



Is it time to rethink ISPMs?

COMMISSION ON PHYTOSANITARY MEASURES

NINETEENTH SESSION

IS IT TIME TO RETHINK ISPMs?

AGENDA ITEM 8

(Prepared by the New Zealand)

Background

- [1] At the CPM Strategic Planning Group (SPG) meeting in October 2024, New Zealand presented an assessment of issues with the current ISPMs, the impact of these issues on implementation, and potential options to resolve them¹. Strong support was expressed, and significant discussion was had on new ways forward for new and adopted ISPMs. It was agreed that the Bureau would discuss the issues further and provide the necessary direction to implement change.
- [2] Following, is the paper presented at SPG with suggested next steps for the CPM to consider. The revised recommendations have been informed by SPG discussions

Discussion

Introduction

- [3] The International Standards for Phytosanitary Measures (ISPMs) are intended to assist contracting parties (CPs) to the International Plant Protection Convention (IPPC) to harmonize phytosanitary measures for the protection of plant life and to facilitate safe international trade. The ISPMs are intended to be accessible to all CPs that need to use them, and CPs should be able to easily understand what is required of them.
- [4] Since the first ISPMs were developed, there has been an increasing focus on and need for better science communication worldwide. The IPPC and its ISPMs are no exception. Plants and plant pest science are at the core of the ISPMs, and we, and our experts that develop the ISPMs, excel at science.
- [5] However, consultation on the reorganization of the pest risk analysis ISPMs in 2023 highlighted that the draft ISPM, and potentially other ISPMs, are challenging for some contracting parties to interpret and comply with, because they are long and complex, and the core requirements are unclear. The ISPMs may inadvertently be creating barriers to harmonisation rather than facilitating safe trade. Some comments² from Pacific Island nations of the Pacific Plant Protection Organization (PPPO³) were:

“If the PRA process does not need to be long and complex, reciprocally it would be good to have a more concise standard.”

“The reorganised standard would benefit from a full review to simplify it to core requirements and remove guidance information to appropriate implementation resources. A simplification of the standard could allow for different approaches to achieving the same outcome.”

¹ SPG Paper - [paper 05 SPG 2024 Oct](#)

² IPPC (2023) Compiled comments in English for 2023 First Consultation: 2020-001_Draft ISPM_PRA, https://assets.ippc.int/static/media/files/publication/en/2023/10/2023_First_consultation_Reorganization_and_revision_of_pest_risk_analysis_standards_2020-001_-CompiledComments.pdf

³ The PPPO is an FAO region representing 26 member countries including New Zealand.

- [6] This paper uses the comments made by the PPPO to explore the broader issues with the ISPMs, analyse the impact of these issues on how they are used, and make recommendations for further actions with the aim of improving the accessibility of ISPMs to contracting parties.

Assessment of issues

Low readability

- [7] The Flesch–Kincaid readability test⁴ shows that many ISPMs are “*difficult to read*” or “*extremely difficult to read*” (requiring a university or post-graduate education level). However, staff from NPPOs in developing countries may not have access to tertiary education, nor should this be necessary for operating a good phytosanitary system.
- [8] Many governments and organisations, including the Food Agricultural Organization of the United Nations (FAO), require that standards and regulations are written in plain language, so they are easy to read and easy to follow. Plain language is about using simple words, cutting out unnecessary ones, keeping sentences short and speaking directly (i.e. using active voice). Most ISPMs do not do this well.
- [9] Most ISPMs have long (i.e. over 30 words), repetitive sentences filled with unnecessary and specialized words. They use complex sentence structure and are written in the ‘passive voice’. This style is common in academic writing which is likely to reflect the educational background of the experts who create the standards. But for standards and guidelines that tell people what to do, it is better to keep language straightforward and clear.
- [10] An example of a long [53-word], complex sentence in an ISPM that does not meet plain language principles when checked by the Flesch–Kincaid readability test is:

Results of field trials carried out in a certain area may be extrapolated to comparable areas if the target fruit fly species and the physiological condition of the fruit are similar, so that fruit fly host status determined in one area does not need to be repeated in a separate but similar area. (from ISPM 37)

(Flesch–Kincaid readability test = university graduate, very difficult to read, reading ease score 9.2)

- [11] This sentence could be written in plain language as:

NPPOs may be able to apply the results of field trials to other areas. This approach is suitable if other areas are like the area of the field trial, with the same fruit fly and similar fruit condition.

Or

NPPOs may not need to determine the host status of fruit to fruit flies in all areas when field trials show that:

- *characteristics of the areas are comparable*
- *fruit fly species are the same*
- *the condition of the fruit is similar*

(Flesch–Kincaid readability test = 8th–9th grade, plain English, reading ease scores over 69)

- [12] The FAO style⁵ guide recommends checking readability of documents using the Flesch–Kincaid readability test. Readability testing is not currently a core task for expert working groups.

⁴ Flesch Kincaid Calculator <https://goodcalculators.com/flesch-kincaid-calculator/>. Flesch–Kincaid readability scores help to determine how easy or difficult a text is to read. Higher scores are easy to read whereas lower scores are more complicated and harder to understand.

⁵ FAO (2017) FAO style 2017/English. <https://www.un-redd.org/sites/default/files/2021-10/FAO%20Style%20Guide%202017.pdf>. The IPPC style guide should be read conjunction with the FAO style

Low translatability

- [13] The technical language used in ISPMs often includes technical terms that are hard to translate into non-FAO languages such as those spoken in the Pacific and Asia. This can make ISPMs hard to understand for people who don't use one of the official FAO languages as their first, second or third language.
- [14] Asian countries are linguistically diverse, and many do not have any of the FAO languages as official languages. While some of the Pacific countries do have English or French as official languages, they are not widely spoken. For example, of the 26 countries represented by the PPPO, only six use FAO languages as their first language (2 English, 4 French).
- [15] One diagnostician from a Pacific Island described diagnostic protocols as 'incomprehensible'. This comment was not due to a lack of technical knowledge but due to the complex sentence construction for those who speak an FAO language as a second, third or fourth language.
- [16] The low translatability of the ISPMs might lead to some CPs investing in interpretation services to help translate and use the ISPMs. It is unlikely that developing countries or small NPPOs have the resources to do so.

Core requirements are unclear

- [17] The PPPO has found that the guidance information in many ISPMs is overly complicated and detailed, which makes it difficult to grasp the essential requirements. This complexity could result in misunderstandings or incorrectly interpreting requirements.
- [18] The terms 'should', 'may' and 'can' are used frequently in the ISPMs. 'Should' implies an obligation or requirement to act. 'May' suggests an option to do something and 'can' indicates something is possible or someone is able to do it. 'May' and 'can' are not obligations or requirements (IPPC 2024⁶).
- [19] ISPM 11 (*Pest risk analysis for quarantine pests*), use 'should' 138 times, 'may' 205 times and 'can' 23 times. This indicates that ISPM 11 has almost twice as much guidance than requirements. It also indicates that there are a very large number of requirements to be met. The ISPM is 40 pages long, very detailed and descriptive which makes it appear that there is little room for flexibility in how to carry out a PRA.
- [20] The World Organisation for Animal Health's (WOAH) Terrestrial Animal Health Code on import risk analysis (WOAH 2019⁷) is much shorter than ISPM 11, with only 5 pages. It outlines the same key steps as in ISPM 11 but uses simpler language. The terms 'should' and 'may' appear only 14 and 15 times respectively. The WOAH code also includes an overview flowchart of the process. It is supported by a separate guidance handbook for risk analysis which includes a template and example (WOAH 2010⁸).
- [21] The WOAH code is reported by New Zealand risk analysts to work well and is user-friendly without making the requirements too complex.

guide, FAOSTYLE. The IPPC style guide does not explicitly state that ISPMs should be written in plain language.

⁶ IPPC Secretariat. 2024. *International Plant Protection Convention style guide*. Rome. FAO on behalf of the Secretariat of the International Plant Protection Convention. <https://openknowledge.fao.org/items/eb11e77b-8696-4364-8c31-040ccb095631>

⁷ WOAH. 2019. Section 2: Chapter 2.1. Import risk analysis (p101-105) *in Terrestrial Animal Health Code*, Volume 1, General provisions. https://rr-europe.woah.org/app/uploads/2020/08/oie-terrestrial-code-1_2019_en.pdf

⁸ WOAH. 2010. *Handbook on import risk analysis for animals and animal products*, Volume 1, 2nd Ed. *Introduction and qualitative risk analysis*. https://rr-africa.woah.org/app/uploads/2018/03/handbook_on_import_risk_analysis_-_oie_-_vol_i.pdf

- [22] The naming of the ISPMs maybe part of the problem. For example, ISPMs 42-45 are ‘*Requirements for...*’ suggesting they are obligatory while others such as ISPMs 9, 13, 19, 20, 23, 24, are ‘*Guidelines for...*’ implying they are optional. Despite these titles all the ISPMs contain the terms ‘*should*’ and ‘*may*’, indicating a mix of obligatory requirements and optional elements. This inconsistency in naming might be a result of poor naming conventions and can be misleading to those trying to use and understand them.
- [23] The excessive guidance in ISPMs may have carried over from before the IPPC Implementation and Capacity Development Committee (IC) was formed. A core responsibility of the IC is to identify and solve problems that hinder the effective application of the IPPC. One way the IC does this is to develop detailed guides and training resources to support the ISPMs. Ideally these guides should be developed and adopted in parallel with ISPMs. However, it may take time to prioritize and create these documents and the delay can leave a significant information gap for some CPs. This could be another reason why guidance information is included in ISPMs.

Options for resolving issues

- [24] The selection of any options for improving the current ISPMs will depend on recognition that there are issues with ISPMs that need resolving, and if appropriate, agreeing principles of what a good ISPM should look like. The following suggestions are a starting point for these discussions.

1. Plain language

- [25] Plain language aims to make information clear and accessible to a broader audience without sacrificing accuracy or detail. Plain language can be beneficial to improve clarity, efficiency, inclusivity and reduce errors in the understanding and application of standards such as the ISPMs. Using plain language in standards does not mean oversimplifying complex ideas; it means presenting them in a way that is straightforward and easy to understand. The approach can enhance the effectiveness of technical documents by making them more user-friendly and impactful; attributes that can support harmonizing the application of ISPMs and international trade.
- [26] Options for developing and revising ISPMs in plain language could include one or more of the following:
- a. inserting explicit plain language principles into the IPPC style guide;
 - b. using a plain language specialist in expert working groups to assist drafting of ISPMs;
 - c. including a core task for expert working groups and technical panels to:
 - i. develop ISPMs using plain language principles;
 - ii. test text using the Flesch-Kincaid readability test with the aim of text having a reading ease score of 50 or greater (10th to 12th grade, high school);
 - d. establishing a Technical Panel on Plain Language to review and revise all adopted ISPMs to ensure that all ISPMs are revised into plain language over time;
 - e. seek in-kind contributions from NPPOs to re-draft adopted ISPMs in plain language and consulting on re-drafted ISPMs.

2. Visual and digital tools

- [27] The inclusion of diagrams (e.g. as used in the WOA risk analysis code⁹, WOA 2019¹⁰), and potentially other visual tools, could be used to reduce the length of ISPMs and promote ease of use and understanding.

⁹ WOA. 2019. Section 2: Chapter 2.1. Import risk analysis (p101-105) *in Terrestrial Animal Health Code*, Volume 1, General provisions. https://rr-europe.woah.org/app/uploads/2020/08/oie-terrestrial-code-1_2019_en.pdf

¹¹ WOA. 2019. Section 2: Chapter 2.1. Import risk analysis (p101-105) *in Terrestrial Animal Health Code*, Volume 1, General provisions. https://rr-europe.woah.org/app/uploads/2020/08/oie-terrestrial-code-1_2019_en.pdf

- [28] The PPPO indicated that diagrams would aid their understanding of the reorganised pest risk analysis ISPM, and commented in 2023 that:

“The diagram (infographic) from Appendix 1 should be moved up front to provide a clearer overview of the process.”

- [29] It is acknowledged that the IPPC Standards Committee decided to only include diagrams and tables in appendices and implementation materials and not in ISPMs. However, there is value in revisiting this position as the use of diagrams could be used to convey complex and multiple ideas in a single image building greater understanding than words alone.
- [30] Other visual tools could include highlighting important points and including annotations in margins to help users quickly locate information and understand core requirements. Incorporating visual elements such as diagrams, flowcharts, infographics, and annotations can help illustrate concepts, processes, and requirements more clearly and faster than lengthy paragraphs.
- [31] Examples of digital tools and formats that could be incorporated into ISPMs include hyperlinks to cross-reference ISPMs, guidance materials and references; mouseover definitions for ISPM-defined terms; images and multimedia; smartphone and tablet accessibility of ISPMs.

3. Layering information

- [32] A layered format to ISPM that starts with a concise summary followed by more detailed guidance could allow CPs to choose the level of information they need. It would also ensure that important guidance information is not lost from ISPMs.
- [33] The North American Plant Protection Organization (NAPPO) have recently started to create one-page overviews of Regional Standards for Phytosanitary Measures (RSPM)¹¹ that summarise the core contents to aid understanding.

4. ISPMs with core requirements only

- [34] ISPMs could be redrafted to contain core requirements only, to make it clear what the obligatory components are. Attachment 1 provides an example of what the core requirements for ISPM 11 (*Pest risk analysis for quarantine pests*) could look like. Guidance information could be removed to a larger manual that could include templates and examples; the same approach taken by WOA. H.
- [35] This approach may mean that expert working groups focus on establishing core requirements and could develop guidance information in parallel. Guidance information could be completed after the main working group meeting but with the aim of consulting both documents concurrently. This approach would avoid the current delays in providing implementation resources, would promote efficiency and reduce costs.

5. Learn from other standard setting organizations

- [36] Learning from the experiences of other standard setting organizations (e.g. WOA. H., CODEX, World Customs Organization) may assist with developing core principles for what a good ISPM could look like for plant health. It could provide an opportunity to:
- integrate best practices in standard setting;
 - help to avoid potential mistakes that may disadvantage some CPs;
 - identify areas in the standard development process for innovation and improvement; and
 - enable the IPPC to be more efficient and cost-effective by leveraging proven successful strategies for drafting standards.

¹¹ NAPPO. 2024. Regional standards for phytosanitary measures. <https://www.nappo.org/english/products/regional-standards-phytosanitary-measures-rspm>

- [37] Longer term this approach could help the IPPC develop standards that are more effective, resilient and adaptable to change.
- [38] An example where this strategy could be used for the development of a specific standard is the upcoming revision of the reorganized pest risk analysis standard (see draft specification for ISPM: *Revision of the draft reorganized pest risk analysis* ISPM (2023-037)). The draft specification proposes to include a participant from either WOA or CODEX¹² in the expert working group as both organizations have standards for risk analysis. These standards follow a similar analysis process to that used for assessing plant pests but have a simple format that begins with describing the core principles of risk assessment followed by core requirements.

Conclusion

- [39] The SPS agreement encourages countries to use international standards, guidelines, and recommendations where they exist. Therefore, it is crucial that the ISPMs are clear, straightforward, and feasible for all CPs to implement. The current ISPMs may not be fit-for-purpose for all CPs.
- [40] The SPG and then the CPM, should reflect on these opportunities to significantly improve the core functions of standard setting and standards implementation. With open minds, and with courage to create change, CPM could agree a shift in approach that would significantly benefit all contracting parties.

Next steps

- [41] Based on feedback from the Pacific Plant Protection Organisation, the Asia Pacific Plant Protection Commission, and the CPM Strategic Planning Group, the following next steps could be help to initiate necessary changes:
- (1) The Bureau to work with SC to further analyse issues with the ISPMs and consider next steps, in addition to those proposed below.
 - (2) The IPPC Secretariat to:
 - a. update the IPPC style guide to explicitly include plain language principles;
 - b. contract a standards design specialist to provide advice on ISPM format, including digital and visual tools, to promote ease of use and understanding;
 - c. work with the Chairs and Vice-Chairs of the SC and IC to develop a work programme and priorities for the next 5 years to re-draft and publish all ISPMs adopted before 2026 with associated guidance information.
 - d. seek in-kind contributions from NPPOs to re-draft adopted ISPMs in plain language and consulting on re-drafted ISPMs;
 - (3) The Standards Committee to:
 - a. recommend to the CPM-20 (2026) a revised standard setting procedure for developing, consulting and publishing redrafted ISPMs adopted before 2026 in parallel with associated guidance;
 - b. recommend to the CPM-20 (2026) to begin the redesign process with the reorganization of the PRA ISPM;
 - c. include in all specifications for new and revised ISPMs developed by one EWG:

Tasks

- i. a task to develop ISPMs of core requirements and an initial guidance document in parallel by the same EWG;

¹² CODEX. 2021. Guidelines for risk analysis of foodborne antimicrobial resistance. https://www.fao.org/fao-who-codexalimentarius/sh-proxy/en/?lnk=1&url=https%253A%252F%252Fworkspace.fao.org%252Fsites%252Fcodex%252FStandards%252FCXG%252B77-2011%252FCXG_077e.pdf

- ii. a task for developing ISPMs and guidance information using plain language principles and a Flesch-Kincaid readability score of 50 or greater (10th to 12th grade, high school);

Expertise

- iii. a plain language specialist;

- Stewards

Each standard to be supported by 2 stewards to ensure that core requirements and guidance documents are developed in parallel. Specifications to include:

- iv. a member of the SC to steward the development of core requirements for ISPMs;
- v. a member of the IC to steward the development of an initial guidance document;
- d. revise specifications for technical panels to reflect relevant changes;
- e. update the CPM 20 (2026) with a detailed multi-year work programme to implement the new approach with urgency.

Recommendations

[42] The CPM is invited to:

- (1) *discuss* the issues identified with the current ISPMs;
- (2) *ask* the CPM bureau, to work with the SC and IC to explore issues and opportunities for the improvement of ISPMs, and to develop a detailed plan for the prospective implementation of a new approach to ensure that ISPMs meet the needs of contracting parties regardless of their developmental or language status and for this plan and any associated observations or recommendations to be presented at CPM-20 (2026).

Appendix 1: Example of what a revised ISPM could look like (presented in English only)

[43] Please note: The annotations on the left of this example have a Flesch-Kincaid readability score of 58.8. The annotations show eight core requirements (the “*shoulds*”) of PRA).

	Pest Risk Analysis for Quarantine Pests
<p>This standard only outlines the core requirements and the process of PRA.</p>	<h3 data-bbox="453 448 1275 492">Introduction</h3> <p data-bbox="453 492 1275 761">Pest Risk Analysis (PRA) is a scientific, evidence-based method used to evaluate the level of risk that pests pose in a geographic area. For some organisms, it is already known that they are pests. For others, PRA helps determine if they need to be regulated as quarantine pests on specific pathways, such as imported commodities. PRA assesses the likelihood of a pest entering, establishing, and spreading in an area and the size of the potential consequences it could have. If the risks are deemed to be unacceptable, PRA guides decisions on the phytosanitary measures needed to protect food security, biodiversity, and economies.</p>
<p>Detailed and specific guidance about PRA is available on the IPP.</p>	<p data-bbox="453 761 1275 918">Detailed and specific guidance on how to conduct PRA, types of pest risks (e.g. plant and environmental pests, living modified organisms), example templates, example analyses and training materials are available at: https://www.ippc.int/en/centre-of-excellence/phytosanitary-system/pest-risk-analysis/training-materials/.</p> <h3 data-bbox="453 918 1275 963">Scope</h3> <p data-bbox="453 963 1275 1142">This standard describes the core requirements for conducting PRA to identify quarantine pests. It outlines the process for assessing, managing, and communicating pest risks to ensure compliance with the principles of the World Trade Organization Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) (WTO, 1994).</p> <h3 data-bbox="453 1142 1275 1187">Definitions</h3> <p data-bbox="453 1187 1275 1254">Definitions of phytosanitary terms are in ISPM 5 (Glossary of phytosanitary terms).</p> <h3 data-bbox="453 1254 1275 1299">General Requirements</h3> <p data-bbox="453 1299 1275 1344">The PRA process has three stages:</p> <ol data-bbox="453 1344 1275 1456" style="list-style-type: none"> <li data-bbox="453 1344 1275 1388">1. Initiation <li data-bbox="453 1388 1275 1433">2. Pest risk assessment <li data-bbox="453 1433 1275 1456">3. Pest risk management <p data-bbox="453 1456 1275 1545">The general requirements for all PRA stages include information gathering, documentation and pest risk communication. PRAs should be shared with those affected by their outcome without undue delay.</p> <p data-bbox="453 1545 1275 1657">To ensure consistent conclusions in PRA, National Plant Protection Organizations (NPPOs) should create standard decision criteria and procedures, train PRA personnel, and review draft PRAs.</p> <h3 data-bbox="453 1657 1275 1702">Information gathering</h3> <p data-bbox="453 1702 1275 1792">Relevant information should be collected throughout the PRA process. This includes verifying whether organisms, pests, or pathways have been previously analysed, and assessing the relevance to the PRA area and pathway in question.</p>
<p>PRAs should be documented conclusions applied consistently and shared with those affected by the outcome without delay.</p>	

Overview of the PRA process

Documentation

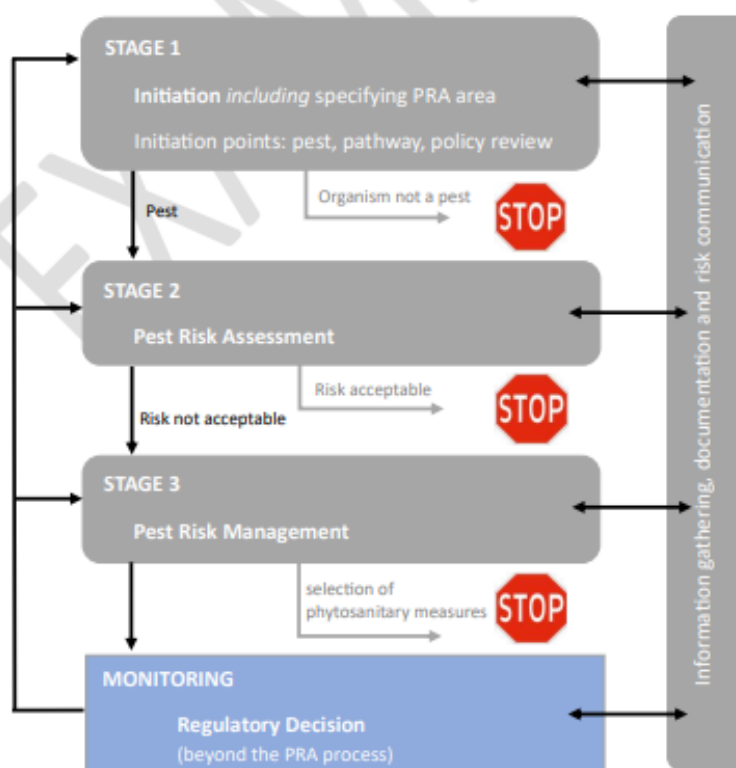
The documentation of PRA should include describing:

- The purpose of the pest risk analysis, including identifying the pathway(s) to which it applies
- The identity of any organisms assessed
- The area covered by the PRA
- Information showing how organisms could enter, establish, spread and cause harm in the PRA area
- Conclusions (the pest risk posed based on probabilities and size of consequences)
- Options for managing pest risk that have been considered and chosen
- The level of uncertainty and how expert judgement was used

Pest risk communication

[Pest risk communication](#) should occur at every stage of PRA. It is an interactive transparent process where the NPPO shares information with stakeholders. Effective communication is crucial to achieving a common understanding of pest risk, developing practical and feasible pest risk management options and promoting awareness of the phytosanitary issues under consideration.

If the results of a PRA affect other parties, the NPPO conducting it should promptly provide information about its completion and expected timeline when requested, avoiding unnecessary delays (see [ISPM 1](#)).



The PRA area should be defined.

An organism should meet the IPPC definition of a pest to be considered further by the PRA process.

Specific Requirements

The PRA process does not need to be carried out in a specific order, nor does it need to be long and complex. A short and concise PRA is acceptable if it is transparent and leads to justifiable conclusions.

Stage 1: PRA Initiation

In this stage, the pests and pathways of quarantine concern should be identified for the PRA area. The initiation process includes:

- Defining the PRA area
- Gathering information
- Identifying if an organism is a pest
- Concluding which pests need further assessment.

1.1 Defining the PRA area

The PRA area should be clearly defined. The PRA area is the region that could be threatened by pests. This area can encompass a whole country, part of a country, or several countries.

1.2 Gathering information

The specific information gathered during the initiation stage includes:

- Assembling a list of organisms of potential quarantine concern
- Clarifying the identity of the organisms, their distribution and association with host plants and commodities.

1.3 Identifying an organism is a pest

To continue in the PRA process, an organism should meet the definition of a pest:

“Any species, strain or biotype of plant, animal or pathogenic agent injurious to plants or plant products. Note: In the IPPC, “plant pest” is sometimes used for the term “pest” [FAO, 1990; revised ISPM 2, 1995; IPPC, 1997; CPM, 2012]” (ISPM 5 *Glossary of phytosanitary terms*).

1.4 Concluding which pests need further assessment

At the conclusion of the initiation stage, candidate pests and pathways are identified for further assessment (Stage 2).

Organisms that are not pests, and pathways that do not carry pests, do not need further assessment.

Stage 2: Pest risk assessment

The assessment process consists of three steps to estimate the level of risk a pest poses:

1. Categorizing pests
2. Assessing a pest’s potential to enter, establish, and spread
3. Assessing a pest’s potential impact

The quarantine status of pests should be determined.

Pests should be assessed for their likelihood to enter, establish, spread and how much harm they could cause in the PRA area.

1 Pest categorization

Pests should be categorized to determine if they are quarantine pests or regulated non-quarantine pests. To do this:

- Identify the pest (or its vector) to allow for accurate assessment
- Confirm the pest is absent from all or part of the PRA area or, present but under official control
- Determine the pest's current regulatory status in the PRA area
- Assess the pest's potential to establish and spread in the PRA area
- Assess the pest's potential to cause harmful consequences in the PRA area

If a pest is likely to have an unacceptable impact, proceed with a risk assessment. If it doesn't meet all the criteria for a quarantine pest, stop the process.

2 Assess the pest's potential for introduction and spread

A pest should be assessed for their likelihood to enter and establish (introduction), and spread in the PRA area, as well as the size of the harm they could cause.

2.1 Potential for entry

To determine if a pest is likely to enter the PRA area, the number of entry pathways, the frequency of pest presence on these pathways, and the pest's biological traits should be considered. If the pest is unlikely to enter, no further assessment is needed.

2.2 Potential for establishment

To determine if a pest is likely to establish in the PRA area, factors such as pest biology, environmental conditions, host production methods, and pest control practices in infested areas should be compared with those in the PRA area. The establishment assessment should also consider whether the pest can transfer to a suitable host in the PRA area.

If the pest is unlikely to establish, no further assessment is needed. The exception to this is transient pests that may not establish in the PRA area but could still cause harmful consequences.

2.3 Potential for spread

To assess if a pest is likely to spread, biological data from areas where the pest is present should be compared with the PRA area. Natural barriers, the potential for the pest to move with commodities and conveyances, vectors, the availability of host plants and natural enemies, and the intended use of the commodity should also be considered.

2.4 Assess the pest's potential to cause harmful consequences

If the assessment shows that a pest is likely to be introduced and can spread in the PRA area, then the magnitude of consequences of introduction should be assessed. The consequence assessment should include determining whether the pest is likely to cause direct or indirect unacceptable economic, environmental, and social impacts in the PRA area.

Only unacceptable pest risks should be considered for pest risk management.

The evaluation of risk management options should consider how effective and feasible they are and if they meet core principles in [ISPM 1](#).

Concluding pest risk assessment

At the conclusion of the pest risk assessment stage, both acceptable and unacceptable risks should be identified. If risk is acceptable then no further assessment is required. If risk is unacceptable then proceed to risk management.

Stage 3: Pest Risk Management

If the risk assessment indicates that the pest risk is too high, then options to manage that risk should be evaluated. The goal is to select phytosanitary measures that will reduce the risk to an acceptable level and are feasible to implement. It's important to understand that zero risk is not possible.

3.1 Identifying Pest Risk Management Options

Various sources of information such as pest risk assessments and historical records of use, should be used to identify and choose pest risk management options. Pest risk assessment can identify points in a pathway where pests can be controlled, how the end use of the commodity affects risk, and any uncertainties. Historical records can show how pests have been successfully managed in similar commodity-origin combinations.

3.2 Evaluating Pest Risk Management Options

3.2.1 Phytosanitary principles

Pest risk management options should be evaluated against four phytosanitary principles: necessity, minimal impact, equivalence, and non-discrimination ([ISPM 1](#)).

3.2.2 Effectiveness and efficacy

Pest risk management options should be evaluated based on their effectiveness or efficacy in reducing the likelihood of pests being introduced, spreading and causing harm. Effectiveness or efficacy should be described by the expected outcome and how they are measured, such as mortality rate, sterility, inactivation of the pest, devitalization or altered pest behaviour.

3.2.3 Uncertainty

When there is significant uncertainty about pest risk, deciding on appropriate measures can be challenging. Despite this uncertainty, measures should only be implemented if the risk is clearly unacceptable. These measures should align with the level of pest risk. However, it is technically justifiable to require phytosanitary measures to manage uncertainty, provided that the source and degree of this uncertainty have been documented. As uncertainty decreases, adjustments to phytosanitary measures can be made accordingly.

3.2.4 Feasibility

Measures should be evaluated for their feasibility including:

- Negative effects on the commodity (e.g., phytotoxicity, physical damage, reduced shelf life)
- Potential negative economic, social, and environmental impacts.

PRA should be reviewed periodically.

- Cost-effectiveness (e.g., costs of researching and applying new phytosanitary measures)
- Availability of facilities and equipment
- Approval status of the treatment
- Operational and technical considerations (e.g., practicality, timing, available technologies)

The NPPO of the importing country should discuss feasibility of measures with the NPPOs of exporting countries.

3.3 Selection of pest risk management options

Depending on their effectiveness and the appropriate level of protection, one or more phytosanitary measures may be selected to manage pest risk. A measure effective against one quarantine pest might also work against other pests, so a single measure can mitigate the risk for multiple pests.

If more than one suitable measure is identified, all should be considered equivalent and published as options in the country's import requirements or shared with the NPPOs of exporting countries. The NPPO of an exporting country should identify its preferred measures.

3.4 Concluding pest risk management

The pest risk management process should conclude when either no suitable risk management options are identified, or one or more options are chosen to reduce the pest risk to an acceptable level. The selected measures can then form the basis for phytosanitary regulations or import requirements for the PRA area.

NPPOs should adhere to obligations specified in Articles of the IPPC when applying and maintaining regulations.

Review of PRA

Information supporting PRA should be reviewed periodically to ensure that new information does not invalidate the original decisions.

References

This standard refers to ISPMs, You can find ISPMs on the International Phytosanitary Portal (IPP) at: <https://www.ippc.int/en/core-activities/standards-setting/ispm/>