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# COMMISSION ON PHYTOSANITARY MEASURES

## Fourteenth Session

Rome, 1-5 April 2019

**Five year investment plan of the IPPC Secretariat - in relation to the IPPC Strategic Framework 2020-2030**

**Agenda item 8.3**

**Prepared by the IPPC Financial Committee**

## I. Draft IPPC Investment Plan

1. The International Plant Protection Convention (IPPC) is the global international treaty for protecting plant resources. The IPPC provides a framework to protect the world's plant resources from the harm caused by pests and diseases. Through the development of international standards and programs that enable their implementation, the IPPC creates a fairer trading system for all countries, and helps countries less able to protect themselves from the impacts of plant pests to produce food, protect valuable natural ecosystems and increase their ability to trade.

2. The IPPC Strategic Framework 2020-2030 (SF) maps a future state for reducing the international movement of plant pests. It identifies targets for 2030 around development goals including exchanging phytosanitary data, facilitating safe trade through commodity and pathway standards, using third parties and minimising risk materials moving through e-Commerce. It also seeks to strengthen national, regional and global systems to detect and respond to emerging pests and risks, adapt to climate change, develop and apply pest diagnostics and coordinate research.

3. The Financial Committee of the CPM Bureau commissioned the development of this 5 year investment plan in 2018 as a means to identify the actions needed to implement the SF and the resources that would be required to undertake them. It also provides a vehicle to consolidate performance indicators that can be monitored to evaluate the progress and, ultimately, the success of both core functions and the development agenda in the SF. The draft plan is at Appendix 1.

*This document can be accessed using the Quick Response Code on this page;  
an FAO initiative to minimize its environmental impact and promote greener communications.  
Other documents can be consulted at [www.fao.org](http://www.fao.org)*



4. The Commission's three Strategic Objectives are to:
  - a) Enhance global food security and increase sustainable agricultural productivity
  - b) Protect forests and the environment from the impacts of plant pests
  - c) Facilitate safe trade development and economic growth
5. The three core programs for implementation of the Convention are standard setting; implementation and capacity development; and, communication and international cooperation. The draft plan also identifies key result areas, performance indicators and measurements to evaluate progress to implement these basic functions and ensure that they continue to evolve to meet contracting party needs in an ever-changing operating environment.
6. The 2030 development agenda focuses a number of activities that will take the IPPC community into the future and position all contracting parties to adapt to changing climates, rapidly advancing technologies, shifting trading patterns and environments, and resourcing challenges. The draft investment plan has identified activities that should occur in the next five years in order to achieve the anticipated state in 2030 that is described in the SF. It has applied estimated costings based on current rates and existing funding sources.
7. The development agenda activities largely reflect the mechanisms that are used today by the CPM. There may be other options to achieving the same or better outcomes in the future. For this reason, the document is developed as a working document of the CPM Bureau and IPPC Secretariat that will be reviewed annually and used as a reference to assist in setting and progressing CPM priorities against the 2030 agenda and time lines. It should always be read in conjunction with the SF.
8. The investment plan may prove useful as an advocacy resource. It provides a transparent overview of projected activities to donors and potential partners, who may be invited to co-invest in those actions that align with their own areas of interest. The plan also makes clear to a global audience, including FAO and contracting parties, just where the IPPC community is headed and why. In this regard it should be a useful document to mobilise investment arising from the increased awareness on plant health generated by the International Year of Plant Health.
9. The Strategic Planning Group (SPG) considered the draft plan in October 2018. It noted the plan as an advocacy tool and an attempt to flesh out how much it would cost to implement the SF. It would need to be accompanied by a sustainable funding strategy.
10. SPG agreed that the plan would be submitted to CPM-14 for noting.

## **II. Recommendation**

11. The CPM is invited to:
  - 1) *note* the investment plan and,
  - 2) *promote* its use as a reference in discussions with donors on potential co-investment in the implementation of the IPPC Strategic Framework 2020-2030.

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# **Investment Plan**

**for the**

**International Plant Protection Convention (IPPC)  
2020 – 2024**

**Protecting the World's Plant Resources from Pests**

**Developed by the Commission on Phytosanitary Measures**

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**Title page and Table of Contents [update]**

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## Glossary of Abbreviations

Terms used in this document, together with those defined in the IPPC Strategic Framework 2020-2030.

CBD	Convention on Biological Diversity
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora Convention. Note in this document references to ‘the Convention’ are to the International Plant Protection Convention
CPM	Commission on Phytosanitary Measures
EMPRES	Emergency Prevention System
ePhyto	Electronic Phytosanitary Certificate
ExtP	External Project. Projects supported by a project proposal and implementation plan approved by an external donor, and subject to governance and other conditions applied by the donor. Examples include the Standards and Trade Development Facility and the World Bank.
EPPO	European Plant Protection Organisation
IAEA	International Atomic Energy Agency
IC	Implementation and Capacity Development Committee
IntP	Internal Project. These are generally projects supported by a project plan that are supported by contributions in cash or kind from contracting parties. They are generally activities with little attraction to donors external to the IPPC community
IPCC	Intergovernmental Panel on Climate Change
IPPC	International Plant Protection Convention (The Convention)
ISPM	International Standard for Phytosanitary Measures
MDTF	Multi Donor Trust Fund. A fund established by the FAO for the collection and administration of donations from contracting parties
NPPO	National Plant Protection Organisations
RP	Regular Program funding provided by the FAO Regular Program budget to support core activities of the IPPC Secretariat
RPPO	Regional Plant Protection Organisation
SPS	The Agreement on the Application of Sanitary and Phytosanitary Measures, the "SPS Agreement"
SC	Standards Committee
STDF	Standards and Trade Development Facility
TFA	World Trade Organization’s Trade Facilitation Agreement
UN	United Nations
WCO	World Customs Organisation
WTO	World Trade Organization

## Executive Summary

The International Plant Protection Convention (IPPC) is the global international treaty for protecting plant resources. The IPPC provides a framework to protect the world's plant resources from the harm caused by pests and diseases. Through the development of international standards and programs that enable their implementation, the IPPC creates a fairer trading system for all countries, and helps countries less able to protect themselves from the impacts of plant pests to produce food, protect valuable natural ecosystems and increase their ability to trade.

The IPPC Strategic Framework 2020-2030 (SF) maps a future state for reducing the international movement of plant pests. It identifies development goals to the year 2030, including exchanging phytosanitary data, facilitating safe trade through commodity and pathway standards, using third parties and minimising risk materials moving through e-Commerce. It also proposes actions to strengthen national, regional and global systems to detect and respond to emerging pests and risks, adapt to climate change, develop and apply pest diagnostics and coordinate research.

The Financial Committee of the Commission on Phytosanitary Measures (the Commission or CPM) Bureau commissioned the development of this 5 year investment plan in 2018 as a means to document the actions needed to implement the SF and the resources that would be required to undertake them.

The Commission's three Strategic Objectives are to enhance global food security and increase sustainable agricultural productivity; protect the environment from the impacts of plant pests and facilitate safe trade, development and economic growth. The three core programs for implementation of the Convention are standard setting; implementation and capacity development; and, communication and international cooperation. The draft plan identifies key result areas, performance indicators and measurements to evaluate progress to implement the Strategic Objectives through these basic functions and ensure that they continue to evolve to meet contracting party needs in an ever-changing operating environment.

The 2030 development agenda focuses a number of activities that will take the IPPC community into the future and position all contracting parties to adapt to changing climates, rapidly advancing technologies, shifting trading patterns and environments, and resourcing challenges. The draft investment plan has identified activities that should occur in the next five years in order to achieve the anticipated state in 2030 that is described in the SF. It has applied estimated costs based on current rates and existing funding sources.

The development agenda activities largely reflect the mechanisms that are used today by the CPM to implement programs. There may be other options to achieving the same or better outcomes in the future. For this reason, the document is developed as a working document of the CPM Bureau and IPPC Secretariat that will be reviewed annually and used as a reference to assist in setting and progressing CPM priorities against the 2030 agenda and time lines. It should always be read in conjunction with the SF.

Implementing the Development Agenda depends on sufficient resources being secured in addition to the FAO regular programme funding of core activities. The investment plan may prove useful as an advocacy resource as it provides a transparent overview of projected activities to donors and potential partners, who may be invited to co-invest in those actions that align with their own areas of interest. The plan also makes clear to a global audience, including FAO and contracting parties, just where the IPPC community is headed and why. In this regard it should be a useful document to mobilise investment arising from the increased awareness on plant health generated by the International Year of Plant Health.

# INTERNATIONAL PLANT PROTECTION CONVENTION STRATEGIC FRAMEWORK 2020-2030



## OUR MISSION

Protect global plant resources  
and facilitate safe trade



## OUR VISION

The spread of plant pests is minimized and their impacts within  
countries are effectively managed

## OUR GOAL

All countries have the capacity to implement harmonised measures to  
prevent pest introductions and spread, and minimise the impacts of  
pests on food security, trade, economic growth, and the environment

## STRATEGIC OBJECTIVES

**A**

Enhance global food security  
& increase sustainable  
agricultural productivity

**B**

Protect the environment  
from the impacts of  
plant pests

**C**

Facilitate safe trade,  
development &  
economic growth

## CORE ACTIVITIES



Standard setting



Implementation &  
capacity development



Communication &  
international cooperation

## IPPC DEVELOPMENT AGENDA 2020-2030

1. Harmonisation of Electronic Data Exchange.
2. Commodity, and Pathway Specific ISPMs.
3. Management of E-commerce and Courier Mail Pathways.
4. Developing Guidance on the Use of Third Party Entities.
5. Strengthening Pest Outbreak Alert and Response Systems.
6. Assessment and Management of Climate Change Impacts on Plant Health.
7. Global Phytosanitary Research Coordination.
8. Diagnostic Laboratory Networking.

## CONTRIBUTING TO UN 2030 SUSTAINABLE DEVELOPMENT GOALS



## Introduction

Plants are essential for life. Healthy plants feed people and animals, contributing to food security for nations and communities; and any surplus can be traded to generate income.

Healthy plants are critical to achieving the core FAO objectives of food security, zero hunger and poverty alleviation.

The International Plant Protection Convention (IPPC) is the global international treaty for protecting plant resources. The IPPC provides a framework to protect the world's plant resources from the harm caused by pests and diseases. As such, the IPPC is the leader in the global effort to promote and maintain plant health. Through the development of international standards and programs that enable their implementation, the IPPC creates a fairer trading system for all countries, whether they trade a little or a lot, and helps countries less able to protect themselves from the impacts of plant pests to produce food, protect valuable natural ecosystems and increase their ability to trade.

The IPPC extends beyond the protection of all cultivated plants to the protection of natural flora and plant products. It includes both direct and indirect damage by pests and pest plants, as well as the vehicles, aircraft and vessels, containers, storage places, soil and other objects or material that can harbour or spread pests.

Implementation of the IPPC involves collaboration by National Plant Protection Organizations (NPPOs), the official services established by contracting parties to carry out the functions specified by the IPPC; and Regional Plant Protection Organizations (RPPOs), which act as coordinating bodies at a regional level to achieve the objectives of the IPPC.

The IPPC is governed by the Commission on Phytosanitary Measures (Commission). The Commission comprises delegates from each of the contracting parties, 183 as at January 2019. The Commission reviews the state of plant protection around the world and:

- identifies action to control the spread of pests into new areas
- develops and adopts international standards and guidelines
- approves programmes to support implementation of the Convention and adopted standards; and
- cooperates with international organizations on matters covered by the Convention.

## Strategic Objectives

The core purpose of the IPPC is to prevent the international spread of plant pests and reduce their impact.

The Commission has identified three Strategic Objectives that capture the major contributions it makes in a global context. They are equally important and the Commission work programme is balanced to ensure the collective work programme contributes to all three objectives.

The Commission's three Strategic Objectives are to:

- A. Enhance global food security and increase sustainable agricultural productivity
- B. Protect the environment from the impacts of plant pests
- C. Facilitate safe trade, development and economic growth

### 1. Achieving and Measuring Key Results

Key Result Areas are described for each Strategic Objective and outline the impact the Commission expects to see under each. Results are delivered through both the core work of the IPPC and the IPPC Development Agenda initiatives.

#### ***A. Enhance Global Food Security and Increase Sustainable Agricultural Productivity***

Food security is achieved with community access to sufficient safe and nutritious food. This also requires food to move without impediment from where it is produced to where it is consumed.

Crop production intensification and pest management strategies need to be more sustainable than current or historical ones. They must also build on elements that include integrated pest management, conservation agriculture, access to and sustainable use of plant genetic resources, while also reducing soil, air and water pollution.

Contracting parties should be ensuring their phytosanitary regulatory frameworks are appropriately structured and resourced to avoid plant pests putting their food security at risk.

#### **2030 Key Result Areas**

- A1: All NPPOs have effective pest surveillance systems in place for timely detection of new pest arrivals and monitoring spread.
- A2: All NPPOs have strong capacities to monitor, detect, diagnose, report, and prepare rapid responses to pest outbreaks, so these pests do not have major impacts on food supplies and they do not spread to threaten other regions and trading partners.
- A3: A plant health emergency response system facilitates timely action against new pest incursions and supports countries with emergency response systems tools and knowledge.
- A4: Sustainable pest management practises, such as 'systems approaches', are implemented widely to minimise pest impacts right through the production process and harvesting, and minimise the need for endpoint treatments.
- A5: All NPPOs have Pest Risk Analysis (PRA ) capacity in place to identify and mitigate pest risks to crop production
- A6: Pest risk prevention is integrated throughout the production, processing and trade chain of plants and plant products.

Key result area	Performance indicator	Measurement
Early detection surveillance systems implemented	Systems are available CPs are implementing the system(s) The system(s) works	PCE assessments of early detection capacity Increased detection and reporting of new pests Pests detected earlier than before
Reporting and response capability established and maintained	Enabling guidance developed and proven through testing CPs report ability to report and respond Earlier and shorter responses occur	PCE assessments of reporting and response capacity Number of new pests reported Average time to initiating a response Length and cost of responses – average over time Cost impact of new pests reduced Successful eradications increase over time
IPPC phytosanitary emergency response system established and used	System in place Fit for purpose and working effectively	CPs aware of the system Alerts integrated into intelligence systems Resources generated through the system are received and used CPs contribute resources and material through the system
Systems approaches are implemented for sustainable production systems	Import and export pathways are documented as systems Critical control points are applied Validation and verification processes confirm the efficacy of systems approaches Information is shared to assist other CPs implement and approve systems approaches	Number of systems approaches approved and operating in trade Efficacy and impact assessments collated and analysed SWOT analysis completed Website analytics
All NPPOs have the capacity to undertake PRA to protect crops	CPs are using PRA to direct pest controls	Number of countries using pest risk analysis in plant protection
Preventing pests is fully integrated into plant production and trading systems	Pest impacts on yield and quality demonstrably reduced, volumes of plants and plant products produced and traded increase	Production systems documented, with crop protection methods identified

## ***B. Protect the Environment from the Impacts of Plant Pests***

Invasive alien species can have a significant and permanent impact on terrestrial, marine and freshwater environments, agriculture and forests. Continuing concern with climate change and protecting forests and the environment compels the Commission, RPPOs and contracting parties to be aware of the potential for pest distribution and impacts to change with the changing climate.

The IPPC standards and the IPPC framework are applied to address environmental concerns as they relate to plant biodiversity and emerging problems associated with invasive alien species that are plant pests. As climates modify, environmental ranges will change and pest impacts have the potential to increase significantly.

Importantly the IPPC has recognised the need to protect environments from plant pests in ways that don't themselves have negative environmental impacts. Acceptance of sustainable pest management practises, such as systems approaches and integrated pest management is reducing reliance on end-point chemical treatments. The prevention of pest spread also significantly reduces the need to use harmful chemicals in the environment.

The IPPC engages with biodiversity and environment related conventions, international collaborations, and capacity development arrangements such as the Convention on Biodiversity (CBD), the Global Environmental Facility and the Green Climate Fund. Whereas the CBD addresses biodiversity and the environment in general, the IPPC deal specifically with those invasive alien

species that are pests of plants, and establishes standards and provides guidance for protection against them. Many International Standards for Phytosanitary Measures (ISPMs) developed by the IPPC have elements directed to protection of biodiversity. The ISPMs on pest risk analysis, for example, can be essential and important tools for the assessment of environmental pest risks. The standard concerning the treatment of wood packaging material is aimed at risk management of tree and wood pests that can affect biodiversity or commercial forests.

The IPPC has and continues to progress the development of a number of other standards, guidance and recommendations dealing with the potential movement of invasive alien species important to the protection of biodiversity. These deal with invasive aquatic plants, minimizing pest movement by sea containers and air containers, and reducing the pest risk from waste material from ships.

The IPPC also makes accessible a wide range of resources for environmental agencies to take action against plant pests with environmental and biodiversity impacts.

## 2030 Key Result Areas

- B1: Contracting parties recognise management of environmental plant pests as part of their responsibilities and work with national environmental sector agencies to support pest management programmes aimed at environmental protection.
- B2: Contracting parties have mechanisms in place to control the spread of environmental contaminant pests on non-plant trade pathways, e.g. invasive ants on vehicles and machinery, or gypsy moth egg masses on sea containers and vessels.
- B3: Mechanisms are in place to share adaptation strategies for responding to the impacts of climate change.
- B4: Agencies with environmental and natural forest stewardship responsibilities regularly access information and other resources managed by the IPPC Secretariat.
- B5: Contracting parties continue to improve their capacity to implement key IPPC standards, which directly address the spread of forest and environmental pests, such as ISPM 15 on wood packaging materials and other such standards, to contain the global spread of pests which threaten forests, biodiversity, and non-cultivated flora

Key result area	Performance indicator	Measurement
National arrangements support pest management for environmental protection	National arrangements shared as examples for other CPs A model framework for national arrangements available on the IPP	PCE assessments of national arrangements supporting environmental protection Number of CPs with arrangements in place Number of CPs developing arrangements Analysis of impediments to implementing national arrangements Website analytics
Strategies to manage the risks associated with the introduction of pests on non-plant pathways are developed and implemented	Risk pathways are identified and impacts assessed to raise awareness Associated pest risks and their impacts identified and quantified Pathways strategies shared as examples for other CPs Model systems available on the IPP for a number of pathways	Outcomes and impacts from SCTF are assessed and reported Data on pest risks across a number of pathways consolidated and shared [Replicate all or some of the SCTF program to define and address risks - as relevant] Website analytics
Climate change adaptation strategies are shared	Climate change impacts on IPPC objectives identified and published Adaptation strategies shared as examples for other CPs Research results published	A list of climate change adaptation projects – location, outcomes, resources, outputs, costs Strategies published Strategies implemented

Key result area	Performance indicator	Measurement
	Adaptation implementation information shared	Changes in the impact of climate change parameters on impacts of plant pests on trade, food and the environment Adaptation options increasingly applied Website analytics
Information and other resources that assist environmental and forest stewardship are accessed	Information to assist CPs is made available	Information on stewardship programs sourced Information posted Website analytics – access stats
Global implementation of ISPMs relevant to the protection of forests and the environment is increased	CPs improve capacity to implement these standards	Number of countries implementing ISPM 15, List of countries implementing standards that impact the natural and forest environment

### ***C. Facilitate Safe Trade, Development and Economic Growth***

Trade builds wealth and supports economic and social stability. Trade in plants and plant products, stimulates economic growth and brings well-being and prosperity to rural communities and agricultural sectors. The main pathway for the spread and introduction of harmful pests is through international trade.

Minimising production losses from pests and reducing pest control costs is important to maximising returns for domestic growers. Eradicating newly established pest populations, or creating recognised pest free areas simplifies access to export markets. Exporting countries need strong phytosanitary systems to assure their trading partners that the imports they receive will not come with pests that would harm the importing country economy or environment. When the phytosanitary assurances and certification of exporting countries have integrity, trade pathways are smoothed and barriers to trade are minimised.

The World Trade Organization's (WTO) Trade Facilitation Agreement (TFA) entered into force on 22 February 2017. This agreement will support NPPOs in their responsibilities as border agencies and offer greater opportunities to facilitate safe trade through greater collaboration with other border agencies, including Customs.

#### **2030 Key Result Areas**

- C1: Commodity specific standards with harmonised phytosanitary measures have sped up trade negotiations and simplified trade in significant plant products.
- C2: Detections of pests on trade pathways are declining as exporting countries take more responsibility for managing the pest risk on exports, and importing countries report detections more quickly and more consistently.
- C3: NPPOs have built capacity and been supported to establish export assurance and certification systems that have strong integrity and are trusted by trading partners.
- C4: The efficiency of administering export certification systems has improved and the circulation of fraudulent certificates has been eliminated through the electronic phytosanitary certification systems including the Generic National System and the Global ePhyto Hub.
- C5: NPPOs have ready access to expert advice on phytosanitary issues in trade.
- C6: NPPOs are able to meet regularly to deliberate on phytosanitary research and emerging issues and other matters of common interest.
- C7: Member countries have legislation in place to enable implementation of ePhyto.

Key result area	Performance indicator	Measurement
Pest and commodity standards apply harmonised treatments and measures	Systems and processes for developing and implementing pest and commodity specific standards are available Countries have the required capacity and apply methods competently Multiple countries apply the same measures on pathways	Number of standards Volume of trade in these commodities Clearance times measured over time Compliance and non-compliance data compiled and analysed for changes
Pest interceptions are reducing due as the efficacy of pest management on traded goods improves	Fewer pests intercepted on imported goods Increased pest reporting Non-compliance reporting systems used consistent with ISPM 13	Interception data Non-compliance reporting Pest reports by country Remedial actions identified and implemented
Integrity of export and import assurance	Implementation guidance available Training available and accessed by CPs	Training programs available PCE assessments of capacity and capability Number of assurance systems in place Volume of trade that systems support Published lists of competent third-party entities
Efficiency of export certification systems	EPhyto systems implemented and available to all CPs Milestones in the 5-year ephyto implementation plan in achieved	Ephyto implementation and impact measured and reported Number of fraudulent certificates over time
Expert phytosanitary advice available	Mechanism for seeking, providing and receiving expert advice implemented	Requests received Advice provided Analytics on nature, source etc. of requests, issues
Regular meetings of NPPOs to discuss research, emerging and other issues	An ongoing schedule of meetings is in place, which involves all IPPC CPs	Number of meetings Number of NPPOs attending
All countries wanting to use ePhyto have the required legislation in place	Legislation that enables the use of ePhyto is implemented in countries intending to use ePhyto	% countries intending to use ePhyto with enabling legislation

## 2. Core Activities

### Standard Setting

Standards developed under the auspices of the IPPC Secretariat are recognized by the World Trade Organization (WTO) Agreement on the Application of Sanitary and Phytosanitary Measures (the SPS Agreement) as the only international standard setting body for plant health. ISPMs are adopted by the Commission and come into force once countries establish aligned requirements within their national legislation. The standards of the IPPC are recognized as the basis for phytosanitary measures applied in trade by the Members of the World Trade Organization.

The standard setting work of the IPPC is led by the Commission's Standards Committee. The Standards Committee is supported by various technical panels, expert working groups, and the IPPC Secretariat.

Three main types of standards have been developed to provide an internationally agreed approach for the harmonisation of phytosanitary regulations and to guide and assist NPPO's in performing their various functions.

1. Foundational Standards – these establish internationally accepted principles and approaches for NPPO's to undertake such activities as pest risk analysis, establishing pest free areas, surveillance, establishing a phytosanitary certification system, pest reporting, etc.
2. Phytosanitary treatments – these establish internationally accepted treatments for pests on commodities such as irradiation, fumigation, temperature treatment, etc.
3. Diagnostic Protocols – these are targeted at specific pests and establish the internationally accepted method for accurate diagnostic pest identification.

In addition, CPM recommendations are also adopted on a range of topics that are highly relevant to contracting parties but not deemed suitable for the development of an ISPM. The Commission is now starting to develop more ISPMs for specific commodities and pathways. Examples include ISPM 15 for international movement of wood packaging and ISPM 41 for international movement of used vehicles, machinery and equipment. Developing ISPMs for major traded commodities including fresh produce and grain would fill a significant need when used as the starting point for market access agreements. They have the potential to significantly simplify bilateral trade negotiations. Similarly ISPMs for pathways (such as used vehicles and machinery) will do much to limit the spread of invasive alien species that commonly spread as contaminating pests on inanimate objects.

The Standards Committee works hard to ensure ISPMs are not only technically robust, but that they are also practical and can be implemented in real situations. Increasingly the IPPC is inviting industry bodies to participate in expert working groups to provide advice on development of ISPMs. Industry perspectives will further enhance the value of ISPMs but some conflicts of interest may also arise and these need to be recognised and managed.

### 2030 Key Result Areas

- SS1: Prioritised commodities and pathways are covered by commodity or pathway specific ISPMs adopted or being developed by the Commission.
- SS2: NPPOs base their phytosanitary systems and import requirements on adopted ISPMs.
- SS3: Efficient mechanisms are in place to globally coordinate plant health research, with evidence that duplication of effort is reducing.

Key result area	Performance indicator	Measurement
<i>Refer commodity and pathway standards – Development Agenda 2.</i>		
Phytosanitary systems and import requirements are based on adopted ISPMs	ISPMs are referenced in policies and operational procedures by NPPOs	IRSS analysis of published import requirements and risk analyses to measure increases in references over time
Mechanisms for global coordination of plant health research are established	Increased research collaboration – cross regional Reduced duplication	IRSS monitoring and reporting based on literature analytics

Key result area	Performance indicator	Measurement
<i>Link with Development Agenda 7.</i>		

## Implementation and Capacity Development

The IPPC is typically referred to as a standard setting body, which it is. However, the IPPC has long recognised the futility of setting standards without also supporting capacity development to enable the Convention and its standards to be effectively implemented by member countries. The IPPC Secretariat has established an Implementation Facilitation Unit to facilitate and coordination implementation.

Within each member country, fully functioning NPPOs are charged with operating an effective national system to prevent the introduction and spread of pests. Delivery of the system often requires the joint effort of multiple government agencies and the private sector. The Phytosanitary Capacity Evaluation tool was developed by the Commission many years ago to help countries evaluate their capacity to implement the convention. This forms the basis for many capacity development plans, and also provides an insight into global capacity needs and programs.

Through the suite of ISPMs and capacity development programmes, the Commission provides the framework for the NPPOs and the support to help NPPOs build capacity to carry out their functions. Examples of national capacity include the ability to establish and operate an import regulatory system, the ability to conduct pest risk analysis, pest surveillance, pest eradication operations, and operation of an export system capable of providing official assurances through phytosanitary certification.

The Commission collaborates with donor partners and contracting parties to assist NPPO's to develop the required capacity. This collaborative work is essential for countries to capitalise on the economic growth opportunities available through trade development, and protect their natural resources.

In 2014 the Commission agreed to significantly strengthen its focus on implementation of the Convention and ISPMs. Since then:

- The first major implementation pilot programme has been established focused on pest surveillance,
- The IPPC Secretariat has been reorganised to more strongly focus on implementation and capacity development, and
- A new subsidiary body has been created, the Implementation and Capacity Development Committee (IC) charged with oversight of the IPPC's long-term Capacity Development Strategy.

Substantial efforts are being focused on implementation and capacity development, however, it is limited by the extra-budgetary resources that can be secured (additional to the FAO regular programme funds). Fortunately, development agencies are willing to assist with programs to lift the capacity of countries to improve their economy through trade, and support communities to manage pest problems. Capacity development projects can have a major positive impact on the ability of NPPOs to discharge their responsibilities. The project to develop and implement a Global ephyto Hub and Generic National System funded by the STDF and member country contributions is an outstanding example of this.

## 2030 Key Result Areas

- ICD 1: The state of plant health in the world is understood, needs are known and mechanisms to facilitate action are functioning.
- ICD 2: All contracting parties have used the Phytosanitary Capacity Evaluation tool to understand strengths and weaknesses and develop plans to address capacity deficiencies.

ICD 3: The IPPC Secretariat is resourced to help countries access assistance to address phytosanitary capacity needs.

Key result area	Performance indicator	Measurement
The state of plant health in the world is defined and a desired future state agreed by CPM A roadmap to achieving the future state is developed and being implemented through an action plan	State is defined Future state agreed by CPM Road map endorsed by CPM Action plan adopted and resourced	Actions agreed by CPM are completed on time and on-budget
Contracting parties are actively addressing capacity and capability needs	PCE-based implementation plans are in place and actions are progressing	Number of PCEs completed Number of development plans linked with PCEs Outcomes identified in implementation plans achieved
IPPC Secretariat is sufficiently resourced to meet implementation expectations of contracting parties	Funding mechanisms are in place and supported A mechanism to link donors and capacity needs is in place and operational	Additional ongoing RP funding is achieved in FAO budget A mechanisms for partnership agreements is developed, approved and implemented The extent to which CP requests of the Secretariat for ongoing assistance are met

## Communication and International Cooperation

The communications efforts of the Commission are aimed at ensuring understanding of the potential for serious negative impacts from introduced pests worldwide. This must be understood not just by the plant health community but also by key audiences such as the general public, national governments, and decision makers (policy and financial), to demonstrate the importance of plant health being a national and global priority that justifies and receives appropriate and sustainable support.

The IPPC recognizes the importance of maintaining strong links with organizations that share common interests. These relationships can range from informal flexible arrangements to highly defined relationships. The IPPC Secretariat has strong relationships with all Regional Plant Protection Organizations (RPPOs) in facilitating contracting parties to implement the IPPC.

The IPPC Secretariat also cooperates with many other organizations. This cooperation is essential to mainstream plant health considerations and policies into the general debate on environmental and development issues. Especially with regard to climate change and capacity building a more intensified cooperation with relevant international organizations is necessary to ensure that the evaluations of climate change impacts incorporate pest related impacts and that attention is drawn to potential donor organizations about the phytosanitary capacity building needs of developing country NPPOs.

The IPPC make use of many different opportunities to reach out internationally so its mission is understood, well connected and actively participating where doing so will advance achieving its mission. Annual themes were introduced to promote specific aspects of the IPPC mandate on an annual basis. For the period 2016-2019 the IPPC focused on the following themes:

- 2016 Plant Health and Food Security
- 2017 Plant Health and Trade Facilitation
- 2018 Plant Health and Environmental Protection
- 2019 Plant Health and Capacity Development

In addition, through the efforts of contracting parties to the IPPC, the United Nations proclaimed 2020 the International Year of Plant Health (IYPH).

These communication efforts are guided by the [IPPC Communications Strategy](#). The four objectives of the IPPC Communications Strategy are to:

1. Increase global awareness of the importance of the Convention and of the vital importance to the world of protecting plants from pests;
2. Highlight the IPPC's role as the sole international plant health standard setting organization with the objective of helping to ensure the safe trade of plants and plant products;
3. Improve the implementation of the International Standards for Phytosanitary Measures (ISPMs); and
4. Support the activities of the IPPC Secretariat's Resource Mobilization programme.

### 2030 Key Result Areas

- CIC 1: The IPPC Secretariat is effectively communicating phytosanitary issues and the importance of plant health.
- CIC 2: The IPPC Secretariat successfully cooperates with other international organizations and global forums to further increase the visibility of the Convention and its objectives in international policies.
- CIC3: The IPPC Secretariat is effectively coordinating with FAO to ensure that national or regional FAO offices play an important role in the implementation of the IPPC and its standards.

Key result area	Performance indicator	Measurement
Global awareness of the IPPC and the importance of plant health	The International Year of Plant Health is widely supported	All CPs participate in IYPH activities Communications material is widely used Impact is measured, analysed and reported
International standards underpin the majority of global trade of plants and plant products	CPs demonstrate use and benefits of ISPMs to facilitate and achieve safe trade	Impact assessments – pre- and post- market access Analysis of global dispute resolution cases
ISPMs are implemented by all CPs	Import requirements reference relevant international standards	Analysis of SPS notifications for references to the use of ISPMs Analysis of issues raised at SPS committee
Sufficient resources are mobilised to fund the full implementation of this strategy	All identified activities in relevant implementation and action plans are completed	Milestones are identified in action plans and met Budgets are set and funds secured
Strong links are maintained with organisations that share common interests with the IPPC	Plant health considerations are progressed through cooperation with relevant international organisations	CPM priorities are reflected in cooperation agreements Progress is monitored and reported against milestones Cooperation agreements are reviewed every 3 years All agreements are assessed against CPM priorities every 5 years
Identify, plan and implement ongoing program of theme years	Strategic theme years focus global audiences on the role, function and achievements of the IPPC	Theme years endorsed by CPM Annual theme activities completed Impact assessment completed

### 3. IPPC Development Agenda 2020 - 2030

The IPPC Development Agenda 2020-2030 aims identifies priority programmes of new work aligned to the Commissions' Vision, Mission, and Strategic Objectives, taking into account prospective changes to the operational environment of national, regional, and global plant protection organizations.

The success of the Commission to deliver on the purpose of the Convention will ultimately be measured against its ability to support the needs of member countries to stop the spread and reduce the impact of pests, but it will also be measured on its contribution to achieving the UN Sustainable Development Goals.

The IPPC Development Agenda 2020 – 2030 will contribute significantly to achieving the Strategic Objectives of the Commission and also the UN 2030 Sustainable Development Goals. The development programmes are firmly grounded within the strategic objectives. They ensure that the Commission is well positioned to continue development and coordination of international plant health activities to well beyond 2030. However, each of the new programmes is subject to securing required resources to sustain them.

Eight key development programmes have been identified. Each of these are described in terms of the outcome envisaged for 2030 and a more detailed description of each development programme.

#### 1. *Harmonisation of Electronic Data Exchange*

Implementing a global system for production and exchange of electronic certification information (ePhyto).

##### **Desired 2030 Outcome**

A global system for production and exchange of electronic certification information is fully operational and integrated at a country level into trade single windows. The system is supported by a sustainable business model and is self-funded. A significant global effort to implement it in all countries has been completed. The system has strengthened and simplified trade in plants and plant products, reducing transaction costs, expediting the clearance of compliant products and eliminating fraud.

Activities to be carried out during 2020 - 2030 include:

- Successful establishment of the IPPC ePhyto hub as the international system for exchange of electronic phytosanitary certificate information.
- Successful establishment of the IPPC Generic ePhyto National System for production, sending, and receiving of electronic phytosanitary certificate information.
- The successful implementation of both the ePhyto hub and the Generic National System, where needed, in all member countries.
- Investigation of including other databases into the ePhyto hub or associating them with the electronic certification requirements.
- Establishment of pilot projects for new or improved electronic systems.

Action	Funding Source	Estimated budget (USD)				
		2020	2021	2022	2023	2024
Implement the ePhyto solution 5 year plan	MDTF	1 M	1 M	1.2 M	1.2 M	1.4 M
Develop and adopt the business and funding model Consultant	ExtP	40 K	150 K	300 K	150 K	160 K

Action	Funding Source	Estimated budget (USD)				
		2020	2021	2022	2023	2024
<ul style="list-style-type: none"> <li>· Business and IT system development</li> <li>· Governance framework</li> <li>· Transition to permanent funding and business model</li> </ul>						
Identify and evaluate expansion of ePhyto utility	ExtP	-	40 K	-	40 K	-
Develop and implement pilot projects for expanded utility	ExtP	-	-	150 K	-	150 K
<b>Total</b>	<b>ExtP</b>	<b>1.04 M</b>	<b>1.190 M</b>	<b>1.65 M</b>	<b>1.39 M</b>	<b>1.71 M</b>
FTE (estimate)	ExtP	4.0	4.0	4.0	4.0	4.0

## 2. Commodity and Pathway Specific ISPMs

ISPMs developed for specific commodities and pathways, with accompanying diagnostic protocols, phytosanitary treatments and guidance.

### Desired 2030 Outcome

Many new ISPMs have been adopted and implemented for specific commodities and pathways, with, as required, accompanying diagnostic protocols and phytosanitary treatments to support implementation. They provide NPPOs with harmonized phytosanitary measures, which they may use to support their pest risk analysis activities an import regulatory systems, or to establish export oriented production systems. This has simplified trade and expedited market access negotiations.

New, sustainable phytosanitary treatments and alternative pest management approaches are continually being developed through a global co-ordination and funding program, ensuring a strong technical basis for harmonisation and effective tools for NPPOs to mitigate pest risks and impacts.

Activities to be carried out during 2020 - 2030 include:

- Develop and agree on the structure, format and content of commodity and pathway specific ISPMs and apply these concepts to the development of commodity or pathway specific ISPMs.
- Conduct an assessment of the critical factors necessary for an NPPO to effectively implement a new commodity standard, and the barriers that have to be overcome.
- Agree on the criteria to prioritize a list of commodity and pathway specific ISPMs and, if appropriate, establish a work programme for the development of commodity and pathway specific ISPMs.
- As part of performance monitoring, , evaluate the economic, trade, food security, and environmental benefits delivered by a selection of commodity or pathway specific standards after implementation.
- Intensify current activities on phytosanitary treatments.
- As necessary establish working groups to develop alternative pest risk management approaches for individual pests, pathways or commodities.

Action	Funding Source	Estimated budget (USD)				
		2020	2021	2022	2023	2024
Develop and pilot processes for commodity and pathway standards	RP	60 K				

Action	Funding Source	Estimated budget (USD)				
		2020	2021	2022	2023	2024
Analyse and address implementation challenges	IRSS		20 K	20 K	20 K	
Identify priority pathways	RP	20 K				
Establish and implement a work plan for commodity and pathway standards	RP		50 K	50 K	50 K	50 K
Establish evaluation criteria and analyse impacts of commodity and pathway standards	IRSS	20 K		30 K		20 K
Establish and operate working groups on alternative risk management approaches <ul style="list-style-type: none"> <li>· 40% RP FTE (SSU)</li> <li>· Meetings</li> </ul>	RP	50 K	50 K	50 K	50 K	50 K
	MDTF	60 K	60 K	60 K	70 K	70 K
Identify top priority treatments needs	IRSS	20 K		20 K		20 K
	RP	50 K	50 K	50 K	50 K	50 K
Intensify current treatment activities <ul style="list-style-type: none"> <li>· Coordinator</li> <li>· Expert meetings or analysis</li> </ul>	MDTF	150 K	150 K	200 K	200 K	200 K
<b>Total</b>	<b>Various</b>	<b>430 K</b>	<b>380 K</b>	<b>480 K</b>	<b>440 K</b>	<b>460 K</b>
FTE (estimate)	Various	2.5	2.5	2.5	2.0	2.0

### 3. Management of E-commerce and Postal and Courier Mail Pathways

A coordinated international effort to address the spread of pests and pest host material sold through e-commerce and distributed through postal mail and courier pathways.

#### Desired 2030 Outcome

A coordinated international effort has substantially reduced the spread of pests and pest host material sold through e-commerce and distributed through mail and courier pathways. Volumes of high risk plant material purchased online in small quantities and shipped via courier pathways is sourced from plant health export programs, and compliance is tracked and enforced in collaboration with other border agencies, the international postal services and courier services.

Activities to be carried out during 2020 - 2030 would include:

- An international communications effort targeting companies trading through e-commerce channels and consumers, to ensure they understand that the importing country may have phytosanitary requirements, why those requirements exist, and how to comply with importing country phytosanitary requirements.
- Establishing an inter-agency network (CITES/WCO/IPPC/and other interested agencies) to create synergy in developing a joint policy and recommendations with regard to e-commerce and courier/postal pathways.
- Establishing a joint inter-agency toolkit for the regulation and screening of e-commerce and courier/postal pathways.

Action	Funding Source	Estimated budget (USD)				
		2020	2021	2022	2023	2024
Communications strategy and implementation	ExtP	60 K	20 K	20 K	20 K	20 K
Interagency network for e-Commerce and courier/postal pathways	ExtP	30 K	30 K	30 K	30 K	30 K
Interagency tool kit <ul style="list-style-type: none"> <li>· Regulation</li> <li>· Operations</li> </ul>	ExtP	60 K	30 K	30 K	20 K	20 K

Action	Funding Source	Estimated budget (USD)				
		2020	2021	2022	2023	2024
Other support materials						
<b>Total</b>	<b>ExtP</b>	<b>150 K</b>	<b>80 K</b>	<b>80 K</b>	<b>70 K</b>	<b>70 K</b>
FTE (estimate)	ExtP	1.25	0.7	0.7	0.5	0.5

#### 4. Developing Guidance on the Use of Third Party Entities

Enabling use of third parties to perform phytosanitary actions, including treatments, inspections, etc.

##### Desired 2030 Outcome

Countries wanting to use third parties will have access to harmonised resources to support them to do this in an effective manner with the necessary management processes and controls. Standards have been adopted and implemented that give guidance on the use of third party entities to perform various phytosanitary actions, including treatments, inspections, diagnostic identification, etc. The standards ensure that when governments choose to take this option, the actions continue to be carried out to the same standard and level of phytosanitary security.

Activities to be carried out during 2020 - 2030 would include:

- Adoption of relevant ISPM(s) and guidance providing guidance on authorization of third party entities to perform phytosanitary actions such as inspection, testing, surveillance and treatment on behalf of the NPPO.
- Explore how confidence in authorization systems can be increased internationally, e.g. through an international accreditation system.
- Provide capacity development resources as needed to assist NPPOs wanting to start using a third party entity model.

Action	Funding Source	Estimated budget (USD)				
		2020	2021	2022	2023	2024
Authorization of third party entities – standard completed - Guidance developed	RP	20 K	20 K			
Scoping study and analysis to increase international confidence in authorisation systems	ExtP	60 K	60 K	30 K	30 K	30 K
Implementation support and capacity development resources available	RP	50 K	100 K	50 K	30 K	30 K
<b>Total</b>	<b>ExtP</b>	<b>130 K</b>	<b>180 K</b>	<b>80 K</b>	<b>60 K</b>	<b>60 K</b>
FTE (estimate)	ExtP	0.4	1.0	0.7	0.5	0.5

#### 5. Strengthening Pest Outbreak Alert and Response Systems

A global pest alert and response system to communicate emerging pest risks, so countries can proactively adapt their phytosanitary systems to reduce the risk of introduction and the strengthening of country and regional abilities to respond effectively to pest outbreaks including new incursions.

##### Desired 2030 Outcome

A global pest alert system with mechanisms to evaluate and communicate emerging pest risks is in place, providing regular information to NPPOs on changes in pest status around the world. NPPOs are using this to quickly adapt their phytosanitary systems to reduce the risk of introduction and spread. In case of outbreaks, strengthened pest outbreak response systems and tools are helping countries take much more timely action against especially new incursions. NPPOs, RPPOs and the FAO have collaborated to develop and roll out a comprehensive but easy to use toolbox to support countries responding quickly and effectively. RPPO's are playing an active role to assist NPPO's and coordinate outbreak responses across their regions.

Activities to be carried out during 2020 - 2030 could include:

- Understand the global state of emerging pest risk scanning and reporting at NPPO and RPPO levels, and user requirements for an enhanced system.
- Continue to work with countries to facilitate the development of pest surveillance systems, based on IPPC standards and other technical guidance, necessary for early detection and response to emerging pest risks.
- Develop a system to coordinate the dissemination of emerging pest risks and changes in pest status, including establishing common data standards for all countries and regions engaged in this activity.
- Set-up a generic system countries and RPPO's could use to enter and report emerging risks including changes in pest status.
- Explore new ways to facilitate timely reporting of new incursions and to remove current barriers that work against proactive pest reporting.
- Develop a clear IPPC mandate, policy and structure including, if appropriate, the integration of the Emergency Prevention System for Transboundary Animal and Plant Pests and Diseases (EMPRES) plant health activities into an overall plant health mandate.
- Establish a network of phytosanitary emergency response expertise
- Facilitate engagement of expertise and response resources in a timely manner
- Develop a simple and effective incursion response toolbox that countries can use including contingency response plans, delimitation methods, diagnostic protocols, containment protocols, lists of lures, attractants and control agents, control options, phytosanitary treatments, etc.
- Facilitate advocacy with potential donors for support in implementing the developed incursion response tool box.

The establishment of a strengthened international pest outbreak response system under the IPPC provides unique opportunities to address catastrophic pest outbreaks, such as the recent outbreak of Fall armyworm (*Spodoptera frugiperda*) in Africa, by providing speedily expertise and methodologies for its eradication. The benefits can be substantial. However, resources needed to establish and maintain such a system will overtax current IPPC capabilities, so this activity must go hand-in-hand with the creation of an international donor initiative to finance it.

Action	Funding Source	Estimated budget (USD)				
		2020	2021	2022	2023	2024
Analysis and report – global state of emerging pest risk scanning and reporting, impediments to reporting	IntP	80 K				
User requirements for an enhanced scanning and reporting system	IntP	60 K	60 K			
Facilitate development and implementation of standards-based pest surveillance systems	ExtP	100 K	60 K	30 K		
Global system for providing and sharing information on emerging pest risks and changes in pest status (potential joint project FAO (EMPRESS)/RPPOs)	ExtP	30 K	100 K	60 K	30 K	
Develop and globally adopt enabling policies to optimise reporting including IPPC mandate and operating structures	RP	30 K	15 K			
A network of phytosanitary emergency response expertise is established	IntP	30 K	10 K	10 K	10 K	10 K
Develop, adopt and apply processes for rapidly engaging expertise and response resources	IntP	60 K	25 K	10 K		

Action	Funding Source	Estimated budget (USD)				
		2020	2021	2022	2023	2024
Establish an incursion response tool box	RP	20 K	60 K	100 K	20 K	20 K
Facilitate advocacy with potential donors	IntP	20 K	20 K	20 K	20 K	20 K
Establish and operate an international donor scheme for this system	ExtP	20 K	10 K	10 K	10 K	10 K
<b>Total</b>	<b>Various</b>	<b>450 K</b>	<b>360 K</b>	<b>240 K</b>	<b>90 K</b>	<b>60 K</b>
FTE (estimate)	ExtP	3.0	3.0	1.3	0.5	0.2

## 6. Assessment and Management of Climate Change Impacts on Plant Health

A work programme is initiated to assess and manage impacts caused by climate change with regard plant health and international trade of plants and plant products.

### Desired 2030 Outcome

The impacts of climate change on plant health and the safe trade of plants and plant products are evaluated especially in relation to risk assessment and risk management issues and phytosanitary issues are adequately reflected in the international climate change debate under the Intergovernmental Panel on Climate Change (IPCC).

Activities to be carried out during 2020 - 2030 could include:

1. Explore how far the Commission needs to address climate change issues and their impact on plant health policies.
2. Establishment, if appropriate, of a structure to systematically analyse and discuss climate change and plant health.
3. Development of recommendations with regard to climate change and plant health and, if necessary, guidelines for pest risk analysis and surveillance.
4. Mainstreaming phytosanitary policies into the climate change debate.

Action	Funding Source	Estimated budget (USD)				
		2020	2021	2022	2023	2024
Analysis of CPM responsibilities on climate change issues as they impact plant health policies	IntP	25 K				
Consider recommendations from the analysis and shape a response for adoption and implementation	IntP		30 K			
Review and revise IPPC policies and guidelines as recommended	RP			15 K		
Establish working relationships with the IPCC and other climate-focussed organisations, as appropriate and relevant to IPPC outcomes	RP	15 K	15 K	15 K	15 K	15 K
<b>Total</b>	<b>IntP</b>	<b>40 K</b>	<b>45 K</b>	<b>30 K</b>	<b>15 K</b>	<b>15 K</b>
FTE (estimate)	IntP	0.25	0.4	0.25	0.1	0.1

## 7. Global Phytosanitary Research Coordination

A voluntary mechanism for global phytosanitary research coordination, to accelerate development of science to support all regulatory phytosanitary activities.

### Desired 2030 Outcome

An analysis of international phytosanitary research structures and policies has been conducted with a view to explore in how far internationally coordinated plant health research can help countries to

avoid overlap in research activities and to utilize research resources in the most efficacious manner. Possibilities for establishing an international phytosanitary research collaborative structure have been explored and if appropriate established.

Activities to be carried out during 2020 - 2030 would include:

- Analysis of existing international research coordination policies and structures.
- Explore the benefits of developing an IPPC policy and structure, especially determining the role of RPPOs in this activity.
- Adoption of an IPPC international research coordination and policy and structure.
- Establishment, if appropriate, of an international phytosanitary journal for publication of phytosanitary research findings.

Action	Funding Source	Estimated budget (USD)				
		2020	2021	2022	2023	2024
Analyse existing international research coordination policies and structures	IntP	25 K				
Investigate benefits of IPPC policy and coordination structures, as well as an international journal	RP		20 K			
Adopt and implement coordination arrangements	RP			25 K	10 K	10 K
<b>Total</b>	<b>IntP</b>	<b>25 K</b>	<b>20 K</b>	<b>25 K</b>	<b>10 K</b>	<b>10 K</b>
FTE (estimate)	IntP	0.25	0.2	0.25	0.1	0.1

### 8. Diagnostic Laboratories Network

A network of recognised diagnostic laboratory services and diagnostic protocols to support countries to identify pests in a more reliable and timely manner.

#### Desired 2030 Outcome

An international network of diagnostic laboratory services provides reliable and timely pest identifications. National laboratories with strong diagnostic functions are officially recognised as capable of offering reliable services within regions or globally, reducing the need for all countries to develop duplicated capacity.

Activities to be carried out during 2020 - 2030 would include:

- Conceive a model for the establishment of sub-regional joint diagnostic laboratories and proficiency testing.
- Adopt required standards and diagnostic protocols.
- Facilitate the establishment of an international laboratories network.
- Establish and communicate a listing of available diagnostic laboratories and their expertise.

Action	Funding Source	Estimated budget (USD)				
		2020	2021	2022	2023	2024
Coordinate and publish a list of diagnostic laboratories including operational expertise	ExtP	30 K		10 K		
Develop a model for networked or shared diagnostic laboratories	ExtP		100 K	60 K		
Draft standards and protocols	ExtP			60 K	15 K	15 K
Coordinate a pilot laboratory network	ExtP			15 K	30 K	
<b>Total</b>	<b>ExtP</b>	<b>30 K</b>	<b>100 K</b>	<b>145 K</b>	<b>45 K</b>	<b>15 K</b>
FTE (estimate)	ExtP	0.25	0.5	1.25	0.5	0.1

## 4. Projected expenditure 2020-2024

The collective investment in the IPPC Development Agenda from 2020 to 2024 based on indicative activities is USD 12.78 million over the 5 years, or around \$2.5 million each year. This includes funding for between 7.5 and 12.3 staff per annum (as full time equivalent or FTE) to undertake the activities. This is largely in addition to the expected budget and staffing levels of the IPPC Secretariat that are funded from the FAO Regular Program biennial budget.

Around half of the expenditure is for the implementation of the ePhyto Solution, which will be directed by a separate five year investment and implementation work plan. Most of the remainder is projected to be funded as external projects beyond the contributions by contracting parties to the IPPC Multi Donor Trust Fund, with donors potentially entering into joint projects with the IPPC Secretariat. These projects will require funding for staff resources in addition to operating capital in order for them to be undertaken.

### Total projected investment in the IPPC Development Agenda, 2020 to 2024

Development Agenda Item						
	Primary Source	2020	2021	2022	2023	2024
<b>1. Harmonisation of Electronic Data Exchange</b>						
USD	ExtP	1.04 M	1.190 M	1.65 M	1.39 M	1.71 M
FTE (estimate)	ExtP	4.0	4.0	4.0	4.0	4.0
<b>2. Commodity and Pathway Specific ISPMs</b>						
USD	Various	430 K	380 K	480 K	440 K	460 K
FTE (estimate)	Various	2.5	2.5	2.5	2.0	2.0
<b>3. Management of E-commerce and Postal and Courier Mail Pathways</b>						
USD	ExtP	150 K	80 K	80 K	70 K	70 K
FTE (estimate)	ExtP	1.25	0.7	0.7	0.5	0.5
<b>4. Developing Guidance on the Use of Third Party Entities</b>						
USD	ExtP	130 K	180 K	80 K	60 K	60 K
FTE (estimate)	ExtP	0.4	1.0	0.7	0.5	0.5
<b>5. Strengthening Pest Outbreak Alert and Response Systems</b>						
USD	Various	450 K	360 K	240 K	90 K	60 K
FTE (estimate)	ExtP	3.3	3.3	1.6	0.8	0.5
<b>6. Assessment and Management of Climate Change Impacts on Plant Health</b>						
USD	IntP	40 K	45 K	30 K	15 K	15 K
FTE (estimate)	IntP	0.25	0.4	0.25	0.1	0.1
<b>7. Global Phytosanitary Research Coordination</b>						
USD	IntP	25 K	20 K	25 K	10 K	10 K
FTE (estimate)	IntP	0.25	0.2	0.25	0.1	0.1
<b>8. Diagnostic Laboratories Network</b>						
USD	ExtP	30 K	100 K	145 K	45 K	15 K
FTE (estimate)	ExtP	0.25	0.5	1.25	0.5	0.1
<b>TOTAL</b>						
	<b>USD</b>	<b>2.705 M</b>	<b>2.685 M</b>	<b>2.940 M</b>	<b>2.180 M</b>	<b>2.430 M</b>

<b>FTE</b>	<b>12.2</b>	<b>12.6</b>	<b>11.15</b>	<b>8.5</b>	<b>7.8</b>
	2020	2021	2022	2023	2024