Report on the analysis to support the transition to a sustainable Implementation Review and Support System (IRSS)

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Abbreviations and acronyms

CBD Convention on Biological Diversity
CPM Commission on Phytosanitary Measures

FAO Food and Agriculture Organization of the United Nations IC Implementation and Capacity Development Committee

IP Implementation Plans

IPP International Phytosanitary Portal

IPPC International Plant Protection Convention
IRSS Implementation Review and Support System
ISPM International Standards for Phytosanitary Measures

NPPO National Plant Protection Organization

OEWG Open-Ended Working Group

RPPO Regional Plant Protection Organization SBDS Subsidiary Body on Dispute Settlement

SC Standards Committee SPG Strategic Planning Group

SPS Agreement Agreement on the Application of Sanitary and Phytosanitary Measures (of

the World Trade Organization)

SPTA Strategic Planning and Technical Assistance STDF Standards and Trade Development Facility

TORs Terms of Reference
TRG Triennial Review Group
WTO World Trade Organization

Executive Summary

- [1] This report provides a diagnostic of the International Plant Protection Convention (IPPC) Implementation Review and Support System (IRSS). This analysis was carried out in response to a request from the Implementation and Capacity Development Committee (IC) for a clear message on the benefits of the IRSS and a proposal for how the IRSS might be embedded into the day-to-day work of the IPPC Secretariat to support the Commission on Phytosanitary Measures (CPM) and its subsidiary bodies.
- The objectives of this diagnostic were to analyze the history of the IRSS with a view to 1) identify major factors to be considered when shifting the IRSS from the current project management cycles to a sustainable system; 2) to develop guidance to shift the IRSS to a sustainable system; and 3) to prepare a proposal for a sustained system embedded in the IPPC Secretariat for presentation to the IC via the IC Sub-group on IRSS.
- Through a review of documents related to the IRSS and feedback from members of the IC Subgroup on IRSS, the history of the IRSS was analyzed and lessons learned were identified. This information was used to identify major factors to consider in the transition to a sustainable system. These factors fell into two main categories, those related to the system design and those related to the execution of the system. The major factors related to the system design include points related to the name and vision; scope; integration into the IPPC Secretariat; relationship to the IPPC Strategic Framework 2020-2030; guiding principles; system objectives, outputs and work plan development; funding model; communications; and monitoring, evaluation and learning. Major factors related to the execution of the IRSS pertain to the process of updating and managing the work plan; study design and delivery (including study design, data collection and analysis); reporting; and structured management of the system.
- [4] The report concludes with recommendations for next steps and a proposal for a system embedded in the IPPC work programme for the IC Sub-group on IRSS to consider in its deliberations on how to transition the IRSS to a sustainable system. One of the principle recommendations which emerged from the analysis is that the system design should be revisited and revised. This revision will help to support the transition to a sustainable IRSS, embedded in the IPPC Secretariat. Other key recommendations are as follows:
 - The name of the IRSS should be changed to something which better reflects the system's vision, mission and objectives such as "IPPC Insight" or "IPPC Observatory".
 - A statement of purpose, mission statement and / or vision statement should be developed.
 - A statement of scope which reflects the cross-cutting support the IRSS provides to respond to the information needs of all aspects of the IPPC work programme should be written.
 - The formation of a cross-cutting team within the IPPC Secretariat has been a positive development. To ensure that the cross cutting function is delivered efficiently, a structured management approach is needed.
 - A list of "Guiding principles" should be included in the system description.
 - The IRSS expected outcomes, outputs and work packages should be updated and tied more directly to the mission of the IRSS.
 - The IRSS should be fully integrated into the IPPC and supported with baseline funding and adequate staff.
 - Project funds should cover priorities which have been identified above the baseline.
 - A common approach to communicate on all IRSS activities continuously should be developed.
 - How the IRSS fits into the overall IPPC monitoring and evaluation approach should be defined, and feedback should be collected on IRSS outputs.
- Draft tools such as instructions for authors and reviewer checklists are included in the report's appendices.

1. Introduction

- The International Plant Protection Convention (IPPC) is an intergovernmental treaty signed by over 180 countries that aims to protect the world's plant resources from introduction and spread of pests and promote safe trade. The Commission on Phytosanitary Measures (CPM), the governing body of the IPPC, adopts International Standards for Phytosanitary Measures (ISPMs) as its main tool to achieve its goals, making it the sole global standard setting organization for plant health. Through its capacity development programme, the CPM also provides support to NPPOs to build capacity to carry out their functions. An important output of the capacity development programme is the publication of IPPC Guides and Training Materials to facilitate implementation of the IPPC, ISPMs and recommendations of the CPM. Another important tool is the Phytosanitary Capacity Evaluation (PCE) that the IPPC Secretariat has implemented in over 70 countries to date. Standard setting activities are led by the Standards Committee (SC) whereas the capacity development programme is led by the Implementation and Capacity Development Committee (IC).
- The IPPC Implementation Review and Support System (IRSS) is responsible for monitoring implementation of the IPPC, ISPMs, and CPM recommendations and identifying related challenges. The IRSS was first conceptualized at an Open-Ended Working Group in 2007 as a system to verify compliance with the IPPC and to gauge uptake of its ISPMs. At that time, capacity development and implementation activities were limited as there was no dedicated committee. Under the IRSS, identified gaps in implementation were to be addressed through an assistance-based and facilitative approach. The IRSS programme adopted by the CPM listed three main functions: an implementation review system to monitor implementation of the IPPC and ISPMs, an implementation support system through an IPPC Help Desk, and an implementation review response to summarize the activities and findings of the other two components and propose appropriate action plans.

1.1 Background

The IRSS has evolved since its adoption by the third session of the CPM in 2008, and more change is on the horizon. This report provides a diagnostic of the IRSS. This analysis was carried out in response to a request in 2018 from the CPM Bureau for a review of the functions of the IRSS as well as its operating model and to a request in 2020 from the IC for a clear message on the benefits of the IRSS and a proposal for how the IRSS might be embedded into the day-to-day work of the IPPC Secretariat to support the CPM and its subsidiary bodies.

1.2 Objectives

- [9] The objectives of this diagnostic are as follows:
 - To analyze the history of the IRSS with a view to identifying lessons learned;
 - To use the lessons learned to identify major factors to be considered to shift the IRSS from the current project management cycles to a sustainable system;
 - To develop guidance on how to shift the IRSS to a sustainable system; and
 - To propose options to evolve the IRSS to a sustained¹ system embedded in the IPPC Secretariat to be presented to the IC via the Sub-group on the IRSS.

2. Methods

2.1 Document review

For the analysis of the history of the IRSS, documents and other records in the public domain available through the International Phytosanitary Portal (IPP) and the internet, as well as project documents for the three funding cycles of the IRSS were reviewed. For each record, any information on IRSS-related activities, outputs, outcomes, objectives, impacts / achievements and organizational arrangements such as budgets, staffing levels, and governance was noted. Major feedback on the IRSS, its activities,

¹ Sustained: maintained over time without interruption or weakening; Sustainable: Capable of being sustained.

outputs, and outcomes were also compiled in spreadsheet of lessons learned. The analysis covers the period from 2007 (when the IRSS was first conceived) to the present. The records are grouped by year, and links between related activities, outputs and outcomes are also tracked across years. The review covered the following document types:

- Meeting papers and reports, e.g., of the CPM, Open-ended Working Group (OEWG) on a
 Possible IPPC Compliance Mechanism, the Subsidiary Body on Dispute Settlement (SBDS),
 the CPM Bureau, Strategic Planning and Technical Assistance (SPTA), Strategic Planning
 Group (SPG), Finance Committee, Triennial Review Group (TRG), the IC, the IC Sub-group
 IRSS, other IRSS-related meeting reports
- IPPC Secretariat Annual Reports
- IPPC Strategies
- IPPC Evaluations
- IRSS survey reports
- IRSS study reports
- IRSS project documents, e.g., proposals, status updates and terminal reports
- Calls
- Announcements
- News
- Calendar events
- IPPC reporting on budgets and fund raising.

2.2 Feedback from the IC Sub-group on IRSS

[11] Some members of the IC Sub-group on IRSS which includes representatives of the Bureau, SC, IC, RPPOs and the IPPC Secretariat who are involved with the oversight of the IRSS or represent beneficiaries of IRSS outputs were interviewed to get their feedback on lessons learned, how the IRSS can better serve the IPPC Community and the early drafts of the recommendations for next steps. Questions addressed the IRSS programme design, sustainability, objectives, oversight, relationship to IPPC core activities and IPPC Secretariat Units, link to the 2020-2030 Strategic Framework, IPPC Secretariat resource mobilization, IRSS planning, processes, outputs, outcomes, communications, monitoring and evaluation. The interviews provided valuable insights into how information generated by the IRSS could contribute to other activities of the IPPC community and the best form for this information to take.

2.3 Limitations of the study

- [12] Efforts were made to systematically identify and review relevant documents, but some records may have been overlooked. For example, text search was used to identify references to the IRSS and its outputs on the internet, the IPP, and within the documents themselves, but there is the possibility that discussions and decisions relevant to the IRSS did not directly reference the IRSS or its outputs. Also, information in the reports may not be complete. For example, even though care is usually taken to note decisions taken in meeting reports, it is possible that not all decisions relevant to the IRSS have been captured in the reports. Likewise, while it is possible to identify the IRSS in the chain of results for some initiatives, it is difficult to estimate the extent of its contribution with the records and time available. Finally, it was beyond the scope of this analysis to carry out an in-depth examination of the entire IPPC work programme over the past 13 years, so there may be points which are relevant to the integration of the IRSS into the overall IPPC work programme which have been overlooked. For example, some areas of work of the IRSS which potentially overlap with activities of other groups were identified, but there may be others that were not identified.
- In many cases, the information available through the document review or interviews on lessons learned was incomplete (e.g., sometimes the exact cause of the problem was not identified), so the author attempted to fill-in missing information based on the available data. Given that the data on lessons learned was compiled after-the-fact, the findings should be interpreted with caution.

3. Findings

3.1 History of the IRSS

- [14] This section of the report presents a high-level summary of IRSS activities, outputs, outcomes and the evolution of the IRSS components, organizational arrangements, funding, staffing and governance. The history is divided into stages: conceptualization, the 1st Cycle, the 2nd Cycle and the 3rd Cycle of the IRSS. Detailed findings of the analysis have been compiled into tables in Appendix 1 and detailed timelines with information on the outcomes of the individual outputs are given in Appendix 2.
- Conceptualization. In 2007, the OEWG on a Possible IPPC Compliance Mechanism was held in Kuching, Malaysia, with participation from 16 countries, the IPPC Secretariat, an expert from the FAO Legal Office and an expert on Multi-lateral Environmental Agreement (MEA) compliance mechanisms (IPPC, 2007). The discussion on the development of a possible compliance mechanism covered legal aspects and mechanisms put in place by other MEAs. The group decided to limit the scope to a system of verification of compliance and not to include punitive measures. The OEWG considered capacity limitations to be the primary cause for lack of compliance with IPPC requirements and implementation of ISPMs, therefore an assistance-based and facilitative approach was determined to be more desirable than a mechanism that would include enforcement aspects. The group concluded that a comprehensive implementation review and support system specifically designed to take account of the situation of the IPPC would best suit the need of contracting parties, and it drafted a proposal for the IRSS which was subsequently adopted by CPM-8 (2008). The adopted IRSS envisaged three main components: the implementation review system to monitor implementation of the IPPC and ISPMs; the implementation support system to establish an IPPC Help Desk; and the implementation review response to summarize the activities and findings of the other two components and to propose appropriate action plans. A three-year work plan listed activities and milestones. A need for additional dedicated IPPC Secretariat support and the establishment of a Triennial Review Group (TRG) was identified. Input on the development of what has come to be referred to as the "IPPC General Survey" was to be sought from the CPM Bureau, other experts and the Subsidiary Body on Dispute Settlement (SBDS). Analysis and reporting on the survey responses was to be carried out by the Triennial Review Group for submission to the Strategic Planning and Technical Assistance (SPTA) and the CPM.
- First Cycle. Activities for the first cycle of the IRSS formally initiated in 2011 with funding of approximately EUR 1.2 million from the European Commission Directorate-General for Trade. The objectives for the first cycle of the IRSS listed in the project document (IPPC, 2011a) are as follows: "The IRSS will build on existing, or planned, processes already approved by the IPPC governing body, the CPM, with the primary objective of facilitating and promoting the implementation of the IPPC and its ISPMs and will contribute to a number of goals of the IPPC strategic plan. Additional advantages of the IRSS include: an improved ability to monitor, encourage and support the harmonized implementation of the IPPC and its ISPMs by contracting parties; it would provide feedback into the IPPC standard setting process as to implementation issues that the quality of new and revised standards can be improved; the development of a mechanism to identify, and address emerging, and potential implementation problems before they become phytosanitary trade disputes, through an assistance-based and non-confrontational process, and it would also address establishing baseline information and annually updated data that could be used for the review of the state of plant protection in the world." The anticipated activities included monitoring the fulfilment of the reporting requirements of contracting parties, establishment of an IPPC Help Desk; the conduct of a Triennial review to evaluate the implementation of other obligations (non-reporting) contained in the IPPC; and the development of an implementation review response. These activities were expected to result in 1) identification of challenges and trends with regards to the implementation of the IPPC and its ISPMs identified globally or for a subset of countries and 2) subset of countries actively using the helpdesk to identify resources for solving difficulties in the implementation of the IPPC and its ISPMs.
- Oversight of the IRSS was carried out by the CPM Bureau, and one or more papers on the IRSS were presented to the CPM each year. In 2011, the CPM Bureau agreed to the establishment of the TRG

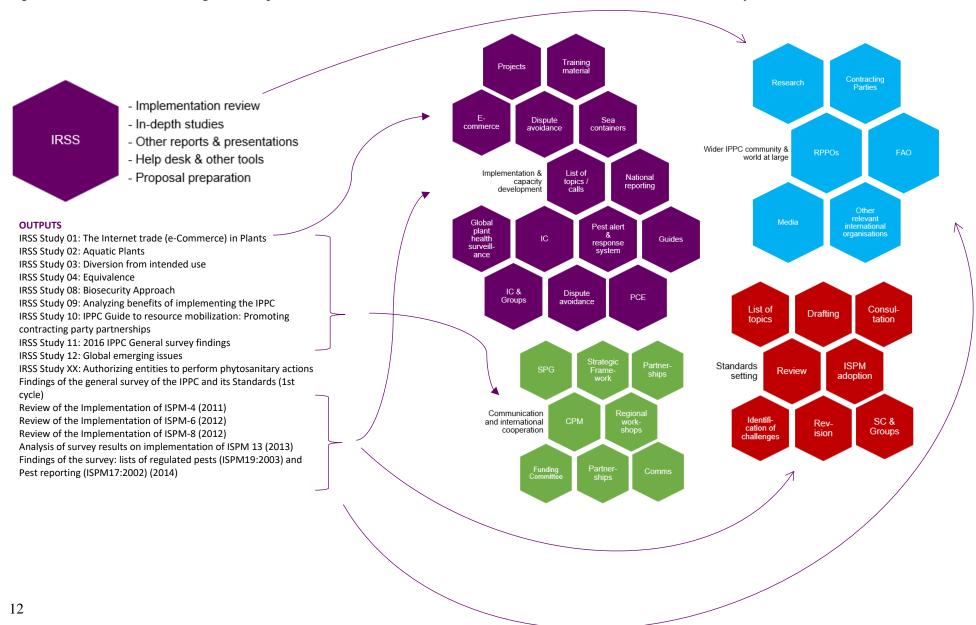
- which then met twice, once in 2012 and another time in 2014. The first cycle of the IRSS ended in 2013, and a Triennial Review Report was published in 2014.
- Outputs of the first cycle of the IRSS included reports on surveys to review implementation of ISPMs 4 (IPPC, 2012a), 6 (2012b), 8 (2012c) and 13 (2013); the report of the general survey of the of the International Plant Protection Convention and its Standards (2014a); reports of desk studies on ecommerce (2012d) and aquatic plants (2012e); development of a Help Desk and Tools (FAQ, Discussion forum, Projects database, Activities database, Phytosanitary consultants' roster, Donor table); and publication of an IRSS factsheet.
- [19] Some of the outputs from the first cycle of the IRSS clearly fit into a larger chain of results, suggesting that the outputs contributed to further outcomes:
 - The IRSS study on e-commerce was followed by adoption of the CPM recommendation on internet trade (e-commerce) in plants and other regulated articles; the launch of the IPPC ecommerce programme; engagement with several external stakeholder groups; a Special Topics Session; the addition of topics on e-commerce to the work programmes of the IC and the SC; and the inclusion of a development programme on e-commerce and postal and courier pathways in the Strategic Framework 2020-2030.
 - The IRSS study on aquatic plants was followed by the adoption of a CPM recommendation.
 - The review of ISPM 4 *Requirements for the establishment of pest free areas* was followed by publication of a guide, an international symposium on pest free areas (PFAs), baseline data collection on PFAs and revisions to the standard being undertaken.
 - The review of ISPM 6 *Surveillance* was followed by publication of a guide, the adoption of a revised standard, an implementation pilot programme on surveillance, and an international symposium.
 - The review of ISPM 8 Determination of pest status in an area was followed by the adoption of a revised version of the standard.
 - The review of ISPM 13 *Guidelines for the notification of non-compliance and emergency action* was followed by discussions in the SBDS and the National Reporting Obligations Advisory Group.
 - The findings of several surveys provided evidence of the need for the recommendation which was subsequently adopted on the importance of pest diagnosis. A guide on delivering phytosanitary diagnostic services was also published.
- Directorate-General for Trade (EUR 600,000) and the Government of Switzerland (USD 339,751). Under the EU project, the main expected results of the second cycle of the IRSS were that: 1) Challenges and trends with regards to the implementation of the IPPC and its ISPMs identified globally or for a subset of countries; and 2) a subset of countries actively using the helpdesk to identify resources for solving difficulties in the implementation of the IPPC and its ISPMs." The aim listed in the project document for the funding from Switzerland was to enable the IPPC community to "understand the global situation in terms of implementation of the convention and its standards, and to develop products and services appropriate to the needs of the IPPC Community. The current project was intended to maximize the impact of the IPPC programmes regarding standard-setting, capacity development and national reporting obligations. It would do this by establishing a system for the prolonged review of the implementation of the IPPC and its International Standard for Phytosanitary Measures (ISPM) by contracting parties to the IPPC."
- During the second cycle of the IRSS, oversight was carried out by the CPM Bureau, the Capacity Development Committee and the TRG. Once again, one or more papers on the IRSS were presented to the CPM each year. The reporting on the IRSS indicated liaison with several other international organizations (United Nations Economic Commission for Europe, World Bank, CBD, International Food Policy Research Institute), but the intent and outcomes of liaison was not clear.

Activities listed in reporting documents at the end of the second cycle include the following:

- Monitoring the fulfilment of reporting obligations by contracting parties.
- Review and evaluation of the implementation of other non-reporting obligations.
- Conducting surveys and questionnaires of contracting party implementation of ISPMs.
- Conducting case studies and technical analysis of implementation issues at national, regional, and global levels.
- Scanning for emerging issues relating to plant health.
- Collating implementation reports from regional and national plant protection organization (NPPO) data for IPPC Secretariat reports.
- Providing implementation support to contracting parties via the IRSS help desk.
- Preparing annual implementation review reports.
- Presenting implementation updates annually to the CPM.
- The means of verification for the deliverables of some of these activities is unclear.
- In addition to papers for meetings, outputs during the second cycle included the reports of studies on diversion from intended use (2016), equivalence (2016), the biosecurity approach (2016), the benefits of implementing the IPPC (2017), and global emerging issues (2017). The findings of the second general survey (2016) were also published as well as the second triennial review report (2018). A guide to resource mobilization was also published under the IRSS (2017).
- [24] Some examples of outcomes that the IRSS outputs contributed to are as follows:
 - Following publication of the review of ISPM 17 and ISPM 19, revisions of these standards were listed as topics in the Framework for Standards.
 - Following the publication of the study on diversion from intended use, the Framework for Standards includes diversion from intend use as a topic for a concept standard or supplementary document.
 - Following the publication of the study on the benefits of implementing the IPPC, a side event on the benefits of the IPPC was held at CPM-12.
 - Following the publication of the guide on resource mobilization, a side event was held on resource mobilization at CPM-13.
- *Third Cycle*. Funding for the third cycle of the IRSS came from European Commission Directorate-General for Trade (USD 742,925). The overall objectives listed in the project documents for the third cycle were 1) Improved contracting party implementation of the Convention, ISPMs and CPM recommendations and 2) Contracting party implementation contributes to the protection of global plant resources from pests, food security, environmental protection, and facilitation of safe trade, linking to the FAO Strategic Framework (2012-2019) for sustainable agriculture and the UN SDGs (1, 2, 8, 12, 13, 15 and 17).
- The outcome listed in the project document was "Improved contracting party implementation of the IPPC, ISPMs and CPM recommendations". Outputs were to be 1) Challenges and successes of contracting parties' implementation of the IPPC, ISPMs and CPM recommendations are identified, monitored, and evaluated. 2) Contracting parties are helped to address gaps in implementation of the IPPC, ISPMs and CPM recommendations through specific actions or activities to improve implementation. The work packages were to 1) Review contracting party implementation of the IPPC, ISPMs and CPM recommendations to provide strategic and analytical input into the IPPC Secretariat units and the implementation pilot on surveillance; 2) Provide support and assistance to contracting parties seeking help in implementing the Convention and ISPMs, through management of support tools (e.g., IRSS Help desk); 3) Seek information from contracting parties and regional plant protection organizations (RPPOs) on emerging implementation issues, in order to anticipate how to address them;

- 4) Analyze key issues identified by CPM and subsidiary bodies; and 5) Prepare annual implementation reviews and the triennial review.
- During the third cycle of the IRSS, oversight shifted to the IC which subsequently established the IC Sub-group on IRSS for the management of the IRSS. A report updating on the status of the IRSS was presented at CPM-13.
- The third cycle of the IRSS is still underway (extended until May 2022). Staff turnover within the IPPC Secretariat and the outbreak of COVID-19 lead to slow-downs in activity during the third cycle. One study on authorizing entities to perform phytosanitary actions was published in 2021. A webinar was also held on the topic. Following the publication of the study on authorizing entities, ISPM 45 Requirements for national plant protection organizations if authorizing entities to perform phytosanitary actions was adopted at CPM-15. Several other studies are being finalized and are planned to be published before the end of the third cycle.

Figure 1. Illustration summarising IRSS outputs and some contributions to the IPPC Core Activities and the IPPC Community



3.2 Lessons learned

The full list of lessons learned is provided in Appendix 3. The findings of the analysis of lessons learned is summarized below, with the lessons learned grouped into two main categories: lessons related to the system design of the IRSS, and lessons learned related to the execution of the IRSS. The points corresponding to these two main categories are further organized into sub-groups of related points.

3.2.1 Lessons learned related to the system design

- Rationale for the IRSS: The review of documents related to the IRSS indicated that the IRSS responds to a real need, i.e., the need for information on challenges faced by NPPOs in implementing the IPPC. For example, at its meeting in June 2018, the CPM Bureau indicated that the IRSS has an important functionality to assist matters, such as analytics, to support decision-making and to provide information on the best ways to address some issues. The CPM has indicated that IRSS survey findings have proven useful to target capacity building and other work to address specific gaps that contracting parties have identified.
- [31] The interviewees also supported the assessment that the IRSS responds to a definite need. The NPPO representatives who were interviewed expressed support for the IRSS and even described the IRSS as filling a "crucial" role for orienting the work of the IPPC. One opinion was that the data available "to support decision-making in the plant health field has been skeletal at best." The IRSS helps to address this information gap.
- [32] An evaluation of the IPPC Secretariat which was conducted in 2015 found that the IRSS is "highly esteemed by the other organizations" such as the Codex Alimentarius, the World Organization for Animal Health (OIE) and the Standards and Trade Development Facility (STDF) (FAO, 2015). Likewise, a study on EU-FAO cooperation lauded the contribution of the IRSS to "ensuring the implementation of international phytosanitary standards at national level" (Sarfatti, Laanouni and Spinelli, 2018).
- [33] Name and vision: The name of the IRSS comes from the original components described in the proposal adopted by the 3rd Session of the CPM. Some of the interviewees felt that the name should be changed because 1) it does not provide clarity on what the IRSS does for many people, the "support" component is unclear and seemingly overlaps with the remit of the IC, 2) it is difficult to say and 3) it does not contribute to creating awareness and brand identity.
- [34] The interviewees also indicated that a shared vision of the purpose of the IRSS has not been identified and reflected, and as a result not everyone in the IPPC Community knows what the IRSS is for. The lack of a shared vision leads to misunderstanding about what the IRSS should do, and it contributes to lack of buy-in by the IPPC Community. This also contributes to a perception that the IRSS is *ad hoc* as opposed to an integral system.
- [35] Scope: The document review and interviews indicated that there is some fundamental confusion about the scope of the IRSS and what its activities and outputs should extend to. In the first cycle of the IRSS, the CPM Bureau felt there was a need to think about what exactly falls under the IRSS. Questions have been raised about what form IRSS "support" should take, and there has been disagreement about what this should entail, with some suggesting that IRSS activities should extend to training while others thought that training needs should be addressed by the IC. For example, the CPM Bureau has indicated that the IRSS should be a factual monitoring activity whereas training, for example, in the use of the IPP to meet reporting obligations, should be covered under capacity building activities.
- In the past, existing IPPC core activities have been presented as part of the IRSS, and as a consequence, members requested that existing core IPPC activities should not be presented as part of the IRSS. Overlaps have been identified with other parts of the IPPC work programme. The CPM Bureau has noted that reviewing implementation difficulties is a task for the SC, and therefore the IRSS should bring these difficulties to the attention of the SC. In the second cycle of the IRSS, the EU encouraged the IPPC Secretariat to build on the programme and to apply resources for closer integration

- with implementation activities. At one stage, the CPM Bureau indicated that a review of the functions and operating model of the IRSS was required.
- Subsequently, the CPM Bureau has highlighted that the IRSS is not purely an IC project, as there are elements of research that would inform standard setting, and that it was a project critically important to the entire IPPC community. The CPM Bureau further indicated that the IRSS has an important functionality to assist matters, such as analytics, to support decision-making and to provide information on the best ways to address some issues. The first Triennial Review Group recommended that the CPM should consider if all technical assistance activities discussed in Article XX of the IPPC should be modelled after the IRSS structure identification first and then targeted assistance."
- [38] Some of the confusion about the scope of the IRSS may be rooted in the timing of the establishment of the IRSS and its first project logical framework, both of which predate many organizational changes in the IPPC Secretariat, in particular the division of the IPPC Secretariat into its present units and the establishment of the IC. The outputs and objectives listed in the initial logical framework do not reflect the immediate purpose of the IRSS, but rather that of the IPPC as a whole. The relationship of the IRSS to the IPPC core activities was ambiguous.
- Integration into IPPC Secretariat: As described in the history above, the oversight of the IRSS has shifted several times since it was first conceived, for the most part it has operated as a project and has not been well-integrated into the IPPC Secretariat. One person who previously worked with the IRSS observed that the IRSS sometimes "stood alone in isolation without feeding into the Secretariat's different functions, even within IFU, and vice versa". In the time since that observation was made, the IC Sub-group on IRSS was formed with membership from the CPM Bureau, IC, SC and Regional Plant Protection Organizations and support from each of the units in the IPPC Secretariat. This oversight model should help alleviate the silo effect, but it may lead to blurred boundaries on who does what. One of the interviewees indicated that "creating a little bit of structure could be helpful". Other feedback has identified a risk that the oversight approach will be coordination heavy, both within the Secretariat and the governance bodies.
- [40] In the documents and in the interviews, there was widespread agreement that the IRSS should be embedded into the day-to-day work of the IPPC Secretariat. The value of embedding the IRSS as a tool for the CPM and the IPPC Secretariat has been recognised by the IC. Advantages identified include the following:
 - Monitoring of implementation will be a regular part of activities; it will help support the development, revision and implementation of standards and related activities by contracting parties:
 - By providing a means of engaging with contracting parties, it will help CPM bodies learn about the needs and practices of contracting parties and help to identify the challenges that hinder implementation by contracting parties.
 - By providing information on what went well and what can be improved, it will allow the success or failure of activities to be tracked, which will help inform future improvements to the standards and how they are implemented.
 - It will allow continued improvement of surveys and terms of reference (TORs) for studies in the short, medium, and long term. A well-designed tool can help in setting long-term approaches.
 - It will contribute to the visibility of information for contracting parties, including common messages that can be communicated via the IPPC Regional Workshops.
 - It will facilitate the calls for topics and the prioritization of topics.
- There is still some discussion about where the management of the IRSS should be placed within the IPPC Secretariat. Given that "implementation" is in the name of the IRSS and that much of what it does should facilitate implementation, some interviewees felt that it belongs in the IFU as a sub-group to the IC. The IC and the Subgroup also agreed that the purpose of the IRSS is cross-cutting, and it should address the information needs of all of the IPPC's core activities. Regardless of where the management of the IRSS is placed, interviewees noted that an approach for working together needs to be decided.

- [42] Activities under some of the IPPC Core Activities may result in the identification of implementation challenges or emerging issues. Likewise, follow-up on IRSS outputs will generally be carried out as part of the IPPC Core Activities. Without coordination and communication, this information may be lost.
- [43] Contribution to the IPPC Strategic Framework 2020-2030: A Theory of Change for the IPPC Community has been approved and illustrates how the work of the Core Activities supports the mission, strategy and goals of the IPPC, FAO and the SDGs. Through this model, the chain of results can be traced from the activity level on to the higher-level outcomes and impacts which are the objectives of the IPPC Strategic Framework 2020-2030.
- [44] One interviewee observed that the IPPC Strategic Framework 2020-2030 envisions some relatively new areas of work, and the IPPC Secretariat is weak in some of these areas, e.g., research coordination. They suggested that the IRSS should be able to jumpstart these activities by looking at what is being done in these areas (e.g., situation analysis). Another interviewee indicated that the IRSS should also be in a position to provide input into the selection and monitoring of indicators for the IPPC Strategic Framework's 2020-2030 Development Agenda Items.
- [45] *Guiding principles:* Numerous documents and interviews identified that IRSS processes and outputs need the following points:
 - transparency;
 - impartiality and independence;
 - credibility;
 - outputs that are useful, of high quality, driven by the overall work plan and based on set TORs with a defined purpose and scope;
 - inclusion and participation of the whole IPPC Community and other interested stakeholders outside of the IPPC Community, as relevant;
 - feedback loops;
 - systematic communications to all target audiences; and
 - follow-up as appropriate.
- [46] These points can and should be addressed by the overall system design and the approach to its execution. Some other organizations have recognized similar needs and flagged them as key principles for evaluation studies. For example, similar key principles are listed in the widely adopted best practice guidelines published by the OECD (OECD Development Assistance Committee, 1991).
- [47] Objectives, outcomes, outputs, and work plan development: There are various descriptions of the objectives, purpose and deliverables of the IRSS, which are generally similar in spirit but often differ in the specifics (or are not very detailed). Many of these descriptions' pre-date the current arrangements with respect to the IPPC Committees and the units in the IPPC Secretariat. As stated above, the IRSS was first conceptualized over ten years ago as a system to verify compliance with the IPPC and to gauge uptake of the IPPC and ISPMs. Under the IRSS, identified gaps in implementation were to be addressed through an assistance-based and facilitative approach. The IRSS programme adopted by the CPM listed three main components: an implementation review system to monitor implementation of the IPPC and ISPMs, an implementation support system to establish an IPPC Help Desk, and an implementation review response to summarize the activities and findings of the other two components and to propose appropriate action plans. The IPPC Secretariat and the IRSS itself have evolved over the past 13 years, in response to changes in the organization of the IPPC Secretariat and the formation of new committees, changes to IRSS oversight and processes, staff turnover, and responses to lessons learned. Much of the IRSS documentation still lists these three components but in practice some of these components may be better addressed by other groups, e.g., the development and delivery of an implementation support programme is one of the main tasks of the IC, and in practice the IRSS's active contribution to implementation support (beyond the provision of information) has been limited.

- Objectives: The project documents for the three cycles of the IRSS have listed various iterations of the IRSS projects' objectives, outcomes, outputs, and work packages. The project document for the third cycle provides, perhaps, the most recent and most detailed view of the intended objectives, outcomes, outputs, and work packages of the IRSS. The objectives listed in the project document for the third cycle of the IRSS are basically in line with the IPPC Strategic Framework Objectives 2020-2030. For any given project or programme, stated objectives should reflect the longer-term changes that it aims to contribute to, so objectives which align with those of the IPPC Strategic Framework 2020-2030 make sense.
- Outcomes: In the Logical Framework Approach applied by the FAO (and many other organizations), outcome statements describe the specific short to medium-term purpose for which the project or programme is being implemented. They typically describe the changes in behaviour resulting from implementation of a programme. The outcomes listed in much of the documentation for IRSS may not accurately reflect the specific purpose of the IRSS. Feedback has raised questions about how IRSS study reports contribute to the desired outcome as listed in the project document, and some feedback indicated that the service provided by the IRSS is unclear. The outcome listed in the project document for the third cycle of the IRSS ("Improved contracting party implementation of the IPPC, ISPMs and CPM recommendations") is interchangeable with that of many other aspects of IPPC work programme. Given the specific remit of the IRSS, this outcome as listed in the project document is deemed too high level. For example, several layers of other actors will typically need to follow-up on IRSS findings. An outcome statement which better reflects the specific purpose of the IRSS would be more appropriate, and it would help clarify what the IRSS is for. Consideration of how IRSS outputs have led to outcomes may help bring clarity to what the outcomes of the IRSS should be.
- The realized outcomes of IRSS studies were examined. For some studies, such as the study on e-commerce, the placement of the IRSS study in the overall results chain is clear as it was reported in various documents, but for other studies it was difficult to identify follow-up actions taken as part of the IPPC work programme (reporting on discussions on the studies was limited and no concrete actions were identified). For some studies, action may have been taken at the level of the NPPO, but this is difficult to judge without more feedback from NPPOs or an extensive search of policy documents.
- Outputs: Outputs are the tangible infrastructure, goods and services delivered directly by the activities of a project or programme. The three main components described in the IRSS proposal adopted by the CPM can be considered the main outputs of the IRSS as it was first conceived. As stated above, the project document for the third cycle of the IRSS lists two outputs ("Challenges and successes of contracting parties' implementation of the IPPC, ISPMs and CPM recommendations are identified, monitored and evaluated" and "Contracting parties are helped to address gaps in implementation of the IPPC, ISPMs and CPM recommendations through specific actions or activities to improve implementation.").
 - Implementation review: Many of the realised outputs of the IRSS across all cycles have either related to the implementation review output. The IC has suggested that monitoring of implementation should be a regular part of activities going forward, so this output should be retained. Up until now, implementation review has largely relied on the collection of data through surveys. Objective, verifiable data assessing implementation is lacking. This could be problematic in that some implementation gaps may not be recognised or fully understood. To address this, some aspects of implementation review could potentially be carried out through direct observation and data collection in the field.
 - Implementation support: Based on the document review, the IRSS has directly delivered products and services related to the implementation support only to a minor extent. Given that the Helpdesk was almost never visited, and no questions were submitted, this output should not be retained. Some interviewees indicated that having a direct line of communication with the IPPC Secretariat is of value. In discussions with the Secretariat and the Subgroup on IRSS, it was determined that the Phytosanitary Systems page which is currently under development will fill the same role as the Helpdesk and will also serve as a direct channel of communication given that it provides a link for contacting the Secretariat.

- Implementation review response: With respect to the implementation review response output, the most tangible deliverables seem to be the reports of the Triennial Review Group, though potentially other reports could also go in this category. The action planning aspect of this output is not very visible. In previous cycles of the IRSS, a tendency for requests to be made to expand or extend the funding in order to conduct additional and related activities was observed. For instance, when the value of the study on diversion for intended use was noted, requests were made to conduct training sessions on the guidance provided. Likewise, IRSS studies identify needs which should be addressed by the IC or the development of new tools or other IPPC initiatives. In order to respond to these points proactively, the development of concept notes or funding proposals to be passed on to donors could be another form of IRSS output. IRSS data contributed to the development and implementation of some programmes which were supported with donor funding such as the Implementation Pilot Programme on Surveillance (IPPC, 2019) and the Global Phytosanitary Manuals, Standard Operating Procedures and Training Kits Project (STDF/PG/350) (Weitzenegger, 2019).
- Foresight: As the IRSS evolved, there was interest in developing a foresight function, and some of the activities and outputs were related to this. Interviewee feedback demonstrated that there is high interest in retaining and building on this function. Interviewees emphasised that environmental scanning is important for identifying and proactively addressing emerging issues. Deliverables related to foresight may not be fully reflected by the original three outputs listed above. The foresight function could be made more visible by listing a separate foresight output.
- *In-depth studies:* Several IRSS studies helped to advance the understanding of technical topics, for example, where there was not a clear view on how the issues or practices were being addressed or applied globally. Many of these studies supported decision-making on these issues. These deliverables could be considered implementation support outputs, but changes to the wording of the output may be needed to differentiate this form of implementation support from other forms of implementation facilitation. Meanwhile, outputs related to the proposed foresight function and the many in-depth studies on technical topics which have been produced by the IRSS may not be fully reflected by the current outputs.
- In practice, the main form that the outputs have taken is reports of studies and surveys. The document review and interviews indicated that publication of the full reports is not enough to ensure follow-up action as many potential audiences in the IPPC Community and other relevant stakeholder groups will not have time to read and digest large reports. Summary reports or oral presentations of targeted key messages with actionable information need to be made to relevant groups. It should be standard practice to provide a takeaway for NPPOs and to clearly identify recommendations for follow-up. In the past, when consolidated reports on the insights, outputs and activities of the IRSS have been presented to the CPM this has been highly appreciated. The IC Sub-group on IRSS has requested more reporting on an ongoing basis on all activities. To reach a wider audience the preparation of "policy notes" for decision-makers in NPPOs has also been proposed.
- Other forms of outputs which are in line with the IRSS remit may be needed, e.g., topic proposals. For factual data which is collected on a repeated basis over time such as data on implementation, other international organizations (e.g., the International Labour Organization and the Stockholm Convention) have set up databases on implementation. These databases have high visibility and are widely used references. The pest free area (PFA) study also demonstrates a potential link between the IRSS and either the development, execution or monitoring of implementation plans by the IC, but how this approach could be carried forward would need to be examined in more detail. Likewise, there was some feedback that the IRSS could use study recommendations as the basis for preparing and submitting topics for consideration as part of the general call for topics.
- [54] <u>Work plan development</u>: Originally, the IRSS work plan was driven by project cycles. The document review found that some Contracting Parties expressed concern regarding IRSS outputs and clear and measurable work plans (CPM Bureau Meeting Report, April 2018). Some interviewees indicated that it was hard to understand how to provide input into the work planning process. They suggested a unified

planning process going forward. The CPM Bureau agreed that the IRSS needed a proactive and goal-focused annual work plan (CPM Bureau Report, April 2018). With the establishment of the IC Subgroup on IRSS and the process for proposing topics for the IRSS work programme, the process is now clear and democratic. This change was appreciated.

- In the historical analysis of the IRSS, it was difficult to trace how certain topics had been added to the work programme. Some survey reports and studies did not provide background information on the request for the study or the information was vague and a deeper understanding could not be gained by reading the group reports which were cited as requesting the study (e.g., the SC or the CPM Bureau). To increase transparency, reports should include background information, who requested the topic, when, and for what reason.
- [56] **Funding model:** Several points were raised in documents and interviews regarding how the IRSS is funded and the consequences of the current funding model.
- In initial discussions on the IRSS, ideas for funding the Secretariat support to the IRSS were as follows: financial and in-kind contributions; joint support / financing by FAO, the World Bank (WB) and the Standards and Trade Development Facility (STDF); and / or preparation of a proposal for consideration by CPM. A proposal for the IRSS was then presented to CPM, and funding was solicited.
- Subsequently, the IRSS has operated as a project with extra-budgetary funding. The EU funded the first cycle of the IRSS, and, to date, has been the major donor. Several issues were identified with the project-basis funding model. First and foremost, if funding is not received in future years the value of the identification phase of the IRSS may be lost. Also, initially, the project was managed with little input from the IPPC Community. Interviewees indicated that, because the IRSS was supported by project funding, other countries felt they could not influence the IRSS work programme. In recent years, steps have been taken to address the ownership as outlined above, but based on interviewee feedback, the perception that the IRSS is not for the whole IPPC Community still lingers. Also, since funding has been cyclical, at the end of project cycles, activities have at times been put on hold until new funding became available. At its October 2020 meeting, the IC identified the need for baseline funding, also supported by interviewees. It was suggested that funding for the IRSS be included in the regular programme and that support for the IRSS could come from the IPPC multi-donor trust fund.
- Most IRSS studies are highly technical in nature and, for some, the intent has been to address topics for which no clear consensus has been reached. Under current arrangements, individuals or organizations are often recruited to carry out IRSS studies, e.g., through a consultancy contract or a letter of agreement. There is a need to attract subject matter experts who can conduct research and high quality reports, and often expertise in multiple disciplines is required, e.g., an understanding of plant health, statistics, economics, social sciences, survey design, surveillance systems, international law, etc. Some subject matter experts employed by universities, research organizations, governments or other organizations may be excluded from taking-on consultancies outside of their normal employment. Also, for some studies it may be difficult to identify a single individual who possesses the required technical expertise. Alternative approaches for recruiting individuals and whole organizations as well as comprehensive IRSS formulation mechanisms in the countries may need to be identified.
- [60] In various reports to the CPM, the IPPC Secretariat indicated that funding, in a given year, was not sufficient to cover priorities, and certain priorities had to be put on hold. Even with baseline funding, the IC and interviewees expressed that support for studies on specific topics will likely need donor funding support.
- [61] Given that IRSS support may come from various sources, there is a need for coordination, and the document review and feedback from interviews emphasized the need for transparency in funding of the IRSS. The CPM Bureau requested that the IPPC Secretariat discuss with the EU concerning setting up an oversight interface by the IC and donors (CPM Bureau report, 2018).

- [62] One interviewee noted that the ePhyto model shows that the step to sustainable funding takes years, and more attention is needed to indicate how gaps in funding can be bridged. They suggested that one possibility may be less activities.
- Communications: Many of the records and interviewees identified a need for improved communications on what the IRSS is and does. Engagement with the IPPC Community and other relevant stakeholders outside of the IPPC Community has been uneven. Reporting and broader communications have sometimes been inadequate. Given the high turnover of IPPC Secretariat staff, NPPO staff and contracting party representatives to CPM and IPPC Regional Workshops, institutional memory may be limited. Many members of the IPPC Community are not familiar with the IRSS, its purpose is not understood, and its value may not be recognized. For newcomers, the history of the IRSS is not easily comprehended as the thread between the call for topics, the work programme, study terms of TORs, study data, study reports and study outcomes is difficult to trace. The IC requested more frequent and regular reporting and a common approach to communicate on all IRSS activities. The list of topics, work plan and meeting reports of the IC Sub-group on IRSS are now available on the IPP, and this practice improved transparency.
- [64] The IRSS deliverables have been best suited to a technical audience, and the reach of IRSS studies has largely been limited to the internal IPPC community. Communications targeted at decision-makers and other audiences has been lacking. The interviewees suggested the identification of a way to make donors appreciate the importance of the IRSS is needed.
- Although many of the findings of IRSS studies may be of interest to a broader audience outside of the immediate IPPC Community, awareness is likely low given that most information generated by the IRSS is only available through pdfs of study reports and the studies themselves have typically been publicized and made available through channels such as IPPC meetings, the International Phytosanitary Portal and, in some cases, the FAO website. While these channels are sufficient for informing the IPPC Community they may not be adequate for informing other interested stakeholders outside of the IPPC Community. Reaching out to a broader audience may amplify the impact of IRSS studies, for example by prompting other organizations to take steps to address identified needs or by stimulating additional research on topics addressed by the IRSS studies.
- [66] Some novel approaches to communications have been noted. For example, a highly successful webinar was held to launch a recent IRSS study, and it likely increased the impact of the study.
- Monitoring, evaluation and learning: Some of the interviewees stated that the IRSS is implicitly a monitoring tool, and, over time, attempts have been made to use it as such. The 1st and 2nd General Surveys and the study comparing the two demonstrate the willingness of the IPPC Community to learn and use the IRSS as a tool for monitoring, but the comparison of the two General Surveys also highlights challenges associated with using the data for comparison purposes. The relationship to the IPPC's overall M& E strategy / framework is unclear. There seems to be the potential for synergies or overlapping remits / duplication of work, which need to be clarified.
- [68] With respect to monitoring and evaluation of the IRSS, a framework for monitoring and evaluation exists in that some of the project documents include a logical framework with objectives, outcomes, outputs, indicators and a means for verification, but projects indicators were set independently, before the current work plan was put in place by the IC. As stated above the objectives and outcomes in the project logical framework are not appropriate to measure the achievements of the IRSS itself. The log frame for the IRSS is not closely tied to its current objectives and work plan. Thus, monitoring and evaluation of the IRSS against this logical framework may be misleading. Also, it does not seem that monitoring and evaluation of the IRSS has extended across funding cycles.
- Because the IRSS indicators have been set at the level of the project, the IPPC Community does not have a shared understanding of what a successful IRSS looks like. There are no shared objective measures on whether or not the IRSS has been successful, efficient or effective.

- [70] While many IRSS outputs have been tied to some significant outcomes (inclusion in the 2020-2030 IPPC Strategic Framework, revision of standards, adoption of recommendations, etc.), the impact of IRSS studies has not been assessed systematically. Evidence of impact is anecdotal, and objective measurement of the impact and its contributions is difficult.
- The placement of some IRSS studies in the overall results chain is clear, but for other studies it was difficult to identify follow-up actions taken as part of the IPPC work programme. For some studies, action may have been taken at the level of the NPPO but this is difficult to assess given available data. Many study reports did not provide detailed information on the motivation for the study, who requested for the study, when the study was commissioned and with what objective. Likewise, some studies provided data and finding summaries but did not have recommendations on next steps, which was a missed opportunity. It also makes it difficult to gauge how those studies fit into the work programme over time and track the studies' outcomes. The net result is that the full picture of outcomes and impacts of IRSS studies may not be known.
- There seems to be no solid feedback loop from the IPPC Secretariat or IPPC Community following publication and dissemination of IRSS outputs. Likewise, uptake of IRSS outputs have not been tracked although the IPPC Secretariat regularly monitors satisfaction of the IPPC community on guides, workshops, governance body meetings, etc. Data on the reach of IRSS studies is not published suggesting that little is known about their usage outside of the context of the CPM and its subsidiary bodies.
- [73] Because of staff turnover and periods with limited reporting, there is spotty institutional memory on the IRSS in the IPPC Secretariat. Lessons learned are not systematically captured and addressed so there is a risk that mistakes are repeated and best practices are not institutionalized. This complicates on-boarding of new staff to the IRSS. Training to NPPOs and some back-up measures at FAO country offices may be helpful in this regard.
- [74] In the first IRSS cycle, a need was identified for an external advisory group with technical expertise on monitoring implementation and impact to comment on details of the IRSS over time. Given that other approaches for monitoring, evaluation and learning are in the works for the IPPC, an external advisory group on M&E for the IRSS may no longer be needed.
- [75] Some ideas have already been generated towards questions to be considered in evaluating the IRSS. Some proposed questions are as follows:
 - What factors influence creating the inputs? Are factors such as ease of creation (surveys, expert consultations, consolidating TC RPPO meeting outcomes), credibility, resources (surveys are heavily resource intensive) important?
 - How many outputs have been created? And why? What was the impetus for the knowledge product?
 - What about cases where valuable information was generated and not used (missed opportunities)?
 - How should response rates on the surveys define the SoPS on conducting surveys? Which respondents respond regularly? Is language a problem? How has desk research been used together with papers? Are people more likely to submit detailed responses to surveys immediately after their participation in a workshop? Response rate of surveys immediately after workshops seems higher than the cold calling equivalent of surveys. An analysis of response and completion rates of the surveys should be undertaken.
 - Have outputs of the IRSS been cited or used by any contracting parties? (This could potentially be done by Googling IRSS outputs and determining if they are cited anywhere else.)
 - Uptake of triennial review reports, the Emerging Issues report etc.
 - Who uses survey data?
 - Who uses the studies? Have the outputs of the IRSS been cited or used by governing bodies? (Governing body reports)

- Have the outputs of the IRSS been used by the IPPC Secretariat to inform workshops, other knowledge products?
- If not, is the problem relevance/communication/quality?

3.2.2 Lessons learned related to the execution

- *Updating and managing the work plan:* While the work plan itself is not very detailed, new items added to the list of topics are accompanied by proposals, and TORs are developed with appropriate levels of detail. Under the current process, the objectives and scope of IRSS studies should be clearly defined. This will ensure that output match expectations. Experience with the general call for topics has shown that clear goals are needed, and a highly detailed topic submission form helps to ensure clarity, e.g., regarding links to the strategic framework, needs addressed, goals, etc.
- [77] The Subgroup representatives felt it important to assign priorities to activities and assign sub-priorities to topics given that there are multiple topics with the same priority category. As such, it is not always clear which topic should be addressed first.
- Not all proposed topics are of global interest. A topic may be requested because an NPPO has a specific need particular to that NPPO. In such cases a new standard or guide may not need to be developed.
- [79] Advanced planning is needed. Work planning needs to be timed so that resources can be mobilized, consultants recruited, etc. In 2020, the work plan was agreed advance minus the M&E component. The IC and the Subgroup also indicated that they appreciate that studies can be carried out rapidly and that there is flexibility in the work plan. They indicated that the ability to produce quick results is an advantage.
- [80] **Study design and delivery:** The areas of study design, particularly survey design and execution, generated considerable feedback.
- Study design: With respect to study design, it was suggested that more engagement with the groups requesting the study could ensure the study matches its goals and delivers the needed information. It was also noted that for many IRSS studies the primary form of data collection is through surveys and questionnaires, but this may not always be the most appropriate tool and, even in cases where survey data is needed, it may be beneficial to also collect data from other sources. There is a lack of triangulation with other data sources. One person who previously worked on the IRSS observed that, "Generally information generated has been 'safe', non-confrontational satisfaction survey-like questions. The hard questions will not be asked and answered." The measures used to review implementation are often not objective. For example, NPPOs have been asked to rank their level of implementation, which results in subjective data. In some cases, synergistic relationships between the IRSS, the Phytosanitary Capacity Evaluation (PCE), ePhyto, NRO could be explored. Meanwhile, PCE data and trade data are highly sensitive, and its use is up to the discretion of individual Contracting Parties.
- [82] The data on emerging issues was based on findings from 2016 IPPC Regional Workshops. This exercise has not appear to have been repeated. The interviewees indicated that foresight should be one of functions of the IRSS, and that tools (e.g., for data collection and analysis) are needed to ensure that it is carried out on an ongoing basis.
- [83] <u>Survey design</u>: Feedback from reports and interviews and examination of the survey tools indicate that, due to the survey design, certain forms of error cannot be ruled out:
 - Sampling error: Response rate to surveys tends to be low, leading to relatively high sampling margin of error. On average, 56 NPPOs responded to the IRSS surveys (minimum = 28 NPPOs, maximum = 106 NPPOs). Fourteen percent of Contracting Parties have never responded to an IRSS survey. Only one NPPO has responded to all IRSS surveys. The reasons for the low response rate are not fully known, but numerous factors have been

suggested, e.g., length of surveys, unwillingness to share potentially sensitive information, lack of incentives, NPPOs' high workloads, complexity of responding to some surveys (e.g., if information required to respond must come from multiple people), poor design, language, perception that surveys are not followed-up on, insufficient time to submit responses, information exchange is not a high priority, etc. In some cases, poor survey logic may have further exacerbated the issue. In some surveys, survey logic likely contributed to respondents exiting the survey prematurely and relevant data not being collected. Because of low survey response rates, the views presented by survey reports may be incomplete. Baselines may not be sufficient. Likewise, low response rates also correspond to little overlap between survey respondents over time, making it difficult to make comparisons between data sets. Consequently, it is difficult to identify trends.

- Important stakeholder groups omitted: Data collection has largely focussed on the traditional IPPC Community (NPPOs and RPPOs). Engagement with stakeholder groups beyond this community has been limited. Some IRSS studies identified external stakeholder groups with an interest in the topic but did not gather information from them. The views of stakeholders with an interest in the topic of the IRSS study may not be considered which may reduce relevance, usefulness, impartiality, etc. of the findings.
- Frame error: Surveys seem to have been posted on external platforms such as survey monkey with links disseminated through the IPP and other channels (WTO SPS Committee). In at least one case, most survey respondents exited the survey without providing any information on who they were, while some countries had multiple responses. Although efforts were taken to ensure that responses were received from the NPPOs, frame error (i.e. a mismatch between the sampling frame and the true target population) cannot be ruled out. Contact information was missing for most survey respondents so their identities could not be confirmed.
- Nonresponse bias: The likelihood of responding to surveys may have been related to how a potential respondent would have answered the survey, e.g., NPPOs who would have given a positive self-assessment may have been more likely to respond (though the reverse could also have been true if NPPOs with technical assistance needs considered that they had more of a stake in having their views heard).
- Social Desirability and Conformity bias: When something is perceived to be a "good" thing, there is a tendency to respond positively. If an NPPO values the IPPC and ISPMs, responses to questions which ask for ratings, for example, may be skewed. Social desirability and conformity biases may lead to an overly rosy assessment of the situation.
- Acquiescence bias: Acquiescence bias (tendency for respondents to select a positive response option) cannot be ruled out.
- Missing response options: Close-ended questions, Likert-type scale questions (i.e. questions
 which use a scale to represent respondents' opinions or attitudes on a topic) omitted options
 for "Not relevant" and "Not known". Some respondents indicated that these options should
 have been included.
- [84] Feedback from documents and the interviews also indicated that survey questions were sometimes not easily understood. The survey language may have been an issue for some NPPOs as the surveys were only distributed in English, and the writing style lacked clarity for respondents who speak English as a second language. Possible misinterpretations of survey questions and language barriers may have affected the validity and quality of responses. The way the questions were written may have contributed to mismatches between survey questions and responses, overall low response rates, and skipped questions.
- [85] Feedback also noted that survey results were frequently interpreted in isolation, without contextualizing the results in a broader desk review.
- The interviewees indicated that issues with survey design have already been recognized, and efforts are being made to address them by recruiting survey design specialists. Unfortunately, experience to date has been that survey specialists are hard to find, and they generally do not have a background in plant health.

- [87] The importance of having regular General Surveys has been highlighted. There is also recognition of the need to improve the General Survey instrument. While the NPPOs recognize the value of the General Survey, NPPOs find it a burden to complete it and have difficulty responding to some questions. Feedback in the documents and from the interviews indicated that NPPOs consider the General Survey to be too long and some questions are too convoluted.
- [88] <u>Survey dissemination</u>: In the early stages of the IRSS, surveys emailed to IPPC Contact Points often bounced back with error messages. Since then, significant improvements in the maintenance of contact information on the IPP have been made, and the number of surveys which cannot be delivered has been reduced. In the first cycle of the IRSS, NPPOs provided feedback that they were receiving too many surveys in close succession, and thereafter efforts were taken to ensure that surveys were staggered. It was noted that NPPOs receive many surveys and the benefits of completing them are not always clear. One interviewee indicated that surveys administered by other IPPC Secretariat units may not always be taken into consideration when considering the timing of IRSS studies and as a result NPPOs are sometimes asked to fill multiple surveys in roughly the same time period.
- [89] It has been observed that insufficient contextual information is provided when surveys are disseminated, and, if the intent of the survey is unclear, this may contribute to a lower response rate. It has also been noted that there is no incentive offered to participate, it seems to be altruistic and aligned with community building there is no real carrot or stick.
- [90] Explicit information on how data will be used was sometimes not provided, and a means of obtaining consent to use the data may be have been lacking. This may go against privacy policies / policies on data usage. This may be of concern to some potential respondents given that some questions may ask for sensitive information (e.g., trade sensitive data). This may make NPPOs reluctant to share data, leading to a lower response rate.
- [91] It was noted that the IRSS data collection survey lack recognizable branding. The style and presentation of IRSS surveys has changed over the years, and as a result IRSS surveys are not immediately recognizable and may be overlooked.
- [92] Reporting: Based on available information, some IRSS study reports have required significant revision and this has occasionally led to delays in their publication. There was not always good alignment between expectations of the oversight bodies requesting the studies and the study outputs. Some IRSS reports were not cleared for publication, and some of those that were finalized were not of high quality. Some study reports do not work well as standalone documents for audiences who are not familiar with the IRSS and the IPPC. Background information, methods, key results, discussion on implications of the findings and recommendations for next steps were not always well developed. This diminishes the potential impact of those studies and limits the potential audience. The usefulness of the IRSS reports depends in large part on their quality. High quality reports can be promoted to reach a wider audience and may also be useful for supporting the IPPC work programme. High quality, standardized reports will help to build the IRSS brand.
- [93] Lots of different people have authored IRSS studies. The technical expertise of the study authors contributes to their credibility of the in-depth studies. For much of the work of the IRSS, outside expertise is needed so the people involved in IRSS studies will continue to change.
- [94] The interviewees listed the study on aquatic plants, diversion from intended use, and authorizing entities as examples of highly successful reports since they were highly informative, and responded to a defined need. They indicated some study reports were too broad in scope and tended to be less successful.
- [95] **Structured management of the system:** In the past, funds and staff resources were not always sufficient to carry out the work programme.

- [96] Given that representation of all IPPC Units and teams in the meetings of the IC Sub-group on IRSS is very new, new members are not yet clear on their roles and responsibilities.
- [97] While certain aspects of the IRSS have improved considerably, e.g., in terms of transparency and oversight, those changes have largely been reactive.

4. Conclusions and recommendations on major factors to be considered for the shift to a sustainable IRSS

[98] Given that the third cycle of the IRSS will wind down in May of 2022, this is a highly appropriate moment to consider the way forward for the IRSS. The document review and the interviews found that there is broad support for the IRSS, and many examples of clear and concrete contributions to the mission and objectives of the IPPC were identified. There was ample evidence of and feedback on points which could be improved. This section of the report summarizes the conclusions of the analysis and makes recommendations for next steps. These recommendations are intended to provide guidance on how to shift to a sustainable system.

4.1 Major factors related to system design

- [99] One of the principal recommendations emerging from this analysis is that system design should be revisited and revised. This will help support the transition to a sustainable IRSS, embedded in the IPPC Secretariat. Conclusions and recommendations in this regard are provided below.
- [100] Stakeholder analysis can help guide who should be involved, consulted, and confirmed regarding this update, but to ensure a smooth transition, it would seem that at a minimum there should be a high level of engagement with the IC, IC Sub-group on IRSS, the CPM Bureau and relevant donor(s).
- [101] Name and clear statement of purpose: It is recommended to change the name of the IRSS better reflects its vision, mission and objectives. Ideally, the name should stimulate interest and not be an acronym. The name should be more appealing than the current acronym and should reflect the intended service provided by the system. So that there is a clear message of what the system is for, it is also recommended that a vision and mission statement be developed and included. The name could be evocative of the purpose and the scope of IRSS (e.g., ''IPPC Review System'' or ''IPPC Observatory'') or if the current name is kept, a simple and clear purpose could be defined which allows the IPPC community to better understand its usefulness and functioning.
- [102] Scope: The document describing the system design should include a statement on the scope. In light of current arrangements within the IPPC community, the scope should reflect the cross-cutting support the IRSS provides to respond to the information needs of all aspects of the IPPC work programme. The response to information needs can be achieved through the system's foresight function, implementation reviews and the provision of expert advice, e.g., through in-depth studies on specific topics. The statement should also indicate that the system is global in scope.
- [103] The IRSS perhaps should be limited to collecting information (through studies and surveys) on the implementation of the IPPC, ISPMs, CPM recommendations and the use of guides and materials developed to support implementation. Based on results of studies and surveys, the IRSS could thus formulate recommendations for the attention of the CPM, which would give the relevant bodies (SC, IC or SPG) the responsibility to address the gaps or issues. This could contribute to focus the scope of IRSS and clarify the objective of scanning emerging issues with what is done through the Call for topics and also address some overlaps with the mission with the IC on the aspects of "Support" that the IRSS is supposed to cover.
- [104] *Integration:* There is considerable support for firmly embedding and fully integrating the IRSS into the IPPC Secretariat and the day-to-day work programme, but, because the IRSS is cross cutting, it is

unclear where its management should sit. This placement needs to be agreed on, and linkages to the Core Activities need to be clarified. Schematics illustrating these linkages are included in Figure 2 (in the Appendices). Where groups have overlapping remits with the IRSS, these may need clarification, but in general the IRSS should exclusively focus on information collection and analysis to support other core activities and the IPPC Community. The benefits of integrating the IRSS into the day-to-day work of the IPPC Secretariat to support the CPM and its subsidiary bodies should be presented to the CPM.

- [105] To ensure that the cross-cutting function is delivered efficiently, the IPPC Secretariat may want to consider a structured management approach such as PRINCE2. Under this approach, a board would be established within the IPPC Secretariat, the membership of which would have defined roles and responsibilities: an executive (the business-oriented person who's ultimately responsible for the project), senior users (the staff who represent the final users' / beneficiaries' requirements on the board − i.e., the Secretariat representatives of the IPPC Committees / Secretariat Units), senior suppliers (one or more people who represent the interests of the suppliers, e.g., communications, web support, data providers within the Secretariat), and the system manager (responsible for the day to day management of the system). This board would potentially have the following duties: to be accountable for the success or failure of the system; to provide unified direction to the system and the system manager; to provide visible and sustained support to the system manager; to ensure effective communication within the IPPC Secretariat team and with the CPM Bureau, IPPC Committees and the IPPC Community at large. The IC Sub-group would retain its functions to steer the system and potentially other functions related to quality assurance or change authority. Users' requirements and the requirements for suppliers could be clearly identified, e.g., in the overall system description and in the TORs for individual studies. Identifying these points will help to coordinate across units, and ensure that other units are able to plan for contributions to and from the IRSS. So that relevant information generated through the IPPC Core Activities is not lost, the new board could provide a framework for centralized data collection and reporting on points which are addressed by the IPPC Core Activities. A simple template could be used to collect information related to emerging issues, implementation review and outcomes of the IRSS. A draft tool for collecting cross cutting data is included in Appendix 4.
- [106] Contribution and relationship to the IPPC Strategic Framework 2020-2030: In Figure 2, the contribution of the IRSS has been mapped onto the Theory of Change of the IPPC Community so that its cross-cutting contribution to the IPPC Core Activities is clear as well as its contribution to the results chain leading up to the higher-level objectives such as those of the IPPC Strategic Framework 2020-2030. Ways to use the IRSS to support the delivery and monitoring of the IPPC Strategic Framework should be explored. For example, topics to support baseline data collection and the development programmes could be added to the IRSS work programme. Likewise, specific areas requiring information gathering to help guide next steps can be identified.
- [107] *Guiding principles:* A list of guiding principles should be given in the document describing the system design. These guiding principles should be reflected in any guidance documents which are developed to support system processes such as standard operating procedures, instructions for authors, TORs, etc. as well as processes that are applied by the system's oversight bodies. The guiding principles could also be published on the IPPC website. The guiding principles could be based on experiences to date and the OECD best practice guidelines.
- [108] Objectives, outcomes, outputs, and work plan development: The IRSS objectives, expected outcomes, outputs and work packages should be reviewed and updated as needed. The system description which is approved by the appropriate IPPC oversight body and any project documents which are ultimately developed to support the system should not differ with respect to the intended objectives, outcomes, outputs, and major work packages. There should be scope in the system design for the system to address new topics on an ongoing basis as selected by the oversight body designated with the role of steering the system.

- <u>Objectives:</u> The current objectives listed in the project document for the third cycle of the IRSS are in line with the IPPC Strategic Framework for 2020-2030, so most likely do not need to be changed.
- <u>Outcomes:</u> The outcomes should be revised to reflect the specific purpose of the system and actual benefits of the system which have been observed over the past 10 years. The document review and interviewee feedback identified several desired results of the IRSS which could potentially be reflected by revised outcome statements: NPPOs and other relevant stakeholders proactively respond to emerging issues; NPPOs are provided with information which enables them to reduce their responsibilities or work more efficiently; information provided leads to the quality of standards being improved; and information provided leads to barriers to implementation being addressed, etc. NPPO representatives also highlighted that two of the value adds of the IRSS is that it gives NPPOs a voice and that it is a democratic process which gives all contracting parties a chance to provide feedback. These points could potentially be reflected by one of the outcome statements or a guiding principle.
- <u>Outputs:</u> There is agreement that one of the outputs of the IRSS should be products and services that communicate the findings of monitoring implementation of the IPPC, ISPMs, and CPM recommendations and the identification of related challenges. It needs to be decided whether additional outputs should be listed which reflect the foresight function of the IRSS and the provision of expert advice through in-depth studies. Likewise, examples of the forms of the implementation review, e.g., the general survey versus review of implementation of select topics such as specific ISPMs, could be included in the programme design. A "toolbox" with examples of output types and methodologies could also be provided.

In addition to the study reports, verification means for outputs should also include other forms of reporting tailored to the target audiences. In particular, the means of verification should include reports to the CPM, CPM Bureau, IPPC Committees, and other relevant groups as appropriate. For some types of data which are collected on a rolling basis, the development of a database may be considered. Examples of other international organizations with databases which provide information on implementation of the convention include Stockholm Convention² and the International Labour Organization³.

- Work plan development: It is recommended that a unified planning process be put in place going forward with a proactive and goal focused annual work plan that has been agreed by the system's oversight bodies. With the establishment of the IC Sub-group on IRSS and the formal process for proposing topics to be added to the IRSS work programme, the process is now very clear and democratic. It is recommended that all studies proceed on the basis of TORs with clearly identified goals, outputs, outcomes and potentially even the methodology. The topic submission form may need to be revised to reflect changes in the system design.
- [109] Funding model: The interviewees suggested that the IRSS should be fully integrated into the IPPC and supported by the regular programme so that it is more open to everybody in the IPPC Community and management is more transparent. The recommendation is that baseline funding for the IRSS be built into the regular programme budget and that support for the IRSS come from the Multi-Donor Trust Fund. Per the suggestion of the IC, a fixed portion of the Secretariat budget could perhaps be reserved for IRSS activities which take place on an ongoing basis, together with a fixed staff member, plus a variable portion for specific IRSS topics. Other feedback indicated that it is unlikely that more budget will be made available to the IPPC Secretariat and that suggestions for shifts in the work of the IPPC

 $\underline{Extended/FeedbackServer/fsadmin.aspx?fscontrol=respondentReport\&surveyid=73\&voterid=49255\&readonly=1\&nomenu=1\\ \underline{1}$

² http://chm.pops.int/Countries/CountryProfiles/tabid/4501/Default.aspx; http://crs.basel.int/ERS-

³ https://www.ilo.org/safework/info/publications/WCMS_217849/lang--en/index.htm; https://www.ilo.org/dyn/legosh/en/f?p=14100:1100:0::NO:1100:P1100_ISO_CODE3,P1100_SUBCODE_CODE,P1100_YEAR:ALB,,2016:NO">https://www.ilo.org/dyn/legosh/en/f?p=14100:1100:0::NO:1100:P1100_ISO_CODE3,P1100_SUBCODE_CODE,P1100_YEAR:ALB,,2016:NO">https://www.ilo.org/dyn/legosh/en/f?p=14100:1100:0::NO:1100:P1100_ISO_CODE3,P1100_SUBCODE_CODE,P1100_YEAR:ALB,,2016:NO">https://www.ilo.org/dyn/legosh/en/f?p=14100:1100:0::NO:1100:P1100_ISO_CODE3,P1100_SUBCODE_CODE,P1100_YEAR:ALB,,2016:NO">https://www.ilo.org/dyn/legosh/en/f?p=14100:1100:0::NO:1100:P1100_ISO_CODE3,P1100_SUBCODE_CODE,P1100_YEAR:ALB,,2016:NO"

Secretariat are welcome and needed. Ideas on how to address this feedback could potentially be considered as part of budget discussions.

- [110] It is anticipated that project funds will also cover priorities, which have been identified above the baseline. A mini-resource mobilization strategy (e.g., identify a diverse array of possible donors and their interests, develop targeted advocacy materials) could be developed to attract donor support for newly identified priorities which are of special interest. Concept notes could be prepared for newly proposed topics, which would require additional funding. It has been recommended that the findings of previous surveys be reviewed to identify relevant stakeholders and interested donors who can fund particular activities. Likewise, if not already done, profiles of donors and their funding priorities should be developed and updated on ongoing basis. Horizon scanning for new funding opportunities should also be undertaken on an ongoing basis. Most likely, this activity should be addressed as part of the IPPC's general resource mobilization activities.
- [111] An updated funding model may also need to take into consideration how IRSS activities are supported. In order to attract authors or organizations with a proven track record of research and publishing in field of the IRSS study topic, one possible approach would be to fund some studies on a grant basis as opposed to consultancy contracts or letters of agreement as this approach may attract authors which are employed full-time by universities or other research organizations, and it may allow for the recruitment of teams with all of the expertise relevant to the study topic.
- [112] Collaboration may also be fruitful for securing the resources to address highly technical topics. For certain work packages requiring specific types of expertise, soliciting in-kind contributions of technical expertise as originally suggested by the SBDS could be a mutually beneficial approach. Another possibility which could be explored is joint development of project proposals with other relevant organizations, e.g., through a consortia approach such as the Feed the Future Innovation Lab on Current and Emerging Threats to Crops⁴.
- [113] To avoid funding gaps and lulls in activity, consultation should take place with donors to ensure that project funding is secured and released in a timely fashion. Likewise, potential funding gaps, e.g. due to the conclusion of funding a donor, should be identified and steps should be taken to address the coming funding gap. For example, attempts could be made to ensure that support from different donors is staggered.
- [114] To address concerns relating to the transparency of funding arrangements, it is recommended that the IPPC Insight System funding arrangements be disclosed to the IPPC Finance Committee, reported in the IPPC Annual Report, and reported to the CPM.
- [115] If an interface between the IC Sub-group on IRSS and the donors that support the IRSS has not yet been established, it is recommended that a forum be established and convened on a regular basis (e.g., annually). Forum participants could include representatives of the donors, the IC Sub-group on IRSS, the IPPC Secretariat and potentially other Committees and Units as relevant (e.g., related to financing).
- [116] Communications: Without communication, participation in and follow-up on the system's activities will be limited. As a consequence, the system will have no impact. Communications are key to the success of the system, and some guiding principles of the system should be directed at encouraging outreach and engagement. Per the request of the IC, a common approach on communication on IRSS activities should be developed, and communications should be carried out consistently and constantly. In particular, there is a continuing need to communicate in order to increase awareness of the IRSS, its findings and its contributions to the IPPC's primary audiences, to promote participation in the IRSS, to build support for funding a sustainable IRSS, and to raise awareness and create synergies among external audiences. Potential interested stakeholders include NPPOs, RPPOs, donors, and other beneficiaries / affected stakeholders. The reach of studies should be maximized by also targeting interested external stakeholders outside of the IPPC Community. Technical messages need to be translated to reach a wider community, e.g., policy messages for decision-makers. An analysis of

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⁴ https://www.grants.gov/web/grants/view-opportunity.html?oppId=330439

stakeholders' communications needs should be carried out, and the communications strategy should be developed to address these needs. An abridged version of the communications strategy could be included as a section in the system design document. For specific outputs such as studies on particular topics, additional stakeholders outside of the IPPC Community might be identified that should also be targeted by communications on the topic in question. In the planning stages for IRSS studies, stakeholder analyzes should be conducted and communication plans should be made to ensure that study findings are systematically disseminated to all target audiences.

[117] Possible content types to be featured in communications campaigns include:

- Dissemination of surveys
- Posting IRSS reports and other information resources i.e., presentations, factsheets, etc
- Plans for and reports of IRSS events, e.g., webinars and CPM side events
- News items from the IRSS and more generally related to IRSS topics
- News stories linking to latest research and thinking on topics covered by IRSS studies
- Case studies which demonstrate key findings from studies
- A factsheet or a list "Frequently Asked Questions", including the question of what we would lose as a community if the IRSS was no longer available.

[118] Possible communications channels include:

- IPP (the IPPC website)
- Direct communications, e.g., via email
- Papers and reports, e.g., the IPPC Annual Report, CPM papers, reports to other meetings
- Presentations at meetings, e.g., webinars, side events
- IPPC and FAO social media accounts, e.g., Facebook, LinkedIn, Google+, Twitter, relevant WhatsApp groups
- Use media relations to raise the profile of IRSS outputs, e.g., by offering news and opinion pieces to editors of relevant outlets about findings of IRSS reports
- Media coverage in online, print and broadcast (radio and TV) news outlets
- Encourage study authors to help disseminate their own work to other scientists and to nonspecialists
- Other relevant networks such as Aliens-L

[119] Possible tools:

- Publishing meeting reports of the IC Sub-group on IRSS and its work plan to increase
 transparency. Transparency / communications could be further improved through structured
 record keeping of items such as work plans, calls, TORs, survey instruments and
 (anonymised) data. This would improve understanding of the systems' work plan over time,
 for learning the background on specific topics, for benchmarking and for carrying out future
 assessments, among others.
- A data use policy may be needed, with provisions for anonymizing sensitive data.
- Development of a logo and standardizing surveys may help with branding the IRSS
- To facilitate measurement of the use and dissemination of IRSS reports and other IPPC publications across the internet, consider adding altmetric tools such as the Plum Analytics "PlumX metrics" widget to the IPP. This would allow for monitoring citations (including policy citations), usage, captures, mentions, and social media "buzz" related to IRSS outputs.
- Other tools to measure success could include: web statistics from Google analytics (to be measured monthly) and the number of people signed up to IPPC newsfeed.
- [120] Monitoring, evaluation, and learning: The IRSS could potentially be considered a tool in the overall toolkit. If the IPPC's approach to monitoring and evaluation is organized around pillars (e.g., monitoring against the IPPC work plan; performance management to assess the efficiency and

performance of programme implementation; implementation review to assess the extent to which contracting parties and their NPPOs implement the IPPC and its standards and to identify ways to support improved implementation; and evaluation of the IPPC to generate data and stories on outcomes, impact, causality), then the IRSS would likely fit into its own implementation review pillar. The foresight function might not fit in well an overall M&E framework.

- [121] While a standing M&E advisory group for the IRSS is probably not needed, the system should be designed to enable monitoring and evaluation with indicators identified at impact, outcome and output levels. Monitoring should be done against the annual work plan. The system should have its own measures for gauging impact (as well as other typical considerations of evaluations such as efficacy and efficiency), and its contribution to the overall IPPC deliverables should be assessed. The new system should be periodically evaluated. Programme evaluation should gauge the outcomes and impact of the outputs and their contribution to the IPPC Strategic Framework 2020-2030. To increase visibility of the IRSS contribution, identified impacts should be documented and communicated to the IPPC Community.
- [122] Means of measuring uptake of IRSS study recommendations by NPPOs should be explored, e.g., crawling policy documents looking for correlations, requesting feedback through questionnaires. Feedback on IRSS outputs and their uptake should be collected. Questionnaires on satisfaction could be administered date and a question on use of the reports could be included in the General Survey. This feedback could be used to adjust the approach of the IRSS. To facilitate measurement on use and dissemination of IRSS reports and other IPPC publications, the use of altmetric tools such as the Plum Analytics "PlumX metrics" widget should be considered. This would allow for monitoring citations (including policy citations), usage, captures, mentions, and social media "buzz" related to IRSS outputs. Other tools to measure reach include Google analytics (to be measured monthly). Monitoring of publications' reach should be built into the communications strategy / system design.
- [123] "Learning" and " follow-up" should potentially be included on the list of guiding principles for the new system and built into the system design (or the IPPC M&E framework). It is recommended that the IPPC Secretariat institute the practice of maintaining a lessons learned file over time. Summaries of lessons learned and the Secretariat responses / recommendations could be periodically presented to the IC Sub-group on IRSS and their input on lesson learned could incorporated in the file and followed up on, as appropriate.

4.2 Major factors related to system execution

- [124] Updating and managing the work plan: The IRSS topic submission form should be revised to ensure it captures a sufficient level of detail. Interviewees identified a need for the development of guidance to support the processes of suggesting and selecting topics. A need was also identified for distinguishing which topics are more important within priority categories. In general, proposed work plans need to be planned six months in advance. While advanced planning is important, some flexibility should be built into the work programme to allow for rapid address of some topics.
- [125] Study design and delivery: To help establish a recognizable brand of high-quality reports, standard operating procedures for study design and standard reporting format should be developed. IRSS studies should proceed based on TORs which outline the goals, outputs, outcomes and methodology (though this could also be refined in discussion with experts).
- [126] During study planning and execution, there should be direct feedback between IRSS study authors and the Steward(s), Technical Panel(s), or other groups, as appropriate. It is also recommended that desk studies to develop background information for the study should be the first step. The desk study can be used to identify key issues, summarize the current state and gaps in knowledge, assess the availability of information through secondary sources, e.g., using literature search, search of government websites using such as Google Custom Search Engine, FAOLEX, ECOLEX, or other policy search tools available through the FAO Library. Alternate data sources should be explored, e.g., data from the published literature, policy analysis, anonymized PCE data, and input from IPPC Regional Workshops.

In the planning stages for IRSS studies, stakeholder analyzes should take place and study planning should include how to gather information on / from all relevant stakeholder groups. Once a topic summary has been put together and a high level understanding of the available information has been attained, the in-depth approach to generating information (literature review, analysis of policy documents, data mining, surveys, interviews, etc.) should be decided. If it is decided that information is directly needed from NPPOs, for example for feedback on implementation challenges, or access to policy documents which are not available online, then a survey should be developed.

[127] Surveys should be designed by experts. To address the difficulty of recruiting outside experts, options such in-kind contributions of expertise or using in-house FAO survey design expertise could be explored to see if a stable collaboration with a government partner or another group at the FAO can provide advice on data collection, analysis and reporting, with the IPPC Secretariat implementing the study. Potentially, expertise could be available in the FAO Statistical Division or the AgriSurvey implementing group. Another option is be to build capacity within the IPPC Secretariat to carry out systematic, repeated implementation review activities such as general surveys, baseline data collection and longitudinal surveys.

[128] Additional guidance on survey design is as follows:

- Questions should be written in concise and clear language.
- Over-reliance on questions which use rating systems should be avoided. Surveys (or focus
 group discussions or key information interviews) should ask open-ended questions which
 encourage critical views.
- Explicit information on how the data will be used should be provided, and a means of
 obtaining consent on data usage should be included. A data policy could be placed on the IPP
 and made available through links in survey instruments.
- Surveys should be tested (neutrally and realistically) and revised before dissemination.
- The composition of the core team for IRSS needs well-defining in the country.
- Stakeholders outside of the IPPC Community should be engaged as appropriate. The interviewees were supportive of contacting and seeking input from other external stakeholders such as industry associations for input on topics relevant to them. Contacting external stakeholders would have to be done with care and in coordination with other contact points and communication efforts within the IPPC Secretariat.
- Explore the use of the IPPC regional workshops as a means to increase participation.
- [129] Different approaches for improving response rate in order to get the margin of error below 3% should be explored to ensure that the sample is broadly representative of the contracting parties. Direct feedback from the IPPC Community and other external stakeholders could also be collected. For example, one approach would be to administer short surveys to all Contracting Parties, and enumerators could contact NPPOs for key informant interviews with a random selection of NPPOs from each region. Key informant interviews could be limited in duration but would potentially reduce the number of skipped questions, address challenges related to language and understanding of the questions, etc. The number of countries interviewed could be set so that the margin of sampling error is reduced. Training enumerators could help to ensure that sufficient KIIs are carried out in a standardized and objective fashion within a limited time frame.
- [130] There are organizations that specialize in data collection, e.g. for certification schemes, which have global reach and standardized approaches which could be contracted. RPPOs and FAO Regional and Sub-regional Offices could also be engaged for support with data collection.
- [131] Interviewees felt that the general survey is very good and necessary, but the questionnaire must be improved. Steps should be taken to make sure that there is value in the survey and how it can be used. Furthermore, the interviewed NPPO representatives felt that the General Survey on implementation of the Convention and ISPMs should take place at five-year intervals. It was also suggested that the General Survey be tied to a marquee event, such as the CPM.

- [132] In general, the processes should be standardized and supported with appropriate tools, e.g., onboarding consultants, SOPs, instructions for authors, checklists for reviewers, instructions for record keeping. A standardized reporting format would also help in the uniform reporting system.
- [133] To improve the response rate, test whether extending the period for submitting survey responses improves response rates.
- [134] General survey data could potentially be presented in a database for individual countries and a dashboard for the global overview. Data could be partitioned out into factual data (e.g., legislation) and feedback on challenges. The dashboard could be used to visualize the data and to track changes over time. It was also suggested that the general survey be carried out at five-year intervals. The interviewees also indicated that the general survey should be more focused (shorter).
- [135] Consider using other data sources to get data on actual implementation (e.g., anonymized PCE data, data submitted for NROs, interviews and focus groups)
- [136] It has been observed that translation of the surveys would improve the response rate. If translations are carried out, they would have to be of high quality to ensure that meaning and clarity of questions is maintained.
- [137] If foresight is to be included in the IRRS, it would be helpful to have tools that the IRSS Sub-group could use to evaluate the feasibility, adaptability and economic significance of proposals that are submitted.
- [138] For future assessments on the impact of events such as International Symposia, it is recommended to tie baseline data collection more directly to the event itself, for example including it as part of the event registration process or collecting baseline data during the event itself. Surveys could be part of the registration process or action plans could be an output of the event.

Other aspects of events which could be assessed for events could be content alignment, event success, and impactful takeaways.

- [139] Survey dissemination: To address the potential issue of non-frame error, surveys should be administered through the IPP to NPPO contact points and IPP editors. Alternatively, contact information (and possibly confirmation of the email address) should be collected at the beginning of the survey. More contextual information should be provided when surveys are circulated. The IRSS surveys (not the IRSS survey results) should communicate the need to collect, analyze and maintain data in plant health. The surveys which are administered to the Contracting Parties should contain both perception-based questions which require a respondent to respond to the survey based on their perception (opinion surveys, satisfaction surveys etc.), but should also include factual questions which attempt to capture the status quo (area under Pest Free Areas etc.). Countries, depending on the state of data-collection and availability might find these questions challenging to answer. However, it is hoped that the need for main documentation pertaining to some of these information points will be recognized by the respondents. There should be communications campaigns associated with the distribution of surveys to help frame the need for the study. Assurances should be provided on how the data will be used and kept anonymous as appropriate. Distribution of surveys could be tied to participation in events or other incentives. The dissemination of the survey should be accompanied by a small communications campaign which presents the background and objectives of the study and the survey itself. In addition to email, consider announcing calls using other communication channels such as WhatsApp. Communication is needed to increase participation, to collect ideas and to communicate results.
- [140] The benefit of filling-in the surveys needs to be communicated. Potentially create a template for the types of information which should be communicated when a survey is distributed.
- [141] **Reporting:** For topics which require in-depth literature reviews, policy analyzes or other highly technical analysis, subject matter experts in the appropriate fields should be recruited. Given that there will be continual turnover in study authors, instructions for authors of IRSS reports are needed to ensure

high quality standards and a certain level of standardization in reporting. Draft instructions for authors are provided in Appendix 5. The instructions to authors should be aligned with the IPPC style guide and feedback from IPPC. Checklists for document reviewers can also be used to streamline the process of reviewing documents and they can help to ensure that the feedback collected on documents is comprehensive. A draft reviewer checklist is provided in Appendix 6.

- [142] **Structured management of the system:** The point related to uncertainty about roles and responsibilities would be addressed by implementing the recommendations related to PRINCE2 (or another approach for the structured management of cross cutting teams).
- [143] To create a shared vision for change and a systematic approach for deploying change, adapting, and applying a systematic approach for change management, such as Kotter's 8 Step Change Model, could potentially be a constructive way to move forward.
- [144] The eight steps for change management are as follows:
 - 1. Increase the urgency for change.
 - 2. Build a team dedicated to change.
 - 3. Create the vision for change.
 - 4. Communicate the need for change.
 - 5. Empower staff with the ability to change.
 - 6. Create short term goals.
 - 7. Stay persistent.
 - 8. Make the change permanent.

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Appendix 1. IRSS history

This appendix summarizes IRSS activities, outputs and outcomes since its conception

CONCEPTUALIZATION PHASE

Years	Activities	Outputs	Outcomes
2007	Workshops and meetings - Open-ended Working Group on a Possible IPPC Compliance Mechanism	Report of the OEWG on a Possible IPPC Compliance Mechanism	-
2008	Workshops and meetings - SBDS discussed IRSS - SBDS submitted proposal for the IRSS to the CPM	CPM Conference Room Paper - CPM 2008/CRP/7 Draft Programme for Development of the "IPPC Implementation Review and Support System"	CPM-3 adopted the Programme for the Development of the "Implementation Review and Support System"
2009	None	CPM Paper - CPM2009/18 Update on the Implementation Review and Support System	-
2010	None	CPM Papers - CPM2010/17 Implementation Review and Support System	-

FIRST CYCLE

Years	Activities	Outputs	Outcomes
2011	Formal initiation of the IRSS - Surveys administered - General IPPC Questionnaire - "Mini-survey" on ISPM-4 - "Mini-survey" on ISPM 8 - Questionnaire on the implementation of ISPM-6 - Call for the provision of technical resources - Work on help desk initiated	Survey report - Review of the Implementation of ISPM-4 CPM papers - CPM2011/16 Implementation Review and Support System (IRSS)	- CPM Bureau agreed to the establishment of a Triennial Review Group - Supported SC on the review of ISPMs 4, 6 and 8 - SC invited to provide additional ISPMs to add to the IRSS work programme
2012	IRSS webpage development Studies drafted - Desk study on internet trade in plants - Desk study on aquatic plants Surveys administered - General IPPC Questionnaire (extended) - Questionnaire on the implementation of ISPM-6 (extended) - Questionnaire on the implementation of ISPM-13 Workshops and meetings - Seven regional workshops on phytosanitary surveillance - 1st meeting of the IRSS Triennial Review Group - Global Symposium on Plant Pest Surveillance	IRSS webpage - Country profiles (with data from FAOSTAT) - Help Desk and Tools (FAQ, Discussion forum, Projects database, Activities database, Phytosanitary consultants' roster, Donor table) - Information on IRSS activities Study reports - IRSS Study 01: The Internet trade (e-Commerce) in Plants - IRSS Study 02: Aquatic Plants Survey reports - Review of the Implementation of ISPM-6 - Review of the Implementation of ISPM-8 CPM papers - CPM 2012/17 IPPC Implementation Review and Support System	- Commitment of the APPPC to fund a Global Symposium on Pest Surveillance - Global Symposium on Pest Surveillance used the analysis of the IRSS survey on ISPM 6 as a basis for developing an outline for manuals on surveillance systems - Studies on internet trade in plants and aquatic plants contributed to the discussions in a Seminar on International Trade and Invasive Alien Species hosted by the WTO in July 2012
2013	Workshops and meetings - 2nd meeting of the IRSS Triennial Review Group - Round Table Discussion on indicators of implementation of the International Plant Protection Convention - SPS Committee Meeting Surveys administered - General IPPC Questionnaire (extended) - Questionnaire on ISPM 17 and ISPM 19	Survey reports - Analysis of survey results on implementation of ISPM 13 - Findings of the general survey of the IPPC and its Standards CPM Papers - CPM 2013/20 Implementation Review and Support System (IRSS) - 2012 Report - CPM 2013/17Rev1 Proposed CPM Recommendations Based on Implementation Review and Support System Studies - CPM 2013/INF/04 Implementation Review and Support System Surveys: Overview of Work and Next Steps - IRSS Update Report for the SPS Committee - IRSS Factsheet	- SC used information provided by the IRSS programme as a basis for producing draft specifications for the revision of ISPMs 4, 6 and 8 - CDC considered IRSS information in developing the IPPC short and long term capacity building work programme - Information provided to SPG and Contracting Parties to support implementation

SECOND CYCLE

Years	Activities	Outputs	Outcomes
2014	Workshops and meetings - IRSS participated in the discussions for preparation of a Framework for Standards - IRSS participated in Open-ended Working Group on Implementation - Meeting on traceability	Survey reports - Findings of the survey: lists of regulated pests (ISPM19:2003) and Pest reporting (ISPM17:2002) - Findings of the general survey of the International Plant Protection Convention and its Standards (Survey results from October 2012 – February 2013) CPM Papers - CPM 2014/24 IPPC Implementation Review and Support System	- CPM-9 adopted the recommendations on IPPC coverage of aquatic plants and on Internet trade (e-commerce) in plants and other regulated articles - The IRSS fed into considerations on a potential approach to implementation tabled at CPM-9
		Other reports - IRSS Triennial Implementation Review Report for first cycle (2011-2014)	
2015	Surveys administered - Call for Case Studies on Diversion from Intended Use	CPM Papers - CPM 2015/23 Implementation Programme on Surveillance and the Implementation, Review and Support System (IRSS) - update - CPM 2015/28 Recommendations - Proposed recommendation on the importance of pest diagnosis	- IRSS findings informed the Implementation Pilot Programme on surveillance (IPS) - IRSS data and analyzes recognized as valuable for identifying priorities to be addressed by the CPM

2016	IRSS webpage development - analyzed the current use Workshops and meetings - IRSS Discussion on analysing the benefits of implementing the IPPC - Participated in a United Nations Economic Commission for Europe Conference on Traceability of Agricultural Produce - Participated with FAO technical units (IPPC, FAO Food Safety (AGDF), Animal Health(AGAH) and Fisheries (FIPM)) in a foresight meeting to work towards developing methodologies to identify emerging issues and their impacts, and explore potential strategies to mitigate associated risk - Participated in the Ad Hoc Technical Group Meeting (AHTEG) of the Convention on Biological Diversity (CBD) to ascertain synergies between CBD and IPPC strategic objectives to identify relevant environmental protection and biodiversity related indicators - Engaged with the World Bank on indicators for the 2016 Report on Enabling the Business of Agriculture - IFPRI on the Global Food Systems index Desk studies - Diversion from Intended Use - Application of Equivalence - Biosecurity Approaches	- IRSS Study 03: Diversion from intended use - IRSS Study 04: Equivalence - IRSS Study 05: ? - IRSS Study 06: ? - IRSS Study 07: ? - IRSS Study 08: Biosecurity Approach - Survey reports - Draft report of Findings of the general survey of Contracting Party Implementation - CPM papers - CPM 2016/14 Report on Implementation, Review and Support System (IRSS) - CPM 2016/21 Rev.01 CPM Recommendations - Proposed recommendation on the importance of pest diagnosis	- IRSS surveys indicated access to diagnostic support needs to be improved and subsequently a recommendation on the importance of pest diagnosis was adopted by CPM 11 (2016) - Traceability discussions will potentially link with future IPPC work on the topic, already being considered by the Standards Committee and other work areas - Contributed to work towards achieving harmonization in agricultural produce traceability systems
2017	Workshops and meetings -Expert Meeting –IPPC Monitoring and Evaluation - Internal FAO Foresight Activities Network Meeting - IRSS organized a meeting of representatives to discuss and scope a proposal for contracting parties' to access GEF funding - Development of an IPPC Monitoring and Evaluation Framework initiated	CPM papers - CPM 2017/07 Implementation Review and Support System (IRSS) Studies - IRSS Study 09: Analyzing benefits of implementing the IPPC - IRSS Study 10: IPPC Guide to resource mobilization: Promoting contracting party partnerships - IRSS Study 11: 2016 IPPC General survey findings - IRSS Study 12: Global emerging issues Other - new IRSS webpage launched	- Funding secured for third cycle of the IRSS

THIRD CYCLE

Years	Activities	Outputs	Outcomes
2018	Workshops and meetings - 2018-09 IC Sub-group: IRSS (virtual meeting) Formal process for work programme - Summer 2018 Consultation on proposed IRSS topics - Proposals for topics for the 3rd cycle of the IRSS presented by the SC, IC, and CPM Bureau - IC Sub-group on IRSS preliminarily agreed the list of topics and associated priorities - IC Sub-group on IRSS Terms of Reference approved by the IC	Triennial Review Group - IRSS Triennial Implementation Review Report for second cycle - Implementation Review and Support System Surveys: Overview of Work and Next Steps IC Sub-group on IRSS - IC Sub-group on IRSS Meeting Report - Topics for the third cycle of the IRSS - TORs for the IRSS Sub-group on IRSS CPM papers - CPM 2018/22 Implementation Review and Support	- Phytosanitary risks associated with international mail proposed as a topic for an ISPM
2019	- 2019-11 IC Sub-group IRSS meeting - IC approved the IC IRSS Sub-group work plan and updated list of topics - Analytics support provided to the Sea Container Task Force	System (IRSS) - IC Sub-group on IRSS Meeting Report - Updated list of topics for the third cycle of the IRSS - Theory of Change presented to the Strategic Planning Group	- Topic on ecommerce / international mail added to list of topics for standards
2020	 Call for case studies on good practices for M&E of national phytosanitary systems Consolidated analysis of 2012 and 2016 general surveys Desk study on authorization of entities to perform phytosanitary actions Survey on success of implementation of pest free areas Continuing work with Wageningen Centre for Development Innovation related to M&E 	Projects finalized - Evaluation of the implementation programme pilot on pest surveillance - Review of the implementation proposals from the call for topics and evaluation of the feasibility of their implementation (2018-61, priority 1) - Analytics support to the Sea Containers Task Force for survey design, implementation, and analysis of results (2018-51, priority 1). Webinar on the desk study on authorization of entities to perform phytosanitary actions	- IC approved IC Sub-group on IRSS work plan
2021	- Consolidated analysis of the 2012 and 2016 general surveys (2018-53, priority 1) - Report on the success of implementation of pest free areas (2018-50, priority 1) - Continuing work with Wageningen Centre for Development Innovation related to M & E - Initiating studies on diagnostic protocols	Studies - IRSS Study XX: Authorizing entities to perform phytosanitary actions	- The CPM adopted the IPPC Strategic Framework 2020-2030, which includes a development programme on management of e-commerce and postal and courier pathways

Appendix 2. Detailed timelines for the development, publication, and subsequent outcomes of IRSS studies

Table 1 Timeline for the IRSS Study 01: Internet Trade (e-Commerce) in Plants

X 7	O 4 /MP 4	
Year 2010	Outcomes / Milestones	
2010	• IPPC identified e-commerce as an emerging pathway in relation to pests associate	ed :
	with trade of plants and plant products	
2012	• Publication of IRSS Study 01: The Internet trade (e-Commerce) in Plants with the	3
	following recommendations:	
	 NPPOs need to establish mechanisms/procedures to monitor the Internet 	
	identify potential products of concern that may be imported via this pathy	vay.
	 Consider the establishment of a monitoring system hosted by the IPPC 	
	Secretariat to alert contracting parties of products with potential	
	phytosanitary risks being traded on e-commerce sites.	
	 NPPOs to work closely with in-country e-commerce vendors to ensure 	
	adequate information and warnings are provided to both the vendors and	l
	their customers.	
	 Contact Internet trade groups and on-line forums in order to raise aware 	eness
	of phytosanitary requirements and risks and to seek their co-operation.	
	 The IPPC should prepare a recommendation for an International standar 	rds
	for phytosanitary measures (ISPM) on the	
	advertising/marketing/distribution/sale of plants, plant products through	e-
	commerce pathways	
	• Raise awareness of the risks, e.g., through social networking sites,	
	International Plant Protection (IPP), NPPOs/Regional Plant Protection	
	Organizations (RPPOs), etc.	
	o Enhance NPPO import verification systems including closer scrutiny of	
	packages entering the country	
	• Studies on internet trade in plants and aquatic plants contributed to the discussion	s in
	a Seminar on International Trade and Invasive Alien Species hosted by the WTO	
	July	
2013	• A proposal for a recommendation on Internet trade (e-commerce) in plants and ot	her
	regulated articles was presented to CPM-8	1101
2014	 CPM-9 adopted the recommendation on Internet trade (e-commerce) in plants and 	d
2011	other regulated articles	.1
2015	other regulated differes	
2016	•	
2017	IDDC a commerce programme lourched[9]	
2017	• IPPC e-commerce programme launched[?]	
	• Special Topics Session on e-Commerce at CPM-12	1
	• Engagement with Global Express Association (federation of the main carriers suc	h as
2010	DHL, FedEx, and UPS), CBD, WTO, eBay	
2018	A topic was proposed for Guidelines for Phytosanitary of International Mail Item	is.
	Some NPPOs have developed regulations to address the phytosanitary risks	
	associated with e-commerce, e.g., China has implemented the Administrative	
	measures of quarantine on Entry-Exit Mailing, and Australia has implemented the	3
	Australian Biosecurity Act.	
	• Implementation and Capacity Development Committee (IC) added the e-Commer	ce
	Guide to the List of Implementation and Capacity Development Topics	
2019	• The topic on Guidelines for Phytosanitary of International Mail Items was added	to
	the list of topics by the CPM	

- A Joint Work Plan for Cooperation between the Secretariats of the World Customs
 Organization and the International Plant Protection Convention was established
 which includes activities to address phytosanitary risks in the E-Commerce
- Engagement initiated with external partners involved in e-commerce and postal and courier pathways such as the Universal Postal Union (UPU)
 - Call for phytosanitary technical resources related to e-Commerce
 - Consultation on the draft Outline for the e-Commerce Guide
 - Outline for the e-Commerce Guide approved by IC
 - Call for experts to develop a IPPC e-Commerce Guide for plants, plant products and other regulated articles (2017-039)
- The CPM adopted the IPPC Strategic Framework 2020-2030, which recognizes that trading directly with consumers (including e-commerce) will continue to expand rapidly, decreasing the size and increasing the number of consignments to be assessed for phytosanitary risk. To address this, the IPPC Strategic Framework 2020-2030 includes a development programme on management of e-commerce and postal and courier pathways.
 - IC selected experts to participate in the working group to develop the guide
 - Four working group meetings held

Take away message: IRSS studies can help to provide evidence of emerging issues which in turn can translate into targeted action.

Table 2 Timeline for the IRSS Study 02: Aquatic plants, their uses, and risks

Year Outcomes / Milestones

• The IPPC Business Plan 2007 - 2011, adopted at CPM-2 (2007), identified marine and other aquatic plants as an emerging issue to be considered, and it was stated that ISPMs should be developed or modified to take aquatic invasive plants into account.

• Scientific Session at CPM-5 on the subject of "Aquatic Plants"

• Publication of *IRSS Study 02: Aquatic plants, their uses, and risks* with the following recommendations:

- An appropriate risk analysis of the introduction of new species should be performed by the NPPO of each country before introducing a new species into an aquaculture, cultivation, or multiculture programme.
- A small percentage of aquatic plant and macroalgae species are recognized as pests in areas where they have been introduced. These should be handled with care: an appropriate risk analysis, regulate those species, eradicate outbreaks, develop an integrated pest-management plan for those species.
- A database of educational and outreach materials could be developed by the IPPC allowing for best management practices to be disseminated.
- The use and distribution of aquatic plant species in the ornamental trade should be evaluated by NPPOs to determine if regulation is appropriate.
- Organisms that could potentially be pests of economically-important aquatic plants, for aquaculture or cultivation for food, fibre, biofuel feed stock, and chemical precursors, should be evaluated by NPPOs using risk analysis
- o techniques.
- If an organism is determined to be a quarantine pest, then the national plant protection organization should consider implementing phytosanitary measures
- If a pest is already present in a country, the national plant protection organization might consider regulating it; including implementing an integrated pest management plan to target the species and minimize damage to desirable aquatic plant species.

- Protection of natural populations of freshwater and marine plants will ensure their continued ecosystem functions and services and sustain natural ecosystem benefits.
- CPM 2013/17Rev1 Proposed CPM Recommendation on aquatic plants based on the IRSS study
- The Recommendation CPM-9/2014/1 covering IPPC Coverage of Aquatic Plants was adopted: https://www.ippc.int/core-activities/governance/cpm-recommendations/ippc-aquatic-plants.
- 2015 ...
- 2016 ...
- 2017 ...
- 2018 ...
- 2019 ...
- 2020 ...

Vear

- A recent publication⁵ estimates that aquatic invasions cost the global economy USD 345 billion
 - Interviewees cited the aquatic plants study as an example of a highly successful output as NPPOs learned a lot from it

Takeaway message: IRSS studies can help to identify and gain an in-depth understanding of risks.

Table 3 Timeline for the IRSS Study 03: Diversion from intended use (DFIU)

Outcomes / Milestones

<u>Y ear</u>	Outcomes / Milestones
2013	• The issue of DFIU was raised by the United States of America in response to a
	call for new topics for the IPPC standards setting work plan in 2013. The SC
	concluded that DFIU should not be added to the work plan at that time.
2014	 Discussions on DFIU took place in the SC, CPM, SPG and TC-RPPOs
2015	The CPM Bureau decided to narrow the topic of study to validation of the issue
	before moving on to further analysis and recommendations.
	 Questionnaire on DFIU sent to IPPC Contact Points
	• Call for case studies on DFIU issued through the IPP and the International Plant
	Health Risk Assessment list server (hosted at PHRA-L@WWW.AGR.GC.CA)
2016	• Publication of IRSS Study 03 Diversion from intended use with the following
	recommendations:
	o development of a new standard or some other type of official guidance
	o development of a brief issue alert, possibly as a glossy brochure, as unofficial
	guidance
	o further work on harmonizing implementation of existing ISPMs implicitly
	relating to DFIU, including possible changes to definitions
	 further study or educational type efforts to be led by the IPPC Secretariat
	• Pre-CPM -11 Training Session on ISPM 32 Categorization of commodities according
	to their pest risk referenced the IRSS study on DFIU
2017	• SC concluded that "It is the responsibility of the importing country to manage risks
	from material that has been imported, which should not be the responsibility of the
	exporting country."
2018	• Framework for standards and implementation endorsed by CPM-13 lists DFIU as a
	topic for a concept standard or supplementary document with an undetermined
2010	priority level
2019	•
2020	•

⁵ Global economic costs of aquatic invasive alien species. https://doi.org/10.1016/j.scitotenv.2021.145238

2021 • ...

Table 4 Timeline for the IRSS Study 04: Equivalence

Year	Outcomes / Milestones
20XX	• The topic was added to the IRSS work programme on the basis of?
	• Additional FAO funds at the end of 2011, resulted in two letters of agreement one of
	which was to address the use of the concept of "equivalence"
2012	Imperial College Survey on Equivalence
2013	•
2014	•
2015	•
2016	 Publication of IRSS Study 04 Equivalence with the following recommendations: The study concluded that to increase the use of equivalence there needs to be improvements in PRA methodologies that relate to a contracting parties appropriate level of protection (ALOP), availability of a wide variety of pest risk management measures and transparency in bilateral and multilateral trade negotiations.
	•
2017	• The topic "Implementation of ISPM 24: Guidelines for the determination and recognition of equivalence of phytosanitary measures" listed as a possible topic for the 3 rd Cycle of the IRSS, pending review of the IRSS study on equivalence
2018	•
2019	•
2020	•
2021	•
Takeav	way message:

Table 5 Timeline for the IRSS Study 08: Biosecurity Approach

Year	Outcomes / Milestones
20XX	• The IPPC, together with the FAO Food Safety and Quality Unit commissioned this
	study to review and evaluate the global use of biosecurity and changes that have occurred in its use over time, included within FAO departments and in different regions and countries.
2016	Publication of IRSS Study 08: Biosecurity Approach: Equivalence with the following
	recommendations:
	 It is recommended that new guidance covering the key elements of a successful biosecurity policy and legislative framework be prepared.
	•
2017	•
2018	•
2019	•
2020	•
2021	•

Table 6 Timeline for the Study 09: Analyzing benefits of implementing the IPPC

Year	Oı	utcomes / Milestones
20XX	•	Study commissioned by the CPM Bureau

- At the June meeting of the CPM Bureau, the Secretariat presented the initiative to review economic benefits of implementing the IPPC and ISPMs at national level as part of IRSS work. The CPM Bureau supported the initiative.
 - A small group of selected experts from the fields of plant health, trade, international economics, and environmental protection met in September in Washington, DC, to discuss and scope the IRSS study Analyzing the benefits of implementing the IPPC.
- Publication of *Study 09: Analyzing benefits of implementing the IPPC* with the following recommendations:
 - To gain further support for contracting parties, and for successful implementation of the IPPC, broader outreach, and awareness of the importance of maintaining plant health is essential. Although the IPPC community contains many stakeholders at the global, regional, national, and subnational levels, not all of these groups are fully engaged.
 - To practically implement the provisions of the Convention, ISPMs and CPM recommendations, NPPOs and other government ministries and departments need to lobby for national plant health support. To facilitate this, the IPPC Secretariat will be developing advocacy materials based on this study outlining the benefits of implementing the IPPC.
 - When contracting parties have the opportunity to review and improve their phytosanitary systems, legislation, policies and procedures, both existing and newly developed system should be designed to be more results oriented.
 - o Lesson learned:
 - the IPPC Secretariat's difficulty in obtaining pertinent and supporting information for this study
 - the absence or lack of information available on a regional and global level
 - the difficulty with engaging private sector to access information
 - the difficulty in assessing benefits, either quantitatively of aualitatively.
 - Side event on Benefits of the IPPC organized at CPM-12 in Incheon Republic of Korea
 - From CDC Report: "Outcomes of the study are intended to be used as advocacy materials. The factsheet being developed will be distributed during the IPPC regional workshops 2017. The Secretariat thought that materials of the CPM12 side session on the benefits of implementing the IPPC should be further used for raising awareness on the IPPC."

2018 • ...

2019 • ...

2020 • ...

2021 • ...

Takeaway message:

Table 7 Timeline for the Study 10: IPPC Guide to resource mobilization: Promoting contracting party partnerships

Year 2015 Outcomes / Milestones 2016 As an outcome of the eleventh session of the Commission on Phytosanitary Measures (CPM 11) in 2016, the IPPC was requested to develop a Guide for Resource Mobilization to help contracting parties to identify and access sources of funding and assistance to support their national phytosanitary activities. 2017 Publication of Study 10: IPPC Guide to resource mobilization: Promoting contracting party partnerships with the following recommendations:

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The IPPC Secretariat organized a CPM-13 side session on Resource mobilization for Plant Health
Call for case studies on use of the IPPC Guides and training materials, including the guide on resource mobilization
...
...
...
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Table 8 Timeline for the Study 11: 2016 IPPC General survey findings

Year	Outcomes / Milestones
2015	•
2016	•
2017	• Publication of <i>Study 11: 2016 IPPC General survey findings</i> with the following recommendations:
	0
	•
2018	•
2019	•
2020	•
2021	•

Table 8 Timeline for the Study 12: Global emerging issues

Year	Outcomes / Milestones
2014	• SPG discussion on the IPPC in 20 years
2015	•
2016	• At its June meeting, the CPM Bureau discussed "Establishment of a means to deal with emerging issues requiring for global action" – is this related to the workshops? How was the emerging issues topic added to the work programme?
	 As part of the FAO foresight initiative, the Implementation Review and Support System (IRSS) prepared the questionnaire – Emerging Issues in Plant Health (Annex 1) that was sent to all contracting parties participating in the 2016 IPPC Regional Workshops.
2017	 Publication of Study 12: Global emerging issues with the following recommendations:
2018	•Did this study link to the foresight work that followed?
2019	•
2020	•
2021	•

Table 9 Timeline for the IRSS Study XX: Authorizing entities to perform phytosanitary actions

Year	Outcomes / Milestones
2014	•
2018	 In the consultation stage of development of the draft ISPM on authorization, it became apparent that some contracting parties had significant reservations about it IC added "IPPC Guide on the development and implementation of programmes for
	the authorization of entities to perform phytosanitary actions" to its work programme

- IC Sub-group on IRSS added "Desk study on the delegation of NPPO functions in the context of third party authorization" to the IRSS work programme
- CPM-14 endorsed the topic on "Developing guidance on the use of third-party entities" as one of the eight development agendas of the IPPC Strategic Framework 2020-2030
- Call for the expression of interest by national plant protection organizations (NPPOs) to share their challenges, experiences and best practices on AUTHORIZING ENTITIES TO PERFORM PHYTOSANITARY ACTIONS during a side session at the CPM-15
 - Webinar held on Enhancing the understanding of the concept on authorization of entities to perform phytosanitary actions
 - Publication of *IRSS Study XX: Authorizing entities to perform phytosanitary actions* with the following recommendations:
- Final publication of the *IRSS Study XX: Authorizing entities to perform phytosanitary actions* with the following recommendations:
 - o search for additional authorization programmes in regions that were under represented in this study
 - o carry out interviews with NPPO authorization experts in the different FAO regions to gather more detailed information
 - consider the implementation capacity and the availability of resources for implementing authorization programmes (e.g., availability of entities with the experience and knowledge required to carry out phytosanitary actions; technical capacity within the NPPO for evaluation and audit);
 - develop a number of case studies to demonstrate how a delegated system and its elements can be established CPM-15 adopted ISPM 45: Requirements for national plant organizations if authorizing entities to perform phytosanitary actions
 - CPM 15 adopted ISPM 45 Requirements for national plant protection organizations if authorizing entities to perform phytosanitary actions

Takeaway message: The IRSS can deployed rapidly to gather information needed to resolve points of contention.

Table 10 Timeline for the IRSS Survey Review of the Implementation of ISPM-4 (2011)

Year	Outcomes / Milestones
2010	• CPM-5 added the topic the "Revision of ISPM 4 Requirements for the establishment
	of pest free areas)" to the List of Topics for IPPC Standards
2011	 Review of ISPM-4 initiated by a request from the IPPC Standards Committee
2012	• Final publication of the survey report Review of the Implementation of ISPM 4
2013	 SC approved for draft specification for member consultation via e-decision
2014	•
2015	•
2016	•
2017	•
2018	•
2019	Publication of the Guide for Establishing and Maintaining Pest Free Areas
	 International Symposium on Pest Free Areas and Surveillance held
	Baseline data on successes of PFAs collected
2020	• EWG on Revision of ISPM4 (Requirements for the establishment of PFAs) (2009-
	002), and the study was discussed
2021	• Revision of ISPM 4 (Requirements for the establishment of pest free areas) sent to
	members for consultation
Takea	way message:

Table 11 Timeline for the IRSS Survey Review of the Implementation of ISPM-6 (2012)

Year	Outcomes / Milestones		
2010	• CPM-5 added the topic "Revision of ISPM 6 (Guidelines for surveillance) (2009-		
	004)" to the List of Topics for IPPC Standards		
2011	• Questionnaire administered on the implementation of ISPM-6		
2012	• Final publication of the survey report <i>Review of the Implementation of ISPM 6</i>		
2014	SC revised and approved Specification 61		
2015-	Implementation Pilot Programme on Surveillance		
2018			
2016	• Publication of Plant Pest Surveillance: A guide to understand the principal		
	requirements of surveillance programmes for national plant protection organizations		
2017	 Revision of the Plant Pest Surveillance Guide (2017-049) added to the work programme 		
2018	• CPM-13 adopted ISPM 6. 2018. Surveillance.		
2019	International Pest Free Area (PFA) & Surveillance Symposium		
Takeaway message:			

Table 12 Timeline for the IRSS Survey Review of the Implementation of ISPM-8 (2012)

Year	Outcomes / Milestones		
2010	• CPM-5 added the topic "Revision of ISPM 8 (Determination of pest status in an		
	area)(2009-005)" to the List of Topics for IPPC Standards		
2011	• "Mini-survey" on ISPM-8		
2012	• Final publication of the survey report <i>Review of the Implementation of ISPM 8</i>		
2013	• SC approved Specification 59		
2017	Expert working group drafted revised ISPM		
2018	 SC revised and approved draft for first consultation 		
	• First consultation		
2019	Steward revised draft		
	• SC Working Group of seven members (SC-7) revised and approved draft for second consultation		
	Second consultation		
	SC revised and recommended the draft for adoption by CPM		
2021	• CPM-15 adopted the standard. ISPM 8.2021. <i>Determination of pest status in an area</i> . Rome, IPPC Secretariat, FAO.		
Takeaway message:			

Table 13 Timeline for the IRSS Survey Review of the Implementation of ISPM-13 (2013)

Year	Outcomes / Milestones		
2011	•		
2012	 CPM Bureau approval of SBDS proposal for IRSS to collect data and analyze information regarding ISPM 13 		
2013	• Final publication of the survey report <i>Review of the Implementation of ISPM-13</i>		
2014	• Item included on the NRO-AG work programme on "Emergency actions –address constraints to reporting emergency actions identified by the IRSS the study"		
2015	•		
2016	•		

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2017 • ...
2018 • ...
2019 • ...

Takeaway message:
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Table 14 Timeline for Findings of the survey: lists of regulated pests (ISPM19:2003) and Pest reporting (ISPM17:2002) (2014)

Year	Outcomes / Milestones	
2010	•	
2011	•	
2013	• The CPM Bureau expressed an interest in the IPPC to renew efforts to strengthen NPPO's abilities to meet National Reporting Obligations (NRO) [the meeting and year needs to be checked]	
2014	• Final publication of the survey report <i>Findings of the survey: lists of regulated pests</i> (ISPM19:2003) and Pest reporting (ISPM17:2002)	
2015	•	
2016	• "Revision: Pest reporting (ISPM 17)" and "Revision: Guidelines on lists of regulated pests (ISPM 19)" listed on the Framework for standards as Priority 2	
2017	•	
2018	•	
2019	•	
Takeaway message:		

Table 15 Timeline on pest diagnostics, addressed by multiple surveys (e.g., General Survey 2013 and the survey on implementation of ISPM 6)

Year	Outcomes / Milestones
2012	Publication of the survey report Review of the Implementation of ISPM 6
2013	• In the 2013 call for topics, General principles for operation of laboratories had been submitted as a topic but not agreed to by the SC. Several members felt that strategic issues associated with pest diagnosis should be discussed by the SPG.
	• The results of the general survey of implementation of the Convention and its standards by the IRSS and other IRSS surveys indicated that diagnostic support
	needs to be improved
2014	• Publication of the study report Findings of the survey: lists of regulated pests (ISPM19:2003) and Pest reporting (ISPM17:2002)
2015	• The findings of the general survey and the survey on implementation of ISPMs 17 and 19 were a useful references for discussion on the five year plan for the Technical Panel on Diagnostic Protocols
	 CPM 2015/28 Recommendations - Proposed recommendation on the importance of pest diagnosis
2016	 CPM 2016/21 Rev.01 CPM Recommendation on the importance of pest diagnosis recommendation was adopted
	Publication of The Guide to Delivering Phytosanitary Diagnostic Services (2016)
	 Implementation of diagnostic protocols and recommendation on the importance of pest diagnosis assessed by the second general survey
2017	•
2018	•
2019	•
2020	•
Takeav	way message:

Appendix 3. Compiled data on lessons learned

This appendix summarizes lessons learned identified through the review of IRSS-related documents, interviews and the author's observations. Related lessons learned have been grouped by major factor and subcategories. Recommendations for follow-up have been listed for each event. In many cases, the information available through the document review or interviews was incomplete (e.g., the cause of an event was unknown), so the author made an attempt to fill in the missing information based on the available data. Given that the data on lessons learned was compiled after-the-fact, the data should be interpreted with caution.



Figure 2. Illustration of how the IPPC Insight System fits into the Theory of Change for the IPPC Community.

i iguie 2. III	SDGs	SDG 17: Partnerships for the goals SDG 01: No poverty SDG 02: Zero hunger SDG 08: Decent work and economic growth SDG 12: Responsible consumption and production SDG 13: Climate action SDG 15: Life on land	
2030	FAO Strategic Objectives	 Reduce rural poverty Help eliminate hunger, food insecurity and malnutrition Make agriculture, forestry and fisheries more productive and sustainable Enable inclusive and efficient agricultural and food systems Increase the resilience of livelihoods to disasters 	
	IPPC Strategic Objectives (Ultimate impact)	A. Facilitate safe trade, development and economic growth B. Enhance global food security and increase sustainable agricultural productivity C. Protect the environment from the impact of plant pests	
s and	Immediate impact	 The spread of plant pests is minimalized and their impacts within countries effectively managed 	
TS CHAIN Protect global plant resources and safe trade	Outcomes	 Effective phytosanitary systems in place and functioning IPPC, ISPMs and CPM recommendations implemented 	4
	Outputs	 Standards and CPM recommendations developed and adopted Capacity developed to implement the IPPC, ISPMs and CPM Recommendations Communication and international cooperation enhanced 	
RESULT Mission: facilitate	IPPC Core Activities	 Standard setting Implementation facilitation Communication and international cooperation 	IPPC Insight System

Appendix 4. Tool for collecting cross-cutting information from IPPC Secretariat units and teams



Appendix 5. Draft guidelines for authors of IRSS studies

Guidelines for authors of Implementation Review and Support System Studies

General scope of IRSS studies. Studies produced as part of the Implementation Review and Support System address topics on the IRSS work programme. The target audience of these studies is the IPPC Community and other relevant stakeholders as defined in the studies' Terms of Reference.

Language and readability. Drafts should be written in British English. Authors should be concise at all times. The papers should be written in a style appropriate for a scientific journal and use relatively formal English. Names of organisms should be given as the scientific binomial. This is optional for commonplace crop plants. Authorities are not required, except where identity is critical. Use SI units and abbreviations. If abbreviations are used in the text they should be defined in the text at first use, and a list of abbreviations should be provided.

Text should be edited for grammar and spelling. Technical terminology should be explained. Headings should contribute to the general understanding of the text. Related parts of the text should be clearly grouped together, and the text should flow coherently with information presented in a logical order.

IRSS study report sections. The following sequence should be followed for the study report sections: title, author details, table of contents, acknowledgements, list of abbreviations and acronyms, executive summary, main text (usually comprising an introduction, methods, results / main findings, lessons learned, conclusions and recommendations), references.

The information below details the section headings that should in most cases be included in the study report and what information should be within each section.

- **Title page:** The title page should present a concise but informative title that includes, if appropriate, the study design (e.g., "baseline survey on x") or, for non-research studies, a description of what the study reports.
- **Author details:** The title page should also list the names and addresses of the authors, including the e-mail address of the contact author.
- Table of contents
- **Acknowledgements:** The acknowledgements section should identify the funding source and any expert advice or other support which helped make the study possible.
- **List of abbreviations and acronyms:** A list should be made of all abbreviations and acronyms which appear in the report.
- **Report highlights:** Short bullets with the top takeaways of the study and the main recommendations for next steps. The recommendations for next steps should list who is recommended to take action, what action they should take, why they should take it and when.
- **Executive summary:** The executive summary should explain what was done, why it was done, how it was done, key results or findings, implications of the findings, and the recommendations for next steps.

• Main text

This should contain the body of the study report, and may also be broken into subsections with short, informative headings. Typical headings and subsections are described below.

- Introduction: This section should provide a concise introduction to the topic of the IRSS study. Relevant background information should be clearly researched and documented. The objectives and scope of the study should be identified. The information presented should be relevant and justified. There should not be any key information missing.
- o **Methods:** The approach for how data was gathered, collected and analyzed should be explained. Any limitations of the study should also be identified.
- Results / Findings: The results should respond to the objectives, and the information
 presented should be relevant and justified. Findings should be comprehensive with no
 key information missing. Tables and figures should, with their legends, be selfexplanatory. They should be numbered consecutively, using Arabic numerals, in order
 of mention in the text.
- Conclusions and recommendations: This section should summarize the main conclusions and include an explanation of their relevance or importance to the IPPC, the CPM and other stakeholders as relevant. The conclusions of the study should be compared to findings from the literature as appropriate. Recommendations for next steps should also be identified in most, if not all, studies. Ideally, recommendations for next steps should list who will need to take action, what action they should take, why they should take it and when. Feedback from the Secretariat or other members of the IPPC Community may be required to ensure that the recommendations are precise and actionable.
- References: All key information derived from literature and other sources should be properly cited, including figures and tables (if they contain information from the literature).
- **Declarations:** Study reports should contain the following sections under the heading 'Declarations' (as appropriate):
 - Consent for participation: If the study report contains any survey data or an individual person's data in any form, the individual must have been informed on how the data could be used and consent for participation must be obtained. If the study report does not contain data from any individual person, please state "Not applicable" in this section.
 - Availability of data and materials: All study reports are required to publish a data availability statement to confirm the presence or absence of shared data. This statement will describe how the data can be accessed, and include a persistent identifier from the repository where the data is shared. If it is not possible to share the research data publicly, for instance when privacy / sensitive data could be compromised, and in such instances data availability should still be stated in the study report along with any conditions for access. If the study report does not contain any data, please state 'Not applicable' in this section.

Appendix 6. Reviewer checklist for IRSS Study Reports

Study Title: Date: Reviewer:

Assessment criteria	Comments
1. QUALITY OF WORK	
- Summary/Abstract	
Quality of the introduction and background section	
Quality of the methods section	
Quality of the results	
Quality of the discussion and conclusions	
Subtotal	
2. PRESENTATION OF THE INFORMATION	
Language and readability of the study report	
Layout and formatting	
Structure and organization	
- References/Works Cited	
Subtotal	
	DECISION: ☐ Draft approved. ☐ Draft not approved. Major revisions necessary.

Assessment criteria considerations / explanations

1. Quality of Work

- Executive summary: Is the executive summary complete? Is the executive summary no longer than one page? Does the executive summary explain what was done, why it was done, how it was done, key results or findings, and implications of the results?
- Quality of the introduction/background section: Did the author(s) provide a concise introduction to the topic? Has the relevant background information been clearly researched and documented? Were the problems clearly identified (i.e., justification for the study)? Were the objectives scope of the study clearly defined? Is the information presented relevant/justified? Is any key information missing?
- Quality of the methods: Did the author(s) explain how information and/or data was gathered, collected and analyzed?
- Quality of the results: Do the findings respond to the objectives? Is the information presented adapted to the country and/or regional context? Do the authors demonstrate a clear understanding of technical issues related to the IPPC and/or study report topic? Has technical terminology been appropriately used? Is the information presented relevant/justified? Is any key information missing?
- Quality of the discussion, conclusions and recommendations: Did the author(s) explain the significance or implications of the findings? Were the findings compared to findings from the literature, as appropriate? Were general conclusions from the study report relating to the context; which issues have been resolved, which not? Is the information presented relevant/justified? Is any key information missing? Where is more study on the topic necessary? What are the authors' recommendations for next steps? Do the recommendations for next steps identify who should follow-up, what they should do, why they should do it and when they should do it?

2. Presentation of the Information

- Language and readability of the study report: Does the study report stimulate the reader's interest? Does the text read smoothly and is the reader motivated to continue reading (i.e., the reader does not lose interest after a few pages)? Have technical terminology and abbreviations been explained? Is the study report concise?
 - Spelling and grammar: Do issues with spelling and grammar impede understanding of the document? Or are issues with spelling and grammar minor?
- Layout and formatting: Does the study report follow the basic study report layout and formatting guidelines? Are graphs and figures presented well, etc.?
- Structure and organization: There is a distinction between internal structure and external organization.
 - Internal structure: Do the sentences follow coherently from each other? Is the information presented in a logical order?
 - External organization: Have related parts of the text been clearly grouped together? Do headings contribute to the general understanding of the text? Has the separation of the body of the study report from the appendices been correctly implemented? Are the appendices logically structured?
- References/Works Cited: Has all key information derived from literature and other sources been properly cited? Has the literature and other sources been correctly referenced? Has the literature been wisely chosen? Are the Works Cited/References complete? Have figures and tables been correctly cited (if they contain information from the literature)?