

Government of Jamaica

IMPLEMENTATION PLAN



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The Implementation plan has been developed by the Plant Health Coordinating Committee (PHCC) with the support of the Public Sector Modernization Division (PSMD) of the Cabinet Office.

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LIST OF ACRONYMS

ACP	Agricultural Competitiveness Programme
ADRM	Agricultural Disaster Risk Management System
AED	Agricultural Export Division
ASSP	Agricultural Support Services Project
CAP	Certification of Agricultural Produce Programme
CARDI	Caribbean Agricultural Research and Development Institute
CIB	Coconut Industry Board Coffee Industry Board
CITES	Convention on International Trade in Endangered Species of Wild Flora and Fauna
CO	Cabinet Office
CODEX	Codex Alimentarius Commission
CPC	Chief Parliamentary Council
EPPR	Emergency Preparedness and Plant Pest Response
FAO	Food and Agriculture Organization of the United Nations
GAPs	Good Agricultural Practices
GMO	Genetically Modified Organism
GMPs	Good Manufacturing Practices
ICM	Integrated Crop Management
IICA	Inter-American Institute for Cooperation in Agriculture
IOJ	Institute of Jamaica
IPM	Integrated Pest Management
IPPC	International Plant Protection Convention
ISO	International Organization for Standardisation
JCPA	Jamaica Citrus Protection Agency
MoAF	Ministry of Agriculture and Fisheries
MOH	Ministry of Health
MOU	Memorandum of Understanding
NCBJ	National Certification Body of Jamaica
NEPA	National Environment and Planning Agency
NEPPC	National Emergency Plant Pest Committee
NFA/FD	National Forest Agency/Forestry Department
NGO	NonGovernmental Organization
NPHB	National Plant Health Board
NPPO	National Plant Protection Organization
NSC	National Surveillance Committee
PCA	Pesticides Control Authority
PEQ	Post Entry Quarantine
PHCC	Plant Health Coordinating Committee
PHIS	Plant Health Information System

PHS	Plant Health System
PMEU	Performance Management Evaluation Unit
PPU	Plant Protection Unit
PQ/PI	Plant Quarantine/ Produce Inspection Branch
PRA	Pest Risk Analysis
PSMD	Public Sector Modernization Division
RADA	Rural Agricultural Development Authority
RPPD	Rural Physical Planning Department
SRC	Scientific Research Council
SIRI	Sugar Industry Research Institute
SPS	Sanitary and Phytosanitary Measures
TCPA	Town and Country Planning Authority
ToR	Terms of Reference
UWI	University of the West Indies
WTO-SPS	World Trade Organization Agreement on Sanitary and Phytosanitary Measures

1.0 PROJECT OVERVIEW

1.1 *Background*

The task of protecting Jamaican agriculture is becoming increasingly challenging, as natural and national borders that once were effective barriers to the spread and introduction of unwanted organisms or materials are now under pressure from the volumes of international traffic. Continental countries with land borders have always experienced difficulties in monitoring and controlling the movement of pests across their borders. Island nations are no longer protected by their surrounding oceans, as the volumes and speed of modern air and shipping traffic breach their natural defences against pest introduction. These challenges are also compounded by limited financial and human resources to safeguard these borders against unwanted pest introductions.

In addition, the intensification of production systems based on exotic species and climatic and environmental changes have all increased the risks of introducing harmful alien species. This poses increasing difficulties for phytosanitary authorities. In their day-to-day operation, phytosanitary authorities now face many demands such as assessment of pest risk, evaluation of control measures and planning for emergency responses to pest outbreaks.

The impacts of pests and unwanted species are widespread and have a negative effect on the environment, economy and society in general. Some of these pests have the capacity to cause damage to the natural environment and agricultural crops. Economic costs of pest eradication and long term pest control options are normally borne by taxpayers, farmers and ultimately, consumers. The application of pesticides to control unwanted pests leads to damage of the ecosystem, higher costs of production and negative effects on human health and nutrition.

Political and social impacts associated with regulated pests include the hampering of sustainable development opportunities as pest infestations and outbreaks negatively affect food security and rural stability. Pest outbreaks can impact negatively on small farmer incomes and lead to the deepening of poverty in rural areas due to the destruction of livelihoods.

1.2 *Introduction*

The Plant Health Policy was developed, which identified the gaps and failures in the current plant health system in light of requirements of international treaties and agreements and food safety and phytosanitary standards of our major trading partners. The policy identified issues faced by Government that hinder the development of an efficient plant health system. The Implementation Plan will therefore make provision for the revision of existing legislation, building of institutional capacity, scientific systems, quarantine capacity, surveillance systems, emergency response for pest outbreaks and increased public awareness.

The Implementation Plan:

1. Identifies all the activities to be undertaken in achieving each policy objective;
2. Identifies the roles and responsibilities of the various Agencies involved in the process to prevent duplication of efforts;
3. Identifies gaps, limitations and interrelated activities which may impact the successful implementation of the policy;
4. Develops specific timelines, performance indicators and funding requirement; and
5. Provides for the monitoring and evaluation of the policy implementation.

1.3 *Objectives*

The major objectives of this implementation plan are to:

1. Establish a national coordinating mechanism for plant health activities.
2. Improve the current plant health systems in accordance with international standards, obligations and best practices (e.g. International Plant Protection Convention {IPPC}, World Trade Organization Agreement on Sanitary and Phytosanitary Measures {WTO-SPS} Agreement etc.).
3. Promulgate modern plant health legislation, associated regulations and protocols
4. Strengthen technical and operational capacities of plant health entities
5. Facilitate the development of systems to mitigate the introduction, spread and impact of harmful alien pest species, which will be used in tandem with the national Agricultural Disaster Risk Management System (ADRM)
6. Promote the use of good agricultural practices (GAPs) and good manufacturing practices (GMPs) (post-harvest component)
7. Develop and implement public education and awareness programmes for plant health
8. Facilitate plant health research and development activities
9. Monitor and evaluate the plant health system

Interrelations and Interdependences of Objectives

The plan recognizes the inter-relations and interdependences of the various objectives and planned activities as illustrated in the implementation schedule in Section 6.5 of the document.

1.4 Scope of work

The Scope of work includes:

1. Establishment of the National Plant Health Board (NPHB) and National Emergency Plant Pest Committee (NEPPC); designation of National Plant Protection Organization (NPPO)
2. Authorizing the Plant Protection Unit (PPU), Rural Agricultural Development Authority (RADA) and Customs Department to provide complementary support to the NPPO
3. Institutionalization of the National Plant Health Coordinating Committee (PHCC) as the technical advisory to the NPHB
4. Enactment of modern plant health legislation and the revision of existing legislation governing plant health in each agency
5. Development of appropriate technical capacities and competences in plant health (i.e. monitoring, surveillance, quarantine, risk analysis etc.), in keeping with international best practices and standards
6. Promoting the use of GAPs and GMPs in keeping with international best practices and standards
7. Strengthening research and coordinating activities to provide adequate and timely scientific support for phytosanitary concerns, capacity building and cooperative research
8. Development of a public education programmes on plant health issues and their impact on environmental and human health
9. Establishing formal mechanisms for stakeholders participation in the development and sustainability of the Plant Health System (PHS)

The Scope of work includes:

10. Influencing the development of international standards through active participation in meetings, conferences and seminars i.e. Sanitary and Phytosanitary Measures (SPS), Codex Alimentarius Commission (CODEX), IPPC and International Organization for Standardization (ISO)
11. Establishment of mechanisms for the monitoring and evaluation of the national PHS

Interrelated Activities are the activities that will not be undertaken in this implementation plan but have implications/ impacts and supports the Plant Health Policy

1. E-government including the Port Community System
2. International Food Standards impacting trade
3. National Food Safety Policy (2011)
4. Jamaica Trade Policy 2001 (revised)
5. The development of a Food and Nutrition Security Policy
6. Jamaica National Agency for Accreditation (JANAAC)
7. National Certification Body of Jamaica (NCBJ)
8. Bureau of Standards Certification of Agricultural Produce (CAP) Programme
9. Implementation of the E-Trade System (export module)
10. Agricultural Competitiveness Programme (ACP)

Assumptions/Understanding

1. Shared vision and “buy in” among the Agencies
2. Cooperation by relevant stakeholders
3. Project will be adequately resourced
4. The political will to implement the plan
5. Legislative framework

2.0 RISK MANAGEMENT

Objectives	Major Issues	Recommendations
1. To establish a national coordinating mechanism for plant health activities	Fragmentation of responsibilities, gaps, duplication of activities and general lack of coordination among the agencies whose activities impact plant health	<ul style="list-style-type: none"> ▪ Designate Plant Quarantine/Produce Inspection Branch(PQ/PI) as the NPPO with support from RADA, PPU and the Customs Department ▪ Establish the NPHB ▪ Institutionalize the PHCC ▪ Establish the NEPPC ▪ Establish an integrated mandatory reporting system for sharing information ▪ Formalize collaborative arrangements with academia, commodity boards and non-governmental organizations (NGOs)
2. Improve the current plant health systems in accordance with international standards, obligations and best practices (e.g. IPPC, WTO-SPS Agreement)	Enforcement of global standards internationally and use of inadequate standards locally limit Jamaica's access to international markets	Adopt international standards and harmonize local standards
	Lack of coordination in the use of the standards	Improve coordination in the use of the standards
3. To promulgate modern	Lack of legal status to	Enact new legislation to

Objectives	Major Issues	Recommendations
plant health legislation, associated regulations and protocols	support the work of the NPHB and PHCC	empower the NPHB and PHCC
	There are several dated acts and regulations which are not harmonized with international standards and agreements	Revise dated acts and regulations
	There is no act that governs plant protection activities	Investigate the need for a Plant Protection Act
	Length of time which it take to promulgate legislation in large part due to Chief Parliamentary Council (CPC) processes	Seek early and effective engagement of the CPC
	Insufficient compliance with existing legislation	Promote better law enforcement, provide training and education
4. Strengthen technical and operational capacities of plant health entities	Inadequate scientific data and its use in decision making Limited access to scientific information	<ul style="list-style-type: none"> ▪ Strengthen mechanisms for generating, sourcing and accessing scientific data for decision making
	A need for transparent, science-based interventions	<ul style="list-style-type: none"> ▪ Provide further strengthening of the Pest Risk Analysis (PRA) Unit
	Inconsistent training and inadequate staffing in	Increase technical capacities of plant health professionals

Objectives	Major Issues	Recommendations
	appropriate disciplines	through training and increase staff complement
	Inadequate laboratory services	Upgrade and modernize laboratory facilities formally accredit relevant laboratories
5. Facilitate the development of systems to mitigate the introduction, spread and impact of alien pest species, which will be used in tandem with the national Agricultural Disaster Risk Management System (ADRM)	No formal comprehensive system of surveillance and data sharing	A comprehensive system for pest surveillance and monitoring and data sharing formalized
	Unscientific data collection by field and extension officers	Training of field and extension officers participating in surveillance
	Lack of contingency plans for the management of alien species	Establish the NEPPC
	The integrated pest emergency response system is not functioning	Reactivate and improve the integrated emergency pest response system
	Delayed activation of ADRM response system	Simulation for timely activation of response system when needed
6. Promote the use of GAPs and GMPs (post-harvest component)	Stakeholders are reluctant to adapt GAPs and GMPs such as integrated crop management (ICM) and post-harvest standards	Established Training and monitoring systems to foster the use of GMPs and GAPs
	Pesticides misuse by farmers	Provide training in pesticide usage and management
	No formal system for pesticide residue testing	Develop a coordinated programme for pesticide

Objectives	Major Issues	Recommendations
	residue monitoring Adverse impact of climate change on plant health and food security (e.g. high pest pressure and increased crop losses)	Develop climate change adaptation strategies
7. To develop public education programmes on plant health issues and their impact on human and environmental health	Lack of coordinated structure and funding to support public relations programs	Form partnerships with stakeholders for public relations and communication coordinating mechanism
8. Facilitate plant health research and development activities	Lack of coordinated efforts in setting priority research areas	Set priority areas for research with stakeholders
	Limited mechanisms for collaboration in research activities	Enhance the mechanisms for research and development
	Inadequate funding	Access funding through public-private partnerships and external funding agencies
9. Monitoring and evaluation of plant health system	Lack of emphasis on monitoring and evaluation	Collaborate with the Performance Management Evaluation Unit (PMEU) in the Cabinet Office

3.0 ROLE AND FUNCTIONS OF ORGANIZATIONS INVOLVED

The table sets out clearly the different agencies/organization involved in the project, and a summary of their roles and responsibilities.

Organization	Unit/Section	Roles/Functions
National Plant Health Board		Provides high level oversight, coordination and direction.
Plant Health Coordinating Committee		<ul style="list-style-type: none">▪ Provides technical support to the NPHB.▪ Coordinates, advises, implements and monitors plant health issues.
National Plant Protection Organization		<ul style="list-style-type: none">▪ Issues phytosanitary certificates for consignments of plants, plant products and other regulated articles.▪ Conducts surveillance of growing plants, particularly with the object of reporting the occurrence, outbreak and spread of pests, and of controlling those pests.▪ Inspects, disinfects or disinfects consignments of plants and plant products moving in international traffic with the object of preventing the introduction and/or spread of pests and in order to meet phytosanitary requirements.▪ Conducts pest risk analyses.▪ Protects endangered areas and designates, maintains and conducts surveillance of pest free areas and

Organization	Unit/Section	Roles/Functions
		areas of low pest prevalence.
Ministry of Agriculture and Fisheries	Plant Protection Unit (PPU), Research and Development Division	<ul style="list-style-type: none"> ▪ Contributes to improved efficiency, productivity and enhanced competitiveness of plant commodities through development of cost effective and environmentally friendly technologies for the management of plant pest outbreaks, inclusive of honeybee pests. This technology is then transferred to farmers through extension. ▪ Provides improved and relevant pest diagnostic and advisory services to stakeholders. ▪ Maintains an updated pest register and determines pest status.
	Post Entry Quarantine (PEQ) Unit/Plant Protection Unit, Research and Development Division	<ul style="list-style-type: none"> ▪ Provides diagnostic testing of citrus budwood material as a part of the Citrus certification programme. ▪ Maintains citrus parent germplasm. ▪ Provides clean planting material for stakeholders. ▪ Monitors imported plant material and validates phytosanitary clearances issued by exporting countries.
	Plant Quarantine/Produce Inspection (PQ/PI)	<ul style="list-style-type: none"> ▪ Ensures that the highest quality, pest free produce is imported or exported into/from Jamaica. The Branch is

Organization	Unit/Section	Roles/Functions
	Branch	<p>also mandated to ensure that no harmful exotic pest is introduced into the country and becomes established.</p> <ul style="list-style-type: none"> ▪ Monitors activities to protect and enhance plant health and SPS measures. ▪ Conducts pest risk analyses. ▪ Coordinates pest surveillance and pest response activities. ▪ Certifies farms and nurseries.
	Rural Agricultural Development Authority (RADA)	<ul style="list-style-type: none"> ▪ Provides sustainable and environmentally safe crop/pesticide management advice to stakeholders. ▪ Transfers ICM/Integrated Pest Management (IPM) technologies generated by research to stakeholders. ▪ Instructs stakeholders on the safe and efficient use of pesticides. ▪ Conducts pest and pesticide surveillance activities and report findings to Research and Development. ▪ Maintains farmer registration database. ▪ Coordinates the ADRM at the parish levels. ▪ Collects and collates meteorological data for pest forecasting and crop

Organization	Unit/Section	Roles/Functions
	National Forest Agency (Forestry Department) (NFA/FD)	<p>zoning.</p> <ul style="list-style-type: none"> ▪ Maintain the forest cover at not less than 30% of the country ▪ Increase forest cover to at least 2% over the next 10 years ▪ Transfer the local experience and technology to two other territories in the region.
	Agricultural Export Division (AED)	<ul style="list-style-type: none"> ▪ Monitors pests affecting spice crops (e.g. ginger, turmeric, pimento and nutmeg). ▪ Develops and implements IPM programmes for spice crops. ▪ Conducts research on the efficacy of IPM systems.
Ministry of Health	Pesticides Control Authority (PCA)	<ul style="list-style-type: none"> ▪ Regulates the registration, use and disposal of pesticides. ▪ Issues licences to import and manufacture pesticides. ▪ Licenses pest control operators, applicators and farm stores. ▪ Promotes safe use and management of pesticides. ▪ Monitors pesticide residue on imported and locally produced foods.
Commodity Boards/Groups	Sugar Industry Research Institute (SIRI)	<ul style="list-style-type: none"> ▪ Monitors pests affecting sugarcane production and devises IPM strategies for their control.

Organization	Unit/Section	Roles/Functions
		<ul style="list-style-type: none"> ▪ Conducts research for improved sugarcane production.
	Coffee Industry Board (CIB)	<ul style="list-style-type: none"> ▪ Maintains the level of coffee pest at a manageable level (3-5% threshold) through monitoring, grower training and contracting research to develop appropriate pest management strategies.
	Banana Board	<ul style="list-style-type: none"> ▪ Conducts research on the management of banana pests.
	Coconut Industry Board (CIB)	<ul style="list-style-type: none"> ▪ Provides to growers coconut planting material resistant to lethal yellowing disease. ▪ Addresses the management of existing pest problems through research and development of IPM systems. ▪ Uses proactive approach to prevent and minimize the spread of exotic pests into coconut growing areas. ▪ Promotes the interest and efficiency of the coconut industry. ▪ Encourages the production of coconuts and regulates the purchase, sale, and exportation of coconuts. ▪ Keeps the government informed on the state of the industry. ▪ Advises government when any action is necessary. ▪ Arranges for the issuing of licences

Organization	Unit/Section	Roles/Functions
		<p>to manufacturers of coconut products.</p> <ul style="list-style-type: none"> ▪ Arranges for insurance for coconut trees against damage by wind storm. ▪ Assists growers to market their crops. ▪ Carries out research on agricultural problems of the industry. ▪ Advises growers on their agricultural problems.
	Cocoa Industry Board	<ul style="list-style-type: none"> ▪ Promotes the growing of cocoa among farmers ▪ Provides technical support ▪ Purchases and processes wet cocoa beans ▪ Sells dried fermented beans.
Academic Institutions	University of the West Indies (UWI), Department of Life Sciences	<ul style="list-style-type: none"> ▪ Provides academic training and conducts research in the areas of arthropod biology and ecology, botanical pesticides and pesticide management.
	UWI Biotechnology Centre	<ul style="list-style-type: none"> ▪ Uses modern research tools (e.g. molecular tools) to generate information on agricultural pests, and develop plants with novel traits with greater degrees of resistance to plant pests. ▪ Develop <i>in vitro</i> methods for clean planting material, bio-pesticides, bio-active plant products, and soil-bio-ameliorants for <i>in vitro</i> and field

Organization	Unit/Section	Roles/Functions
		<p>trials.</p> <ul style="list-style-type: none"> ▪ Tests for bioactivity (e.g. antimicrobial) and develops bio-products (e.g. neem bio-pesticide) in collaboration with other UWI departments. ▪ Provides disease indexed micro propagated planting material for comparative studies. ▪ Develops soil ameliorants (e.g. biochar) that positively influence microbial soil populations around plant roots. ▪ Develops bio-pesticides, diagnostic kits and other non- genetically modified organism (GMO) agro-biotech tools.
	Northern Caribbean University (NCU)	<ul style="list-style-type: none"> ▪ Provides academic training and conducts research in the areas of arthropod biology and ecology, botanical pesticides and pesticide management. ▪ Tests for pesticides, caloric content of food and beverages, moisture, heavy metals and inorganic ions, microbiological, proteins, lipids, and carbohydrates for agricultural producers involved in domestic and export business. ▪ Conducts testing seminar sessions

Organization	Unit/Section	Roles/Functions
		<p>for farmers to address best practices in growth and maintenance of plants.</p> <ul style="list-style-type: none"> ▪ Provides pest-free plantlets to the public.
Regional Agricultural Research and Development	College of Agriculture, Science and Education (CASE)	<ul style="list-style-type: none"> ▪ Provides academic training and conducts research in agriculture. ▪ Maintains a germplasm bank of all locally grown fruit trees. ▪ Diagnoses plant pathogens.
	Caribbean Agricultural Research and Development Institute (CARDI)	<ul style="list-style-type: none"> ▪ Contributes to the achievement of the national goals for sustainable agricultural development as described in Vision 2030. ▪ Identifies gaps in addressing targeted priority areas through consultation with the Ministry of Agriculture and Fisheries and other stakeholders. ▪ Mobilises resources to address some identified gaps. ▪ Facilitates networking and coordination among institutions involved in agricultural development. ▪ Generates, transfer and apply appropriate technologies through research for development.
	Food Agricultural Organization of the United Nations (FAO)	<ul style="list-style-type: none"> ▪ Collects analyses and disseminates information. ▪ Advises governments on policy and planning.

Organization	Unit/Section	Roles/Functions
		<ul style="list-style-type: none"> ▪ Serves as an international forum for discussing food and agricultural issues and approving international standards and agreements. ▪ Provides direct aid for developments. ▪ Intervenes in times of crisis when food production and distribution are disrupted by human or natural disasters such as war, drought and insect infestations.
	Centre for Agricultural Bioscience International (CABI)	<ul style="list-style-type: none"> ▪ Contributes to improving food security, protecting biodiversity, supporting farmers and providing information to its member countries through scientific publishing, development projects and research, and microbial services.
	Inter-American Institute for Cooperation on Agriculture (IICA)	<ul style="list-style-type: none"> ▪ Provides technical cooperation in technology and innovation for agriculture, agricultural health and food safety, agribusiness, agricultural trade, rural development and training.
Other Organizations	Jamaica Citrus Protection Agency (JCPA)	<ul style="list-style-type: none"> ▪ Implements and monitors the mandatory citrus certification programme. ▪ Conducts citrus pest surveillance and recommend IPM strategies.
	National Environment and Planning Agency	<ul style="list-style-type: none"> ▪ Develops environmental and planning policies.

Organization	Unit/Section	Roles/Functions
	(NEPA)	<ul style="list-style-type: none"> ▪ Monitors natural resource assets and the state of the environment. ▪ Enforces environmental and planning regulations. ▪ Processes applications for environmental permits and licenses (e.g. introduction of species for biological control) and beach licenses. ▪ Grants planning approvals under the Town and Country Planning Act (TCPA). ▪ Grants Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) permits and certificates and Hunters' Licences. ▪ Provides advice on land use, planning and development. ▪ Provides information on environmental, planning and development issues. ▪ Conducts public education and awareness programmes on environmental and planning issues. ▪ Responds to environmental emergencies.

Plant health services provided by these institutions include quarantine, pest/disease diagnosis, pesticide regulation, pest management, surveillance and research.

4.0 LEGISLATIVE IMPLICATIONS

Legislative implications ensure that we have an effective plant health system in compliance with the following Acts and Regulations.

ITEM	CURRENT LEGISLATIONS	STATUS
1.	Plants (Quarantine) Act (1993)	Being reviewed
2.	Plant Quarantine Act, The Citrus Plant (Certification) Regulations (1999)	
3.	Plant Quarantine Act, Plant (Importation) Control (Amendments) Regulation (2005)	
4.	The Pesticides Act (1975)	
5.	The Pesticides Act, The Pesticides Regulations (1996)	
6.	The Pesticides Act, The Pesticides (Amendment) Regulations (2004)	
7.	The Pesticides Act, The Pesticides (Amendment) Regulations (2009)	
8.	The Natural Resources Conservation Authority Act (1991)	
9.	The Forest Act (1996)	
10.	Agricultural Produce Act (1926)	Being reviewed
11.	Agricultural Produce Act, The Agricultural Produce (Coffee) Regulations (1941)	
12.	Agricultural Produce Act, The Agricultural Produce (Tomatoes) Regulations (1948)	
13.	Agricultural Produce Act, The Citrus Fruit (Protection) Regulations (1948)	
14.	Agricultural Produce Act, The Agricultural Produce (Cocoa) Regulations (1950)	
15.	Agricultural Produce Act, The Agricultural Produce (Banana) Regulations (1969)	

ITEM	CURRENT LEGISLATIONS	STATUS
16.	Agricultural Produce Act, The Agricultural Produce (Vegetables, Fruits and Ground Provisions) (Export) Regulations (1969)	
17.	Agricultural Produce Act, The Agricultural Produce (Ginger) Regulations (1979)	
18.	Agricultural Produce Act, The Agricultural Produce (Pimento) Regulations (1988)	
19.	Pesticides Maximum Residues Levels in Crops Food and Feeding Stuff Regulations (2013)	Draft
20.	Food Storage and Prevention of Infestation Act (1958)	
21.	Food Storage and Prevention of Infestation Regulations (1973)	
22.	Standards Act (1969)	Being reviewed
23.	The Bees Control Act (1968)	To be reviewed
24.	Weights and Measures Act (1976)	Being reviewed
25.	Consumer Protection Act (2005)	
26.	Scientific Research Council Act (1960)	Revision pending
27.	The Fertilizers and Feeding Stuffs Act (1942)	
28.	The Fertilizers and Feeding Stuffs, The Fertilizers and Feeding Stuffs Regulations (1945)	
29.	The Public Health Act (1887)	To be revised
30.	The Public Health (Food Handling) Regulations (1998, amended 2000)	Being reviewed
31.	Rural Agricultural Development Authority Act (1990)	
32.	The Coconut Industry Board Control Act (1945)	

5.0 **POLICY IMPLICATIONS**

CURRENT POLICIES	IMPACT/STATUS
National Quality Policy (2001)	
Food Safety Policy (2010)	
E-Trade policy/IT	
Jamaica Trade Policy (2001)	
National Strategy and Action Plan on Biological Diversity in Jamaica (2003)	
Draft National Biosafety Policy (2011)	
Policy for Jamaica 's System of Protected Areas (1997)	
Forest Policy (2001) (updated Forest Land Use Policy, 1996)	
Towards a Watershed Policy for Jamaica (2006) (Green Paper No. 2/99) (revised December 2011)	
Draft Policy and Regulation for Mangroves and Coastal Wetlands Protection (1998)	
Towards a National Policy for Orchid Conservation (2007) (Green Paper No. 1/09)	
Draft National Policy for the Conservation of Sea grass (2001)	
National Forest Management and Conservation Plan (2001)	

6.0 THE IMPLEMENTATION PLAN

The implementation plan below identifies the phases, major outcomes and activities related to each objective, as well as the assignment of lead responsibility. The Implementation Plan is divided into the following five (5) sections:

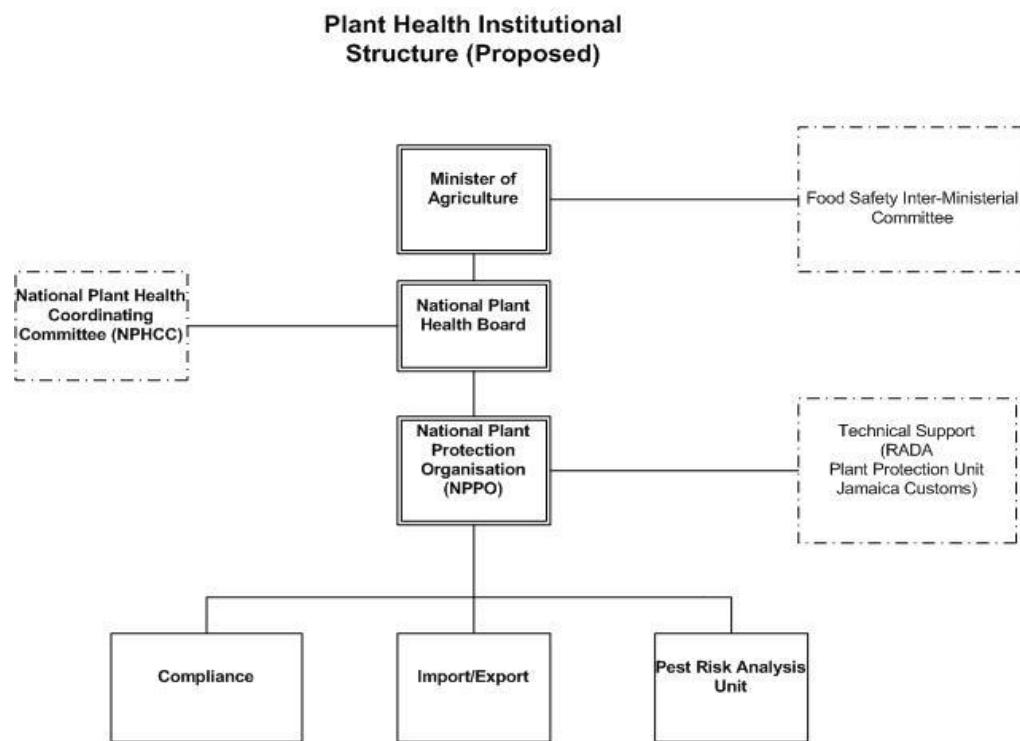
1. Governance Framework
2. Overall Project Financing
3. The major Objectives, related Outcomes and means of verification.
4. Monitoring Implementation
5. Summary of the Implementation Schedule

6.1 Governance Framework

The implementation of this policy will be governed by the structure below where the Government will designate the Plant Quarantine/Produce Inspection Unit as the National Plant Protection Organization for Jamaica, with complementary plant health services provided by RADA, Plant Protection Unit and Customs Department.

Government will also establish a National Plant Health Board to provide advice to the Minister responsible for Agriculture and to the new formally instituted NPPO on all matters related to plant health in the country.

The existing National Plant Health Coordinating Committee will serve as the technical advisory committee to the National Plant Health Board.



Date: 23/11/2012

6.2 Overall Project Financing

OBJECTIVE	DESIRED OUTCOME	COST JA\$M
To establish a national coordinating mechanism for plant health activities	<ul style="list-style-type: none"> Establish the NPHB PQ/PI designated as NPPO with support from RADA, PPU and Customs PHCC institutionalized Collaborative arrangements formalized with academia, commodity boards and NGOs The NEPPC established Coordination of plant health systems improved 	29,200,000
Improve the current plant health system	<ul style="list-style-type: none"> International standards adopted and existing standards harmonized Plant health system fully compliant with international standards and best practices 	15,500,000
To promulgate modern plant health legislation	<ul style="list-style-type: none"> Modern plant health legislation enacted and the existing legislation governing plant health revised <p>New legislation to empower the NEPPC, NPHB and PHCC enacted</p>	5,000,000
Strengthen technical and operational capacities	<ul style="list-style-type: none"> Technical capacities of plant health professionals increased through training Laboratories upgraded, modernized and select processes accredited 	110,500,000
Facilitate the development of sys.spread and impact of alien pest species	<ul style="list-style-type: none"> Comprehensive system for pest surveillance and monitoring developed Early detection of pest incursions increased Emergency Preparedness and Plant Pest Response (EPPPR) Guidelines developed The NEPPC activated Develop a comprehensive Plant Health Information System (PHIS) 	222,600,000
Promote the use of GAPs and GMPs (post-harvest component	<ul style="list-style-type: none"> The use of GAPs and GMPs is promoted Training in pesticide usage and management 	183,500,000

	<ul style="list-style-type: none"> • Training in GAPs and GMPs 	
	<ul style="list-style-type: none"> • National Pesticide residue monitoring programme for imported and locally produced crops 	
	<ul style="list-style-type: none"> • Climate change adaptation strategies developed 	
To develop public education programmes	<ul style="list-style-type: none"> • Increased public awareness 	12,000,000
Facilitate research and development	<ul style="list-style-type: none"> • Plant Health systems driven by relevant and accurate data 	100,600,000
Monitoring and evaluation of plant health system	<ul style="list-style-type: none"> • Structured monitoring and evaluation systems for the implementation of the Plant Health Policy and PHS 	3,000,000
Contingency 10%		68,190,000
TOTAL COST		750,090,000

The implementation of this plan will be financed through budgetary support from the line Ministries and their respective agencies; financing of specific activities by the Cabinet Office; through allocation of funds under Component 2 of the ACP which provides support for the improvement of an integrated, efficient and sustained Agricultural Health and Food Safety system and; additionally, by leveraging international funding, from donor agencies, through development projects.

6.3 *Objectives and Outcomes*

OBJECTIVE	DESIRED OUTCOME	HOW MEASURED/PERFORMANCE INDICATOR	COMPLETION DATE	LEAD ORGANIZATION
1. To establish a national coordinating mechanism for plant health activities	Establish the NPHB	The NPHB is established and functional		Ministry of Agriculture and Fisheries (MoAF)
	PQ/PI designated as NPPO with support from RADA, PPU and Customs	The NPPO is legislated and fully operational		
	PHCC institutionalized	PHCC institutionalized and legislated		
	Collaborative arrangements formalized with academia, commodity boards and NGOs	Memorandum of understandings (MOUs) developed and signed		
	The NEPPC established	The NEPPC established and functional		
	Coordination of plant health systems improved	Roles clearly defined and functions carried out		
2. Improve the current plant health systems in accordance with international standards, obligations and best practices (e.g. IPPC, WTO-SPS Agreement etc.).	International standards adopted and existing standards harmonized	Adoption of CODEX, IPPC, SPS etc. standards		MoAF
	Plant health system fully compliant with international standards and best practices	<ul style="list-style-type: none"> ▪ Number of standards adopted ▪ Reduced incidence of non-compliance 		

OBJECTIVE	DESIRED OUTCOME	HOW MEASURED/PERFORMANCE INDICATOR	COMPLETION DATE	LEAD ORGANIZATION
3. To promulgate modern plant health legislation, associated regulations and protocols	Modern plant health legislation enacted and the existing legislation governing plant health revised	Acts and Regulations revised, amended, consolidated or repealed to support the plant health policy and system		MoAF; Ministry of Health (MOH)
	New legislation to empower the NEPPC, NPHB and PHCC enacted	New legislation enacted		MoAF
4. Strengthen technical and operational capacities of plant health entities	Technical capacities of plant health professionals increased through training	<ul style="list-style-type: none"> • Increase in technical competence • Plant Health professionals trained 		MoAF
	Laboratories upgraded, modernized and select processes accredited	Number of laboratories upgraded, modernized and processes accredited		
5. Facilitate the development of systems to mitigate the introduction, spread and impact of alien pest species, which will be used in tandem with the national	Comprehensive system for pest surveillance and monitoring developed	<ul style="list-style-type: none"> ▪ Increased surveillance and monitoring capabilities ▪ Protocols developed for surveillance activities 		MoAF
	Early detection of pest incursions increased	Increased early detection of pest incursions		
	Emergency Preparedness and Plant Pest Response	<ul style="list-style-type: none"> ▪ Generic emergency action plan for exotic plant pests completed 		

OBJECTIVE	DESIRED OUTCOME	HOW MEASURED/PERFORMANCE INDICATOR	COMPLETION DATE	LEAD ORGANIZATION
Agricultural Disaster Risk Management System (ADRM)	(EPPPR) Guidelines developed	<ul style="list-style-type: none"> ▪ Emergency action plan for priority quarantine plant pests completed 		
	The NEPPC activated	NEPPC functional		
	Develop a comprehensive Plant Health Information System (PHIS)	<ul style="list-style-type: none"> ▪ PHIS developed ▪ Pest populations managed below economic levels ▪ Impact of plant pest on trade minimized 		
6. Promote the use of GAPs and GMPs (post-harvest component)	The use of GAPs and GMPs is promoted	<ul style="list-style-type: none"> ▪ Increased use of ICM by farmers ▪ Post-harvest practices improved ▪ Reduction in the use of pesticide, especially class I and II pesticides ▪ Shift towards the use of environmentally friendly pesticides ▪ Increased use of non-chemical strategies 		MoAF; MOH
	Training in pesticide usage and management	<ul style="list-style-type: none"> ▪ An increase in the number of stakeholders trained ▪ Judicious use of pesticides 		
	Training in GAPs and GMPs	<ul style="list-style-type: none"> ▪ Improved food security and safety and environmental wellbeing ▪ Decreased cost of crop production ▪ Increased compliance with international trade standard 		

OBJECTIVE	DESIRED OUTCOME	HOW MEASURED/PERFORMANCE INDICATOR	COMPLETION DATE	LEAD ORGANIZATION
6. To develop and implement policies and measures to enhance plant health and reduce risks to human and environmental health		<ul style="list-style-type: none"> ▪ Traceability system implemented ▪ Reduction in the use of class I and II pesticides 		
	National Pesticide residue monitoring programme for imported and locally produced crops	Residue levels kept within established maximum residue limits (MRLs)		
	Climate change adaptation strategies developed	<ul style="list-style-type: none"> ▪ Crop and pest forecasting systems developed and employed ▪ Technologies developed and adapted to mitigate effects of climate change 		MoAF
7. To develop public education programmes on plant health issues and their impact on human and environmental health	Increased public awareness	<ul style="list-style-type: none"> ▪ Reduction in human, plant, and environmental health risks 		MoAF
8. Facilitate plant health research and development activities	Plant Health systems driven by relevant and accurate data	Increased availability and application of scientific data and information		MoAF
9. Monitoring and evaluation of plant	Structured monitoring and evaluation systems for the	<ul style="list-style-type: none"> ▪ Policy implementation plan monitored ▪ Plant Health Policy monitoring and 		Cabinet Office (CO)

OBJECTIVE	DESIRED OUTCOME	HOW MEASURED/PERFORMANCE INDICATOR	COMPLETION DATE	LEAD ORGANIZATION
health system	implementation of the Plant Health Policy and PHS	<p>evaluation systems established.</p> <ul style="list-style-type: none"> ▪ Systems periodically reviewed and verified 		

6.4 Monitoring Implementation

The monitoring of project implementation will be as agreed in this document. The format for reporting the status of key activities is outlined below.

6.4.1 Project Activities and Status

OBJECTIVE #1: To establish a national coordinating mechanism for plant health services

DESIRED OUTCOMES	PLANNED ACTIVITIES	HOW MEASURED/PERFORMANCE INDICATOR	TARGET GROUP	AGENCY RESPONSIBLE	ORIGINAL COMPLETION DATE	STATUS	COST JA \$M
Establish the NPHB	Select Board composition	Board composition selected	Responsible Ministers and Permanent Secretaries	MoAF	March 2014		0.0
	Prepare terms of reference (TOR) for Board	TOR prepared and approved by relevant stakeholders					0.1
PQ/PI designated as NPPO with support from RADA, PPU and Customs	Amend the Plant Quarantine Act	Plant Quarantine Act amended	RADA, PQ/PI, PPU, Customs	MoAF – Legal Department	August 2014		1.0
		Amendment of the Act approved by Parliament			August 2015		
PHCC institutionalized	Prepare TOR	TOR prepared and approved	RADA, PQ/PI, PPU, NEPA, Academia, PCA, CARDI, JCPA,	MoAF	April 2014		0.1
	Institutionalized and legislated	PHCC established and functional		MoAF – Legal Department	August 2015		15.0

DESIRED OUTCOMES	PLANNED ACTIVITIES	HOW MEASURED/PERFORMANCE INDICATOR	TARGET GROUP	AGENCY RESPONSIBLE	ORIGINAL COMPLETION DATE	STATUS	COST JA \$M
			NFA/FD, Institute of Jamaica (IOJ), Commodity Boards				
Collaborative arrangements formalized with academia, commodity boards and NGOs	Prepare TOR & MOUs	TOR & MOUs prepared and approved	Academia, Agricultural Institutions, Commodity Boards and NGOs	PHCC	September 2014		1.5
The National Emergency Plant Pest Committee (NEPPC) established	Prepare TOR, MOU & Establish NEPPC	TOR & MOU prepared. The National Emergency Plant Pest Committee established and functional.	NEPA, ODPEM, Farmers' Groups, Academia, Ministries of Justice, Transport, Commerce, Security, and Finance	PHCC & MoAF	March 2014		1.5
Coordination of	Define the	Governance Framework Manual	RADA, PQ/PI,	MoAF	December 2014		10.0

DESIRED OUTCOMES	PLANNED ACTIVITIES	HOW MEASURED/PERFORMANCE INDICATOR	TARGET GROUP	AGENCY RESPONSIBLE	ORIGINAL COMPLETION DATE	STATUS	COST JA \$M
plant health systems improved	specific roles of respective Agencies	with defined roles and responsibilities developed	PPU, NEPA, UWI, CARDI, IOJ, JCPA, PCA, Customs, NFA/FD, Commodity Boards				
	Established integrated and coordinated mechanism	Agreed mechanism developed and implemented					

OBJECTIVE #2: Improve the current plant health systems in accordance with international standards, obligations and best practices
(e.g. IPPC, WTO-SPS Agreement etc.)

DESIRED OUTCOMES	PLANNED ACTIVITIES	HOW MEASURED/PERFORMANCE INDICATOR	TARGET GROUP	AGENCY RESPONSIBLE	ORIGINAL COMPLETION DATE	STATUS	COST JA \$M
International standards adopted and existing standards harmonized	Consultation with trading partners and stakeholders on existing standard	Documentation on consultation held in order to inform stakeholders	Trade partners, exporters, importers, farmers, and other stakeholders	MoAF	December 2018		12.5
	Review existing legislation and amend where necessary	Legislation reviewed and amended		MoAF – Legal Department	December 2018		1.0
	WTO notification	Standards are published by WTO on website etc.		MoAF – PQ			0.0
Plant health system fully compliant with international standards and best practices	Acquire technical assistance to conduct audit and gap analysis	Audit and gap analysis reports prepared and approved by relevant stakeholders	All stakeholders involved in plant health	MoAF	July 2014		1.0
	Acquire technical assistance to prepare implementation plan	Implementation plan prepared and approved by relevant stakeholders					1.0
	Implementation of	Recommendations from			December 2018		1.0

DESIRED OUTCOMES	PLANNED ACTIVITIES	HOW MEASURED/PERFORMANCE INDICATOR	TARGET GROUP	AGENCY RESPONSIBLE	ORIGINAL COMPLETION DATE	STATUS	COST JA \$M
	plan	implementation plan completed					

OBJECTIVE #3: To promulgate modern plant health legislation, associated regulations and protocols

DESIRED OUTCOMES	PLANNED ACTIVITIES	HOW MEASURED/PERFORMANCE INDICATOR	TARGET GROUP	AGENCY RESPONSIBLE	ORIGINAL COMPLETION DATE	STATUS	COST JA \$M
Modern plant health legislation enacted and the existing legislation governing plant health revised	Review existing legislation	Legislation reviewed	Relevant stakeholders	MoAF – Legal Counsel, CPC, MOH	December 2014	Review begun on some legislation	5.0
New legislation to empower the NEPPC, NPHB and PHCC enacted	Promulgate legislation for the establishment of the NEPPC, NPHB and PHCC	Legislation enacted		MoAF – Legal Counsel, CPC, MOH, CO, PHCC	August 2015		
	Legal framework established for the individual agencies to operate within the National Plant Health Policy	Legislation enacted		MoAF – Legal Counsel, MOH	August 2015		

OBJECTIVE #4: Strengthen technical and operational capacities of plant health entities

DESIRED OUTCOMES	PLANNED ACTIVITIES	HOW MEASURED/PERFORMANCE INDICATOR	TARGET GROUP	AGENCY RESPONSIBLE	ORIGINAL COMPLETION DATE	STATUS	COST JA \$M
Technical capacities of plant health professionals increased through training	Conduct training needs assessment	Training needs assessment report produced	RADA, PPU, PQ/PI, UWI, NEPA, PCA, CARDI, JCPA, Customs, Commodity Boards	RADA, PQ/PI, PPU, NEPA, UWI, CARDI, JCPA, PCA, Customs, Commodity Boards	June 2014		1.5 Recurrent budget of Individual Agency/M inistry
	Develop Training Plan	Training Plan developed			December 2014	Ongoing	
	Conduct training	Training conducted and number of staff trained			December 2018		
Laboratories upgraded, modernized and formally accredited	Procure technical assistance to evaluate and make recommendations for existing laboratory testing capacity	Report produced and accepted	PQ/PI, PPU, PEQ, Rural Physical Planning Department (RPPD), Academia, Commodity Boards, SRC	MoAF/ACP	August 2014		4.0

DESIRED OUTCOMES	PLANNED ACTIVITIES	HOW MEASURED/PERFORMANCE INDICATOR	TARGET GROUP	AGENCY RESPONSIBLE	ORIGINAL COMPLETION DATE	STATUS	COST JA \$M
	<p>Implement recommendations:</p> <ul style="list-style-type: none"> - Acquire and/or upgrade <p>infrastructure and equipment</p> <ul style="list-style-type: none"> - Certification/ accreditation of priority methods and tests 	<p>Physical infrastructure, equipment and supplies in place</p> <p>Labs certified, and methods/tests accredited</p>	<p>PPU, PQ/PI, PEQ, Commodity Boards</p> <p>PPU, PEQ, Commodity Boards</p>	<p>MoAF/ ACP</p> <p>PPU, PEQ, Commodity Boards, JANAAC</p>	<p>August 2014</p> <p>December 2017</p>		<p>100.0</p> <p>5.0</p>

OBJECTIVE #5: Facilitate the development of systems to mitigate the introduction, spread and impact of alien pest species, which will be used in tandem with the national Agricultural Disaster Risk Management System (ADRM)

DESIRED OUTCOMES	PLANNED ACTIVITIES	HOW MEASURED/PERFORMANCE INDICATOR	TARGET GROUP	AGENCY RESPONSIBLE	ORIGINAL COMPLETION DATE	STATUS	COST JA \$M
Comprehensive system for pest surveillance and monitoring developed	Review existing surveillance and monitoring system	Surveillance and monitoring system reviewed and report provided based on the established standards	PQ/PI, PPU, RADA, PEQ, Commodity Boards, IOJ, Academia, RPPD, NEPA, JCPA, NFA/FD	MoAF	July 2014	TOR for the consultancy have been drafted	4.0
	Establish the National Surveillance Committee (NSC)	NSC established				TOR for the NSC have been drafted	0.0
	Develop surveillance protocols and manuals	Surveillance protocols and manuals for priority quarantine plant pests developed and institutionalized			December 2018		12.0
Officers trained in surveillance	Train field officers in survey methodologies	Number of officers trained in survey methodologies	All agencies responsible for surveillance	MoAF	December 2018		100.0
The NEPPC activated in response to pest incursion	Activate the NEPPC	The NEPPC is activated and simulation conducted	ODPEM, NEPA, Farmers' Groups,		June 2014		2.0

DESIRED OUTCOMES	PLANNED ACTIVITIES	HOW MEASURED/PERFORMANCE INDICATOR	TARGET GROUP	AGENCY RESPONSIBLE	ORIGINAL COMPLETION DATE	STATUS	COST JA \$M
		Emergency pest response funds budgeted	Academia, Ministries of Justice, Commerce, Security, and Finance	PHCC	December 2014	Document has been drafted	100.0
Emergency Preparedness and Plant Pest Response (EPPPR) Guidelines completed	Complete Guidelines for the EPPPR for Jamaica	The EPPPR Guidelines for Jamaica is completed Emergency Action Plan developed	1.0				
Develop a comprehensive Plant Health Information System (PHIS)	Assess the current plant health information system (e.g. PHSPRS)	Action Plan developed	PHCC				
		Report prepared and recommendations implemented	All stakeholders that have plant health information systems	MoAF/ACP	December 2015	TOR drafted	3.6

OBJECTIVE #6: Promote the use of GAPs and GMPs (post-harvest component)

DESIRED OUTCOMES	PLANNED ACTIVITIES	HOW MEASURED/ PERFORMANCE INDICATOR	TARGET GROUP	AGENCY RESPONSIBLE	ORIGINAL COMPLETION DATE	STATUS	COST JA \$M
The use of GAPs and GMPs is promoted	Publish generic GAP and GMP manuals	GAP and GMP manuals published	Farmers, exporters, extension officers and researchers	MoAF	September 2012 (GAPs)	Generic GAP completed	2.0
	Publish crop specific GAP manuals	Crop specific GAP manuals developed and published			February 2013 (GMPs)	Review of GMP manual completed	
	Placement of manuals on the Ministry's website (for viewing only)	Manuals placed on Ministry's website			December 2015		15.0
	Prepare and implement public education and	Public Awareness programme prepared and			December 2018		0.0
					December 2018		6.0

DESIRED OUTCOMES	PLANNED ACTIVITIES	HOW MEASURED/ PERFORMANCE INDICATOR	TARGET GROUP	AGENCY RESPONSIBLE	ORIGINAL COMPLETION DATE	STATUS	COST JA \$M
	awareness programme for GAPs and GMPs manuals	implemented					
Training in GAPs and GMPs	Train stakeholders in applying GAPs and GMPs	Technical staff and farmers trained in GAPs	Relevant staff, exporters	MoAF	December 2015	Under the Ministry's FSMA 10,000 farmers targeted for training for in 2013	20.0
		Technical staff, farmers and all active exporters trained and assessed in GMP	Relevant staff, farmers		December 2018		20.0
Training in pesticide usage and management	Train stakeholders in the use and management of pesticides	Farmers and other stakeholders trained and assessed in pesticide usage and management	Farmers and/or pesticide applicators, exporters, technical staff		December 2018	Trainings initiated with exporters and technical staff (January- March 2012)	5.0
National Pesticide residue monitoring programme for imported and locally produced crops	Review the current monitoring programme	Monitoring programme reviewed	Labs, Regulatory bodies	MOH	December 2014	Some monitoring is done by PCA and FSPID	0.2
	Adopt relevant international standards (eg. Codex MRLs)	Relevant international standards adopted		MOH	December 2014		0.0
	Update current monitoring programme (inspection, sampling,	▪ Functional and effective monitoring programme (supplies, protocols,	Fresh market exporters, farmers	MOH, MOAF, MIIC	December 2018		25

DESIRED OUTCOMES	PLANNED ACTIVITIES	HOW MEASURED/ PERFORMANCE INDICATOR	TARGET GROUP	AGENCY RESPONSIBLE	ORIGINAL COMPLETION DATE	STATUS	COST JA \$M
	etc) for pesticide residue levels	procedures, staffing, etc) ▪ Pesticide residue levels of targeted crops are monitored and data available		Labs, Regulatory bodies	December 2014		0.3
	To develop MOUs amongst relevant stakeholders	MOUs developed and signed					
	Provide training for officers in pesticide residue monitoring	Number of officers trained	December 2018				
Climate change adaptation strategies developed	Develop and/or adopt and implement crop and pest forecasting systems for specific pests/crops	▪ Crop and pest forecasting systems developed and implemented ▪ Impacts of pest outbreaks triggered by climate related factors reduced	Agricultural stakeholders	MoAF, Ministry of Water, Land, Environment and Climate Change	December 2018	CAMI project developing forecasting system for two crop pests (Black Sigatoka and Citrus Psyllid)	30
	Develop and/or adopt technologies to mitigate the effects of climate change	Technologies developed and/or adapted to mitigate the effects of climate change					

DESIRED OUTCOMES	PLANNED ACTIVITIES	HOW MEASURED/ PERFORMANCE INDICATOR	TARGET GROUP	AGENCY RESPONSIBLE	ORIGINAL COMPLETION DATE	STATUS	COST JA \$M
						developing forecasting systems for crop production (e.g. sweet and irish potatoes)	
	Document pest mitigation strategies	Pest mitigation strategies documented				Some adaptation strategies already exist	5

OBJECTIVE #7: To develop public education programmes on plant health issues and their impact on environmental and human health

DESIRED OUTCOMES	PLANNED ACTIVITIES	HOW MEASURED/PERFORMANCE INDICATOR	TARGET GROUP	AGENCY RESPONSIBLE	ORIGINAL COMPLETION DATE	STATUS	COST JA \$M
Increased public awareness	<p>Develop a public education and awareness strategy</p> <p>Prepare and disseminate public education materials (e.g. brochures, fliers, videos)</p> <p>Conduct educational workshops, and stakeholders forums</p>	Increased public compliance	General public including Farmers' Groups/Associations, Exporters, Importers, Custom brokers, and Shipping Association of Jamaica	MoAF, MOH, MIIC, Ministry of Water, Land, Environment and Climate Change	December 2018	ACP has some funds available to support this activity	12

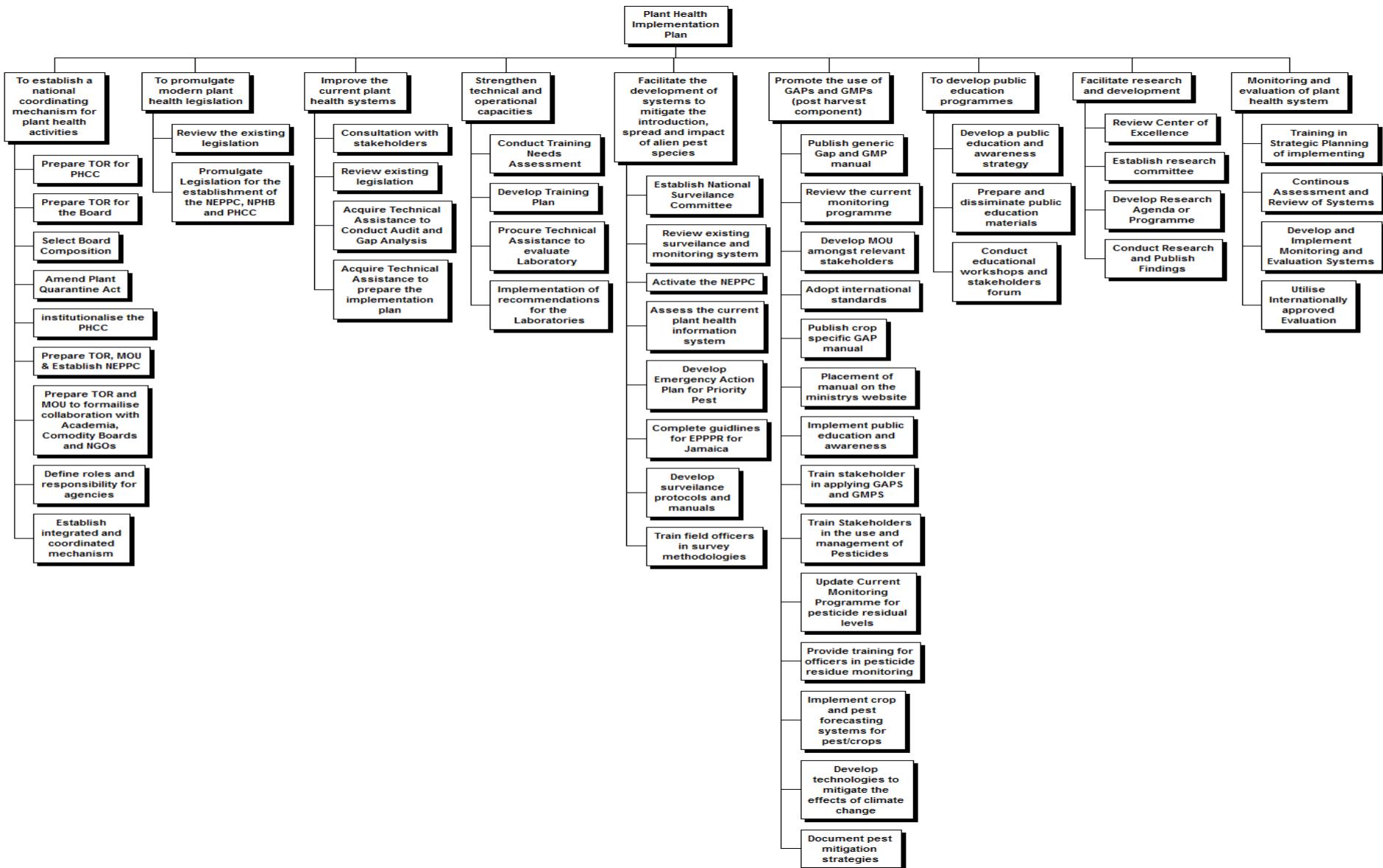
OBJECTIVE #8: Facilitate research and development activities

DESIRED OUTCOMES	PLANNED ACTIVITIES	HOW MEASURED/PERFORMANCE INDICATOR	TARGET GROUP	AGENCY RESPONSIBLE	ORIGINAL COMPLETION DATE	STATUS	COST JA \$M
Plant Health systems driven by relevant and accurate data	Review the status of the Centre of Excellence and determine the way forward	Review completed and way forward determined	PHCC	MoAF Research stakeholders	May 2014		0.0
	Establish research subcommittee	Research subcommittee established	August 2014			0.1	
	Develop Research Agenda or Programme	Research agenda developed and approved and is in keeping with local needs and international best practices	December 2014			0.5	
	Conduct research and publish findings	Research information is shared with the public	Plant health stakeholders and general Public		December 2018		100
		Policy decisions guided by research	Policymakers				0.0

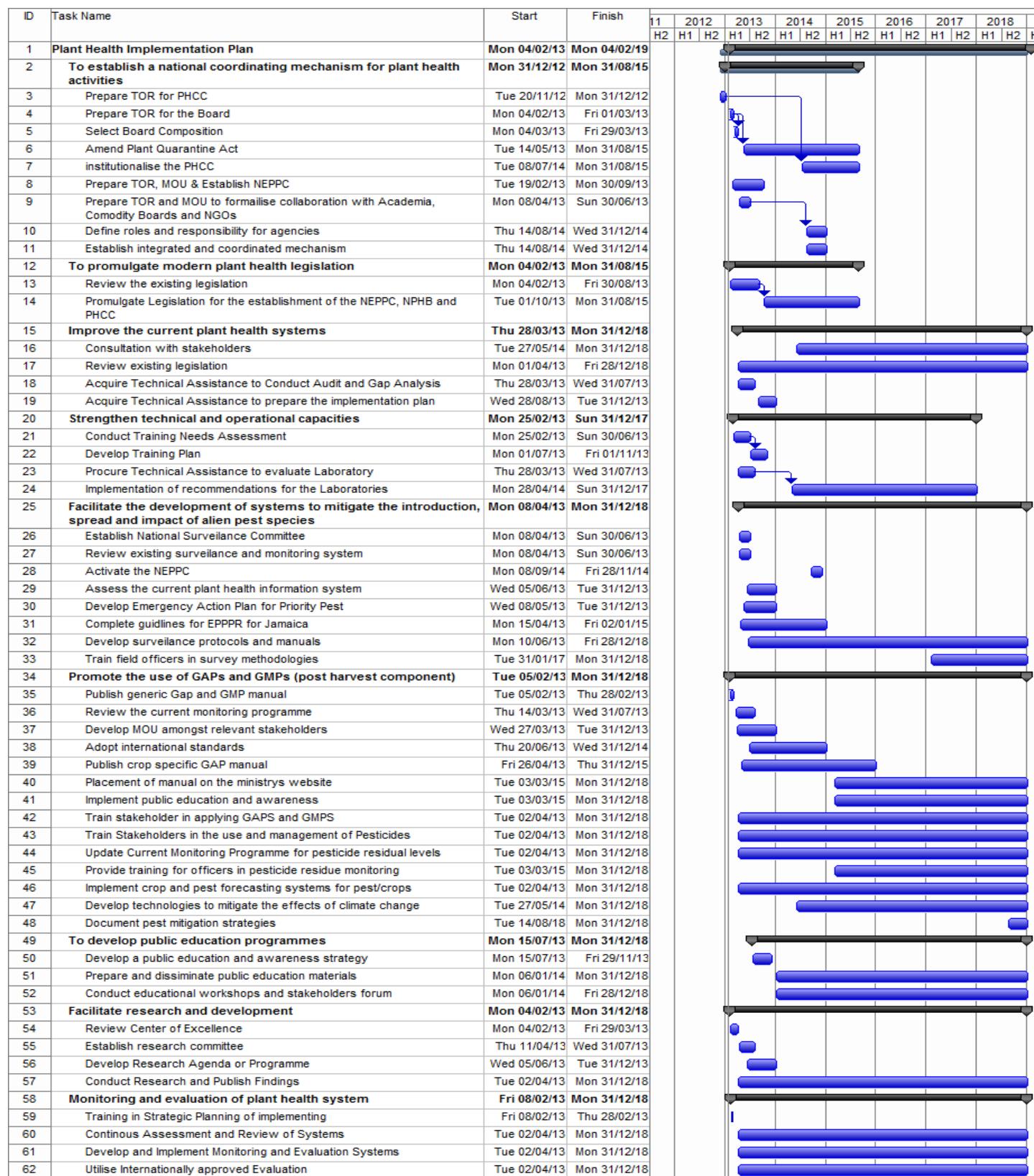
OBJECTIVE #9: Monitoring and evaluation of plant health systems

DESIRED OUTCOMES	PLANNED ACTIVITIES	HOW MEASURED/PERFORMANCE INDICATOR	TARGET GROUP	AGENCY RESPONSIBLE	ORIGINAL COMPLETION DATE	STATUS	COST JA \$M
Structured monitoring and evaluation systems for the implementation of the Plant Health Policy	Continuous assessment and review of systems	Audits done and implementations recommended	NPHB	Audit teams (internal and external)	December 2018		3
	Develop and implement monitoring and evaluation systems	Monitoring and evaluation systems developed and implemented based on GOJ/PMES		Cabinet Office	December 2018		
	Utilise Internationally approved evaluation tools e.g. PCE, PVS, CODEX etc.	Recommendations made for improvements based on international benchmarking					
	Training in strategic planning of implementation policy	Persons trained in strategic planning	PHCC	MoAF	February 2014		

6.4.2 Work Breakdown Structure (WBS)



6.5 Overall Implementation Schedule



6.6 Annual Breakdown of Costs for Implementation

Implementation of Plant Health Policy Budget 2012-2018

Activities	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Totals
	\$	\$	\$	\$	\$	\$	\$	\$
To establish a national coordinating mechanism for plant health activities		4,200,000	10,000,000	10,000,000	5,000,000	0	0	29,200,000
Improve the current plant health systems	0	5,000,000	2,500,000	2,000,000	2,000,000	2,000,000	2,000,000	15,500,000
To promulgate modern plant health legislation	0	5,000,000	0	0	0	0	0	5,000,000
Strengthen technical and operational capacities	0	55,500,000	30,000,000	20,000,000	2,000,000	2,000,000	1,000,000	110,500,000
Facilitate the development of sys.spread and impact of alien pest species	0	124,600,000	20,200,000	21,000,000	26,200,000	18,300,000	12,300,000	222,600,000
Promote the use of GAPs and GMPs (post-harvest component)	500,000	46,900,000	19,200,000	43,000,000	33,800,000	23,100,000	17,000,000	183,500,000
To develop public education programmes	0	2,000,000	3,600,000	1,600,000	1,600,000	1,600,000	1,600,000	12,000,000
Facilitate research and development	0	18,600,000	20,000,000	17,000,000	17,000,000	15,000,000	13,000,000	100,600,000
Monitoring and evaluation of plant health system	0	1,125,000	300,000	300,000	300,000	300,000	675,000	3,000,000
Subtotal	500,000	262,925,000	105,800,000	114,900,000	87,900,000	62,300,000	47,575,000	681,900,000
Contingencies	50,000	26,292,500	10,580,000	11,490,000	8,790,000	6,230,000	4,757,500	68,190,000
Grand Total	550,000	289,217,500	116,380,000	126,390,000	96,690,000	68,530,000	52,332,500	750,090,000

7.0 APPENDICES

Appendix 1: Participants involved in developing the Project Plan Document

Ministry of Agriculture and Fisheries

Plant Quarantine/ Produce Inspection Division

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Francine Webb
Marina Young

Ministry of Health

Michael Ramsay – Pesticide Control Authority

Ministry of Water, Land, Environment and Climate Change

Shakira Azan – National Environment and Planning Agency

Coconut Industry Board

Wayne Myrie (Dr.)

Coffee Industry Board

Glenroy Griffiths

Gary Watson

Cabinet Office

Lorna Perkins

Wayne Thompson

Agricultural Competitiveness Programme

Gail Nelson

8.0 GLOSSARY

Alien pest species	Introduced species (also called "non-indigenous" or "non-native") that adversely affect the habitats and bioregions they invade economically, environmentally, and/or ecologically.
Accreditation	A process in which certification of competency, authority, or credibility is presented.
Emergency action	A prompt phytosanitary action undertaken in a new or unexpected phytosanitary situation [ICPM, 2001]
Eradication	Application of phytosanitary measures to eliminate a pest from an area [FAO, 1990; revised FAO, 1995; formerly eradicate]
Establishment	Perpetuation, for the foreseeable future, of a pest within an area after entry [FAO, 1990; revised FAO, 1995; IPPC, 1997;]
Exotic	Not native to a particular country, ecosystem or ecoarea (applied to organisms [ISPM No. 3, 1996])
Germplasm	Plants intended for use in breeding or conservation programmes [FAO, 1990]
Inspection	Person authorized by a National Plant Protection Organization to discharge its functions [FAO, 1990]
International Standard for Phytosanitary Measures	An international standard adopted by the Conference of FAO, the Interim Commission on phytosanitary measures or the Commission on phytosanitary measures, established under the IPPC

[CEPM, 1996; revised CEPM, 1999]

Introduction

The entry of a pest resulting in its establishment [FAO, 1990; revised FAO, 1995;]

In vitro

In vitro studies are those that are conducted using components of an organism that have been isolated from their usual biological surroundings in order to permit a more detailed or more convenient analysis than can be done with whole organisms

Legislation

Any act, law, regulation, guideline or other administrative order promulgated by a government [ISPM No. 3, 1996]

National Plant Protection Organization

Official service established by a government to discharge the functions specified by the IPPC [FAO, 1990]

MRLs

The maximum amount of residue legally permitted on food

Organism

Any biotic entity capable of reproduction or replication in its naturally occurring state [ISPM No. 3, 1996; revised ISPM No. 3, 2005]

Pest

Any species, strain or biotype of plant, animal or pathogenic agent injurious to plants or plant products [FAO, 1990; revised FAO, 1995; IPPC, 1997]

Pest free area

An **area** in which a specific **pest** does not occur as demonstrated by scientific evidence and in which, where appropriate, this condition is being **officially** maintained

	[FAO, 1995]
Pest outbreak	A sudden increase in a pest population resulting in economic damage to the crop
Pest Risk Analysis	The process of evaluating biological or other scientific and economic evidence to determine whether an organism is a pest, whether it should be regulated, and the strength of any phytosanitary measures to be taken against it [FAO, 1995; revised IPPC, 1997; ISPM No. 2, 2007]
Phytosanitary authority	Any official responsible for implementing phytosanitary measures including the performance of inspections, tests, surveillance or treatments in connection with regulated pests
Plant quarantine	All activities designed to prevent the introduction and/or spread of quarantine pests or to ensure their official control [FAO, 1990; revised FAO, 1995]
Surveillance	An official process which collects and records data on pest occurrence or absence by survey, monitoring or other procedures [CEPM, 1996]
Survey	An official procedure conducted over a defined period of time to determine the characteristics of a pest population or to determine which species occur in an area [FAO, 1990; revised CEPM, 1996]