




# The role of the IPPC in pre-import animal screening





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# Outline

- Scope of the Convention (IPPC)
- Key Principles
- Pest Risk Assessment
  - as a screening tool
  - in context

**INTERNATIONAL PLANT PROTECTION CONVENTION**  
(New Revised Text approved by the FAO Conference at its 29th Session - November 1997)

**PREAMBLE**

The contracting parties,


- recognizing the necessity for international cooperation in controlling pests of plants and plant products and in preventing their international spread, and especially their introduction into endangered areas;
- recognizing that phytosanitary measures should be technically justified, transparent and should not be applied in such a way as to constitute either a means of arbitrary or unjustified discrimination or a disguised restriction, particularly on international trade;
- desiring to ensure close coordination of measures directed to these ends;
- desiring to provide a framework for the development and application of harmonized phytosanitary measures and the elaboration of international standards to that effect;
- taking into account internationally approved principles governing the protection of plant, human and animal health, and the environment; and
- noting the agreements concluded as a result of the Uruguay Round of Multilateral Trade Negotiations, including the Agreement on the Application of Sanitary and Phytosanitary Measures;

have agreed as follows:

**ARTICLE I**

**Purpose and responsibility**


1. With the purpose of 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, the contracting parties undertake to adopt the legislative, technical and administrative measures specified in this Convention and in supplementary agreements pursuant to Article XVI.
2. Each contracting party shall assume responsibility, without prejudice to obligations assumed under other international agreements, for the fulfillment within its territories of all requirements under this Convention.
3. The division of responsibilities for the fulfillment of the requirements of this Convention between member organizations of FAO and their member states that are contracting parties shall be in accordance with their respective competencies.







## Aim of the IPPC


- Prevent introduction & spread of pests
- Protect plant life
- Promote fair & safe trade



## So what's a pest?






- any species, strain or biotype of plant, animal or pathogenic agent injurious to plants or plant products






## What is *plant life*?


- cultivated plants (agriculture, horticulture, forestry)
- wild flora
- habitats & ecosystems



## What is “potential economic importance”?

- Includes economic, environmental and societal impacts
- Includes direct and indirect effects to plants
- May be quantitative or qualitative measure of impacts






## Scope of the IPPC

- Extends to items capable of harbouring or spreading pests, such as:
  - storage places
  - conveyances
  - packing materials
- Includes intentional introductions of organisms, including:
  - biological control organisms
  - research, industrial or other organisms




## Key principles

- Countries have the right to use phytosanitary measures to protect plants
- Principles:
 


– Necessity	– Non-discrimination
– Managed risk	– Transparency
– Technical justification	– Cooperation
– Minimal impact	– Equivalence






## Obligations

- Establish a National Plant Protection Organization (NPPO)
- Regulate imports
- Publish phytosanitary requirements
- Conduct surveillance & treatments; certify exports
- Share information on pests and regulations
- Notify trading partners of non-compliance



## Two kinds of pests in IPPC

- 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
- Regulated non-quarantine pest





## International Standards for Phytosanitary Measures (ISPMs)

ISPMs:

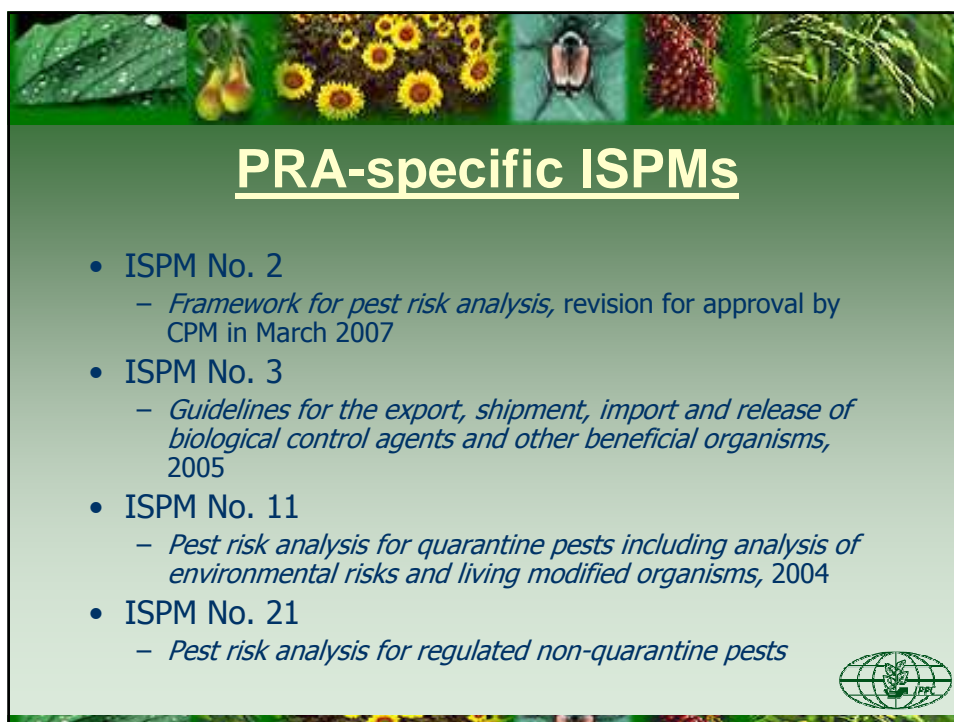
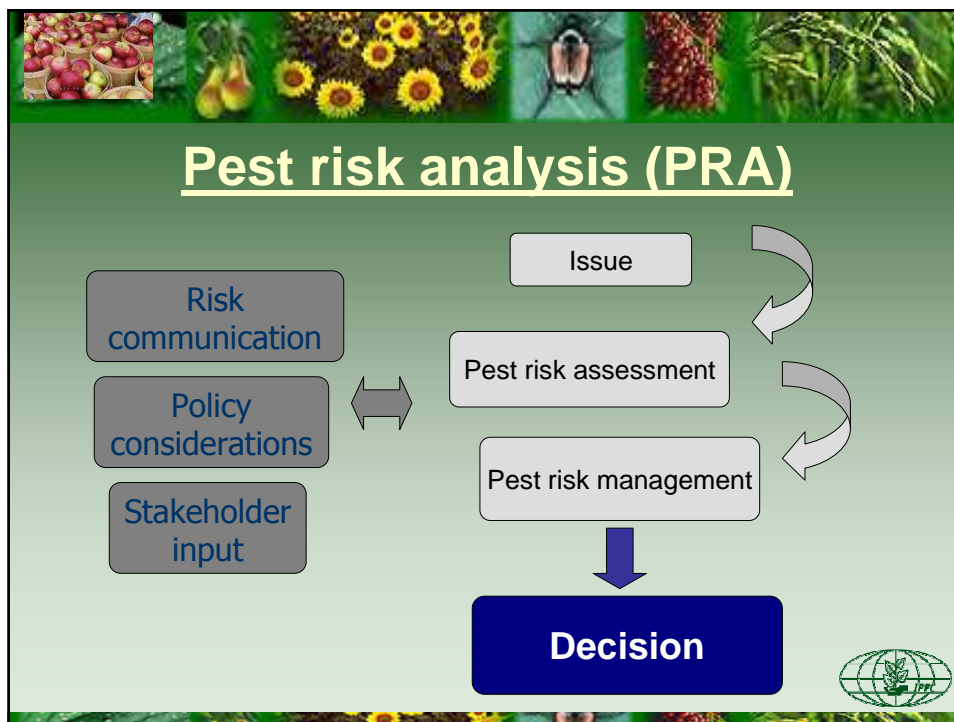
- provide guidance to member countries in implementing national programs and fulfilling requirements of the IPPC
- are not mandatory – they are guidelines to assist member countries in meeting IPPC obligations which are contained in the Convention itself
- IPPC is recognized as a standard-setting body under the WTO-SPS




## What is Pest Risk Analysis?

- Science-based process that provides a rationale for implementing phytosanitary measures for a specified area
- Systematic approach to deciding if a pest should be managed and, if so, what tools are appropriate







## PRA asks 5 basic questions

**Categorization**



- What bad thing can happen?

**Assessment**

- How likely is it to happen?
- How bad will it be?
- Can I live with that?


**Management**

- If not, what can I do about it?



## ISPM 11

- Three initiation points for a PRA:
  - Pest
  - Pathway
  - Policy
- Identify your PRA area
- Characterize your pathway(s):
  - Intentional vs. unintentional
  - Origin, destination, volume, season, route, treatments prior to departure or en route, intended end-use





## ISPM 11


- Potential for introduction & spread
  - Probability of entry
    - Association with pathway at origin
    - Survival in transit
  - Probability of establishment
    - Availability/abundance of suitable hosts
    - Suitability of environment
    - Human factors
  - Probability of spread after establishment
    - Presence of natural barriers
    - Life history & dispersal mechanisms



## ISPM 11



- Potential economic consequences
  - Direct & indirect pest effects
    - Known hosts/habitats
    - Types, amounts or frequency of damage
    - Biotic & abiotic influences
    - Effects on crops, natural environments, commercial markets
    - Feasibility & costs of control
  - Includes effects on plant communities, designated environmentally sensitive or protected areas, ecological processes, and human access or use





## Conclusion of risk assessment

- Risk is a product of likelihood & impact
- Conclusion of pest risk assessment identifies:
  - Overall risk
  - Endangered area
  - Uncertainty
- Determination of whether or not level risk is acceptable

## Pest risk analysis (PRA)

- Stage 1 (initiation) asks:
  - What bad thing can happen?
  - Is it within the scope of the IPPC framework?
- Stage 2 (pest risk assessment) asks:
  - How likely is it to happen?
  - How bad will it be?
- Does it matter? Is the risk acceptable?
- Stage 3 (pest risk management) asks:
  - What can be done about it?
  - Are measures feasible, effective, appropriate?
  - Can we lower the risk to an acceptable level?


Identify issue


↓

Assess overall pest risk

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Respond to risk





## Applying the guidelines at a national level


- Different countries or regions have different PRA formats or models
  - Text-based full qualitative PRA
  - Mathematical modelling or mapping
  - Dichotomous key format, e.g., EPPO model
  - Question-based semi-quantitative methods
  - Preliminary semi-automated PRA
- PRA must:
  - address the same basic questions
  - be fit for purpose
  - consistent with IPPC principles
- The ISPMs do not say what a PRA should look like or how detailed it must be



## Examples from Canada


- Unintentional introductions
  - ALHB & EAB in wood packing materials, firewood
  - Phytophthora ramorum in nursery stock
  - Sirex wood wasp ?
- Intentional introductions of organisms
  - Live worms for live bait or composting
  - Live snails for food or pets
  - Live butterflies, ants etc. for school programs etc.
  - Myriad of bio-control organisms





## Can the IPPC contribute to pre-import screening of animals?

- If the animal poses a threat to plants, either directly or indirectly, the IPPC may apply and its PRA standards may provide useful guidance
- If it has the potential to become established and result in unacceptable economic (or environmental) harm and if it is not yet present, or present and not widely distributed, it may be a quarantine pest
- Whether or not a country chooses to regulate animals as quarantine pests, the standards may prove useful in assessing relative levels of risk




- **Challenges**
  - IPPC history is rooted in agriculture; most, if not all, NPPOs are government departments of agriculture or trade
  - Some countries still lack infrastructure & resources to fully implement IPPC
  - Phytosanitary regulation alone will not solve IAS problem
  - Interdepartmental collaboration at national level presents new set of complications
- **Benefits**
  - IPPC has long history & is recognized by WTO
  - Phytosanitary measures may prevent or slow human-mediated introduction and spread of IAS
  - Many countries have infrastructure & systems in place
  - Link between NPPO & border control agencies established
  - Many standards already in place; training materials & technical support available





## More Information

- Convention and Standards are available on [www.ippc.int/](http://www.ippc.int/)
- Select "IPPC Publications"
- Select "Standards (ISPMs)"
  - Individual ISPMs or compilation
  - IPPC PRA Training Materials

