





The IC Meeting Open Session on Implementation and Capacity Development Projects

17 May 2022 Questions & Answers

This document compiles Questions & Answers from the IC Meeting Open Session on Implementation and Capacity Development Projects held on 17 May 2022, 12:00 – 14:30 (CEST). About 80 participants attended the session.

Questions are organized by technical topic and some questions and answers were further edited for enhanced clarity.

The agenda, presentations and recording of the session can be found <a href="here">here</a>.

## **Phytosanitary Capacity Evaluation (PCE)**

1. How will a contracting party ask the IPPC Secretariat to conduct a PCE? What is the process/procedures to follow?

Answer: An official letter of request to conduct a PCE should be sent by a high-level official (e.g. Minister of Agriculture) through the IPPC Contact Point of the requesting country to the IPPC Secretary (with copy to Sarah Brunel Sarah.Brunel@fao.org) indicating that the country is fully committed to undertaking a PCE and has the available funds to do it. The PCE coordinators name and CV should be included.

The IPPC Secretariat will then propose a PCE facilitator and discuss further arrangements. If the IPPC Secretariat oversees the PCE, it will help organize the first PCE mission and identify stakeholders for the consensus workshops for each selected PCE Module.

Please visit our webpage to follow all the steps to conduct a PCE: <a href="https://www.ippc.int/en/core-activities/capacity-development/phytosanitary-capacity-evaluation/">https://www.ippc.int/en/core-activities/capacity-development/phytosanitary-capacity-evaluation/</a>

# **Sterile Insect Technology (SIT)**

2. 40 million SIT moths released per week seems a big work. Do you need to release the same amount of moths continuously to keep the level of infestation low? How much does it cost?

Answer: The sterile moths need to be released year-round in order to keep the pest populations suppressed. The annual cost per hectare, to give a rough idea, ranges from USD 30 to USD 50. This does not include other costs such as monitoring (trap costs) and other control measures such as orchard sanitation, etc.

## Integrated Pest Management (IPM) by using laser shooting

3. Does the laser differentiate between pests and harmless or even beneficial insects, like pollinators? Is there a negative effect of lasers on pollinating insects, birds and bats?

Answer: Laser itself could attack pests and beneficials evenly, but core technology of the technique is to extract pest species by image analysis and predict their flying course. It is possible to identify only pest species by real-time video-image analysis and successfully shoot only them by the pest-specific course prediction. One of the important issues in the ongoing research is to raise the preciseness of such identification to avoid unintended shooting. The laser shooting should be combined with other research outcomes (e.g. breeding of more effective biological control agent strains and incompatible insect techniques) to substantially reduce chemical use for pest controls as an integrated system.

Further information is available at the following external sites:

- Moonshot R&D IPM project: MS505IPM:
  <a href="https://www.naro.go.jp/laboratory/brain/moon\_shot/MS\_PM\_E05.pdf">https://www.naro.go.jp/laboratory/brain/moon\_shot/MS\_PM\_E05.pdf</a>
- Moonshot R&D Goal 5: <a href="https://www.naro.go.jp/laboratory/brain/english/moon-shot/">https://www.naro.go.jp/laboratory/brain/english/moon-shot/</a>

# Friut Fly Management in South Africa

4. What would be the limitations for the Sterile Insect Technique (SIT) not to be a tool for mass use, is it a matter of cost?

Answer: South African SIT is a partnership between growers and government. The cost is shared but it is costing a lot. However, if one aims to apply SIT against Mediterranean Fruit Fly in Africa it means one needs isolated areas since the fly is endemic. Hence mass use is not practical. We have very specific valleys between mountains which qualify to be efficient in the application of SIT.

5. What are the main challenges you faced to implement the relevant ISPMs to implement pest free areas (PFAs), in particular ISPM 26 (*Establishment of pest free areas for fruit flies (Tephritidae)*)<sup>1</sup>? Did you find the IPPC Guide for establishing and maintaining pest free areas<sup>2</sup> useful or is there a need to have other types of implementation materials?

Answer: The ISPM 26 is not challenging per se, but one needs 12 months of surveillance for fruit flies, and it was challenging together with COVID-19. However, we do have good information. Outbreaks in presumed free areas need corrective actions which is costly. Data collection and obtaining the different lures are sometimes difficult.

Yes, the IPPC guides developed are most useful and provides a more comprehensive view of ISPMS such as surveillance and PFA's, taking into account that they are still guides and individual countries may have to implement it in accordance with their situation, environment, distribution of the pest, crops, etc.

### **Risk Based Border Management**

6. Can you elaborate more about how to determine the risk of import consignment?

<sup>&</sup>lt;sup>1</sup> ISPM 26 (Establishment of pest free areas for fruit flies (Tephritidae)): <a href="https://www.ippc.int/en/publications/594/">https://www.ippc.int/en/publications/594/</a>

<sup>&</sup>lt;sup>2</sup> Guide for Establishing and Maintaining Pest Free Areas: <a href="https://www.fao.org/documents/card/en/c/ca5844en">https://www.fao.org/documents/card/en/c/ca5844en</a>

Answer: Categorizing the risks of imported commodities must be undertaken by looking at the overall suite of commodities that the agency is managing. Data on compliance along with other operational and environmental scanning information can be used to prioritize the commodities' risks against one another.

For example, first what should be done is categorizing the commodities on the basis of the risk they pose for the plants of the importing country. It can be done by taking into consideration the type of consignment, whether it is high risk plant (ex. propagating material which will be directly planted in fields) or low risk plant (e.g. cereals intended for consumption). Additionally, the origin of the consignment should be taken into consideration too. In the case when the cereals are originating from not risky origin, origin with similar pest status; these consignments should be considered as less risky origin and should pose low risk. If the cereals originate from a country with a pest status different to the importing country where a quarantine pest has occurred then the commodity should be considered a high risk and border inspection should be undertaken with a higher frequency. Seasonality of import may also be a factor which should be considered in certain periods when some pests are unlikely to occur.

Despite the category of risk the commodities pose, other very important issues are the history of incompliance of the specific origin and type of consignment, as well as previous behavior of operators (exporter and importer).

The following example provides a simple scenario on how to think through this prioritization across the suite of commodities that may be being imported to a country. Carrots from country A (commodity 1) are imported daily through a variety of crossings without compliance issues. Hundreds of shipments enter annually and in the past three years no imports have been found to be non-compliant. These are also imported by regional partners who rarely find issues. Tomatoes from country B (commodity 2) are imported seasonally, and compliance issues only occur when the commodity is first imported early in the season. Finally, horticultural imports for planting are imported from a neighboring country (commodity 3) with minimal compliance issues but present a higher risk than vegetables as these are propagative and placed in the field where pest distribution is more likely than in the case of a commodity intended for consumption. At the same time commodity 3 is sometimes found to be a higher risk if specific genera are included. In each of these cases, significant historical and real-time data is used to provide a general analysis of the current operational risks of the commodities and allow the agency to allocate its resources to the highest risks at the time. In this scenario, commodity 2 might warrant the most interventions when the shipments are coming in early in the season, while commodity 3 might be the highest risk at other times but only when specific genera are being imported. Allocating resources to manage risks in this way allows the agency to better prioritize its resources, and to forgo actions on low-risk articles like commodity 1. A guide of risk categorization developed was during work and available SAI's https://pubdocs.worldbank.org/en/186841605045083824/WBG-Risk-Prioritization-in-Phytosanitary-Management-FINAL-web.pdf

#### Other matters

7. I would like to know if the panelists believe there is sufficient expertise in the upcoming young professionals for the work they are leading. Are there topics or specialties that are underrepresented? Or are they confident of the next generation filling the roles required? What new roles and expertise will be needed?

Answer: Diagnostic expertise is limited in most countries, not just in developing countries. Recently, the teaching of taxonomy that underpins diagnostics has become less popular in universities.