



11th European Development Fund (EDF)

“Support to CARIFORUM States in furthering the implementation of their Economic Partnership Agreement (EPA) commitments and in meaningfully reaping the benefits of the Agreement”

SANITARY AND PHYTOSANITARY MEASURES (SPS) PROJECT

Development of National Agricultural Health and Food Safety Policy and Action Plan for Antigua and Barbuda

**AGRICULTURAL HEALTH AND FOOD
SAFETY POLICY AND IMPLEMENTATION
PLAN FOR ANTIGUA AND BARBUDA**



Submitted by: Stacy Rose, Consultant – June 18, 2023

Approved by: The Cabinet of Antigua and Barbuda – March 27, 2024



CARIFORUM

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ABBREVIATIONS AND ACRONYMS

ABBS	Antigua and Barbuda Bureau of Standards
AHFS	Agricultural Health and Food Safety
BSc	Bachelor of Science
CAHFSA	Caribbean Agricultural Health and Food Safety Agency
CARICOM	Caribbean Community
CARPHA	Caribbean Public Health Agency
CBD	Convention on Biological Diversity
CBH	Central Board of Health
CCAHFSAB	Coordinating Council on Agricultural Health & Food Safety for Antigua & Barbuda
CCP	National Codex Contact Point
CCPHD	Committee of Caribbean Plant Health Directors
CODEX	Codex Alimentarius Commission
CPDN	Caribbean Plant Diagnostic Network
CPHD	Caribbean Plant Health Directors
CRFM	Caribbean Regional Fisheries Mechanisms
CROSQ	CARICOM Regional Organization for Standards and Quality
EEZ	Exclusive Economic Zone
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
GCSI	Greater Caribbean Safeguarding Initiative
GDP	Gross Domestic Product
HACCP	Hazard Analysis Critical Control Points
IICA	Inter-American institute for Cooperation on Agriculture
IPM	Integrated Pest Management
IPPC	International Plant Protection Convention
ISO	International Organization for Standardization

ISPM	International Standards for Phytosanitary Measures
MoFAATBA	Ministry of Foreign Affairs, Agriculture, Trade & Barbuda Affairs
MoFCGPPP	Ministry of Finance & Corporate Governance & Public-Private Partnerships
MoHWSTE	Ministry of Health, Wellness, Social Transformation & The Environment
NEP	National Enquiry Point
NPPO	National Plant Protection Organisations
NQI	National Quality Infrastructure
OECS	Organization of the Eastern Caribbean States
OIE	Office International des Epizooties
PAHO	Pan American Health Organization
Ph.D.	Doctor of Philosophy
PPD	Plant Protection Division
PSIP	Public Sector Investment Program
PVS	Performance, Vision, Strategy
SPS	sanitary and phytosanitary
Sq.	square
TBT	Technical Barriers to Trade Agreement
UK	United Kingdom
USA	United States of America
USDA-APHIS	US Department of Agriculture Animal and Plant Health Inspection Service
WHO	World Health Organization
WOAH	World Organization for Animal Health
WTO	World Trade Organisation
WTO-SPS	Agreement on Sanitary and Phytosanitary

EXECUTIVE SUMMARY

BACKGROUND

Globally, there has been a significant emphasis placed on the safety and wholesomeness of food, as well as pest and disease-free products entering markets of importing countries, given the proliferation of foodborne illnesses, zoonoses, pests, and disease outbreaks, which threatens public health and the agricultural sector and environment, respectively. However, these requirements place domestic agri-food producers in CARIFORUM countries such as Antigua and Barbuda at a disadvantage as they are typically unable to meet or comply with international sanitary and phytosanitary (SPS) standards for trade in food, agriculture, and fisheries products. This is compounded by inherent challenges of small-scale production and food systems, which also significantly impact the viability of agri-food production and the ability to export agri-food commodities competitively. It is therefore incumbent on countries to make investments in Agricultural Health and Food Safety (AHFS) systems as part of the broader strategy to improve agricultural growth and development, thereby enabling exporters to take advantage of external markets.

In this regard, the 11th European Development Fund (EDF) SPS Measures Project is assisting the Government of Antigua and Barbuda to strengthen its policy framework for AHFS. The Project seeks to build on the advances made under the 10th EDF SPS Measures Project to further increase compliance by CARIFORUM States with international SPS measures, standards and procedures to improve opportunities for international and regional market access. These interventions are financed by the European Union. Through this Project, the regional SPS regulatory framework has been strengthened through the development of a Regional AHFS Policy and Action Plan as well as a National AHFS Policy Framework. These Policy documents were approved at the 104th Meeting of the Council of Ministers for Trade and Economic Development (COTED) in October 2022.

The National AHFS Policy Framework is being piloted in Antigua and Barbuda to enhance the national AHFS system of Antigua and Barbuda through cooperation and coordination of all relevant actions along the entire food chain. This approach is expected to contribute to the attainment of the appropriate level of protection of human, plant, and animal health and ensure access to safe and nutritious food and optimum trade facilitation of agricultural and food products.

POLICY SCOPE

The scope of this Agricultural Health and Food Safety Policy considers:

- All foods that are produced domestically or imported into Antigua and Barbuda, whether processed, semi-processed, or raw, which is intended for human consumption and any substance which has been used in the manufacture, preparation, or treatment of “food”.

- All aspects of the food chain, from farm to table, as a continuum and include input supply, primary production (primary crop production, ornamental, livestock production and fisheries), processing, importation, distribution, sale and consumption.
- All aspects of plant health, animal health, veterinary public health and food safety, with consideration to environmental health.
- All aspects of the SPS control system, to protect human, animal, or plant life or health from risks arising from the introduction, establishment and spread of pests and diseases and from risks arising from additives, toxins and contaminants in food and feed.
- All public and private entities involved in the scientific, technical, operational and management aspects of plant health, animal health, public health, food safety and control systems in the country.
- All aspects of national, regional, and international practices, principles, guidelines, standards and agreements governing agricultural health and food safety to which Antigua and Barbuda is signatory.

GUIDING PRINCIPLES

The principles guiding the design and implementation of this policy are:

- Achieving the **Appropriate Level of Protection (ALOP)** will be the focus whilst ensuring compliance with all international obligations.
- Farm to table principle** is adopted to ensure that the entire food chain is considered when identifying and addressing threats to human, animal, plant and environmental health.
- Inclusiveness** will ensure the involvement of all relevant stakeholders that are impacted by AHFS, including public sector actors, the food industry, private sector, producers, consumers, etc.
- Traceability** ensures that the source of a threat can be identified wherever it is along the food chain and primary responsibility ensures accountability.
- Transparency** ensures the publication and availability of all applicable regulations to all stakeholders and participants in the agri-food chain.
- Sustainability** will be built into all interventions from the outset so that outcomes will be assured long after external support has ended.
- All interventions will be targeted and focused to ensure that they are realistic and achievable with the available resources.
- Harmonisation** with global and regional best practices and standards will ensure compatibility and integration into the world agri-food trading system.
- Risk-based, science-based and data-driven** decision-making will ensure rational and WTO-compliant outcomes.
- Coordination and collaboration** of AHFS regulatory institutions in oversight of the agri-food system will be preferred to fragmented institutional responsibility.

POLICY VISION

Antigua and Barbuda's agricultural health and food safety system provides adequate levels of protection of human, plant, animal, veterinary public and environmental health, improved food and nutrition security, and optimum facilitation of intra-regional and international agri-food trade.

POLICY GOAL

The goal of the Agricultural Health and Food Safety Policy is to safeguard human, animal, plant and environmental health and food safety systems and facilitate trade through the application of science-based principles and risk management approaches, enabled by an integrated institutional framework, effective interagency collaboration and appropriate legislation, as well as a strengthened public/private sector partnership.

POLICY OBJECTIVES

The objectives of the policy are to:

- i. Modernise and harmonise the agricultural health and food safety legislative and regulatory frameworks in line with international standards.
- ii. Improve inter-agency collaboration, and coordination of the design and management of all agricultural health and food safety measures and actions in an integrated and comprehensive way along the entire food chain.
- iii. Review and modernise organizational structures of Competent Authorities to effectively execute their mandates in line with international standards and best practices.
- iv. Create an evidenced-based agricultural health and food safety system by enhancing the technical capabilities of Competent Authorities to apply sanitary and phytosanitary measures transparently.
- v. Provide sustainable financing for the efficient management and operation of the agricultural health and food safety system.
- vi. Enhance the capacity of the food chain, from farm to table, to supply safe food for sale and consumption.
- vii. Raise awareness about agricultural health and food safety in a coordinated manner, thereby minimising the risks and incidences of the introduction of pests and diseases and outbreaks of foodborne illnesses.

The policies aligned with each objective are elaborated below.

MODERNISED LEGISLATIVE AND REGULATORY FRAMEWORKS

Modern AHFS systems must include adequate legislation that *inter alia*, empowers regulatory authorities to tackle problems that can be caused by pest and disease outbreaks and the sale of unsafe food, defines the roles and responsibilities of government agencies having oversight of the SPS control system, avoid an abuse of power, and defines the procedures for enforcement. The policy will seek to strengthen the legislative and regulatory frameworks that underpin the AHFS system and ensure its harmonization with international agreements, standards and

guidelines. It will also seek to improve the capacity to enforce proposed, new and existing legislation to ensure compliance on all matters related to AHFS.

ENHANCED COORDINATION OF AGRICULTURAL HEALTH AND FOOD SAFETY FUNCTIONS

The AHFS system is multidimensional comprising of *inter alia*, animal health, plant health and food safety dimensions and several public and private sector stakeholders who tend to have overlapping roles with inconsistencies and gaps in their coverage. The policy, therefore, emphasizes coordinated planning and execution of functions and activities by AHFS bodies in an integrated manner to ensure maximum effectiveness and efficiency of resources for both the public and private sectors. Effective coordination among relevant Government institutions, as well as improved interaction between public and private sector stakeholders with an interest in SPS issues, are critical to reduce information gaps, minimise the overlap of activities undertaken by various agencies, cost-effectively address SPS issues and ultimately improve countries' implementation of trade agreements.

MODERNISED AGRICULTURAL HEALTH AND FOOD SAFETY INSTITUTIONAL ARCHITECTURE

Provisions of the SPS Agreement require countries to be transparent in adopting SPS measures, which must be based on scientific principles and applied only to the extent necessary to protect human, animal, or plant life or health. Adhering to these provisions, as well as regulatory requirements, imply the existence of public sector institutions whose structures are fit for purpose and are adequately resourced and staffed with the requisite expertise to undertake the functions necessary to maintain credibility in the eyes of trading partners. Modernization of the organizational structures of AHFS institutions in an integrated and comprehensive manner is therefore elaborated in this policy to allow for more effective mechanisms to regulate the AHFS system. Emphasis will be placed on designing robust institutional structures that meet international standards and allow for the adoption of modern science-based WTO-compliant approaches that meet the requirements of trading partners.

ENHANCED TECHNICAL CAPABILITIES OF THE AGRICULTURAL HEALTH AND FOOD SAFETY SYSTEM

Public sector Competent Authorities invest in and operate regulatory systems, including building capacity for control, which are based on scientific and technical evidence provided by competent and certified laboratories. Strengthened controls for animal and plant health reduce the risk of the introduction of damaging plant pests and animal diseases, resulting in less frequent and less damaging outbreaks, which can potentially destroy the agricultural sector. The policy aims to strengthen the capabilities (e.g. diagnostic, surveillance, quarantine, risk analysis, inspection, emergency response, etc.) of Competent Authorities to operate a modern AHFS system, which makes decisions based on the availability of data, uses scientific principles and applies risk management in the adoption of SPS measures, policies and delivery of services acceptable to international standards.

SUSTAINABLE FINANCING OF AHFS SYSTEM

Competent Authorities require a significant investment of financial resources to operate AHFS systems, including building capacity for control and, in many cases, provision of laboratory testing and other critical infrastructure. Public sector investment in optimising SPS control systems is critical for engendering the confidence of trading partners in the integrity of exports. The policy seeks to promote the allocation of financial resources for institutional strengthening to implement legislation and effect compliance with international agreements, standards and guidelines. Investment in staffing and capacity building are promoted to ensure that the resulting institutions and their technical orientation on SPS are fit for the purpose. It also focuses on the development of financial mechanisms for the private sector, including producers and producer groups, to ensure that they can undertake investments in the agri-food supply chain to improve compliance with SPS measures, thereby providing opportunities for regional and international trade.

IMPROVED CAPACITY OF THE FOOD CHAIN TO SUPPLY SAFE FOOD

The country's agri-food sector is characterised by a strong distributive trade that imports most of the country's food, as well as many small-scale producers, processors and food operators. For the latter groups, although SPS-compliant production reduces the frequency and severity of SPS incidents, the costs and administrative burden of establishing and maintaining such systems by small-scale operators are prohibitive. The policy, therefore, promotes the adoption of quality assurance systems on farms and in processing facilities among producers and food processors. For farmers, existing systems will be evaluated, and the most appropriate system introduced for implementation. Traceability and food recall systems will be established to help protect consumers from contaminated products by doing rapid tracebacks, identifying sources of contamination and coordinating the removal of products from the marketplace in the shortest time. Capacity building will be provided to private sector players in the agri-food sector for production, processing, preparation, handling, packaging, labelling, distribution and sale of safe foods to the population.

PUBLIC EDUCATION, INFORMATION AND AWARENESS

Continuous awareness and education of the stakeholders in the agri-food sector and the general population about AHFS issues engender a higher level of responsibility for AHFS matters by both these groups. The policy promotes investment in communication and education programmes to improve awareness about AHFS issues and reduce incidences of foodborne illnesses and pest and disease outbreaks in the agri-food sector. This will foster an AHFS culture along the agri-food chain and in homes by influencing and addressing how the population thinks about AHFS issues, thereby resulting in positive behavioural changes.

IMPLEMENTATION ARRANGEMENTS

The National AHFS Policy and Implementation Plan will be implemented over an initial five-year period, from 2023 to 2028. The implementation framework involves actors from the public sector, private sector, civil society, international development partners and regional bodies. An emphasis will be placed on greater coherence, coordination and integration of actions, accountability of all stakeholders and efficient allocation of resources in the operationalization of the National AHFS Policy and Implementation Plan.

The National AHFS Policy and Implementation Plan will be executed across two Ministries, *MoFAATBA and MOHWSTE*, and their respective agencies underpinned by a clear mechanism for inter-ministerial/inter-agency coordination. Oversight and coordination of policy implementation will be undertaken by the CCAHFSAB as per its mandate, until the Food Safety Act is promulgated, and the Food Safety Advisory Board is established to undertake this function. A Project Management Team reporting to the CCAHFSAB/Food Safety Advisory Board will be appointed to manage the day-to-day execution of the Implementation Plan. The Animal Movement and Disease Advisory Council and National Plant Protection Board will oversee matters on Animal Health and Plant Protection, respectively, as per their legislation.

The implementation of the National AHFS Policy and Implementation Plan will require the development of a legislative agenda that will include:

- Promulgation of the Food Safety Bill and Integrated Chemicals Management Bill, which are currently in draft.
- Review of all consequential legislation and regulations impacting AHFS to ensure alignment with the Plant Protection Act of 2012 and the Animal Health Act of 2017, as well as the Food Safety Bill.
- Development of Regulations to give effect to various provisions in legislation for Food Safety, Animal Health and Plant Protection.

A Communications Programme will be developed and implemented by the CCAHFSAB/Food Safety Advisory Body in collaboration with the Plant Protection Board and Animal Movement and Disease Advisory Council to promote public awareness about the AHFS initiatives being implemented under the policy.

MONITORING AND EVALUATION

The National AHFS Policy and Implementation Plan is underpinned by an indicator framework, which establishes specific indicators to measure and track its performance. The framework consists of impact and output indicators. At a higher level, the impact indicators are aligned with the goal of the policy. Studies will be undertaken to quantify the baseline and consultations held with CCAHFSAB/Food Safety Advisory Board to set targets after the baseline has been assessed. The output indicators are found in the Implementation Plan and are linked to actions, which are each aligned to a strategy.

1.0 BACKGROUND

The international agri-food trade has been evolving over the past three decades since countries' accession to the World Trade Organization (WTO). The network of food and agricultural trade has become denser, with more countries trading with each other, including greater participation of low and middle-income countries, from groupings such as CARIFORUM. Despite the liberalisation of trade and opportunities for greater markets, exporters in many CARIFORUM countries, including Antigua and Barbuda, face significant barriers to market entry in the form of sanitary and phytosanitary (SPS) measures, in addition to their inherent difficulties in the production of food and agricultural products.

This is because importing countries have placed significant emphasis on the safety and wholesomeness of food and pest and disease-free products entering their markets, given the proliferation of foodborne illnesses, zoonoses, pests, and disease outbreaks, which threatens public health and the agricultural sector and environment, respectively. This has resulted in reduced access to global and regional markets for CARIFORUM countries due to insufficient capacity to comply with the SPS measures that trading partners require.

National agricultural health and food safety (AHFS) systems and domestic agri-food producers in CARIFORUM countries such as Antigua and Barbuda are typically unable to meet or comply with international SPS standards for trade in food, agriculture, and fisheries products. This is compounded by inherent challenges of small-scale production and food systems, poor land and water management, susceptibility to extreme weather events, the adverse impact of climate change, high cost of inputs and distribution costs to international markets, which also significantly impact the viability of agri-food production and the ability to export agri-food commodities competitively. It is therefore incumbent on countries to make investments in AHFS systems as part of the broader strategy to improve agricultural growth and development, thereby enabling exporters to take advantage of external markets.

Stronger SPS regimes benefit countries by improving the health of national populations through the availability of safer food and reduced incidence of foodborne illness. The risk of the introduction of damaging plant pests and animal diseases, which can potentially destroy the agricultural sector, would also be reduced, resulting in less frequent and less damaging outbreaks. Therefore, strong SPS regimes would positively impact sustaining livelihoods in the agri-food sector and contribute to the food security of national populations through the growth and development of the agricultural sector, increased trade and income for producers, as well as reductions in health and treatment costs from foodborne illnesses. Additionally, tourism-dependent economies are more attractive destinations when safe food is provided to visitors.

Focus must therefore be placed on strong policy and regulatory frameworks, standards, and guidelines aligned with the requirements of international standard-setting bodies; establishment of a leadership function and accountable administrative structures; shared responsibility, coordination, and communication amongst stakeholders; adequate resources to support activities and programmes; effective risk-based operational management of SPS controls along

the entire food chain; scientific capacity to conduct risk assessments, including laboratory capacity; data information collection/generation to support risk-based control measures; SPS emergency response plans; and communication and education, including staff competence and training. The food industry, producers, processors, distributors, traders, and exporters should ensure that the agri-food chain is well managed, national regulations and standards are met and in the case of exporters, the SPS standards set by their destination markets are complied with.

Antigua and Barbuda is challenged with weak AHFS systems, which manifest in fragmented legislation, multiple jurisdictions, inadequate enforcement, limited human resources, and chronic underfunding of activities, programmes, and facilities. The small-scale nature of the agri-food sector also inhibits the private sector from making significant investments in its own food control and quality assurance systems.

In recent years, the country has benefitted from several regional and donor-led interventions that sought to address these challenges to varying extents. One such is the 11th European Development Fund (EDF) SPS Measures Project, which seeks to build on the advances made under the 10th EDF SPS Measures Project to further increase compliance by CARIFORUM States with international SPS measures, standards, and procedures to improve opportunities for international and regional market access. These interventions are financed by the European Union. Through this Project, the SPS regulatory framework has been strengthened through the development of a Regional AHFS Policy and Action Plan, as well as a National AHFS Policy Framework. These Policy documents were approved at the 104th Meeting of the Council of Ministers for Trade and Economic Development (COTED) in October 2022.

Following this activity, the National AHFS Policy Framework is being piloted in Antigua and Barbuda by the Project, to enhance the national AHFS system of the country through cooperation and coordination of all relevant actions along the entire food chain. This approach is expected to contribute to the attainment of the appropriate level of protection of human, plant, and animal health and ensure access to safe and nutritious food and optimum trade facilitation of agricultural and food products. It will also serve to bolster the Government's strategies towards further development of the domestic agricultural sector and export of food products.

2.0 SITUATION ANALYSIS

2.1 Country Context

2.1.1 Physical Environment

2.1.1.1 Geographic Location

Antigua and Barbuda, at the north of the Leeward Islands in the Eastern Caribbean, is composed of three islands: Antigua the largest island (280 square kilometres; 650 km southeast of Puerto Rico), Barbuda (161 square kilometres; 40km north of Antigua) and the smallest uninhabited island of Redonda (1.6 square kilometres; 40km south-west of Antigua).

Antigua has a relatively flat topography characterized by central plains and volcanic hills in the South-Western section of the island. The island is partly volcanic, partly coral and limestone, with a rather rugged shoreline and numerous bays. Approximately 20 km² of the country is forested. The soils are mostly comprised of clay, and together with the dry climate, limit crop production.

A deep-water harbour located in the capital city of St. John's serves as the country's main seaport and a regional centre for the movement of cargo and passengers.

2.1.1.2 Climate

Antigua and Barbuda experience a tropical maritime climate with average daily temperatures ranging from 24°C to 31°C (70° F to 88° F). There is little precipitation because of the islands' low elevations. The average annual rainfall is 1,143 millimetres (45 inches), concentrated during the period of June to November. However, in recent years, there has been a significant increase in rainfall during the hurricane season. This has led to flooding, which adversely affects crop production.

2.1.2 Socio Economic Context

2.1.2.1 Demography

The total population was estimated at 99,337¹ persons in 2021, with females accounting for approximately 52 percent and males, 48 percent of the population. The 2011 Census of Population and Housing observed that population growth in Antigua and Barbuda was to a large extent driven by migratory patterns, as opposed to mortality and fertility, which remained fairly constant between 1991 and 2011.

¹ <https://statistics.gov.ag/subjects/population-and-demography/population-projections-by-age-group-annual-1991-2026/>

2.1.3 Economic Structure and Trade

With a Gross Domestic Product (GDP) per capita of US\$15,781.4², Antigua and Barbuda is ranked as a high-income country by the World Bank. The country has a services-based economy, with tourism contributing significantly to economic activity, both directly and indirectly. Outside of the construction industry, the goods-producing sector contributes very minimally to the economy of Antigua and Barbuda.

Services play a major role in the employment of labour³, with Hotels and Restaurants contributing 17.4 percent, the public sector, 15.9 percent, and Wholesale and Retail, 11 percent of the employed labour force. Employment in the goods-producing sector is led by Construction, accounting for 8 percent of the total employed labour force. Agriculture, Forestry, and Fisheries only accounted for 2.2 percent of the employed labour force.

The overall unemployment rate for the population of persons 15 years and older was 8.7 percent in 2018. The unemployment rate for women was 9.9 percent and for men 7.3 percent in 2018.

Trade

Given the limited size of the goods-producing sector, the country consistently records a visible trade deficit, as imports outstrip exports. The country is a net food importer. Over the five years, from 2016 to 2020, the country recorded an EC\$1.6 billion trade deficit.

It should be noted that goods exports are dominated by re-exports and to a lesser extent, locally produced and exported products. The country's main trading partners are the USA, UK, Canada, China, and other CARICOM countries.

Lobster is the main food export, and is marketed in the EU, Hong Kong, mainland China, the USA, and Canada. Queen conch is also exported in limited quantities to the USA, Canada, and Sint Maarten. Coffee is normally imported, packaged, and exported to neighbouring CARICOM countries.

For crops, it should be noted that several plant commodities are currently prohibited entry into the USA. However, most prohibitions are imposed due to the absence of pest risk analyses having been done for pests generally known to affect these commodities. The Plant Protection Division (PPD) reports that many market access requests have been received from potential exporters. However, anecdotal evidence suggests that the requirements of the markets of interest for the potential exporter are onerous and discouraging, given the small operations in existence at the national level.

2.1.4 Agriculture, Fisheries and Food Sector

The Agriculture, Livestock, Forestry, and Fisheries sector mainly consists of small-scale producers supplying the domestic markets, with limited exports of a few commodities, mainly fisheries. The sector contributed to an average of 2.1 percent of GDP over the period 2012 to 2021. When

² GDP at current prices. [Antigua and Barbuda | Data \(worldbank.org\)](https://data.worldbank.org/locations/yt?locations=yt)

³ Labour Force Survey. 12 March 2020. Statistics Division, Ministry of Finance and Corporate Governance

disaggregated, the Fisheries sector is significant and a greater contributor to GDP than the agriculture, livestock, and forestry sub-sectors. On average, the Fisheries sector's contribution to GDP of 1.1 percent was higher than that of the Agriculture, Livestock, and Forestry sectors of 1 percent.

The agricultural sector has been constrained by praedial larceny, high labour costs, limited labour availability, the small size of the local market, lack of marketing structures and infrastructure, competition from imported foodstuffs, limited land tenure rights, inadequate water supplies for irrigation, a regular succession of severe droughts, destructive hurricanes and inadequate investments in agricultural health and food safety.

Crop Production

The crops sub-sector is focused primarily on the production of root crops (e.g., sweet potato, yams, cassava), solanaceous crops (e.g., sweet pepper, eggplant, tomatoes), cucurbits (e.g., pumpkin, butternut squash, cucumber, etc.), leafy vegetables (lettuce), onion, pineapples, etc. The priority crops for the Government are sweet potato, onion, sweet pepper, eggplant, tomato, pumpkin, and butternut squash. The semi-arid ecology of Antigua and Barbuda necessitates the use of irrigation. As a result, more than 80 percent of crops are grown using drip irrigation technology. There are an estimated 1,500-1,600 farmers across six extension districts.

In recent years, there have been investments in hydroponics and aquaponics⁴ by local farmers. The main crop produced is lettuce. Kale and mint are also grown by farmers using hydroponics. These systems optimise the use of water, save on space, and are also resilient to climate change. Aquaponics also generates additional income through the production and sale of cultured fish (tilapia).

The crops sub-sector contributed 0.79 percent to the total GDP in 2021, an 18 percent increase when compared to its contribution in 2017. This is attributed to a greater emphasis on crop production, especially during the pandemic, when persons displaced by the services sector had to resort to their own food production.

Livestock Production

The semi-arid ecology of Antigua and Barbuda, coupled with an undulating savannah-type landscape, provide the ideal environmental conditions for livestock rearing. The main livestock grown are sheep, goats, pigs, poultry (predominantly layers), and to a lesser extent, cattle. The country is near self-sufficient in table eggs.

The livestock sub-sector accounted for 0.33 percent of GDP, an increase of 27 percent when compared to 2017.

Fisheries

Fish resources in the country consist mainly of marine capture fisheries, with inland fisheries not being economically significant. The technology employed within the artisanal fishery is trap

⁴ <https://agriculture.gov.ag/index.php/2022/04/08/aquaponics-and-hydroponics-the-future-of-agriculture-in-antigua-and-barbuda/>

fishing. This type of fishing is conducted over the 34,000 sq. km of the Exclusive Economic Zone (EEZ), making Antigua and Barbuda one of the largest fisheries within the Organization of the Eastern Caribbean States (OECS).

Live Caribbean spiny lobster is currently exported mainly to the European Union (EU), Hong Kong, and the People's Republic of China. Queen conch is also exported in limited quantities to the USA, Canada, and more recently to Sint Maarten. Fresh fish (snappers, groupers, red hind, etc.) was exported mainly to the EU up to 2012 when approval was revoked due to the issue of ciguatera fish poisoning in the north-eastern Caribbean.

The facilities for the processing of fish for the export market have in place approved Hazard Analysis Critical Control Points (HACCP) plans, as required for export to the EU, USA, and Canada. These are assessed by the Fisheries Division, which is the National Competent Authority for the export of fish and fishery products, as well as by the Directorate-General for Health and Food Safety in the case of the EU.

There are four fisheries complexes in Antigua and one in Barbuda with cold storage, ice-making facilities, etc., which comply with EU requirements for landing sites. The fisheries sector is challenged by overfishing, poaching, chronic problems with fish poisoning (i.e., ciguatera, particularly off the Redonda Bank), importation of cheaper fish from other CARICOM countries, limited investment capital to equip boats for deep sea fishing and limited capacity to meet health and safety standards in external markets.

The Fisheries sub-sector makes the greatest contribution to agriculture and fisheries GDP. In 2021, it accounted for 1.33 percent of GDP, a 20 percent increase when compared to 2017.

Agro-Processing

Antigua and Barbuda's food manufacturers process several food items including rum, meat, poultry, fish, dairy products (including ice cream), fruits and condiments (into hot pepper sauces, jams and jellies), snack food, and baked goods. Raw materials for many food manufacturers are normally sourced externally with the duty being waived or reduced. However, some cottage industries normally access their main raw materials from producers within the country due to the small volumes. Inputs such as packaging materials, food additives, and other chemicals are imported.

2.2 Agricultural Health and Food Safety Situation

2.2.1 Plant Pests and Diseases Status

The Plant Protection Division (PPD) reports that there are at least 20 regulated pests⁵ in Antigua and Barbuda. Based on field work done by the Ministry of Foreign Affairs, Agriculture, Trade & Barbuda Affairs (MoFAATBA), the Giant African Snail now occurs in 70 percent of Antigua. The Giant African Snail and Lethal Yellowing Disease of palms are not established in Barbuda.

In recent times, a planthopper, tentatively identified as being in the Cicadellidae family of insects, has negatively affected sorrel and okra crops in Antigua.

Anecdotal evidence suggests that current entry pathways for plant pests into Antigua and Barbuda are through commercial trade and movement of goods, passenger baggage, movement of regulated items and/or pests through e-commerce, mail, smuggling, and “acts of God” (e.g., hurricanes).

2.2.1.1 Cost of Pest and Diseases

The PPD has done work on the Giant African Snail and Lethal Yellowing Disease. Based on a survey conducted in 2019-2020, management of the infestation of the Giant African Snail costs individuals an average of EC\$4,468.92 annually. The Lethal Yellowing Disease has resulted in an estimated loss of 75 percent of palms since the first report of the disease in Antigua in 2012.

Country-wide assessments of the citrus greening disease have revealed that it has adversely impacted citrus plants in both Antigua and Barbuda. Most citrus plants have succumbed to the disease on both islands, leading to a loss of income for farmers. The rough lemon is the prevalent citrus variety remaining.

The Extension Division estimates that the percentage of harvestable yields that are lost to pest/disease infestation are: cucurbits- 30 percent; sweet potato- 35 percent; okra- 50-60 percent; lettuce-25 percent; and solanaceous crops- 30 percent.

⁵ Regulated pests: (i) *Rhynchophorus ferrugineus* - Red Palm Weevil; (ii) *Tuta absoluta* - tomato leaf miner; (iii) *Thrips palmi* - melon thrips; (iv) *Ganoderma zonatum* - Ganoderma butt rot; (v) *Candidatus Phytoplasma palmae* - lethal yellowing disease of palms; (vi) *Phytoplasma palmi* - lethal bronzing of palms; (vii) *Candidatus liberibacter spp.* – Huanglongbing; (viii) *Opogona sacchari* - banana moth; (ix) *Bursaphelenchus cocophilus* - Red Ring Nematode; (x) *Tephritid fruitflies* (Tephritidae); (xi) *Mycosphaerella fijiensis* - Black Sigatoka; (xii) *Omphisa anastomosalis* Guen. - Sweet potato stem borer; (xiii) *Cylas formicarius elegantulus* - sweet potato beetle; (xiv) *Euscepes postfasciatus* - scarabee weevil; (xv) *Lissachatina fulica* - Giant African Snail; (xvi) *Phytophthora palmivora* - Budrot of palms; (xvii) Citrus canker; (xviii) *Fusarium oxysporum f.sp. cubense* - Panama disease/fusarium wilt of banana; (xix) *Ralstonia solanacearum* Race 3 biovar 2 - brown rot of potato & *Ralstonia solanacearum* Race 2 - moko disease; and (xx) Citrus leprosis virus – CiLV.

2.2.2 Animal Pest and Disease Status

Due to the limited size of the livestock industry, there are no major notifiable pests and diseases affecting livestock. However, work is needed to determine the disease status of the island.

Livestock tends to be adversely impacted by ticks, especially during dry seasons. Ticks can cause Lyme disease in ruminants and cattle. Other pests include poultry mites, which may occur if the birds are grown under unsanitary conditions.

The main treatments for ticks are anti-parasite medication. Antibiotics are used only as a last resort.

2.2.2.1 Cost of Pests and Diseases

There has been no recent quantification of the costs of the impact of pests and diseases on the livestock industry. Most of the losses to livestock occur during dry periods, and not necessarily to pests and diseases.

2.2.3 Traceability System

At present, there are no traceability systems for crops or livestock produced locally. There was an attempt to develop traceability systems through a technical cooperation programme, but this was halted due to the COVID-19 pandemic.

2.2.4 On Farm Quality Assurance System

There are no on-farm certification and quality assurance systems. The challenges of introducing such systems revolve around the small size of operations, the focus of producers on the domestic market, the time-consuming nature of the process, onerous paperwork, and the lack of sufficient knowledge regarding quality assurance systems.

Good agricultural practices are encouraged and promoted among farmers to ensure consumers have the best quality products.

2.2.5 Food Contamination/Foodborne Illnesses

There are no major food outbreaks in the country. Contamination of food is normally isolated to food establishments. The main cause of contamination is normally the multi-use of cooking utensils/cutting boards, time and temperature abuse of already prepared foods. The most vulnerable sectors to a food outbreak are areas of itinerant vending, delis, and snackettes/cook shops. Financial constraints sometimes cause these establishments to take shortcuts, as opposed to installing the appropriate procedures and infrastructure.

The Central Board of Health (CBH) has established procedures to address an outbreak and works with the establishments to address the breakdown in their food safety systems. They also conduct monthly training in food safety for food establishments.

2.2.5.1 Slaughter of Animals

The slaughter of animals and storage of carcasses after slaughtering are areas of concern for food safety. Presently, the only abattoir, which is owned by Government, is in a state of disrepair. Slaughter of animals is done by butchers. Some of the challenges relating to slaughter are the inadequacy of the appropriate equipment to ably conduct slaughtering in a hygienic manner, which can lead to possible cross-contamination. Inhumane slaughtering activities, not allowing animals to rest properly (24 hours or more before slaughtering) which can lead to the quick onset of rigor mortis can ultimately affect the quality of the meat (carcass) after slaughtering. Spoilage of meat, due to poor storage is another issue post-slaughter.

2.2.5.2 Praedial Larceny

Crop and livestock theft can have negative impacts on the food chain. Farmers who spray crops with agricultural chemicals are generally knowledgeable about the withholding period before harvesting can be done. However, when items are stolen and marketed during that period, the unsuspecting consumer can be at risk of ingesting products with very high pesticide residue, which is harmful to human health.

Similarly, thieves do not know or care about the conditions of the animals that they steal. These animals can be sick, or recently treated with medication, which could pose a food safety risk to consumers. Depending on the disease, there can be transmission from animal to human, zoonosis, which can cause outbreaks, epidemics, or pandemics, and challenge medical and veterinary systems. Recently treated livestock, which has not passed the withdrawal time for medication, can also pose serious risks to food safety and human health. Although not common in Antigua and Barbuda, there is global concern with antibiotic resistance in humans, due to its use in the treatment of livestock illnesses.

2.2.6 Agro-processing

The Antigua and Barbuda Bureau of Standards (ABBS) provides specifications for processed products such as spices, sauces, honey, and other food products. Codes of practice for the general principles of food hygiene are also available from the Bureau. There are also specifications for labelling of commodities.

Agro processors are however challenged by limited ability to meet international quality standards due to inadequate application of HACCP management systems, especially for exporters; high costs of implementation of international standards; high costs and variable quality of some basic services, such as product testing and certification by the private sector; fragmentation of government agencies responsible for testing and laboratory services necessary to ensure that food exporters meet international food safety and traceability standards.

2.3 Governance Framework for Agricultural Health and Food Safety

2.3.1 AHFS Global, Hemispheric and Regional Framework

The World Trade Organization (WTO) Agreements on Sanitary and Phytosanitary (WTO-SPS) measures and Technical Barriers to Trade (TBT) encourage governments to base their national measures on the international standards, guidelines, and recommendations developed by relevant international organisations. These organisations include, for food safety, the joint FAO/WHO Codex Alimentarius Commission; for animal health, the World Animal Health Organisation; and for plant health, the Food and Agricultural Organization of the United Nations' (FAO) International Plant Protection Convention (IPPC).

At the regional level, the Caribbean Agricultural Health and Food Safety Agency (CAHFSA) was established by the Revised CAHFSA Agreement signed on February 25, 2011, to establish an effective regime of sanitary and phytosanitary measures, provide regional and national support to countries in the establishment, management, and operations of national agricultural health and food safety systems; and execute actions and activities that can be more effectively and efficiently executed through a regional mechanism. Three Technical Advisory Committees are supporting the work of CAHFSA, namely, the Committee of Caribbean Plant Health Directors (CCPHD); the Committee of CARICOM Chief Veterinary Officers; and Caribbean Regional Fisheries Mechanisms (CRFM).

The CARICOM Regional Organisation for Standards and Quality (CROSQ) is a regional inter-governmental organisation established in February 2002 to facilitate the development of regional standards, promote the harmonization of metrology systems, and support the sustainable production and trade of goods and services in the CARICOM Single Market and Economy (CSME).

The Caribbean Public Health Agency (CARPHA) provides public health laboratory testing in support of surveillance, prevention, promotion, and control of important public health problems in the Region. It also coordinates responses to transboundary public health crises in the Caribbean and provides public health capacity building to enhance national capacities to deliver public health goods and services. Food safety is one of several areas of public health in which it is involved, which also includes nutrition, environmental health, mental health, and family and community health.

Antigua and Barbuda is signature to the agreements establishing CAHFSA, CROSQ, and CARPHA.

Other institutions such as FAO and WHO provide technical support to the work of member states in strengthening agricultural health and food safety systems at the international level, with the Inter-American Institute for Cooperation on Agriculture (IICA) focused on the hemispheric levels.

Figure I: International and Regional Framework Agreements for Agricultural Health and Food Safety



2.3.2 National Framework

At the national level, the institutional framework for AHFS is spread across two main ministries and their respective divisions and agencies. These are described below.

Table 1: National Institutional Framework for Agricultural Health and Food Safety

Institution	Main Functions
Ministry of Foreign Affairs, Agriculture, Trade & Barbuda Affairs (MoFAATBA)	
Plant Protection Division (National Plant Protection Organization)	The Plant Protection Division (PPD)- Ministry of Agriculture is the National Plant Protection Organization (NPPO) and carries out two main functions: (i) Plant Quarantine at the various ports of entry and (ii) regular surveillance of plants in the country for the presence of undesirable levels of pests and diseases. The PPD is responsible for the prevention of the introduction of plant pests, the protection of plant resources from plant pests, the facilitation of trade in plant and plant products, and the regulation of other matters connected to plant protection. PPD is the IPPC Contact Point and the National Enquiry Point for matters about the SPS Agreement.
Veterinary & Livestock Division	The Veterinary & Livestock Division is the National Veterinary Authority responsible for overseeing national animal health status and welfare through the various services offered. The Division

Institution	Main Functions
	certifies the health of animals and has responsibility for the import/export inspection of live animals, meats and meat products. It offers veterinary consultations, treatment and some surgical procedures for livestock animals.
<i>Fisheries Division</i>	The Fisheries Division is the National Competent Authority for the export of fish and fishery products. Concerning food safety and quality assurance, the Division provides basic fisheries infrastructure to international standards (e.g., ice-making facilities, cold storage, slipway and docking facilities and processing) at the four fisheries complexes (Rulings, Parham, Point Wharf and Barbuda Fisheries Complex). The Division also undertakes activities aimed at ensuring that safe and wholesome seafood is being traded both locally and internationally, which also includes upgrading the capabilities of fishers' seafood safety and quality assurance.
<i>Analytical Services Division</i>	The Analytical Services Division is comprised of the Government's Analytical Laboratory, located at Friar's Hill Road, Dunbar's and another analytical laboratory located at the Point Wharf Fisheries complex. The latter laboratory houses the Analytical Chemistry department, which provides the capacity for an expanded range of analyses such as heavy metals and pesticide residues. The Friar's Hill facility is comprised of the main administrative office and Microbiology and Molecular Biology departments. The Division is responsible for accurate, timely and reliable diagnostic and advisory services for both public and private sector agencies. It is currently being transitioned to the Institute of Applied Science and Research.
<i>Pesticides & Toxic Chemicals Control Board/Secretariat</i>	The Pesticides and Toxic Chemicals Control Board was established for the management of pesticides and toxic chemicals in Antigua and Barbuda. The Board is tasked with responsibility for licensing, registration, training, inspection and enforcement.
<i>Antigua and Barbuda Bureau of Standards</i>	The ABBS is the agency authorized by law (The Standards Act) to establish and maintain the national quality infrastructure (NQI – standards, testing, metrology – measurement services, certification and accreditation) in the country. The services provided under the ambit of the NQI are aimed at ensuring and protecting the health and safety of the consumer and the environment and promoting fair trading practices, in the production, import and export of goods and services. The Bureau prepares standards that are relevant to the economy of Antigua and Barbuda.

Institution	Main Functions
	ABBS hosts the National Codex Contact Point (CCP), which manages a collection of Codex Standards and other FAO and WHO publications, and Codex activities and disseminates Codex information at the national level. ABBS also hosts the National Enquiry Point (NEP) for the WTO TBT Agreement.
Barbuda Council	The Barbuda Council is the local authority that runs the internal affairs of Barbuda on a day-to-day basis. The Council has overall responsibility for supporting activities relating to agriculture and fisheries in Barbuda.
Ministry of Health, Wellness, Social Transformation & the Environment (MoHWSTE)	
Central Board of Health	Central Board of Health is a premier health regulatory agency responsible for human and environmental health, which is mandated by the Public Health Ordinance Cap. 353 of 1956. Concerning food safety, inspections are conducted at food service establishments to ensure that safe and wholesome foods are provided to the general public.
Coordinating Bodies	
Coordinating Council on Agricultural Health and Food Safety for Antigua and Barbuda	The Coordinating Council on Agricultural Health and Food Safety for Antigua and Barbuda (CCAHFSAB) was formally established by Cabinet Decision No. 42 of February 18, 2015. The Council serves to ensure that synergies are attained through the collaboration of both public and private sector agencies involved in one way or another in agricultural health and food safety to encompass the requirements of the WTO-SPS Agreement.
Plant Protection Board	The Plant Protection Board was established under the Plant Protection Act of 2012. The Board acts in an advisory capacity to the Minister and the NPPO on issues of plant protection and is responsible for: (a) recommending changes to relevant legislation as required, and recommending regulations, schedules, notices and orders to be made, issued, or amended under the Plant Protection Act 2012. (b) assisting in the determination of criteria for the declaration of a phytosanitary emergency.
Animal Movement and Disease Advisory Council	The Animal Movement and Disease Advisory Council was established by the Animal Health Act of 2017 and is responsible for: (a) proposing animal health policies and the manner of implementation; (b) proposing animal health laws or regulations to the Minister;

Institution	Main Functions
	(c) providing guidance on matters related to risk assessment and applicable international standards; and (d) such other duties and functions as may be assigned by the Minister under the Act.

2.3.3 Legislative Framework

AHFS is governed by Acts and Regulations relating to plant protection, animal health and welfare, food safety, public health, pesticide registration and standards. These Acts and their attendant regulations are administered by the MoFAATBA and MoHWSTE. The main pieces of legislation relating to animal health, plant protection and food safety (draft bill) benefitted from technical assistance provided at the regional level which aimed to ensure conformity with the main international agreements that address AHFS.

The table provides a list of the main legislations and regulations impacting AHFS.

Figure II: Legislation Impacting Food Safety in Antigua and Barbuda

Plant Protection	Animal Health	Fisheries	Food Safety and Public Health	Standards
•The Plant Protection Act, 2012 (No. 18 of 2012)	•Animal Health Act, 2017 (No. 12 of 2017) •The Animals (International Movement and Disease) Act, 1987 (Cap. 19)	•The Fisheries Act, 2006 •Fisheries Regulation, 2013	•The Public Health Act, 1992 (Chapter 353) •Food Safety Bill, 2020 (not passed as legislation) •The Pesticides and Toxic Chemicals Act, 2008 (No. 12 of 2008) •Antibiotics and Therapeutic Substances Act, 1951 (Chapter 17).	•Standards Act 2017 (No. 24 of 2017) •The Standards Regulations, 1998 (under Section 32 or the Standards Act, Cap. 411). •The Standards (Technical Regulations) Labelling of pre-packaged goods Regulations, no. 32 of 2021. •The Standards (Technical Regulations) (Labelling of Pre-Packaged Foods) Regulations. Statutory Instrument no. 33 of 2021.

2.4 Policy Issues/Challenges

Developing modern AHFS systems require specific capacities (knowledge, technical skills, operational procedures, financial resources, policies, legislation/regulations, standards, etc.) that allow actors in the value chain (e.g. producers, processors, distributors, wholesalers, retailers, consumers, etc.), organizations (e.g. government institutions, official/accredited laboratories) and systems to function properly, effectively, and sustainably to ensure the safety of imported and domestically produced food for citizens, as well as minimize the introduction of harmful pests and diseases, given the deleterious impact on the agricultural sector.

Three Performance, Vision Strategy Tools (i.e., National Plant Protection Organization, National Veterinary Services, Food Safety Services) developed by IICA were administered to the Chief Plant Protection Officer, Chief Veterinary Officer and Chief Public Health Inspector (see Appendix I for a summary of the results). These were centred on: (i) the technical capability to address current and new issues based on scientific principles; (ii) the human and financial capital to attract resources and retain professionals with technical and leadership skills; (iii) strong interaction with the private sector to be responsive to users' needs and carry out relevant joint programmes and services; and (iv) the ability to access markets through compliance with existing standards and active participation in harmonization, including the establishment of standards and recognition of the concepts of equivalence and regionalization.

The analysis revealed that while there were some competencies in the assessed areas, major recurring themes, namely, outdated organizational structures, inadequate staffing, insufficient financial investments in AHFS and inadequate physical infrastructure/facilities were highlighted in the responses from the key stakeholders as significant challenges in the AHFS system. Institutions function sub-optimally in the areas that are required for the efficient functioning of the AHFS system based on international standards, as well as the requirements of the legislation.

At the market level, there is an absence of traceability and food recall systems, on-farm quality assurance systems and proper facilities for the slaughter of animals. The maintenance of HACCP for processors is a challenge due to the small size of operations. Although there are no issues with food outbreaks, food operators still require regular capacity building to maintain food safety standards in their establishments.

These problems are compounded by the agricultural sector's low contribution to GDP and exports, which means that key investments in the enabling environment and support to the agri-food sector may be de-prioritized in favour of sectors that have a higher economic value to the country. The absence of an agricultural policy, plan, or strategy that would justify investments in AHFS cannot be downplayed as AHFS systems support the growth and development of domestic and external markets in the trade of food.

3.0 THE POLICY

3.1 Scope of Policy

The scope of this Agricultural Health and Food Safety Policy considers:

- All foods that are produced domestically or imported into Antigua and Barbuda, whether processed, semi-processed, or raw, which is intended for human consumption and any substance which has been used in the manufacture, preparation, or treatment of “food”.
- All aspects of the food chain, from farm to table, as a continuum and include input supply, primary production (primary crop production, ornamental, livestock production and fisheries), processing, importation, distribution, sale and consumption.
- All aspects of plant health, animal health, veterinary public health and food safety, with consideration to environmental health.
- All aspects of the SPS control system, to protect human, animal, or plant life or health from risks arising from the introduction, establishment and spread of pests and diseases and from risks arising from additives, toxins and contaminants in food and feed.
- All public and private entities involved in the scientific, technical, operational and management aspects of plant health, animal health, public health, food safety and control systems in the country.
- All aspects of national, regional, and international practices, principles, guidelines, standards and agreements governing agricultural health and food safety to which Antigua and Barbuda is signatory.

3.2 Policy Approach

The comprehensive and integrated food chain approach from “Farm⁶ to Fork” will ensure that the linkages and interdependence of the various AHFS elements are considered at every stage of planning and implementation and that it represents a recognised modern science-based AHFS system, which is compliant with all international obligations. The proposed approach is fully in line with and reinforces the WHO, FAO, and OIE One Health⁷ concept.

⁶ The farm in this sense extends to include the aquatic and terrestrial environment as a source of food and a source of risk to the food chain. The farm-to-table concept includes foods that are produced locally and imported.

⁷ One Health is a collaborative, multisectoral, and trans-disciplinary approach - working at local, regional, national, and global levels - to achieve optimal health and well-being outcomes by recognizing the interconnections between people, animals, plants and their shared environment. https://www.onehealthcommission.org/en/why_one_health/what_is_one_health/

3.3 Guiding Principles

The principles guiding the design and implementation of this policy are:

- xi. Achieving the **Appropriate Level of Protection (ALOP)** will be the focus whilst ensuring compliance with all international obligations.
- xii. **Farm to table principle** is adopted to ensure that the entire food chain is considered when identifying and addressing threats to human, animal, plant and environmental health.
- xiii. **Inclusiveness** will ensure the involvement of all relevant stakeholders that are impacted by AHFS, including public sector actors, the food industry, private sector, producers, consumers, etc.
- xiv. **Traceability** ensures that the source of a threat can be identified wherever it is along the food chain and primary responsibility ensures accountability.
- xv. **Transparency** ensures the publication and availability of all applicable regulations to all stakeholders and participants in the agri-food chain.
- xvi. **Sustainability** will be built into all interventions from the outset so that outcomes will be assured long after external support has ended.
- xvii. All interventions will be targeted and focused to ensure that they are realistic and achievable with the available resources.
- xviii. **Harmonisation** with global and regional best practices and standards will ensure compatibility and integration into the world agri-food trading system.
- xix. **Risk-based, science-based and data-driven** decision-making will ensure rational and WTO-compliant outcomes.
- xx. **Coordination and collaboration** of AHFS regulatory institutions in oversight of the agri-food system will be preferred to fragmented institutional responsibility.

3.4 Policy Vision

Antigua and Barbuda's agricultural health and food safety system provides adequate levels of protection of human, plant, animal, veterinary public and environmental health, improved food and nutrition security, and optimum facilitation of intra-regional and international agri-food trade.

3.5 Policy Goal

The goal of the Agricultural Health and Food Safety Policy is to safeguard human, animal, plant and environmental health and food safety systems and facilitate trade through the application of science-based principles and risk management approaches, enabled by an integrated institutional framework, effective interagency collaboration and appropriate legislation, as well as a strengthened public/private sector partnership.

3.6 Policy Objectives

- i. Modernise and harmonise the agricultural health and food safety legislative and regulatory frameworks in line with international standards.
- ii. Improve inter-agency collaboration, and coordination of the design and management of all agricultural health and food safety measures and actions in an integrated and comprehensive way along the entire food chain.
- iii. Review and modernise organizational structures of Competent Authorities to effectively execute their mandates in line with international standards and best practices.
- iv. Create an evidenced-based agricultural health and food safety system by enhancing the technical capabilities of Competent Authorities to apply sanitary and phytosanitary measures transparently.
- v. Provide sustainable financing for the efficient management and operation of the agricultural health and food safety system.
- vi. Enhance the capacity of the food chain, from farm to table, to supply safe food for sale and consumption.
- vii. Raise awareness about agricultural health and food safety in a coordinated manner, thereby minimising the risks and incidences of the introduction of pests and diseases and outbreaks of foodborne illnesses.

3.7 Expected Policy Outcome

The expected outcome of the policy is the design and management of all AHFS measures and actions in an integrated and comprehensive way along the entire food chain by ensuring science-based decisions in line with international standards and best practices and by using modern approaches and technologies to gather, process and disseminate human, plant, animal, veterinary public and environmental health intelligence and data, thereby achieving the appropriate level of protection of human, plant, animal, veterinary public and environmental health and optimum facilitation of intra-regional and international trade in agricultural and food products.

3.8 Policy Recommendations

3.8.1 Modernised Legislative and Regulatory Frameworks

***Policy Objective 1:** Modernise and harmonise the agricultural health and food safety legislative and regulatory frameworks in line with international standards.*

Policy Considerations

AHFS systems are governed by a complexity of laws and regulations, which set out the government's requirements to be met by all actors in the system to ensure the protection of human, animal, plant and environmental health as well as food safety and quality. Modern AHFS systems must include adequate legislation that *inter alia*, empowers regulatory authorities to tackle problems that can be caused by pest and disease outbreaks and the sale of unsafe food, defines the roles and responsibilities of government agencies responsible for the SPS control system, avoid an abuse of power, and defines the procedures for enforcement. Governments must harmonize their legislation with international norms, guidelines and recommendations to ensure that it can participate seamlessly in international trade and take advantage of markets to sustain the livelihood of local firms and producers.

The Government of Antigua and Barbuda has attained a level of success in promulgating legislation for AHFS, particularly as it relates to the Plant Protection Act and Animal Health Act and by drafting and hosting consultations on the National Food Safety Bill. These pieces of legislation are important to ensure the country's compliance with international norms, guidelines and recommendations. There is still further work to be undertaken in developing regulations to enact various provisions of existing and proposed legislation, as well as conducting a comprehensive review of all attendant legislation that impinges on AHFS.

Policy Recommendations

- Strengthen the legislative and regulatory frameworks that underpin the AHFS system and ensure harmonization with international agreements, standards and guidelines.
- Promulgation of Food Safety legislation, drafting and issuance of new regulations to enact various provisions of existing and proposed legislation for food safety, plant health and animal health.
- Review and update all consequential legislation and regulations to ensure relevant provisions pertaining to AHFS are fully entrenched. These include public health, traceability, water quality and safety, farmer registration, management of chemicals, handling of food, praedial larceny, etc. Focus will be placed on increasing Government's capacity to review and promulgate legislation and regulations relating to AHFS.
- Improve the capacity to enforce proposed, new and existing legislation to ensure compliance on all matters related to AHFS.

- Adopt standards, guidelines and codes of practice from standards-setting bodies, namely IPPC, WOAHA and Codex Alimentarius to strengthen governance of the AHFS system and improve compliance among the agri-food sector.

3.8.2 Enhanced Coordination of Agricultural Health and Food Safety Functions

***Policy Objective 2:** Improve inter-agency collaboration, and coordination of the design and management of all agricultural health and food safety measures and actions in an integrated and comprehensive way along the entire food chain.*

Policy Considerations

Sanitary and phytosanitary measures are multidisciplinary in that they encompass, *inter alia*, animal health, plant health and food safety dimensions. Given the number of public and private sector stakeholders involved, there is a tendency for overlapping roles with inconsistencies and gaps in coverage. Effective coordination among relevant Government institutions, as well as improved interaction between public and private sector stakeholders with an interest in SPS issues, are critical to reduce information gaps, minimise the overlap of activities undertaken by various agencies, address SPS issues in a cost-effective manner and ultimately improve countries' implementation of trade agreements.

In Antigua and Barbuda, the institutional framework for AHFS is spread across two main ministries and their respective divisions and agencies and overseen by the CCAHFSAB. Despite the existence of this body, there is a further need for institutional coordination of AHFS activities to effectively utilise human and financial resources and physical facilities, which will positively impact the agri-food sector. Additionally, the coordinating mechanism needs to be fully entrenched in legislation, with the participation of all AHFS functions.

Policy Recommendations

- Promote coordinated planning and execution of functions and activities by AHFS bodies in an integrated manner to ensure maximum effectiveness and efficiency of resources for both the public and private sectors.
- Ensure that Competent Authorities operate in a cooperative and coordinated manner, within clearly assigned roles and responsibilities, for the most effective use of resources to minimize duplication and/or gaps and to facilitate information exchange. This includes joint collection, processing and dissemination of data continuously for policy, planning and operational purposes. The integrated, comprehensive and collaborative approach along the entire food chain will be ensured by focusing on systems and processes and considering the production, processing and distribution of agricultural and food products as a seamless continuum.

- Foster cooperation and coordination through the identification of cross-cutting points, clarification of common purposes, consensus and task-based responsibilities and enhanced communication mechanisms.
- Coordinate responses to sudden emerging AHFS issues and the ability to rapidly respond to an incident in the food chain and operatively coordinate its management with other relevant national, regional and international agencies.
- Entrench the coordinating mechanism for AHFS functions in the national food safety legislation. The legislation shall clearly state the inclusion of all public sector AHFS Competent Authorities for animal health, plant health, food safety, fisheries and standards on the National Food Safety Advisory Board to ensure there is no ambiguity in the naming of the same.

3.8.3 Modernised Agricultural Health and Food Safety Institutional Architecture

Policy Objective 3: Review and modernise organizational structures of Competent Authorities to effectively execute their mandates in line with international standards and best practices.

Policy Considerations

The WTO-SPS Agreement encourages governments to base their national measures on international standards, guidelines and recommendations developed by relevant international organisations. Provisions of the SPS Agreement require countries to be transparent in adopting SPS measures, which must be based on scientific principles and applied only to the extent necessary to protect human, animal, or plant life or health, and not maintained without sufficient scientific evidence, including through an assessment of risk, which ultimately reduces arbitrariness of decisions and encourages consistent decision making.

Adhering to these provisions, as well as regulatory requirements, imply the existence of public sector institutions whose structures are fit for purpose and are adequately resourced and staffed with the requisite expertise to undertake the functions necessary to maintain credibility in the eyes of trading partners. Presently, the structures of public sector organizations delivering AHFS services in Antigua and Barbuda are outdated and inadequately staffed in critical disciplines to meet the requirements of a modern AHFS system and those of trading partners. A review of existing structures must be undertaken, with a view to designing new ones that are in line with international best practices for the country to fully meet its obligations under various international agreements, as well as enforcement of provisions in various AHFS legislation and regulations.

Policy Recommendations

- Modernize the organizational structures of AHFS institutions in an integrated and comprehensive manner to allow for more effective mechanisms to regulate the AHFS system. Emphasis will be placed on designing robust institutional structures that meet

international standards and allow for the adoption of modern science-based WTO-compliant approaches that meet the requirements of trading partners.

- Organisational structures shall be fit for purpose and facilitate greater coordination and collaboration among institutions within the AHFS system. Emphasis shall be placed on obtaining synergies in human resources, physical facilities and technical expertise to bolster AHFS services. The redesign of the institutions will inform staff complements, roles, as well as the required competencies to accomplish the objectives of the organization.
- Focus will be placed on increasing the staff complement in requisite disciplines based on new organizational structures, capacity building and provision of adequate financial resources for operations, and provision of suitable physical facilities and infrastructure, including new offices and laboratories to allow for a more efficient and effective AHFS regulatory system.

3.8.4 Enhanced Technical Capabilities of the Agricultural Health and Food Safety System

Policy Objective 4: Create an evidenced-based agricultural health and food safety system by enhancing the technical capabilities of Competent Authorities to apply sanitary and phytosanitary measures transparently.

Policy Considerations

Public sector competent authorities invest in and operate regulatory systems, including building capacity for control, which are based on scientific and technical evidence provided by competent and certified laboratories. Strengthened controls for animal and plant health reduce the risk of the introduction of damaging plant pests and animal diseases, resulting in less frequent and less damaging outbreaks, which can potentially destroy the agricultural sector. Concerning food safety, improved controls result in improved health of the population through reduced incidence of foodborne diseases and contaminants.

The technical capabilities in the public sector underpinning Antigua and Barbuda's AHFS control system are weak and inadequate to establish and apply sanitary and phytosanitary measures and science-based procedures. There are constraints in sufficiently ensuring protection from the introduction and spread of pests and diseases to the local agricultural sector. These include inadequate laboratory infrastructure/facilities, weak surveillance systems, limited capabilities for emergency response, quarantine, risk analysis, pest reporting, identification of emerging issues and utilization of technological innovation. Improving these enabling functions will be critical for Antigua and Barbuda's ability to sufficiently participate in international trade and protect its borders from pests and diseases, as well as ensure safe food for its citizens and visitors.

Policy Recommendations

- The capabilities of Competent Authorities shall be strengthened to operate a modern AHFS system, which makes decisions based on the availability of data, uses scientific principles and applies risk management in the adoption of SPS measures, policies and delivery of services acceptable to international standards.

- **Diagnostic Capability:** The system for identification of pests, diseases, zoonoses, food pathogens and contaminants shall be enhanced through the upgrading, capacitating, designation and accreditation of the Government owned laboratory network to serve as the reference laboratory for AHFS Competent Authorities.
- **Emergency Response Capability:** The capability of the AHFS Competent Authorities shall be boosted to rapidly respond to unexpected pest or disease outbreaks and incursions, or other situations that put at immediate risk, the SPS status of plants and their products and animal populations, as well as public health. Focus will be placed on improving systems and capacities and providing resources to determine, make timely decisions and respond to SPS emergencies and outbreaks of foodborne illnesses. Increased coordination and collaboration of actions will be encouraged among public sector actors, as well as the private sector in response to emergencies.

Regulations for emergency responses to pests, diseases, zoonoses and food outbreaks shall be developed and promulgated to give legal underpinning to the country's AHFS emergency response system. This includes the establishment of contingency funds for pest, disease and food emergencies, which are based on economic analysis and sustainability considerations. Emergency response plans, procedures and guidelines will be developed by Competent Authorities in response to phytosanitary and sanitary emergencies and food outbreaks.

- **Quarantine:** The capability of the NPPO and Veterinary Services shall be strengthened to prevent the entrance and spread of unwanted pests and diseases in the country. Competent Authorities shall be equipped with the relevant skills, tools and infrastructure to develop and implement quarantine procedures and programmes based on appropriate evidence taken in a transparent way to preserve the SPS status of the country and ensure that actions taken against pests and diseases are proportionate to the risk they are considered to impose.
- **Surveillance:** The capability of the AHFS Competent Authorities shall be enhanced to detect and monitor pests and diseases and verify the phytosanitary and sanitary status covered under their mandates, as well as lead a continual and systematic process of collection, analysis and interpretation of data related to food production, and the establishment of adequate policies for the control of food products based on risk.

An efficient and coordinated system of surveillance throughout the entire agri-food chain will be established for the consistent and frequent collection and monitoring of information on pests, diseases and food contaminants, as well as for neighbouring countries and trading partners. Active monitoring programmes for pests and diseases of economic and quarantine importance and foodborne illnesses/contaminants will be established to ensure that the SPS status of the country is preserved. Government shall enhance its internal capabilities to develop and implement surveillance programmes in populations of greatest risk covering pests, diseases and zoonoses, of economic and quarantine importance, including environmental hazards (e.g., invasive species), as well as foodborne diseases/illnesses.

Where necessary, for pests and diseases, procedures and standards for the recognition of pest-free areas and areas of low pest prevalence will be established to enhance trade facilitation.

- **Reporting of Pest and Disease Status:** The capacity of the NPPO and National Veterinary Services will be strengthened to actively collect and report on pest and disease status to its neighbours and trading partners, participate in global and regional pest and disease reporting systems and provide timely updates to producers and the wider public.
- **Emerging Issues:** The capability of the AHFS Competent Authorities will be enhanced to identify in advance, those phytosanitary and sanitary problems covered under their mandate and adopt prevention or control actions due to adverse emerging issues.
- **Risk Analysis:** The capability of the AHFS Competent Authorities will be strengthened to make decisions and carry out actions based on scientific principles and evidence, including the assessment, communication and management of risk. Emphasis will be placed on the employment of risk assessment techniques that identify and utilise relevant data and information, as well as incorporate scientific principles and evidence to assess and provide the basis for options to be considered by regulators to manage risks in the agri-food chain. In this regard, shared systems for the collection and management of data and information will be designed and implemented for risk assessment among regulatory agencies for AHFS.

Risk Analysis Units will be established and staffed with professional experts who are trained in requisite disciplines to implement science-based risk analysis for the application of SPS measures consistent with the WTO-SPS Agreement towards facilitating trade and safeguarding the local agri-food sector.

The Government through its Competent Authorities will jointly manage and communicate the risks in conformance with the norms and standards prescribed in Codex, OIE, IPPC and the WTO/SPS agreement.

- **Inspection Services:** The capability of the National Food Safety Service shall be enhanced to prevent the contamination of food products throughout the agri-food chain. An integrated and coordinated cross-sectoral approach shall be adopted among Competent Authorities in the planning and execution of inspection activities to improve efficiencies, optimise the use of scarce resources and reduce costs for such activities. Emphasis will be placed on improving the capacity of inspection services to conduct inspections, sampling and certification of products for local consumption, importation and exportation. A risk-based approach to food inspections shall be adopted by inspectors, where data is collected and proactively shared across the system to improve efficiency and remove barriers to trade. Inspectors shall be provided with the requisite training, tools and resources to support risk-based inspection procedures.

Where applicable, voluntary standards shall be incorporated to complement AHFS control as a mechanism to reduce the burden of inspection activities in several areas of the AHFS system.

- **Technical Innovation:** Competent Authorities shall be resourced (human, financial, physical facilities, technologies, etc.) and capacitated to update their overall service in accordance with the latest scientific advances and based on the norms, measures and standards of the IPPC, WOH, Codex Alimentarius and relevant provisions of the WTO/SPS Agreement. Operations shall be periodically reviewed, and technical innovations identified, which can improve the effectiveness of Competent Authorities to undertake their functions. Collaboration will be made with research institutions regionally and globally to provide adequate and timely scientific support for SPS concerns, capacity building, cooperative research and funding efforts.
- **Official Representation:** Ensure participation of the representatives from its SPS Competent Authorities at international meetings to ensure the country has input on critical matters impacting AHFS. Payment of membership fees will be included in the national budgets annually to ensure full membership of the country on all standard-setting bodies.

3.8.5 Sustainable Financing of AHFS System

Policy Objective 5: Provide sustainable financing for the efficient management and operation of the AHFS system.

Policy Considerations

Small island developing states such as Antigua and Barbuda are challenged by the high costs of operating robust SPS control systems that meet international standards. Competent Authorities require a significant investment of financial resources to operate these systems, including building capacity for control and, in many cases, provision of laboratory testing. Public sector investment in optimising SPS control systems is critical for engendering the confidence of trading partners in the integrity of exports. Countries that are not able to invest in robust SPS control systems tend to be disadvantaged due to the non-compliance of agri-food businesses with the requirements of export markets.

Private sector operators at all levels of the supply chain (farmers, distributors, processors and exporters) also incur significant costs of complying with regulatory requirements, such as upgrading facilities and equipment, installation of new control systems such as Hazard Analysis Critical Control Points (HACCP) and traceability, as well as the additional costs of operating them. Small-scale producers are particularly at a disadvantage, having much smaller human and working capital and cash flows to invest in SPS control measures, thereby risking exclusion from global supply chains. A strong case, therefore, exists for strengthening SPS systems by public and agri-food businesses with public resources, where the economic benefits outweigh the costs.

Policy Recommendations

- Allocate financial resources for institutional strengthening to implement legislation and effect compliance with international agreements, standards and guidelines. Investment in staffing and capacity building shall be undertaken to ensure that the resulting institutions and their technical orientation on SPS are fit for the purpose.
- Secure capital investments for strengthening and operation of the public infrastructure (such as offices, laboratories, quarantine facilities, public abattoirs, etc.) towards a capacitated and optimised AHFS system. Investment decisions shall, as far as possible, be based on economic analysis and reflect the benefits to be gained from compliance.
- Provide adequate operational resources to enable AHFS institutions to undertake their functions in an effective manner and in accordance with international standards.
- Establish and finance contingency funds for SPS emergencies. Global best practices for funding models shall be explored for the establishment and operation of the fund underpinned by economic analysis to ensure sustainability.
- Develop financial mechanisms for the private sector, including producers and producer groups, to ensure that investments can be undertaken in the agri-food supply chain to improve compliance with SPS measures, thereby providing opportunities for regional and international trade. These include lines of credit, grants and other types of concessionary financing to support capital investment in SPS-compliant production.

3.8.6 Improved Capacity of the Food Chain to Supply Safe Food

Policy Objective 6: Enhance the capacity of the food chain, from farm to table, to supply safe food for sale and consumption.

Policy Considerations

Food safety management systems ensure the safe production of food by preventing contamination with biological, chemical, or physical hazards. The responsibilities of private sector operators in the agri-food sector are to ensure that production steps are well managed, national legislation/regulations/standards are met and in the case of exporters, compliance with SPS standards set by destination markets. However, these private sector operators sustain the costs of complying with regulatory requirements associated with these systems, such as upgrading facilities and equipment, installation of new control systems such as HACCP and traceability, as well as the additional costs of operating them.

The agri-food sector in Antigua and Barbuda is characterised by a strong distributive trade that imports most of the country's food, as well as many small-scale producers, processors and food operators. For the latter groups, although SPS-compliant production reduces the frequency and severity of SPS incidents, the costs and administrative burden of establishing and maintaining such systems by small-scale operators are prohibitive. Additionally, they may derive relatively little benefit from complying with SPS requirements, especially where there is no stipulation from the markets being supplied, or the costs of compliance outweigh the revenue that can be gained.

This situation provides a case for public sector intervention to assist these small-scale operators to increase capacity and capabilities to comply with SPS standards and regulations through various interventions and programmes.

Policy Recommendations

- ***Traceability and Food Recall:*** Traceability and food recall systems shall be established to help protect consumers from contaminated products by doing rapid tracebacks, identifying sources of contamination and coordinating the removal of products from the marketplace in the shortest time.

Adequate procedures shall be implemented to facilitate the traceability of all ingredients and inputs used in the production of agricultural and food products to their source of origin and ensure that the documentation chain is always reliable and accessible during the shelf life of the products and for appropriate periods of time thereafter. The traceability activities will include the obligations of producers, processors, distributive trades and other actors in the food chain, as well as the regulatory agencies.

Appropriate digital technologies that can be shared amongst all regulatory bodies shall be identified and utilised to improve product traceability, and collection and management of data to track the product as it moves along the supply chain. This will enable data sharing amongst regulators and the introduction of approaches that greatly reduce the time it takes to identify the origin of contaminated food tied to a recall and/or outbreak. Additionally, there will be a determination of protocols for recall and the most efficient mechanisms for communication of recall information to consumers. Consultations will be held with the agri-food sector to design affordable and efficient traceability and recall systems that are suitable to the local context. Capacity building and financing will be provided for the introduction and implementation of traceability and food recall systems.

- **Quality Assurance Systems:** The adoption of quality assurance systems on farms and in processing facilities shall be encouraged among producers and food processors. For farmers, existing systems will be evaluated, and the most appropriate system introduced for implementation. For processors, technical support, grants and concessionary financing will be provided to enable them to obtain and/or maintain HACCP compliance in their plants/facilities.
- **Slaughter:** The existing abattoir will be rehabilitated to ensure that meat can be slaughtered under hygienic conditions, thereby reducing the probability of contamination of meat and meat products. Continuous training of butchers in slaughter, handling and storage of meat shall be undertaken to improve hygiene and food safety for locally produced meat and meat products.
- **Food Distributors/Importers/ Marketers/ Establishments/Operations:** Continuous capacity building in food safety practices will be undertaken for all actors in the food chain to ensure safe food to consumers, as well as the provision of concessionary financing for the improvement of facilities to the required legislative requirements and standards. Training

and sensitization will be conducted on existing legislation, regulations and guidelines impacting their operations.

- **Shared Infrastructure:** Investment will be made in public and community-managed infrastructure (markets, processing facilities, landing sites, abattoirs, chilled storage facilities) with improved and SPS-compliant conditions, based on the feasibility of such projects.
- **Capacity Building:** Capacity building will be provided to private sector players in the agri-food sector for production, processing, preparation, handling, packaging, labelling, distribution and sale of safe foods to the population.

3.8.7 Public Education, Information and Awareness

Policy Objective 7: Raise awareness about AHFS in a coordinated manner, thereby minimising the risks and incidences of the introduction of pests and diseases and outbreaks of foodborne illnesses.

The value of strong SPS systems is derived from the protection of consumers from foodborne infections, and national agriculture and ecosystems from imported invasive species, pests and diseases. However, the protection of these systems will not be fully effective unless there is continuous awareness and education of the stakeholders in the agri-food sector and the general population about AHFS issues to engender a higher level of responsibility to AHFS matters by both these groups.

Investment in communication and education programmes is therefore vital to improve awareness about AHFS issues and reduce incidences of foodborne illnesses and pest and disease outbreaks in the agri-food sector. However, accessibility of such information is vital to ensure its uptake and use by stakeholders. Advances in information and communication technologies (ICTs) provide increased opportunities to reach diverse audiences in a more cost-effective and targeted manner in real-time. Communication tools and channels which utilise ICTs can result in an increased engagement of the target audience in simplified, but impactful messages, and result in increased knowledge, when applied, result in positive social and behavioural attitudes and outcomes which benefit the AHFS system.

Policy Recommendations

- Develop and implement a joint public awareness and education programme on AHFS, targeting all segments of society, including stakeholders along the agri-food chain. Emphasis will be placed on educating respective stakeholder groups and the general public on AHFS legislation. Communication messages will be tailored to suit each type of stakeholder being targeted by the programme.

- Foster, support, and strengthen an AHFS culture along the agri-food chain and in homes by influencing and addressing how the population thinks about AHFS issues, thereby resulting in positive behavioural changes.
- Empower consumers regarding information on the occurrence of food-borne illnesses and how to reduce the incidences of these occurrences in the home, or when purchasing food from various sources.
- Integrate AHFS into the curriculum of educational institutions to improve the knowledge, attitudes and behaviours of students on AHFS matters, which can be translated into homes for greater impact.

4.0 IMPLEMENTATION FRAMEWORK

The National AHFS Policy and Implementation Plan will be implemented over an initial five-year period, from 2023 to 2028. The implementation framework involves actors from the public sector, private sector, civil society, international development partners and regional bodies. An emphasis will be placed on greater coherence, coordination and integration of actions, accountability of all stakeholders and efficient allocation of resources in the operationalization of the National AHFS Policy and Implementation Plan.

4.1 Institutional Arrangements

The National AHFS Policy and Implementation Plan will be executed across two Ministries, *MoFAATBA and MOHWSTE*, and their respective agencies underpinned by a clear mechanism for inter-ministerial/inter-agency coordination. Table 2 shows the roles and responsibilities of the main implementers.

Table 2: Implementing Divisions and Agencies for the AHFS Policy

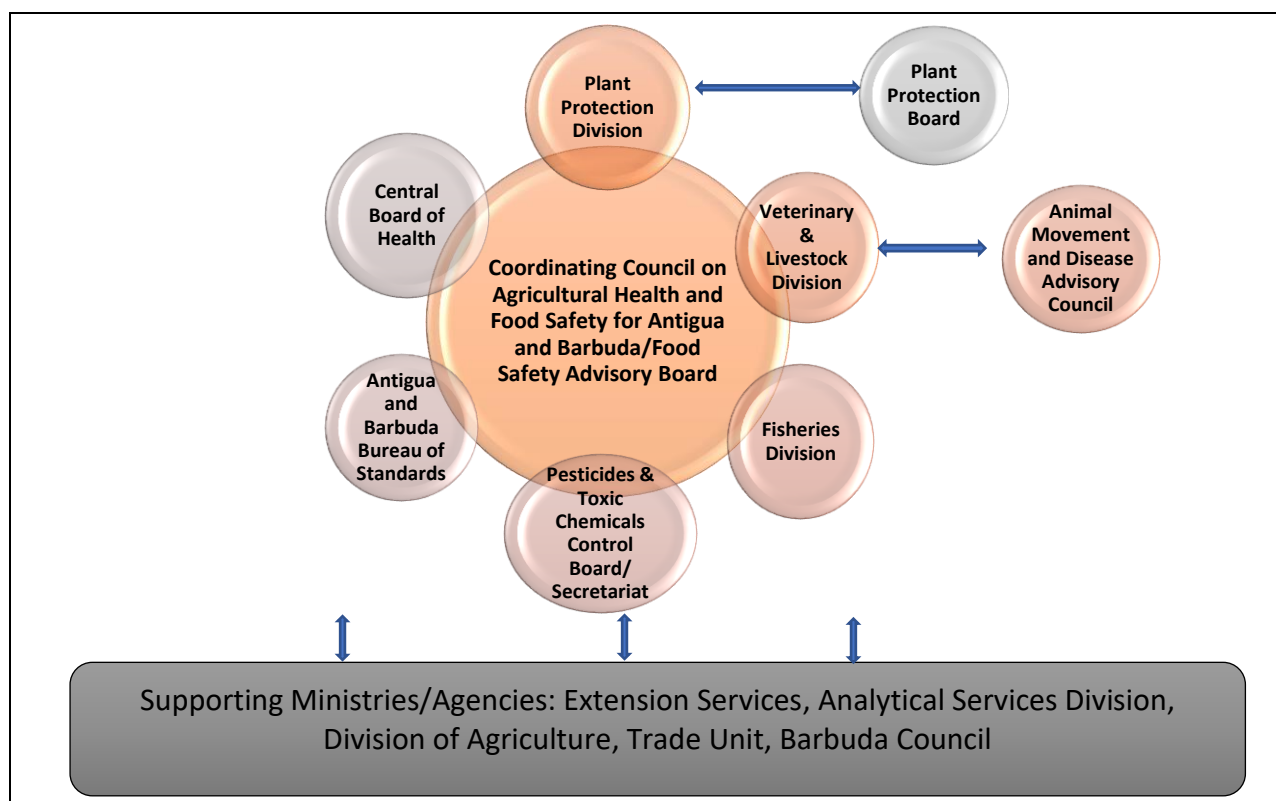
Division/Agency	Plant Protection	Animal Health	Aquatic Health	Food Safety	Diagnostic	Standards	Capacity Building/ Training	Border Protection
Plant Protection Division								
Veterinary & Livestock Division								
Fisheries Division								
Pesticides & Toxic Chemicals Control Board/ Secretariat								
Antigua and Barbuda Bureau of Standards								
Central Board of Health								
Analytical Services Division								
Extension Services								
Customs								
Trade Unit								
Barbuda Council								

Oversight and coordination of policy implementation will be undertaken by the CCAHFSAB as per its mandate, until the Food Safety Act is promulgated, and the Food Safety Advisory Board is established to undertake this function. These bodies will:

- Establish the specific roles/areas of intervention/support from the respective Ministries/entities and the specific operating modalities for inter-Ministerial coordination;
- Ensure alignment of Business Plans with the Policy; and
- Ensure alignment of contributing programmes and projects of relevant Ministries and Agencies with the Policy.

The Animal Movement and Disease Advisory Council and National Plant Protection Board will oversee matters on Animal Health and Plant Protection, respectively, as per their legislation.

Figure III: National Agricultural Health and Food Safety Coordinating Mechanism



A Project Management Team reporting to the CCAHFSAB/Food Safety Advisory Board will be appointed to manage the day-to-day execution of the Implementation Plan. The main tasks will entail:

- i. Development of Annual Workplans for the execution of the policy and plan;
- ii. Collaboration with the CCAHFSAB/Food Safety Advisory Board to monitor the progress of implementation of the policy and plan;
- iii. Collaboration with implementing agencies to identify funding sources and prepare project documents for funding;
- iv. Identification of challenges/gaps and working with the CCAHFSAB/Food Safety Advisory Board to provide solutions;
- v. Oversee the execution of the communication programme; and
- vi. Preparation of quarterly and annual reports.

4.2 Roles and Responsibilities of Stakeholders

(i) Government of Antigua and Barbuda

The roles and responsibilities of the Government of Antigua and Barbuda in the implementation of this policy are:

- Providing adequate resources for policy implementation, monitoring and evaluation.
- Reviewing, preparing and promulgating legislation and regulations pertaining to AHFS.
- Overseeing coordination of development and execution of joint work programmes, budgets and human resources for policy implementation among public sector AHFS regulators to improve synergies and reduce overlaps of activities.
- Leveraging/providing resources to improve the operating environment and technical capabilities of AHFS regulatory bodies to ensure that SPS decisions are based on scientific principles and in a transparent manner.
- Providing financial and technical resources to the private sector to ensure compliance with SPS measures for the production, processing, sale and distribution of safe food.
- Ensuring collaboration and participation among AHFS stakeholders in the public, private sector, civil society and international development partners in the implementation of the policy and implementation plan.
- Updating the agri-food chain, general public, trading partners and other relevant international bodies about developments in AHFS.

(ii) Agri-Food Chain Stakeholders

Agri-food chain stakeholders will be responsible for:

- Producing, processing, marketing, distribution and sale of safe food.
- Investing in SPS compliant facilities, processes and systems, including implementation of quality assurance and traceability systems.
- Participating in food recalls initiated by the public sector.
- Adopting and utilising good agricultural practices/good manufacturing practices, including climate resilient and environmentally sustainable practices in production/processing systems.
- Participating in training and capacity-building activities.
- Collaborating with Government to participate in AHFS and related programmes and projects.
- Participating in, and technically contributing to the work of AHFS governance mechanisms.
- Participating in communication and advocacy initiatives on AHFS matters.
- Assisting with disseminating best practices, technology transfer and innovation.

(iii) Civil Society-Led Actions

Civil society should be encouraged and empowered to:

- Build partnerships with Government and other stakeholders to participate in, strengthen, advise monitor and provide feedback on the implementation of projects, programmes and initiatives for AHFS.
- Initiate and contribute to dialogue, communication, advocacy, capacity building and governance processes.

(iv) Roles and Responsibilities of International Development Agencies

International development partners, regional and international agencies (e.g., IICA, CAHFSA, CROSQ, FAO, etc.) shall be responsible for:

- Providing technical, financial and other capacity-building support for policy implementation, monitoring and evaluation.
- Provide financial and technical support for the execution of the legislative programme for AHFS.
- Coordinating development support to optimise resources for policy implementation.

4.3 Coordination of Planning and Budgeting

Public sector implementing bodies will streamline actions into their Business Plans and budgetary processes.

Specifically, steps will be taken to ensure:

- Alignment of Business Plans with the relevant actions in the Implementation Plan, taking into consideration the timelines;
- Alignment of programmes and projects with actions in the Implementation Plan; and
- Development, strengthening and utilization of effective resource allocation mechanisms.

To achieve this level of integration within the regular planning and budgetary processes across the relevant Ministries and Agencies, sensitization and enhanced coordination among designated Competent Authorities will be required. In addition, relevant agri-food chain actors will also be encouraged to include relevant elements of the Implementation Plan into their planning cycle.

4.4 Legislative and Regulatory Framework

The implementation of the National AHFS Policy and Implementation Plan will require the development of a legislative agenda that will include:

- Promulgation of the Food Safety Bill and Integrated Chemicals Management Bill, which are currently in draft.
- Review of all consequential legislation and regulations impacting AHFS to ensure alignment with the Plant Protection Act of 2012 and the Animal Health Act of 2017, as well as the Food Safety Bill. These include the Public Health Act of 1957, the Pharmacy Act and Regulations of 1995 and the Small Holdings Act.
- Development of Regulations to give effect to various provisions in legislation for Food Safety, Animal Health and Plant Protection. Regulations for fisheries hygiene⁸ should be placed on the legislative agenda for AHFS, given the importance of fisheries exports to the national economy. Regulations are also needed for water for human consumption; water safety standards for public utilities; rainwater harvesting; value chain; traceability; registration of farmers, vendors and processors; and food handlers' certification.

Table 3: Preliminary List of Legislation to Be Reviewed

Legislation	Action
Food Safety Bill	Promulgate legislation and prepare regulations
Integrated Chemicals Management Bill	Promulgate legislation and prepare regulations
Plant Protection Act	Prepare regulations
Animal Health Act of 2017	Review legislation and prepare regulations
Public Health Act of 1957	Review legislation
Small Holdings Act	Review legislation
Fisheries Act, 2006	Review legislation
Pharmacy Act and Regulations, 1995	Review legislation
Praedial Larceny Act Cap 337	Review legislation

⁸ Headley, C. (2015). Technical Support to develop model legislation, protocols and guidelines for health and food safety related to fisheries and aquaculture in CARIFORUM States. CRFM Technical & Advisory Document. Number 2015 / 07. 10th EDF funded Sanitary and Phytosanitary (SPS) Measures Project.

4.5 Synergies With Related Policies

The AHFS Policy will be implemented in conjunction with the National Quality Policy of Antigua and Barbuda. The National Quality Policy sets out the objectives and strategies of the country regarding the development and use of Quality Infrastructure in relation to its economic and societal needs and the building of a quality culture. The specific objectives of the policy are to:

- i. Ensure that leadership structures exist, which can provide appropriate governance and institutional building;
- ii. Establish an integrative quality policy framework which supports other policies;
- iii. A legal framework which allows for the development of standards, an effective technical regulatory mechanism, certification and conformity assessment;
- iv. Guarantee that adequate physical infrastructure and as well as technical and organisational capabilities are available for the implementation of standards and the application of conformity assessment;
- v. Aid consciousness to exist among critical stakeholders, to the point where they are willing to make decisions, that leads to the creation of an environment that favours the development, alignment, establishment, implementation and maintenance of the National Quality Infrastructure; and
- vi. Support to meeting the SDGs, protecting people and the environment in a sustainable manner.

The ABBS as the main implementing agency of the National Quality Policy is also part of the CCAHFSAB. Therefore, the CCAHFSAB should promote synergies between the AHFS Policy and National Quality Policy to ensure resource optimization and efficiency gains in the implementation of both policies and plans.

4.6 Communications Programme

A Communications Programme will be developed and implemented by the CCAHFSAB/Food Safety Advisory Body in collaboration with the Plant Protection Board and Animal Movement and Disease Advisory Council to promote public awareness about the AHFS initiatives being implemented under the policy. It will ensure accountability and transparency in the implementation of the National AHFS Policy and Implementation Plan by updating stakeholders and the public about its progress.

The private sector's and civil society's involvement in the Communications Programme will be encouraged as it is critical to its success. Social media and traditional methods will be adopted to increase the impact of the Communications Programme.

4.7 Risk Analysis

The National AHFS Policy and Implementation Plan focuses on seven main policy issues and an implementation framework that underpins the policy. It is recognised that there are risks involved in the implementation of the policy and plan, such as political commitment, resource availability, institutional capacity, technical capacity, infrastructural development and stakeholder ownership.

The Risk Matrix is summarized in Table 4 below.

Table 4: Risk Matrix

Type of Risk	Description of Risk	Risk Probability	Risk Mitigation Measure/Response
Macroeconomic	Considerable fiscal constraints to finance new policies and programmes	High	- Seek financing through international development cooperation. - Prepare project profiles/documents to submit to international development partners for funding. - Work with the Ministry with portfolio responsibility for finance to programme resources for the implementation plan.
Governance	Lack of political commitment to the implementation of the policy and implementation plan	Low	- Advocacy with portfolio and other key Ministers to provide political support and commitment for approval and implementation of the policy and plan.
Institutional	Limited capacity to adequately execute policy and implementation plan	High	- Institute Project Management Team to oversee the execution of the policy and implementation plan in collaboration with the oversight committee and other implementing entities.
Institutional	Staff attrition may undermine capacity-building efforts	Medium	Develop and implement succession planning for respective functions that can be adversely impacted by the departure of staff.

5.0 FINANCING

The National AHFS Policy and Implementation Plan will be financed by Government's budgetary resources, donor funding (including technical, bilateral and multilateral cooperation) and resources from the private sector for their own actions. The CCAHFSAB/Food Safety Advisory Board will need to work with the implementing Ministries and Agencies to develop a strategy to mobilise resources and identify possible sources of funding for activities. This should involve:

- Review of budgets of Ministries and Agencies dedicated to AHFS to ensure the availability of adequate resources for agreed joint actions;
- Identification and leveraging of resources from development partners (technical, bilateral, multilateral, commercial lending, soft loans, grants, etc.), based on areas of support; and
- Packaging of projects to attract funding, engaging donors/partners at the highest level to secure their support, partnerships with research and educational institutions and bilateral partners.

Private actors in the agri-food sector will need to allocate resources toward their implementation of actions that need to be undertaken under the National AHFS Policy and Implementation Plan.

6.0 MONITORING AND EVALUATION

Monitoring and evaluation (M&E) of the National AHFS Policy and Implementation Plan is important to facilitate effective management and oversight of its implementation. Evidence generated through the monitoring process is critical in identifying problems that need intervention and can enable the prioritising and targeting of activities and resources. CCAHFSAB/Food Safety Advisory Board, in collaboration with the *MoFAATBA and MoHWSTE*, will be responsible for managing and tracking the indicators in the M&E framework for the National AHFS Policy and Implementation Plan.

6.1 Indicator Framework

The National AHFS Policy and Implementation Plan is underpinned by an indicator framework, which establishes specific indicators to measure and track its performance. The framework consists of impact and output indicators that are SMART⁹. At a higher level, the impact indicators are aligned with the goal of the policy (see Table 5). Studies will be undertaken to quantify the baseline and consultations held with CCAHFSAB/Food Safety Advisory Board to set targets after the baseline has been assessed.

Table 5: Impact Indicators

Indicator	Means of Verification
Performance Index of Plant Health Service increased	PVS tool score for NPPO
Performance Index of Animal Health System increased	PVS tool score for National Veterinary Services
Performance Index of Food Safety System increased	PVS tool score for Food Safety Services
Incidence of reported foodborne illness reduced	<i>MOHWSTE</i> Annual Reports
Consumer awareness of AHFS issues improved	Knowledge, attitudes, behaviour and perceptions survey on AHFS.
Number of rejections of export consignments (exports of fishery products)	Fisheries Division
Number of pest and disease outbreaks reduced.	Annual Reports of NPPO and National Veterinary Services

The output indicators are found in the Implementation Plan and are linked to actions, which are each aligned to a strategy.

⁹ Specific, Measurable, Achievable, Reliable and Time-bound.

6.2 Monitoring of the National AHFS Policy

Performance monitoring will be closely tied to the Implementation Plan. By continuous monitoring of the implementation process, information will be generated on the progress of implementation and inform the CCAHFSAB/Food Safety Advisory Board on the remedial actions to be taken, if necessary. An Annual Progress Report will be compiled each year by the CCAHFSAB/Food Safety Advisory Board and posted on the websites of the *MoFAATBA and MoHWSTE* to ensure transparency and accountability.

6.3 Evaluation of the National AHFS Policy

A baseline for the National AHFS Policy and Implementation Plan will be conducted through the use of IICA's PVS (NPPO, National Veterinary Services and Food Safety Services) tools and a knowledge, attitudes, behaviour and perception survey on AHFS for the general public during the first year of implementation of the policy. An evaluation of the National AHFS Policy and Implementation Plan will be conducted after the first five years of its implementation, using these tools as the main benchmarks for progress. IICA and CAHFSa, along with other development partners will therefore be instrumental in supporting the country to conduct the baseline and evaluation exercises for this Policy and Implementation Plan.

A final evaluation will be conducted at the end of the five-year period designated for implementation of the Policy and Implementation Plan. The final evaluation will focus on the achievement of the goal, objectives, policies, impact of policy and programme initiatives. The outcome of this process will be used to provide updates, recommendations and guidance for revision of the Policy and actions to improve interventions for the AHFS system.

7.0 IMPLEMENTATION PLAN

STRATEGIES	ACTIONS	INDICATORS OF ACHIEVEMENT	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIMEFRAME
Objective 1: Modernise and harmonise the agricultural health and food safety legislative and regulatory frameworks in line with international standards.				
1.1 Develop a legislative programme for AHFS.	1.1.1. Prepare a listing of all legislation and regulations that require passage, review and updating.	i. List of legislation and regulations prepared in Year 1.	CCAHFSAB, MoFAATBA, MoHWSTE, Plant Protection Board, Animal Movement and Disease Advisory Council, Pesticides & Toxic Chemicals Control Board/ Secretariat, Attorney General's Chambers	Year 1
	1.1.2 Promulgate Food Safety and Chemical Management Bills.	i. Food Safety and Chemical Management Bills passed into law by Year 1.	CCAHFSAB, MoFAATBA, MoHWSTE, Pesticides & Toxic Chemicals Control Board/ Secretariat, Plant Protection Board, Animal Movement and Disease Advisory Council, Attorney General's Chambers	Years 1- 2
	1.1.3 Conduct review and update of existing legislation and regulations to ensure alignment with main pieces of AHFS legislation and new international developments.	i. All pieces of primary legislation and regulations reviewed and updated by Year 2.	CCAHFSAB, MoFAATBA, MoHWSTE, Plant Protection Board, Animal Movement and Disease Advisory Council, Pesticides & Toxic Chemicals Control Board/ Secretariat, Attorney General's Chambers	Years 1- 2
	1.1.4 Develop regulations to enact provisions in key	i. Regulations to enact provisions in	CCAHFSAB, MoFAATBA,	Years 1-3

STRATEGIES	ACTIONS	INDICATORS OF ACHIEVEMENT	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIMEFRAME
	primary AHFS legislation (Plant Protection Act, Animal Health Act and Food Safety Bill)	primary AHFS legislation drafted and passed by Year 3.	MoHWSTE, Plant Protection Board, Animal Movement and Disease Advisory Council, Pesticides & Toxic Chemicals Control Board/ Secretariat, Attorney General's Chambers	
1.2 Establish and maintain food standards towards protecting consumers' health and ensuring fair practices in the food trade.	1.2.1 Identify and develop new standards ¹⁰ in line with international trends.	i. At least 1 new standard developed and adopted each year.	MoFAATBA, ABBS, CCAHFSAB, private sector	Years 1-5
	1.2.2 Conduct a review of existing standards and update, where necessary.	i. At least two reviews of existing standards conducted annually.	MoFAATBA, ABBS, CCAHFSAB, Private Sector	Years 1-5
	1.2.3 Ensure participation of staff in regional and international fora.	i. Staff participates in at least 3 regional/ international fora annually.	MoFAATBA, ABBS, CCAHFSAB, MoFCGPPP, Private Sector, International Development Partners	Years 1-2
1.3 Enhance the capacity of regulators to enforce AHFS legislation, regulations and standards.	1.3.1 Conduct training needs analysis for AHFS regulators.	i. Training needs analysis conducted in Year 1.	CCAHSAB, MoFAATBA, MoHWSTE, Plant Protection Board, Animal Movement and Disease Advisory Council, Pesticides & Toxic Chemicals Control Board/ Secretariat, International Development Partners	Year 1
	1.3.2 Identify suitable training opportunities/ courses for attendance by staff from AHFS regulatory bodies.	i. At least 2 members of staff trained in their respective areas annually.	CCAHSAB, MoFAATBA, MoHWSTE, ABBS, Pesticides & Toxic Chemicals Control	Years 1-5

¹⁰ Mandatory food packaging guidelines and standards and public utilities water safety standards have been identified by stakeholders as priority. These should be included as part of regulations.

STRATEGIES	ACTIONS	INDICATORS OF ACHIEVEMENT	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIMEFRAME
			Board/ Secretariat, International Development Partners	
1.4 Build the capacity of the agri-food sector to comply with legislative and regulatory requirements, standards and guidelines.	1.4.1 Conduct sensitization of the agri-food sector to legislation, regulations, standards and guidelines impacting their business operations.	i. Sensitization of the agri-food sector conducted annually.	CCAHFSAB, MoFAATBA, MoHWSTE, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, private sector, International Development Partners	Years 1-5
	1.4.2 Build the capacity of the agri-food sector to comply with legislation, regulations, standards and guidelines impacting their business operations.	i. Capacity building sessions with the agri-food sector conducted annually.	CCAHFSAB, MoFAATBA, MoHWSTE, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, private sector, International Development Partners	Years 1-5
Objective 2: Improve inter-agency collaboration, and coordination of the design and management of all agricultural health and food safety measures and actions in an integrated and comprehensive way along the entire food chain.				
2.1 Embed AHFS coordination mechanisms in food safety legislation.	2.1.1 Review and update the existing Food Safety Bill to include AHFS regulatory bodies on National Food Safety Advisory Board.	i. Food Safety Bill reviewed and AHFS regulatory bodies included in the composition of the National Food Safety Advisory Board.	CCAHFSAB, MoFAATBA, MoHWSTE, Attorney General's Chambers	Years 1-5
	2.1.2 Review and update the Food Safety Bill to provide clear guidance on the coordination functions of the National Food Safety Advisory Body.	i. Food Safety Bill updated to include coordination functions of the National Food Safety Advisory Body.	CCAHFSAB, MoFAATBA, MoHWSTE, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, Attorney General's Chambers	Years 1-2

STRATEGIES	ACTIONS	INDICATORS OF ACHIEVEMENT	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIMEFRAME
2.2 Develop a coordination mechanism for AHFS operational activities to reduce overlaps and duplication of effort.	2.2.1 Prepare and execute a joint work plan/ programme and budget for AHFS operational activities.	i. Annual joint work plan/ programme and budget prepared and executed annually.	CCAHFSAB, MoFAATBA, MoHWSTE, Plant Protection Board, Animal Movement and Disease Advisory Council, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat	Years 1-5
	2.2.2 Define institutional mandates in the development and execution of work plan/programme.	i. Institutional mandates defined at the start of the work plan/programme process.	CCAHFSAB, MoFAATBA, MoHWSTE, Plant Protection Board, Animal Movement and Disease Advisory Council, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat	Years 1-5
	2.2.3 Conduct monitoring of joint work plan/ programme and budget	i. Annual Report prepared on AHFS activities each year.	CCAHFSAB, MoFAATBA, MoHWSTE, Plant Protection Board, Animal Movement and Disease Advisory Council, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat	Years 1-5
	2.2.4 Research and adopt tools ¹¹ to execute the coordination of activities.	i. At least one tool identified and utilised from year 2.	CCAHFSAB, MoFAATBA, MoHWSTE, Plant Protection Board, Animal Movement and Disease Advisory Council, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat	Years 2-5

¹¹ These tools can mainly be ICT based. Given the advancement of cloud-based systems, existing tools used in government should be examined and tailored to the Committee's purpose, until a better option is identified.

STRATEGIES	ACTIONS	INDICATORS OF ACHIEVEMENT	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIMEFRAME
2.3 Mobilize resources for AHFS operational activities.	2.3.1 Develop resource mobilization strategy/plan for AHFS.	i. Resource mobilization strategy/plan developed in year 1 and updated annually.	CCAHFSAB, MoFAATBA, MoHWSTE, MoFCGPPP, Plant Protection Board, Animal Movement and Disease Advisory Council, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat,	Years 1-5
	2.3.2 Liaise with international development partners and Government to obtain resources for the AHFS work plan/ programme.	i. At least 2 proposals prepared annually and submitted for funding to Government and International Development Partners.	CCAHFSAB, MoFAATBA, MoHWSTE, MoFCGPPP, Plant Protection Board, Animal Movement and Disease Advisory Council, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, International Development Partners	Years 1-5
Objective 3: Review and modernise organizational structures of Competent Authorities to effectively execute their mandates in line with international standards and best practices.				
3.1 Modernise existing organizational structures of Competent Authorities in line with international standards and best practices.	3.1.1 Conduct an organizational review of Competent Authorities	i. Organizational review of Competent Authorities undertaken by Year 1	CCAHFSAB, MoFAATBA, MoHWSTE, Plant Protection Board, Animal Movement and Disease Advisory Council, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, International Development Partners	Year 1
	3.1.2 Redesign organizational structures of Competent Authorities	i. Organizational redesign of Competent	CCAHFSAB, MoFAATBA, MoHWSTE, Plant	Years 1-2

STRATEGIES	ACTIONS	INDICATORS OF ACHIEVEMENT	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIMEFRAME
		Authorities undertaken by Year 2.	Protection Board, Animal Movement and Disease Advisory Council, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, International Development Partners	
	3.1.3 Prepare job descriptions for new/upgraded positions	i. Job descriptions for all new/upgraded positions prepared by Year 2.	CCAHFSAB, MoFAATBA, MoHWSTE, Plant Protection Board, Animal Movement and Disease Advisory Council, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, International Development Partners	Years 1-2
3.2 Recruit and build the capacity of human resources for modernised institutions.	3.2.1 Recruit staff for new/upgraded positions.	i. All staff for new/upgraded positions recruited by Year 4.	CCAHFSAB, MoFAATBA, MoHWSTE, Plant Protection Board, Animal Movement and Disease Advisory Council, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat,	Years 2-4
	3.2.2 Develop training/capacity building programme in line with international requirements/standards.	i. Training /capacity building programme developed by Year 2.	CCAHFSAB, MoFAATBA, MoHWSTE, Plant Protection Board, Animal Movement and Disease Advisory Council, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, International	Year 2

STRATEGIES	ACTIONS	INDICATORS OF ACHIEVEMENT	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIMEFRAME
			Development Partners	
	3.2.3 Collaborate with development partners and international educational institutions to offer programmes.	i. At least one partnership identified per annum.	CCAHFSAB, MoFAATBA, MoHWSTE, Plant Protection Board, Animal Movement and Disease Advisory Council, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, International Development Partners	Years 2-5
	3.2.4 Conduct capacity building/training of staff annually.	i. All staff undertake at least one capacity building/ training session per annum.	CCAHFSAB, MoFAATBA, MoHWSTE, Plant Protection Board, Animal Movement and Disease Advisory Council, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, International Development Partners	Years 2-5
3.3 Improve the physical facilities for the operation of modern AHFS institutions.	3.3.1 Conduct an assessment of existing office facilities.	i. Assessment of facilities conducted by Year 1.	CCAHFSAB, MoFAATBA, MoHWSTE, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, International Development Partners	Year 1
	3.3.2 Prepare Strategic Business Plans for funding under the Public Sector Investment Programme	i. Strategic Business Plans prepared by Year 2.	CCAHFSAB, MoFAATBA, MoHWSTE, Plant Protection Board, Animal Movement and Disease Advisory	Years 1-2

STRATEGIES	ACTIONS	INDICATORS OF ACHIEVEMENT	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIMEFRAME
			Council, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, International Development Partners	
	3.3.3 Advocate for budgetary support for existing Strategic Business Plan for the NPPO	i. Funding provided for Strategic Business Plan. ii. New facilities constructed and furnished.	CCAHFSAB, MoFAATBA, Plant Protection Board, MoFCGPPP, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, International Development Partners	Years 1- 3
	3.3.4 Advocate for budgetary support for the improvement of physical facilities of Competent Authorities.	i. Funding provided over Years 2-5 for Strategic Business Plan.	CCAHFSAB, MoFAATBA, MoHWSTE, MoFCGPPP, Plant Protection Board, Animal Movement and Disease Advisory Council, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, International Development Partners	Years 2-5
Objective 4: Create an evidenced-based agricultural health and food safety system by enhancing the technical capabilities of Competent Authorities to apply sanitary and phytosanitary measures transparently.				
4.1 Improve the diagnostic capacity and capability of Competent Authorities to support the AHFS system.	4.1.1 Upgrade/expand the physical infrastructure and facilities (including equipment and services) of the existing laboratory network.	i. Laboratory infrastructure and facilities upgraded by Year 2.	CCAHFSAB, MoFAATBA, MoHWSTE, MoFCGPPP, International Development Partners	Years 1-2

STRATEGIES	ACTIONS	INDICATORS OF ACHIEVEMENT	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIMEFRAME
	4.1.2 Increase testing capabilities of the laboratory network to meet the needs of the AHFS system.	i. Testing capabilities of laboratory network improved by Year 2.	CCAHFSAB, MoFAATBA, MoHWSTE, International Development Partners	Years 1-2
	4.1.3 Obtain ISO/IEC 17025 certification for laboratories in the network.	i. ISO 17025 certification for laboratories in network obtained by Year 3.	CCAHFSAB, MoFAATBA, MoHWSTE, International Development Partners	Years 1-3
	4.1.4 Accredite laboratories in the network for plant protection, animal health and food safety in meeting respective requirements.	i. At least one laboratory accredited in the network each year.	CCAHFSAB, MoFAATBA, MoHWSTE, International Development Partners	Years 3-5
	4.1.5 Designate reference laboratory for AHFS functions.	i. Reference laboratories designated by Year 4.	CCAHFSAB, MoFAATBA, MoHWSTE, International Development Partners	Years 1-4
	4.1.6 Equip laboratories with adequate staff in relevant disciplines to undertake functions.	i. Staff complement increased by 20 percent each year until all positions are filled.	CCAHFSAB, MoFAATBA, MoHWSTE, International Development Partners	Years 1-5
	4.1.7 Provide continuous training and capacity building to improve the competence of staff.	i. All staff undertake at least one capacity building/training each year.	CCAHFSAB, MoFAATBA, MoHWSTE, International Development Partners	Years 1-5
	4.1.8 Develop and implement funding modalities for sustaining operations of laboratories.	i. Funding modalities for the sustainability of laboratory operations developed and implemented by Year 2.	CCAHFSAB, MoFAATBA, MoHWSTE, MoFCGPPP, International Development Partners	Years 1-2

STRATEGIES	ACTIONS	INDICATORS OF ACHIEVEMENT	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIMEFRAME
4.2 Enhance the emergency response capability to rapidly respond in a coordinated manner to situations that pose a risk to AHFS.	4.2.1 Prepare coordinated emergency response plans, procedures and guidelines for sanitary and phytosanitary outbreaks.	i. Emergency response, plans, procedures and guidelines for AHFS emergencies prepared by Year 2.	CCAHFSAB, MoFAATBA, MoHWSTE, Plant Protection Board, Animal Movement and Disease Advisory Council, Pesticides & Toxic Chemicals Control Board/ Secretariat, International Development Partners	Years 1-2
	4.2.2 Draft Regulations for emergency responses to sanitary and phytosanitary outbreaks.	i. Regulations for NPPO Act, Animal Health Act and Food Safety Bill prepared and passed by Year 2.	Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, Attorney Generals Chambers, International Development Partners	Years 1-2
	4.2.3 Draft Regulations for establishment of contingency funds for SPS emergencies.	i. Regulations for establishment of contingency funds for SPS emergencies prepared and passed by Year 2.	Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, MoFCGPPP, Pesticides & Toxic Chemicals Control Board/ Secretariat, Attorney Generals Chambers, International Development Partners	Years 1-2
	4.2.4 Design and establish a contingency fund for SPS emergencies.	i. Contingency fund designed and established by Year 3.	CCAHFSAB, MoFAATBA, MoHWSTE, MoFCGPPP, Plant Protection Board, Animal Movement	Years 1-3

STRATEGIES	ACTIONS	INDICATORS OF ACHIEVEMENT	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIMEFRAME
			and Disease Advisory Council, Pesticides & Toxic Chemicals Control Board/ Secretariat, International Development Partners	
4.3 Strengthen the quarantine capability to prevent the introduction of pests and diseases.	4.3.1 Establish/Upgrade database on quarantine pests and diseases.	i. Database established/ upgraded by Year 2.	Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, International Development Partners	Years 1-2
	4.3.2 Audit quarantine procedures and update in line with best practices.	i. Audit and update (where applicable) quarantine procedures conducted biennially.	Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, International Development Partners	Years 1-5
	4.3.3 Improve facilities for quarantine of live animals upon entry into the island.	i. Facilities for quarantine of live animals established by Year 3.	Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoFCGPPP, International Development Partners	Years 1-3
	4.3.4 Increase staff complement to undertake activities related to quarantine.	i. Staff complement increased for quarantine functions by Year 2.	Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoFCGPPP, International Development Partners	Years 2

STRATEGIES	ACTIONS	INDICATORS OF ACHIEVEMENT	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIMEFRAME
	4.3.5 Build the capacity of staff to adequately undertake quarantine functions.	i. Staff undergo at least one training/capacity building activity annually.	Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, Customs Department, International Development Partners	Years 1-5
4.4 Develop an efficient and coordinated AHFS surveillance system.	4.4.1 Design and implement surveillance programmes for pests and diseases of economic importance.	i. At least one surveillance programme for pests and diseases of economic importance designed and implemented annually.	Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, Private Sector/Producers, International Development Partners	Years 1-5
	4.4.2 Establish and maintain pest/ disease-free areas and areas of low pest/ disease prevalence.	i. At least one pest/disease-free area, or area of low pest/disease prevalence established annually.	Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, Private Sector/Producers, International Development Partners	Years 1-5
	4.4.3 Review and upgrade existing surveillance programmes for the food chain.	i. Surveillance programmes for the food chain reviewed and upgraded biennially.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, International Development Partners	Years 1-5
	4.4.4 Assign financial resources for AHFS surveillance programmes.	i. Dedicated budget assigned for surveillance from Year 2.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory	Years 2-5

STRATEGIES	ACTIONS	INDICATORS OF ACHIEVEMENT	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIMEFRAME
			Council, MoFAATBA, MoHWSTE, MoFCGPPP	
	4.4.5 Increase staff complement to undertake activities related to surveillance.	i. Staff complement increased for surveillance functions increased by Year 2.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE	Year 2
	4.4.6 Build the capacity of staff to adequately undertake surveillance functions.	i. Staff undergo at least one training/capacity building activity annually.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, International Development Partners	Years 1-5
	4.4.7 Form partnerships with stakeholders to improve surveillance in the agri-food chain.	i. At least two partnerships with agri-food chain stakeholders formed each year.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, Private Sector/Producers, International Development Partners	Years 1-5
	4.4.8 Identify and utilise information technology tools to encourage public reporting through official channels.	i. At least one ICT tool identified and utilised by Year 2.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, International Development Partners	Years 1-2
	4.4.9 Develop and implement guidelines for pest reporting on pest status to global reporting systems, trading partners and the general public.	i. Guidelines developed and implemented for pest reporting by Year 2.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE,	Years 1- 2

STRATEGIES	ACTIONS	INDICATORS OF ACHIEVEMENT	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIMEFRAME
			International Development Partners	
4.5 Strengthen the capacity of Competent Authorities to identify and respond to emerging issues.	4.5.1 Develop comprehensive research agenda ¹² for AHFS matters for collaboration with research institutions and other partners.	i. Research agenda developed by Year 1.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, International Development Partners	Years 1-5
	4.5.2 Assign staff to conduct research and prepare position papers on emerging issues.	i. At least two position papers on emerging issues prepared annually.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, International Development Partners	Years 1-5
	4.5.3 Form partnerships with other national, regional and international bodies to conduct research and obtain information on emerging issues and potential responses.	i. At least two partnerships formed and maintained annually.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, International Development Partners	Years 1-5

¹² The research agenda could include areas such as climate change and how it affects or influences food safety with respect to seafood toxins in fisheries, aflatoxins in crops, etc. and the products that are made from these commodities.

STRATEGIES	ACTIONS	INDICATORS OF ACHIEVEMENT	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIMEFRAME
	4.5.4 Prepare contingency plans to address emerging issues.	i. At least one contingency plan prepared annually.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, International Development Partners	Years 1-5
4.6 Develop the capabilities and capacities to make decisions and carry out actions based on scientific principles and evidence.	4.6.1 Establish Risk Analysis Units in the NPPO, Veterinary Services and Food Safety Services.	i. Risk Analysis Units established in the NPPO, Veterinary Services and Food Safety Services by Year 3.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, International Development Partners	Years 1-3
	4.6.2 Build the capacity of staff to adequately undertake risk assessment functions.	i. Staff undergo at least one training/capacity building activity annually.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, International Development Partners	Years 1-5
	4.6.3 Conduct risk assessments for pests and diseases of quarantine and economic importance.	i. At least two risk assessments conducted annually.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, International Development Partners	Years 1-5
	4.6.4 Collaborate with other national, regional and international bodies to leverage competencies	i. At least two collaborations had on risk assessments annually.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory	Years 1-5

STRATEGIES	ACTIONS	INDICATORS OF ACHIEVEMENT	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIMEFRAME
	and support information gathering for risks assessments.		Council, MoFAATBA, MoHWSTE, International Development Partners	
	4.6.5 Develop guidelines for communicating risks in line with international requirements and standards.	i. Guidelines for communicating developed and implemented by Year 2.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, International Development Partners	Years 2
4.7 Develop and implement a coordinated and risk-based approach in the planning and execution of inspection activities across the agri-food chain.	4.7.1 Conduct a review of existing inspection services to identify gaps and areas for improvement.	i. Review of inspection services to identify gaps and areas for improvement conducted in Year 1.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, International Development Partners	Year 1
	4.7.2 Develop proposals for the improvement of inspection services across the agri-food chain, using risk-based and coordinated approaches.	i. Proposals developed for the improvement of inspection services across the agri-food chain in Year 1.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, International Development Partners	Year 1
	4.7.3 Upgrade inspection services based on recommendations in 4.7.2.	i. Inspection services upgraded by Year 2.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA,	Year 2

STRATEGIES	ACTIONS	INDICATORS OF ACHIEVEMENT	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIMEFRAME
			MoHWSTE, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, International Development Partners	
4.8 Develop the capacity to collect, process and utilise data in an integrated manner for planning, technical and operational purposes.	4.8.1 Conduct an assessment of existing data collection and dissemination mechanisms across Competent Authorities.	i. Assessment of existing data collection and dissemination mechanisms across Competent Authorities conducted in Year 1.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, International Development Partners	Year 1
	4.8.2 Design functional requirements and technical specifications for an integrated AHFS database.	i. Functional requirements and technical specifications for an integrated AHFS database designed in Year 1.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, International Development Partners	Year 1
	4.8.3 Design inter-ministerial governance and operational mechanisms for the AHFS database.	i. Inter-ministerial governance and operational mechanisms for the database designed by Year 2.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, International Development Partners	Year 2

STRATEGIES	ACTIONS	INDICATORS OF ACHIEVEMENT	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIMEFRAME
	4.8.4 Create an integrated AHFS database for storage, retrieval, analysis and dissemination of AHFS data.	i. Database created/upgraded for storage, retrieval, analysis and dissemination of data by Year 3.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, International Development Partners	Years 2-3
4.9 Utilise technical innovations to strengthen AHFS services.	4.9.1 Conduct reviews of functions and procedures and identify areas for incorporation of technical innovations in line with international best practices.	i. Review and upgrade of functions and procedures conducted biennially.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, Educational institutions, International Development Partners	Years 1-5
	4.9.2 Form partnerships to leverage technical assistance and financial support for technical innovations into functions and procedures.	i. At least one partnership for technical innovation formed each year.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, Education Institutions, International Development Partners	Years 1-5
4.10 Ensure active and regular participation, coordination and	4.10.1 Budget funding for regular attendance of meetings of	i. Attendance to meetings included in annual budgets.	MoFAATBA, MoHWSTE, MoFCGPPP, ABBS, Pesticides & Toxic	Years 1-5

STRATEGIES	ACTIONS	INDICATORS OF ACHIEVEMENT	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIMEFRAME
follow-up to the meetings of regional and international standard-setting bodies.	regional and international standard-setting bodies.		Chemicals Control Board/ Secretariat, International Development Partners	
	4.10.2 Include a budget for annual fees of regional and international AHFS organizations to which the country has commitments.	i. Annual fees for regional and international AHFS organizations included in the annual budget.	MoFAATBA, MoHWSTE, MoFCGPPP, International Development Partners	Years 1-5
Objective 5: Provide sustainable financing for the efficient management and operation of the AHFS system.				
5.1 Conduct economic analysis to support decisions on AHFS investments.	5.1.1 Prepare feasibility analysis and budgets for infrastructural projects (markets, processing facilities, landing sites, abattoirs, chilled storage facilities, etc.).	i. At least one feasibility analysis and budget prepared for infrastructural projects annually.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, International Development Partners	Years 1-3
5.2 Provide funding for capital investments for infrastructure and facilities.	5.2.1 Prepare a submission for funding under the Public Sector Investment Programme for infrastructural projects.	i. At least one submission made for funding under the Public Sector Investment Programme for infrastructural projects biennially.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, MoFCGPPP, International Development Partners	Years 2-5
	5.2.2 Include allocation for infrastructure projects in national budgets.	i. Allocation for infrastructure projects made in the national budget annually.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, MoFCGPPP, International Development Partners	Years 2-5

STRATEGIES	ACTIONS	INDICATORS OF ACHIEVEMENT	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIMEFRAME
5.3 Provide adequate funding for institutional strengthening and operational activities of AHFS functions.	5.3.1 Determine funding requirements for institutional strengthening for inclusion in the recurrent budget.	i. Funding requirements for institutional strengthening included in the recurrent budget by Year 2.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, MoFCGPPP, International Development Partners	Years 2-5
	5.3.2 Determine annual funding requirements for expanded operational activities for inclusion in the recurrent budget.	i. Funding requirements for expanded operational activities included in the recurrent budget by Year 2.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, MoFCGPPP, International Development Partners	Years 2-5
	5.3.3 Harness funding from international development institutions for institutional strengthening and capacity building.	i. At least one project proposal submitted for funding annually.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, MoFCGPPP, International Development Partners	Years 2-5
5.4 Establish contingency funds for sanitary and phytosanitary emergencies.	5.4.1 Conduct a review of best practices globally for the operation and financing of SPS contingency funds.	i. Review of best practices globally for operation and financing of SPS	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA,	Year 1

STRATEGIES	ACTIONS	INDICATORS OF ACHIEVEMENT	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIMEFRAME
		contingency funds completed in Year 1.	MoHWSTE, MoFCGPPP, International Development Partners	
	5.4.2 Select and implement a funding model for the establishment and operation of a contingency fund.	i. Contingency fund established by Year 3 and financed through established mechanisms.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, MoFCGPPP, International Development Partners	Years 3-5
5.5 Establish financing mechanisms to improve compliance of the private sector with SPS requirements.	5.5.1 Conduct analysis to determine the SPS financing needs of the private sector.	i. Analysis to determine SPS financing needs of the private sector conducted in Year 1	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, MoFCGPPP, Private Sector, Financial Institutions, International Development Partners	Year 1
	5.5.2 Determine instruments of SPS financing for the private sector.	i. Instruments of SPS financing determined in Year 1	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, MoFCGPPP, Private Sector, Financial Institutions, International Development Partners	Year 1
	5.5.3 Design and implement SPS financing mechanisms for the private sector.	i. Financing mechanisms designed and	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory	Years 2- 5

STRATEGIES	ACTIONS	INDICATORS OF ACHIEVEMENT	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIMEFRAME
		implemented by Year 2.	Council, MoFAATBA, MoHWSTE, MoFCGPPP, Private Sector, Financial institutions, International Development Partners	
	5.5.4 Monitoring of SPS financing to the private sector to ensure that the programme is achieving its objectives and targets.	i. Monitoring of SPS financing to the private sector conducted annually.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, MoFCGPPP, Private Sector, Financial Institutions, International Development Partners	Years 2- 5
Objective 6: Enhance the capacity of the food chain, from farm to table, to supply safe food for sale and consumption.				
6.1 Develop the ability to trace food and feed products throughout all stages of the agri-food chain.	6.1.1 Design a technology-based traceability system ¹³ in collaboration with the agri-food sector to track food products as they move along the supply chain.	i. Technology-based traceability system designed by Year 1.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, ABBS, MoHWSTE, Pesticides & Toxic Chemicals Control Board/ Secretariat, Private Sector, International Development Partners	Year 1
	6.1.2 Pilot implementation of traceability system within selected supply chains.	i. Traceability system piloted within selected supply chains by Year 2.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, ABBS, MoHWSTE,	Year 2

¹³ This will include introduction of identification for producers.

STRATEGIES	ACTIONS	INDICATORS OF ACHIEVEMENT	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIMEFRAME
			Pesticides & Toxic Chemicals Control Board/ Secretariat, Private Sector, International Development Partners	
	6.1.3 Conduct a review of the pilot and document lessons learned from the pilot.	i. Review of the pilot and lessons learned documented in Year 3.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, ABBS, MoHWSTE, Pesticides & Toxic Chemicals Control Board/ Secretariat, Private Sector, International Development Partners	Years 2-3
	6.1.4 Roll-out traceability system across the agri-food sector, incorporating lessons learned from a review of the pilot.	i. Traceability system rolled out to the entire agri-food sector by Year 4.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, ABBS, MoHWSTE, Pesticides & Toxic Chemicals Control Board/ Secretariat, Private Sector, International Development Partners	Years 4- 5
6.2 Develop a coordinated system for the recall of food in the food distribution system.	6.2.1 Design protocols and guidelines for the recall of foods using a collaborative approach among regulators.	i. Protocols for food recalls designed in Year 1.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, ABBS, MoHWSTE, Pesticides & Toxic Chemicals Control Board/ Secretariat, Private Sector, Civil Society, International	Year 1

STRATEGIES	ACTIONS	INDICATORS OF ACHIEVEMENT	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIMEFRAME
			Development Partners	
	6.2.2 Train regulators and agri-food stakeholders to execute food recall protocols and guidelines.	i. Regulators and agri-food stakeholders trained in the execution of food recall protocols and guidelines at least once annually.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, ABBS, MoHWSTE, Pesticides & Toxic Chemicals Control Board/ Secretariat, International Development Partners	Years 1-5
	6.2.3 Execute food recall simulation exercise with regulators and agri-food chain stakeholders.	i. Food recall simulation exercise amongst regulators and agri-food chain stakeholders executed biennially.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, ABBS, MoHWSTE, Pesticides & Toxic Chemicals Control Board/ Secretariat, Private Sector, International Development Partners	Years 1-5
6.3 Implement quality assurance systems along the agri-food chain to improve the safety of food.	6.3.1 Evaluate and select suitable on-farm quality assurance systems (e.g., Global GAP).	i. Evaluation and selection of suitable on-farm quality assurance systems completed in Year 1.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, ABBS, MoHWSTE, Pesticides & Toxic Chemicals Control Board/ Secretariat, Private Sector/Producers, International Development Partners	Year 1

STRATEGIES	ACTIONS	INDICATORS OF ACHIEVEMENT	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIMEFRAME
	6.3.2 Pilot on-farm quality assurance systems.	i. On-farm quality assurance systems piloted in Year 2.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, ABBS, MoHWSTE, Pesticides & Toxic Chemicals Control Board/ Secretariat, Private Sector/Producers, International Development Partners	Year 2
	6.3.3 Evaluate the pilot of the on-farm quality assurance systems.	i. Pilot of the on-farm quality assurance systems completed in Year 3.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, ABBS, MoHWSTE, Pesticides & Toxic Chemicals Control Board/ Secretariat, Private Sector/Producers, International Development Partners	Year 3
	6.3.4 Roll out quality assurance systems across the agricultural sector, incorporating lessons learned from a review of the pilot.	i. Full rollout of quality assurance systems across the agricultural sector commences in Year 3.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, ABBS, MoHWSTE, Pesticides & Toxic Chemicals Control Board/ Secretariat, Private Sector/Producers, International Development Partners	Years 3- 5

STRATEGIES	ACTIONS	INDICATORS OF ACHIEVEMENT	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIMEFRAME
	6.3.5 Build the capacity of processors to implement quality assurance systems (e.g., HACCP).	i. Each processor participates in at least one capacity building session per annum.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, ABBS, MoHWSTE, Pesticides & Toxic Chemicals Control Board/ Secretariat, Private Sector/Processors, International Development Partners	Year 1-5
6.4 Improve the safety of locally produced meat and meat products.	6.4.1 Train butchers in slaughter, handling and storage of meat.	i. Butchers undertake at least one training session annually.	CCAHFSAB, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, Private Sector/Butchers, International Development Partners	Years 1-5
	6.4.2 Rehabilitate national abattoir infrastructure and facilities.	i. National abattoir rehabilitated by Year 3.	CCAHFSAB, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, MoFCGPPP, International Development Partners	Years 1-3
6.5 Build the capacity of food establishments/ importers/ marketers/operators to inculcate food safety best practices in their operations.	6.5.1 Conduct continuous training and capacity building of food establishments/ importers/ marketers/ operators.	i. Food establishments/ importers/ marketers/operators undertake capacity building annually.	CCAHFSAB, MoHWSTE, Private Sector/Food Operators, International Development Partners	Years 1-5
6.6 Rehabilitate/ Upgrade public facilities with	6.6.1 Identify facilities (markets, processing facilities, landing sites,	i. Facilities for rehabilitation/	CCAHFSAB, MoFAATBA, MoHWSTE,	Year 1

STRATEGIES	ACTIONS	INDICATORS OF ACHIEVEMENT	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIMEFRAME
improved and SPS-compliant conditions.	abattoir, chilled storage facilities) for rehabilitation/upgrade.	upgrade identified in Year 1.	MoFCGPPP, Private Sector, Civil Society, Community Groups, International Development Partners	
	6.6.2 Conduct feasibility analysis on proposed facilities.	i. Feasibility analysis conducted on at least three facilities by Year 1.	CCAHFSAB, MoFAATBA, MoHWSTE, MoFCGPPP, International Development Partners	Years 1-2
	6.6.3 Prepare submissions for funding under Public Sector Investment Programme.	i. Submissions prepared for all capital projects identified for rehabilitation/upgrade by Year 2.	CCAHFSAB, MoFAATBA, MoHWSTE, MoFCGPPP, International Development Partners	Year 2
	6.6.4 Rehabilitate/ Upgrade existing infrastructure.	i. Rehabilitation/ upgrading of infrastructure commence by Year 2.	CCAHFSAB, MoFAATBA, MoHWSTE, MoFCGPPP, International Development Partners	Years 2- 5
Objective 7: Raise awareness about AHFS in a coordinated manner, thereby minimising the risks and incidences of the introduction of pests and diseases and outbreaks of foodborne illnesses.				
7.1 Improve knowledge and awareness of AHFS issues.	7.7.1 Develop and execute public education and awareness programme, building on global best practices.	i. Public education and awareness programme developed and executed from Year 1	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, International Development Partners, Private Sector, Civil Society	Years 1-5

STRATEGIES	ACTIONS	INDICATORS OF ACHIEVEMENT	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIMEFRAME
	7.7.2 Form a coalition with agri-food stakeholders, the private sector and civil society groups for the promotion of an AHFS culture in the country.	i. Coalition with stakeholders formed in Year 1.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, International Development Partners, Private Sector, Civil Society	Years 1-5
	7.7.3 Appoint Brand Ambassadors to raise awareness about AHFS issues.	i. At least five brand ambassadors appointed by Year 3.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, International Development Partners, Private Sector, Civil Society	Years 1-5
	7.7.4 Plan and execute AHFS days.	i. At least one AHFS day executed per quarter.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, International Development Partners, Private Sector, Civil Society	Years 1-5
	7.7.5 Advocate with promoters of Agricultural/Food Shows/ Exhibitions shows/events to showcase AHFS.	i. At least 30 percent of Agricultural/Food Shows/ Exhibitions shows/events to showcase AHFS.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA,	Years 1-5

STRATEGIES	ACTIONS	INDICATORS OF ACHIEVEMENT	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIMEFRAME
			MoHWSTE, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, International Development Partners, Private Sector, Civil Society	
	7.7.6 Integrate AHFS into the curriculum of primary and secondary schools.	i. AHFS integrated into the curriculum of primary and secondary schools by Year 2.	CCAHFSAB, MoFAATBA, MoHWSTE, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, MoECIS, International Development Partners	Years 2-5
7.2 Develop tools for knowledge dissemination.	7.2.1 Establish and utilise technology- enabled popular mediums and tools (website, digital platform and social media) to transmit AHFS messages.	i. Technology-enabled popular mediums and tools (website, digital platform and social media) dedicated for AHFS established and utilised by Year 2.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, International Development Partners, Private Sector, Civil Society	Years 2-5
	7.2.2 Develop and distribute promotional and information material on AHFS, in particular, legislation and regulations.	i. Promotional and information material on AHFS developed and disseminated annually.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, International Development Partners, Private Sector, Civil Society	Years 2-5

STRATEGIES	ACTIONS	INDICATORS OF ACHIEVEMENT	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIMEFRAME
	7.2.3 Develop and disseminate videos on all facets of AHFS.	i. At least 3 videos on AHFS developed and disseminated annually.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, International Development Partners, Private Sector, Civil Society	Years 2-5
	7.2.4 Compile and disseminate AHFS educational material to stakeholders.	i. Educational material to support AHFS compiled and disseminated annually.	CCAHFSAB, Plant Protection Board, Animal Movement and Disease Advisory Council, MoFAATBA, MoHWSTE, ABBS, Pesticides & Toxic Chemicals Control Board/ Secretariat, International Development Partners, Private Sector, Civil Society	Years 2-5

APPENDIX I- SUMMARY OF POLICY ISSUES

Area	Policy Issue
<i>Technical Capabilities</i>	
Diagnostic Capability	• The main Government laboratory is not accredited. • Inadequate laboratory infrastructure/facilities, operating conditions, funding for laboratory operations, testing capabilities, range of testing, as well as dedicated staffing to better service the AHFS system and allow for the official designation of locally based laboratories under the three main AHFS legislation. • Significant numbers of samples are sent overseas, due to the limited capability of local laboratories to conduct certain tests.
Emergency Response Capability	• Financial support for emergency response is lacking, as there are no emergency funds established by Government for AHFS emergencies. • Inadequate human resources to respond to pest and disease emergencies. • Lack of regulations for emergency response to pest and disease outbreaks.
Quarantine	• Inadequate human resources to undertake required functions. • Lack of quarantine infrastructure for veterinary services. • Relatively open borders, coupled with a lack of human resources to patrol these spaces provide easy access to the country and the introduction of exotic pests and diseases.
Surveillance	• Limited internal capability (financial resources, human resources and transportation) to conduct adequate surveillance programs for pests and diseases of major economic importance. • Limited channels for communication and collaboration with sector stakeholders due to small staff complement and competing activities.
Pest Reporting	• Insufficient human resources to keep up with IPPC reporting requirements. • More robust use of information technology tools is needed to facilitate pest identification and reporting in the country.

Area	Policy Issue
Emerging Issues	• Limited capacity of border control to identify some types of pests that could enter the country. Therefore, some pest situations will not be caught at the point of entry to the country. • Limited NPPO staff are available to operate the plant protection stations at the ports of entry. Therefore, some pest situations will not be caught at the point of entry to the country. • National Veterinary Service does not have robust activities to identify in advance, those sanitary problems covered under its mandate due to limited staffing and equipment.
Risk Analysis	• Limited risk analysis is conducted due to the small staff complement and competing activities. • Heavy reliance on risk analyses conducted externally.
Technical Innovation	• The NPPO and Veterinary Services are challenged by insufficient financial resources and staffing to undertake activities to upgrade their services through the application of science and best practices. • The NPPO is challenged by limited physical space to conduct its activities. In the absence of an appropriate headquarters, and facility outfitted with the relevant laboratories and infrastructure, the use of such technical innovations is severely limited.
<i>Human and Financial Capital</i>	
Human Talent	• Although staff are generally qualified, the requirements of a modern AHFS system require adequate staff with the requisite skillsets to perform the functions outlined in the legislation and for meeting the commitments under the various conventions/trade agreements.
Training	• Excessive dependence on external funding to train staff, as opposed to being funded from national budgets.
Funding	• There are inadequate resources made available for capital investments in AHFS infrastructure, facilities, and for general operational activities to achieve optimal capabilities towards world-class institutions and service delivery. • Revenue generated from user fees is not readily accessible or available to the Unit/Division which provided the services.
Contingency Funds	• No contingency fund exists for pest or disease emergencies, or emerging issues. • Although the plant protection legislation makes accommodations for the establishment of a phytosanitary emergency fund, none has been established.

Area	Policy Issue
	The Animal Health legislation makes no provision for the establishment of a sanitary emergency fund, which will be necessary given the lack of access to extraordinary resources in case of emergencies, or to address emerging issues.
Capability to Invest	There is significant difficulty in securing investments/ resources for improvements and infrastructure from Government. Since Antigua and Barbuda has been moved to the high-income category, it will prove very difficult to obtain donor funds to improve AHFS infrastructure and other types of cooperation programmes. Government and bilateral funding will therefore be critical in further investment in AHFS in Antigua and Barbuda.
Interaction With the Private Sector	
Information and Communication	- Although the Government institutions utilise official communication outlets farmers tend to rely on their networks and the internet for information, to troubleshoot issues and solve pest and disease problems. - More effective communication mechanisms/channels and feedback mechanisms are needed to reach producers/producer groups to provide more effective support for pest and disease management.
Official Representation	- Overreliance on external funding for attendance at meetings of key bodies such as IPPC and CODEX. - Antigua and Barbuda is not a member of the WOA and only sits as an Observer, although its main export is lobster, and to a lesser extent, conch. The country is not able to take part in voting on critical matters, such as the adoption of international standards, resolutions, the election of members, the appointment of the Director General, etc.
Accreditation	Lack of capacity to pursue accreditation of third-party agencies, especially within the context of an agricultural and food sector that focuses on the domestic market.
Capability to Respond	Despite fora and seminars being held with the agricultural and food sector by Government, the stakeholders feel that greater reach is necessary at the grassroots.
Access to Markets	
Compliance With Regulatory Norms	Limited capacity for implementation of compliance programs for all products and procedures covered under respective legislation and regulations.

Area	Policy Issue
Setting of Regulatory Norms	• The Food Safety Bill is in draft and needs to be enacted into legislation but requires consultation with stakeholders in the agriculture and food sector given the cost implications for compliance. Consultation with Government counterparts is required to address any duplication in functions, such as the inspection of consignments for imports and exports by more than one Government entity, which can increase costs to the private sector and has implications for trade facilitation. Given the resource constraints that already exist, there may be a need to collaborate on these functions with the Government entities involved. • There are limited human resources to develop regulations to enact various provisions of existing legislation.
Harmonization	• Limited capacity due to inadequate staff and competing activities to conduct reviews and develop laws/regulations in a timely fashion that conform with international standards.
Traceability	• There are no traceability systems for crops and livestock produced locally. The main domestic market segments do not have traceability requirements, so there is very little incentive to invest in these systems. The challenges of introducing such systems revolve around the small size of operations, focus on the domestic market, time-consuming nature of the process, onerous paperwork, lack of sufficient knowledge regarding traceability systems, weak data management systems and use of ICTs throughout the value chain.
Transparency	• Human resource challenges inhibit the frequent update of information that should be notified on the websites of respective international bodies.
Regionalization	• Resource shortages have hampered implementation of programmes in a meaningful and sustained manner.
Food Chain	
Slaughter	• Absence of a fully equipped abattoir to ensure that best practices concerning the slaughter of animals as well as post-slaughter activities. • Inhumane slaughtering activities. • Post slaughter- Spoilage of meat, due to poor storage.

Area	Policy Issue
	• Inadequacy of the appropriate equipment to conduct slaughtering in a hygienic manner, which can lead to possible cross-contamination.
Food Preparation and Storage	• Contamination of food by some food establishments through improper use of kitchen tools and poor storage of cooked foods.
Agro-processing	• Small-scale operations result in high costs of maintaining food safety requirements, especially for export markets.
Fisheries	• Small-scale operations result in high costs of maintaining food safety requirements, especially for export markets. • Inadequate systems of traceability for fish products (lobster and conch) that are slated for export.

GLOSSARY

Term	Definition
Animal Health	Includes the prevention, treatment and control of diseases and conditions affecting the individual animal and herd/flock.
Appropriate level of sanitary or phytosanitary protection (ALOP)	The level of protection deemed appropriate by the Member establishing a sanitary or phytosanitary measure to protect human, animal or plant life or health within its territory.
Areas of low pest or disease prevalence	An area, whether all of a country, part of a country, or all or parts of several countries, as identified by the competent authorities, in which a specific pest or disease occurs at low levels, and which is subject to effective surveillance, control or eradication measures.
Audits	A systematic and functionally independent examination, the objective of which is to determine if an activity, or process and subsequent results meet the prescribed objectives.
Based on risk	Focused on and proportionate to an estimate of the probability and severity of an adverse effect occurring in consumers.
Certification	The procedure by which official certification bodies or officially recognized certification bodies provide written or equivalent assurance that foods or food control systems conform to requirements. Certification of food may be, as appropriate, based on a range of inspection activities, which may include continuous online inspection, auditing of quality assurance systems, and examination of finished products.
Certifying bodies	Official certification bodies and officially recognized certification bodies.
Codex Alimentarius	Established to facilitate world trade in foods by developing internationally acceptable standards, which meet the objectives of freer trade and protection of consumer health.
Competent authority(ies)	Means the official government organisation/agency(ies) having jurisdiction.

Term	Definition
Compliance and enforcement	Refers to the range of controls, procedures, or other interventions undertaken by a Competent Authority or a third party on its behalf when monitoring or verifying food business operator compliance with official requirements including but not limited to, instigating any corrective measures to achieve compliance.
Consumer	Any person that buys and ingests food.
Contaminant	Any substance not intentionally added to food or feed for food-producing animals, which is present in such food or feed as a result of the production (including operations carried out in crop husbandry, animal husbandry and veterinary medicine), manufacture, processing, preparation, treatment, packing, packaging, transport or holding of such food or feed, or as a result of environmental contamination. The term does not include insect fragments, rodent hairs and other extraneous matter.
Contamination	The introduction or occurrence of a contaminant in food or food environment.
Control	Any form of control that the Competent Authority performs for the verification of compliance with feed and food law (and animal health rules).
Control measure	Any action and activity that can be used to prevent or eliminate a food safety hazard, or reduce it to an acceptable level.
Control system	A system comprising the Competent Authorities and the resources, structures, arrangements and procedures set up in a Member State to ensure that official controls are performed in accordance with the AHFS regulations of the country.
Disease	The clinical and/or pathological manifestation of infection.
Distributive Trades	Businesses that buy and sell other companies products for profit, such as wholesalers and retailers.

Term	Definition
Environmental Health	Refers to aspects of human health (including quality of life) that are determined by physical, chemical, biological, social and psychosocial factors in the environment.
Food	Any substance, whether processed, semi-processed, or raw, which is intended for human consumption, and includes drinks, chewing gum and any substance which has been used in the manufacture, preparation, or treatment of “food”, but does not include cosmetics or tobacco or substances used only as drugs.
Food Additive	Any substance not normally consumed as a food by itself and not normally used as a typical ingredient of the food, whether or not it has nutritive value, the intentional addition of which to food for a technological (including organoleptic) purpose in the manufacture, processing, preparation, treatment, packing, packaging, transport or holding of such food results, or may be reasonably expected to result (directly or indirectly), in it or its by-products becoming a component of or otherwise affecting the characteristics of such foods. The term does not include contaminants or substances added to food for maintaining or improving nutritional qualities.
Food business operator (FBO)	The person/company who undertakes, whether for profit or not, any activity related to any stage of the food chain.
Food chain	The series of processes that food goes through; it includes primary production (including feeds, agricultural practices and environmental conditions), product design and processing, transport, storage, distribution, marketing, preparation and consumption.
Food hygiene	Comprises conditions and measures necessary for the production, processing, storage and distribution of food designed to ensure a safe, sound, wholesome product fit for human consumption.
Food Recall	The action to remove food from the market at any stage of the food chain, including that possessed by consumers.
Food safety	Assurance that food will not cause harm to the consumer when it is prepared and/or eaten according to its intended use.

Term	Definition
Food safety control system	The combination of control measures that, when taken as a whole, ensures that food is safe for its intended use.
Food Safety Service	Involves all the public institutions that interact in food control, vigilance and monitoring across the agri-food chain. It also includes official accredited private professionals or institutions.
Foodborne disease	Any disease of an infectious or toxic nature caused by the consumption of food.
Foodborne pathogen	A pathogen present in food, which may cause human disease(s) or illness through consumption of food contaminated with the pathogen and/or the biological products produced by the pathogen.
Harmonization	The establishment, recognition and application of common sanitary and phytosanitary measures by different Members.
Hazard	A biological, chemical, or physical agent in, or condition of, food with the potential to cause an adverse health effect.
Indicator	Quantitative variable or qualitative factor that provides a simple and reliable means to measure achievement, to reflect the changes connected to activities, or to help assess the performance of a programme or system.
Inspection	Examination of food or systems for control of food, raw materials, processing, and distribution, including in-process and finished product testing, to verify that they conform to requirements.
International norms, standards, guidelines and recommendations	As regards plant health, those established by the IPPC; as regards food safety, those established by the Codex Alimentarius; as regards animal health and zoonoses, those established by the WOAH (formerly OIE).
Laboratory	A properly equipped facility endowed with competent technical personnel to carry out different food analysis, pest and clinic diagnostic methods and tests.

Term	Definition
National Plant Protection Organization	Official service established by a government to discharge the functions specified by the IPPC. Authority resides in the national plant protection organization, but some functions or services may be delegated and executed by third parties under the direction of the official service.
National Veterinary Service	The entity is recognized in the entire country for the application of animal health measures and the international veterinary certification procedures recommended by the WOA. Authority resides in the national veterinary service, but some functions or services may be delegated and executed by third parties under the direction of the official service.
Pest- or disease-free area	An area, whether all of a country, part of a country, or all or parts of several countries, as identified by the Competent Authorities, in which a specific pest or disease does not occur.
Pests and diseases	Clinical and/or pathological manifestation of an infection.
Phytosanitary status	The status of a country, area, or zone within the country with respect to a particular pest or disease, in accordance with the criteria set forth by the IPPC.
Plant Health	Entails the application of scientific knowledge, logic and innovation to administrative and regulatory systems for achieving a good standard of health in plants, including cultivated and uncultivated, unmanaged plants, wild flora, habitats and ecosystems.
Plant Pest	Any species, strain or biotype of plant, animal, or pathogenic agent injurious to plants, or plant products.
Primary production	Means the production, rearing or growing of primary products including harvesting, milking and farmed animal production prior to slaughter. It also includes hunting and fishing and the harvesting of wild products.
Processing	Any action that substantially alters the initial product, including heating, smoking, curing, maturing, drying, marinating, extraction, extrusion or a combination of those processes.

Term	Definition
Quarantine Pests	Pests of potential economic importance to the area are endangered and not yet present, or not widely distributed and controlled.
Risk	A function of the probability of an adverse health effect and the severity of that effect, consequential to a hazard(s) in food.
Risk analysis	A process consisting of three components: risk assessment, risk management and risk communication.
Risk assessment	The evaluation of the likelihood of entry, establishment or spread of a pest or disease within the territory of an importing Member according to the sanitary, or phytosanitary measures which might be applied, and of the associated potential biological and economic consequences; or the evaluation of the potential for adverse effects on human or animal health arising from the presence of additives, contaminants, toxins or disease-causing organisms in food, beverages or feedstuffs.
Sanitary or phytosanitary measures	All relevant laws, decrees, regulations, requirements and procedures including, inter alia, end product criteria; processes and production methods; testing, inspection, certification and approval procedures; quarantine treatments including relevant requirements associated with the transport of animals or plants, or with the materials necessary for their survival during transport; provisions on relevant statistical methods, sampling procedures and methods of risk assessment; and packaging and labelling requirements directly related to food safety.
Sanitary status	The status of a country, area, or zone within the country with respect to a particular pest or disease, in accordance with the criteria set forward in the Terrestrial Animal Health Code of the WOAH.
Scientific evidence	Means information furnishing a level of proof based on the established and accepted methods of science.
Standards	A document that provides technical specifications, or other precise criteria to be used constantly as rules, guidelines or definitions of characteristics, to ensure materials, products, processes and services are fit for their intended purpose.

Term	Definition
Surveillance	An official process which collects and records data on pest presence, or absence by survey, monitoring, or other procedures. With respect to food safety, it means the systematic ongoing collection, collation, and analysis of information related to food safety and the timely dissemination of information for assessment and response as necessary.
Traceability (product tracing)	The ability to follow the movement of a food through specified stage(s) of production, processing and distribution.
Transparent	Characteristics of a process where the rationale, the logic of development, constraints, assumptions, value judgments, decisions, limitations and uncertainties of the expressed determination are fully and systematically stated, documented, and accessible for review.
Veterinary public health	The application of veterinary science and includes all actions that directly link to animals, their products and by-products, so long as they contribute to the protection and improvement of the physical, mental and social well-being of humans.
Zoonoses (Zoonotic diseases)	Diseases transmitted from animals, or animal-related products to humans.

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