New Pest Introduction: Next Steps

Guidance from ISPMs and RSPMs

Marina Zlotina (USDA-APHIS-PPQ)

31 October 2019

IPPC

This Presentation:

- IPPC and its purpose
- International Framework
  - Definition of Quarantine Pest
    - Guidance from ISPM: 5 Supplements 1 and 2
    - Decision to control a regulated pest
  - ISPMs relevant to the framework
  - Relevant RSPMs

International Plant Protection Convention (IPPC)

- **IPPC**:
  - Multilateral treaty for international cooperation in plant protection
  - Phytosanitary standard-setting body named in SPS Agreement

Article I. Purpose and responsibility:

securing common and effective action to prevent the spread and introduction of pests of plants and plant products, and to promote appropriate measures for their control

What is a pest?

- The IPPC defines a pest as “Any species, strain or biotype of plant, animal or pathogenic agent injurious to plants or plant products” (ISPM 5).
- “Pests” are organisms that directly or indirectly affect cultivated or uncultivated plants, including indirect effect on plants through other organisms (Annex 1 of ISPM 11).

IPPC and Sovereign authority to regulate pests

- Does sovereignty mean that Contracting Parties (CPs) manage domestic pests any way they want?
- Are there international obligations to control spread of pests within the territory of a sovereign CP?
- How do domestic rules to regulate pests relate to international obligations?

Example: U.S. Plant Protection Act. SEC. 402.

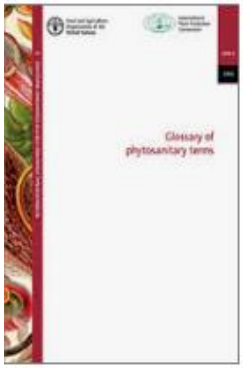
- The *detection, control, eradication, suppression, prevention, or retardation of the spread of plant pests* or noxious weeds is necessary for the protection of the agriculture, environment, and economy of the United States.

- It is the responsibility of the Secretary to facilitate *exports, imports, and interstate commerce* in agricultural products and other commodities that pose a risk of harboring plant pests or noxious weeds in ways that will reduce, to the extent practicable, … the risk of dissemination of plant pests or noxious weeds.

Article VI. Regulated Pests

- 1. Contracting parties **may require** phytosanitary measures for **quarantine pests** and **regulated non-quarantine pests**, provided that such measures are:
  - (a) *no more stringent than measures applied to the same pests, if present within the territory of the importing contracting party*; and
  - (b) *limited to what is necessary to protect plant health* and/or safeguard the intended use and *can be technically justified* by the contracting party concerned.
- 2. Contracting parties **shall not require** phytosanitary measures for **non-regulated** pests.

Quarantine Pest



- A **pest** of potential economic importance to the **area endangered** thereby and not yet present there, or present but not widely distributed and being **officially controlled** [FAO, 1990; revised FAO, 1995; IPPC 1997].

A pest of potential economic importance to the area endangered thereby and not yet present there, or present but not widely distributed and being officially controlled

Supplement 1 provides guidance on:

- the concept of *official control* and its application in practice for quarantine pests that are present in an area;
- the concept of "*present but not widely distributed and under official control*" for quarantine pests.

Official control

- Official control is subject to ISPM 1, in particular the principles of *non-discrimination, transparency, equivalence of phytosanitary measures* and *pest risk analysis.*
- Official control includes:
  - **eradication and/or containment in the infested area(s)**
  - surveillance in the endangered area(s);
  - restrictions on movement into and within the regulated area(s); including phytosanitary measures applied at import.

Official control (continued)

- Program evaluation and pest surveillance are required in official control program to determine the need for and effect of control to justify phytosanitary measures applied at import for the same purpose.

- Phytosanitary measures applied at import should be consistent with the principle of non-discrimination. Domestic and import requirements should be technically justified.

- All official control programs have elements that are mandatory.

NPPO authority and involvement in official control

- Responsibility, accountability and enforcement of official control programs rests with the CP or the NPPO under appropriate legislative authority.
- Programs are performed, managed, supervised or, at minimum, audited/reviewed, by the NPPO.
- Agencies other than the NPPO may be responsible for aspects of official control programs (e.g., subnational authorities or the private sector).

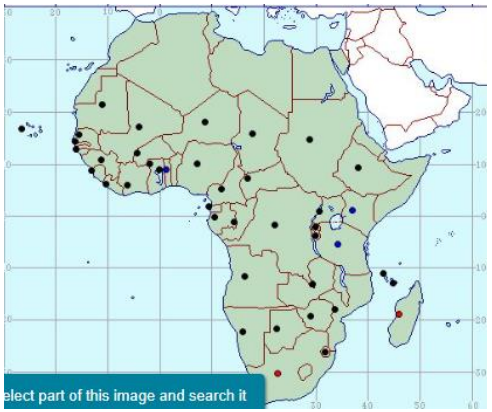
Definition of Q-pest - Not widely distributed

- A pest of potential economic importance to the area endangered thereby and not yet present there, or present but **not widely distributed** and being officially controlled

- "Not widely distributed" is a concept referring to a pest's occurrence and distribution within an area.

A pest may be categorized as:

- Present and widely distributed in an area,
- Present and not widely distributed, or
- Absent.



Cabi.org

Doi.org

- For a quarantine pest (Q-pest) that is present but not widely distributed, the importing country should define the infested area(s) and the endangered area(s).

- Not widely distributed for Q-pest – is when the pest is limited to parts of its potential distribution (infested area) and there are parts of the endangered area(s) that are still free from the pest.

A pest of potential economic importance to the area endangered thereby and not yet present there, or present but not widely distributed and being officially controlled

- **ISPM 5, Supplement 2**:
  - Clarifies concept of *potential economic importance* and related terms and their application is in the framework of IPPC and ISPMs;
  - explains the application of certain economic principles as they relate to the IPPC's objectives, in particular in protecting uncultivated plants and wild flora.

Potential economic importance

- The following criteria should be met before a pest is considered of *potential economic importance*:
  - a potential for introduction in the PRA area
  - the potential to spread after establishment
  - a potential harmful impact on plants:
    - crops (e.g., loss of yield or quality)
    - the environment (e.g., damage to ecosystems, habitats or species)
    - some other specified value (e.g., recreation, tourism, aesthetics).

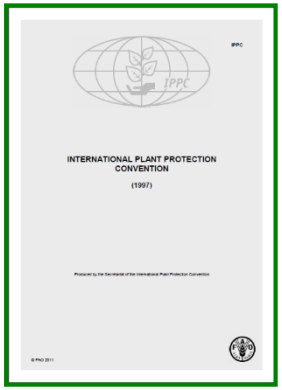
Costs and benefits

- A general economic test for any policy is that its benefit is at least as large as its cost.
- Costs and benefits should include both market and non-market aspects despite that the latter might be difficult to quantify or measure.
- Economic analysis for phytosanitary purposes can only provide information with regard to costs and benefits of a specific policy.

SPS Agreement and ISPM guidance on economic consequences

- The SPS Agreement describes a more limited set of factors to be considered in economic assessments than do the ISPMs.
  - Negative impacts to producers vs. estimating both costs and benefits. The ISPMs describe a very broad range of approaches to economic consequence analysis emphasizing inclusion of environmental impacts.

- Direct and indirect effects of the pest in the PRA area.



Supplement 2 - key points:

- IPPC can account for environmental concerns in economic terms using monetary or non-monetary values;
- Under IPPC, market impacts are not the sole indicator of pest impact;
- Contracting parties have the right to adopt phytosanitary measures for pests for which the economic damage caused to plants, plant products or ecosystems within an area cannot be easily quantified;
- The scope of the IPPC covers the protection from pests of cultivated plants in agriculture, horticulture and forestry, uncultivated plants, wild flora, habitats and ecosystems.

Decision to apply official control

- A national plant protection organization (NPPO) may choose whether or not to officially control a pest of potential economic importance that is present but not widely distributed.
  - NPPO should take into account finding from PRA,
  - the costs and benefits of regulating the pest,
  - the technical and logistical ability to control the pest within the defined area.
- If the pest is not subjected to official control, it does not qualify as a Q-pest.

ISPMs relevant to the discussion today

- **ISPM 1**: "*Phytosanitary principles for the protection of plants and the application of phytosanitary measures in international trade"* (Rev. 2006).
  - General Requirements for Official control are subject to ISPM 1, in particular the principles of **non-discrimination, transparency, equivalence of phytosanitary measures and PRA**.

Relevant ISPMs

- IPPC text: “Contracting parties shall, to the best of their ability, **conduct surveillance** for pests and develop and maintain adequate **information on pest status** *in order to support categorization of pests*, and for the development of appropriate phytosanitary measures.”
- ISPM 6: “*Surveillance*” (Rev. 2018).
- ISPM 8: “*Determination of Pest status in an area*” (1998, currently under revision).

ISPM 9 "*Guidelines of pest eradication programs*" (1998)

- Describes the components of a pest eradication program which can lead to the establishment or re-establishment of pest absence in an area.
  - A program for pest eradication may be developed by NPPO as:
  - an emergency measure to prevent establishment or spread of a pest following its recent entry (e.g., re-establish a pest free area), OR
  - a measure to eliminate an established pest (i.e., establish a pest free area, see ISPMs No. 4, 10, 22).

ISPMs on Pest Risk Analysis

- Requirements for technical justification or Pest Risk Analysis are stipulated in both SPS Agreement and IPPC:
  - ISPM 2 "*Framework for Pest risk analysis*" (Rev. 2007) with the focus on stage 1 - Initiation of the PRA;
  - ISPM 11 "*Pest risk analysis for quarantine pests*" (Rev. 2013) – guidance on conducting all stages of PRA, including relevant guidance for LMOs and plants as quarantine pests.

ISPM 17 "*Pest reporting*" (2002)

- The purpose of pest reporting is to communicate immediate or potential danger from the occurrence, outbreak or spread of a quarantine pest in the country where it is detected, or for neighboring countries and trading partners.

NAPPO Regional Standards for Phytosanitary Measures (RSPMs)

- RSPM No. 31 *General Guidelines for Pathway Risk Analysis*
  - Pathway risk analysis is a process for evaluating the pest risk and risk management options associated with one or more pathways for the introduction or spread of pests.

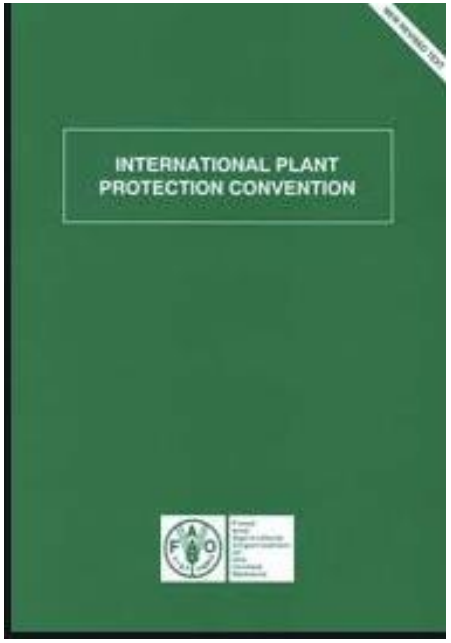
NAPPO RSPMs (Continued)

RSPM 40 *Principles of Pest Risk Management for the Import of Commodities*

- Outlines the analytical process of risk management for identifying, evaluating, and recommending pest risk management options in the context of pest risk analysis.
- Contains important supplement for evaluating reliability and applicability of information sources and uncertainty.

NAPPO RSPMs (Continued)

- RSPM 30 *Guidelines for the Determination and Designation of Host Status of a Fruit or Vegetable for Fruit Flies (Diptera: Tephritidae)* (also ISPM 37 *Determination of host status of fruit to fruit flies (Tephritidae)*).
  - Determining host status for PRA and for host list when eradicating a pest (i.e., limiting the host material movement in and out the regulated area).



Thanks

Merci

Gracias!