phytosanitary treatment and inspection facilities and associated infrastructure; systems of proper maintenance of facilities	National Treasury, MOALD	Modern and efficient phytosanitary infrastructure developed and improved	Continuous
County level			
Develop and improve phytosanitary infrastructure along value chains including development of public and private laboratories, phytosanitary treatment and inspection facilities and associated infrastructure at county level	National Treasury County Department responsible for agriculture, County Assembly, County Department responsible for development , developing partners, private sector actors	Modern and efficient phytosanitary infrastructure developed and improved	Continuous

Policy intervention	Lead/ Responsible institutions	Expected outputs/ outcomes	Timeline: Short term (≤3 years) Medium term (3-7 years) Long term (7-10 years) Continuous
National and County Governments			
Provide sufficient funding and develop mechanisms for sustenance of phytosanitary systems and adequately implement plant health matters at county and country level.	National Treasury County Department responsible for agriculture, County Assembly, County Department responsible for development , developing partners, private sector actors	Well-funded phytosanitary systems and operations	Continuous
Undertake awareness creation, training and knowledge dissemination on plant health matters to the National and County Governments technical staff, farmers and private sector actors and develop a framework for sharing information between actors	CS MOALF&C County Governments KEPHIS KALRO Relevant stakeholders	Well capacity built actors Established framework for information sharing	Continuous Short term (≤3 years)

Policy intervention	Lead/ Responsible institutions	Expected outputs/ outcomes	Timeline Short term (≤3 years) Medium term (3-7 years) Long term (7-10 years) Continuous
Thematic area: Cross cutting and Emerging issues			
Specific policy objective: **Create an effective mechanism for responding to cross cutting and emerging issues mitigating their impact on phytosanitary systems**			
National level			
a. Develop a mechanism for prioritization of research and innovation and enhance capacity to respond to phytosanitary issues including emergency situations	MOALD, Min of Education, Science and Technology KALRO KEPHIS	Prioritized research, innovation and capacity development	Short term (≤3 years)
c. Strengthen ICT systems that support phytosanitary in line with emerging trends, risks and demands	MOALD, Min of Education, Science and Technology Min of ICT	ICT systems strengthened	Short term (≤3 years) Continuous
County level			
Support protection of intellectual property rights for innovations related to plant health from the County	County Department responsible for agriculture, County Department responsible for trade	Intellectual property rights for innovations related to plant health patented	Short term (≤3 years)

Policy intervention	Lead/ Responsible institutions	Expected outputs/ outcomes	Timeline Short term (≤3 years) Medium term (3-7 years) Long term (7-10 years) Continuous
Embrace adoption and use of phytosanitary ICT systems in line with emerging trends, risks and demands	County Department responsible for agriculture, County Department responsible for ICT,	Use of phytosanitary ICT systems adopted	Medium term (3-7 years)
Develop and improve mechanisms for mitigation and resilience to emerging issues related to climate change and external shocks	responsible for agriculture, County Department responsible for environment, County Department responsible for trade	Mechanisms developed and improved	
National and County Government			
Support research and innovation to respond to phytosanitary issues including emergency situations	County Department responsible for agriculture, County Department responsible for education	Research, innovation and capacity development promoted	Short term (≤3 years) Continuous

Policy intervention	Lead/ Responsible institutions	Expected outputs/ outcomes	Timeline Short term (≤3 years) Medium term (3-7 years) Long term (7-10 years) Continuous
Establish a structured mechanism for utilization, uptake, technology transfer for dissemination and feedback of phytosanitary research outputs.	CS MOALF&C KALRO KEPHIS	Mechanism in place	Short term (≤3 years)
Establish a structured mechanism for mitigation and resilience to climate change.	MOALF&C, KEPHIS, CECM responsible for agriculture KEPHIS KALRO, NEMA	Mechanisms for mitigation against climate change	Short term (≤3 years) Continuous
Develop a robust rapid response system for emerging issues and external shocks.	MOALF&C, KEPHIS, CECM responsible for agriculture KEPHIS KALRO	Robust rapid response system developed	Short term (≤3 years) Continuous
Collaborate with development partners, private sector players and other stakeholder	MOALF&C, KEPHIS, CECM responsible for agriculture KEPHIS KALRO, other stak00eholders	Collaboration undertaken	Continuous

Annex 2: References

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