Review of Rolling out Systems Approach globally

MTF/INT/336/STF

FINAL REPORT

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About the Reviewer/Evaluator

Mrs Ransom was a senior executive in the Australian Government Department of Agriculture, Water and the Environment until her retirement in July 2020. She has over 30 years of experience in all aspects of plant health and protection including applied plant pathology, phytosanitary and crop protection treatments, pest risk analysis and risk management, technical market access, legislation and policy development and implementation. She has led many Australian plant health strategies and participated in many CPM forums including standards setting and implementation-related Task Forces, and in regional activities with the Pacific Plant Protection Organisation, including the position of Executive Vice Chair. She was Chair of both the CPM and CPM Bureau from 2016 – 18 and a Bureau member for five years. She was also Chair of the CPM's Subsidiary Body for Dispute Settlement for several years.

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Acronyms and abbreviations

ALOP	Appropriate level of (phytosanitary) protection
ALPP	Area of low pest prevalence
APPPC	Asia and Pacific Plant Protection Commission
BCG	Beyond Compliance Global
CABI	Centre for Agriculture and Bioscience International
CEP	Centre for Environmental Policy, Imperial College London
COLEACP	Comité de Liaison Europe-Afrique-Caraïbe-Pacifique
CPM	Commission on Phytosanitary Measures of the IPPC
CSIRO	Commonwealth Scientific and Industries Research Organisation (Australia)
DSSA	Decision Support for Systems Approach, a tool of Beyond Compliance
EPPO	European and Mediterranean Plant Protection Organisation
FAO	Food and Agriculture Organization of the United Nations
IAEA	International Atomic Energy Agency
IC	Implementation and Capacity Development Committee of the IPPC
ICL	Imperial College London
IPP	International Phytosanitary Portal (www.ippc.int)
IPPC	International Plant Protection Convention
IAPSC	Inter-African Phytosanitary Council of the African Union
IRSS	Implementation Review and Support System of the IPPC
ISPM	International Standards for Phytosanitary Measures
LoA	Letter of Agreement
NEPPO	Near East Plant Protection Organisation (Plant Protection Organization of the Middle East)
NPPO	National Plant Protection Organisation
OED	FAO Office of Evaluation
OIRSA	Organismo Internacional Regional de Sanidad Agropecuaria
OCP	Official Contact Points of the NPPO
PCE	Phytosanitary Capacity Evaluation of the IPPC
PFA	Pest Free Area
PFPP/S	Pest Free Place of Production or Site
PPPO	Pacific Plant Protection Organisation
PRA	Pest risk analysis
RPPO	Regional Plant Protection Organization
SPS	Sanitary and Phytosanitary
SPS Agreement	WTO Agreement on the Application of Sanitary and Phytosanitary Measures
STDF	Standards and Trade Development Facility
ToR	Terms of Reference
WTO	World Trade Organization

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Project Review Report

1. Executive summary

This report presents the outcomes of the independent end-of-project review of the project titled 'Rolling out Systems Approach Globally' (MTF/INT/336/STF), which was commissioned by the Food and Agriculture Organization of the United Nations (FAO). The review is a requirement of the Standards and Trade Development Facility (STDF), which funded the project as STDF/PG/503.

The main objectives of the review were to:

- Identify if the tools provided to implement systems approach were used by the National Plant Protection Organisation (NPPO) for pest risk management
- Evaluate the contribution of the tools to help developing countries increasing opportunities for export plants and plant products
- Evaluate the sustainability of the project with respect to the use of the tools
- Identify project contribution to the International Plant Protection Convention (IPPC) work with respect to promoting the systems approach for pest risk management to the NPPO and the public
- Identify lessons learnt for possible project activities and increased uptake of the tools.

The project aimed to increase opportunities for exports of plants and plant products from developing countries through greater use of systems approaches to pest risk management, enabled using Beyond Compliance (BC) tools and accredited facilitators trained and experienced in their use. Building on the outcomes of an earlier project (STDF/PG/328) the project aimed to disseminate the tools widely and enhance their uptake by demonstrating their benefit through real trade examples.

The review conclusions and recommendations are based on an analysis of outputs and outcomes identified in the project logic framework (logframe). The analysis was informed by a desk study of project and other documentations, followed by semi-structured interviews and email questionnaires to collect information from key people who participated in the project, and others with an interest in the project and its outcomes.

Main findings and conclusions

Twelve facilitators completed the training program and have been accredited as Beyond Compliance (BC) Facilitators by the IPPC Secretariat. They have been included in the facilitator roster on the Systems Approaches landing page of the International Phytosanitary Portal (IPP) (www.ippc.int). They developed production chain and systems approaches to manage pest risks in a range of trade cases using the BC tools, including seven solicited from an international call to NPPOS. Four of these trade cases are progressing and will likely contribute to a market access submission and trade negotiations, as restrictions imposed by the COVID-19 pandemic allow.

The revised BC tools and associated instruction manuals have been published on the IPP in all FAO languages, together with two videos systems approaches for management pest risks and general information on the tools and how they can be used. Success stories will also be posted as they are developed to further encourage NPPOS to use the tools.

Regional networks and meetings on plant health have been used to disseminate information on the tools and generate a deeper understanding of the international standard on systems approaches (ISPM 14: The use of integrated measures in a systems approach for pest risk management) during the project.

The project was significantly impacted by travel and meeting restrictions due to the COVID-19 pandemic. This prevented the stakeholder engagement required to progress most of the trade cases beyond a desk top exercise. Where engagement has been possible, the anticipated benefits of documenting the production chain and identifying and assessing pest risk management in a systems approach are being slowly realised through a common understanding of phytosanitary needs across stakeholders. This will gain further momentum as the pandemic recedes.

Despite ongoing promotion of systems approaches to managing pests in a production or value chain through the two Beyond Compliance projects, a lack of understanding of ISPM 14 and its implementation was evident in BC trainees prior to their training. This is likely reflective of their organisations and presents a significant challenge to wider dissemination and use of both the standard and the enabling BC tools. The facilitators recognise the opportunities presented by the application of systems approaches following their training and they will make good ambassadors for the tools and their use in their country and region, where this is encouraged and supported.

The project achieved most of the projected outputs but was impeded in the overall outcome of wider uptake of systems approaches to enhance trading opportunities for developing countries due to the pandemic impact on the progress of trade cases to demonstrate their benefit. Feedback from project participants indicated that the trade cases will continue to progress outside of the project. Materials that have been uploaded to the IPP will give NPPOs access to the tools and a pool of accredited facilitators who can assist their use.

Recommendations and lessons learned

This report makes 16 recommendations relevant to this project and to future projects proposing the development and deployment of tools. They include recommended activities to promote greater awareness and use of the BC tools and their wider application to progress the IPPC Mission to facilitate safe trade; a review of the BC tools and their impact in the next few years to direct any future investment in them- or not; recommendations on enhanced governance and project management arrangements; and suggested actions to improve the efficacy of capacity development projects in the virtual operating environment of a COVID-19 world.

Recommendations are directed at the Implementation and Capacity Development Committee (IC) of the Commission on Phytosanitary Measures (CPM) and other subsidiary bodies, the IPPC Secretariat, the STDF Secretariat and others who may be considering the development and deployment of SPS tools. They are intended to promote greater awareness of systems approaches, the BC tools and accredited facilitators developed through this project and their wider uptake to facilitate safe trade.

Key lessons are documented in this report. Among them:

- The severe impact that travel and meeting restrictions have on traditional methods of stakeholder engagement and training, and the need to adjust strategies to best use virtual meetings for effective outcomes.
- The value of engaging communications expertise in planning and implementing a project that seeks to disseminate information for the purpose of promoting action ie. Using systems approaches and tools to identify and assess pest risk management options and open markets for trade.
- Identifying project risks and actively reviewing the project plan to ensure outcomes and impacts are achieved in the face of foreseen or unexpected risks. The project logframe is useful for documenting these risks but they must be monitored and used to trigger action.
- The development and deployment of tools through these types of projects needs to be considered in the context of its eventual use and the value that this provides the host organisation and the targeted users. The BC tools have significant potential benefit for better managing pest risks in plants and plant products moving in trade within the framework of the IPPC and the WTO-SPS. Ongoing action is needed to investigate these opportunities and map a path to implementing their use more broadly.

2. Introduction

The Food and Agriculture Organization of the United Nations through the Secretariat of the International Plant Protection Conventions has contracted Lois Ransom to conduct an independent end-of-project review of the project titled 'Rolling out Systems Approach Globally' (MTF/INT/336/STF), which was funded by the Standards and Trade Development Facility as STDF/PG/503. An end-of-project review by the implementing organization is required under STDF Operating Rules.

The Terms of Reference (ToR) of the review are in Annex 1. They require analysis of the project in relation to:

(i) The performance of the project considering both its inter-regional, regional and national dimensions

(ii) Its results, their sustainability and transformational changes occurred in the access to System approach for pest risk management, including its contribution to the IPPC work

(iii) Shortcomings as well as good practices of project implementation

(iv) Trade cases involving Tunisia, Kenya, and Mexico.

They also refer to the "Guidelines for the evaluation of projects funded by the Standards and Trade Development Facility", so this report will also touch on STDF evaluation criteria of relevance, coherence, effectiveness, efficiency, impact, sustainability, and lessons learned.

Brief Description of the Project to be Evaluated

Title: Rolling out Systems Approach globally (STDF/PG/503; FAO reference: MTF/INT/336/STF)

Overall objectives: To increase opportunities for exports of plants and plant products from developing countries through better capacity to deal with phytosanitary issues during market access negotiations and evaluate a wide range of options for managing pest risk.

Specific objectives: To enhance the competency and confidence of countries in applying Systems Approach to specific Trade Cases using pest risk management decision support Tools by refining the Tools, training of future Facilitators, and supporting Trade Cases for demonstrating and embedding the use of the Tools and validating the Trainees as Facilitators.

STDF/PG/503 project timeline: Approved by STDF Working Group: March 2017. Start date: 1 July 2018. End date: 30 June 2021. Final report to STDF: 30 November 2021

Total project value: US$771,186; approved STDF contribution: US$568,966. Estimated funds remaining at 30 June 2021 US$202,220

Implementer: International Plant Protection Convention (IPPC) Secretariat

Beneficiaries: IPPC Contracting Parties, developing countries

Partners: Standards and Trade Development Facility (STDF) (Donor); Centre for Environmental Policy, Imperial College London (ICL); Near East Plant Protection Organization (NEPPO); Organismo Internacional Regional de Sanidad Agropecuaria (OIRSA); the Pacific Plant Protection Organisation (PPPO)

Outputs: (i) Practical tools that test/demonstrate predicted efficacy of alternative plant health risks management measures using promising trade cases from developing countries. (ii) Systems approach tools more broadly accessible to developing countries. (iii) Countries assisted in market access negotiations for plant products.

This project builds on the results of an earlier Standards and Trade Development Facility (STDF)-supported project grant (STDF/PG/328), Beyond Compliance: Integrated Systems Approach for Pest Risk Management in Southeast Asia, which produced three interactive tools for qualitative and quantitative analysis of Systems Approaches and an e-book (Quinlan et al, 2016):

1) A graphical Production Chain, that was used in engagement with stakeholders in four SE Asian national and two regional case studies and an additional case in Australia; this is a structured flowchart to describe the potential measures that could be adopted within a Systems Approach covering the whole of the production cycle

2) A spreadsheet-based Decision Support System (DSS), that was used in case studies in Vietnam, Philippines, Thailand, Malaysia, and Australia, to elicit evidence about the performance characteristics of potential control measures for specific pest/commodity combinations of interest to the participating countries

3) A Bayesian network (BN) model identifying official control points, used in Vietnam, Philippines, Thailand, Malaysia, and Australia to calculate the combined probability of successful performance of selected sets of measures which could be applied along the Production Chains. This probabilistic modelling tool uses the evidence and beliefs elicited using the DSS for these cases.

A summary of the outcomes of STDF/PG/328 are in the logic framework (logframe) in Annex 2, which is extracted from the Final Report: STDF/PG/328: BEYOND COMPLIANCE: INTEGRATED SYSTEMS APPROACH FOR PEST RISK MANAGEMENT IN SOUTHEAST ASIA, May 2015 (STDF, 2015).

The current project, 'Rolling out a Systems Approach Globally', which is also referred to as "Beyond Compliance Global" (BCG) was designed as a three-year initiative to increase the awareness and use of these tools for identifying and assessing a range of measures for pest risk management, in a manner proportional to the estimates of pest risk. Four 'trade cases' from at least two developing countries would provide a practical and realistic basis for demonstrating the tools and embedding their use in two regions additional to the pilot work

in SE Asia. National and regional experts would be trained, including some as facilitators, to support the sustained implementation of the tools and their application. This would provide a platform for further disseminating experience of the tools and their use through existing networks, including the IPPC community.

The project would lead the broader dissemination of the tools and further enhancement of confidence and competence in applying Systems Approach for trade to specific export cases in regions beyond Asia. It expected that guidance and experiences of using the Beyond Compliance Production Chain approach would be developed sufficiently to allow NPPOs to proceed without facilitation.

Four main project elements were described in the project document (FAO, 2018) (extracted):

1. *Trade cases selected from at least two regions or subregions*

   Project cases will be established, and agreements will be signed with NPPOs who will complete the trade cases. A global call issued by the IPPC Secretariat will enable the four trading cases for a minimum of two countries in regions other than Southeast Asia to be selected. Facilitators to be trained will be identified and the training planned accordingly.

2. *Selected cases are initiated and facilitators are trained*

   Once the training materials have been prepared, a total of four facilitators will be trained. The training materials will also be translated. Stakeholders for cases will be identified.

3. *Selected cases are developed*

   Cases will be developed; case material will be verified at a country level. The tools will be applied to cases. Case reports and evaluations will be conducted.

4. *Implementation of cases*

   Following meetings, cases will be submitted to potential trade partner NPPOs. Learned lessons and experiences will be disseminated more widely to other NPPOs.

Under the implementation model proposed in the project document, the IPPC Implementation Facilitation Unit would lead the project with NEPPO. The Imperial College London (ICL) team would be supporting NEPPO and the IPPC for the technical aspects of the tools. They in turn would work with designated representatives of the NPPOs of selected countries.

Training materials would be prepared and translated into relevant languages and shared through the FAO's and STDF repositories. Technical support provided for the implementation of the case studies by facilitators and ICL and country specific verification of case materials would ensure dissemination of knowledge and experience among NPPOs and national stakeholders of the selected countries. Subject to confidentiality that usually surrounds market access negotiations, market access experiences would be shared with additional countries in the region or subregion where exchange on plant health issues is already established. By the end of the project, simpler tools would be made broadly available for use by any country. This might be through publication, sharing through STDF and IPPC portals and presentations.

3. Methodology

The approach taken for the review followed the ToR outlined in Annex 1. It included collecting and analysing relevant data from project reports as a desk analysis and validating/supplementing this through questionnaires and interviews with project participants and relevant organisations. The project logframe indicators were used as the basis for evaluating the project. The project logframe is in Annex 3.

This report presents outcomes against the ToR and STDF evaluation criteria including relevance, coherence, effectiveness, efficiency, impact, sustainability, and lessons learned. It also considers cross cutting issues and suggestions for improvements in addressing gender and environment considerations in planning and implementing similar projects in future.

The Review Matrix in Annex 4 guided the analysis consistent with the review ToRs. This combines the project objectives, outcomes activities and risk that were described in the project logframe in the Project Document (FAO, 2018), and the performance indicators, review objectives and means of verification directed by the review.

A mixed-methods approach was used to collect and analyse both qualitative and quantitative data. Data was collected from both primary sources (interviews and questionnaires) and secondary sources (including project applications and reports, communications materials and publications, and training materials developed – see References). It reviewed relevant documents from the STDF and IPPC Secretariats and other sources and used email questionnaires, video, audio interviews and face-to-face semi-structured interviews to collect information from key stakeholders who participated in the project and others with an interest in the project and its outcomes.

The review was restricted to a purely desktop exercise due to COVID-19 travel restrictions. Efforts were made to contact and engage key stakeholders by remote means including email, videoconferencing, and teleconferences. Feedback from project participants in this review was assessed against information on project activities, risks, benefits, and stakeholder feedback that was included in the six-monthly project progress reports.

The key stakeholders listed Annex 5 participated in the project in a range of identified roles and were approached for feedback relevant to the review criteria from their perspective. Engagement with the trading partners identified in each of the trade cases during the project was limited due to Covid-19 travel restrictions, which severely impacted progress of the cases beyond drafts of production chains and DSSA maps prepared by the trainee facilitators. Two NPPOs that are progressing their trade cases provided feedback to the review. This represented 50% of the four cases that have progressed.

Most stakeholders approached provided the feedback requested within the short time line for the review and their ongoing work pressures. Of the 29 approached, 25 kindly gave their time and considered views. They represent a cross-section of involvement or interest across a range of roles in the project.

The ToR provided an indicative list of questions which formed the basis of this review. These drew out information relevant to the main objectives of the review, which were to:

- Identify if the tools provided to implement systems approach were used by the NPPO for pest risk management
- Evaluate the contribution of the tools to help developing countries increasing opportunities for export plants and plant products
- Evaluate the sustainability of the project with respect to the use of the tools

- Identify project contribution to the IPPC work with respect to promoting the systems approach for pest risk management to the NPPO and the public
- Identify lessons learnt for possible project activities and increased uptake of the tools.

They were supplemented by project-specific and stakeholder-specific questions arising from the desk analysis phase of the evaluation. Questions relevant to the assessment themes are presented in a matrix in Annex 6. All data was collected and analysed between 1 September and 1 October 2021.

The findings from the desk analysis and participant interviews have been considered against the project objectives and outcomes. The main conclusions that can be drawn from the findings are summarised in subsequent sections of this report and consider the extent to which the project strengthened SPS capacity and facilitated trade, together with good practices, lessons learned and recommendations for similar projects in the future. They cover all phases of the project between 1 July 2018 and 30 June 2021, noting that the final project report is still in draft form.

4. Logframe analysis

The overarching goal of the project, as outlined in the logframe, was to increase opportunities for exports of plants and plant products from developing countries through better capacity to deal with phytosanitary issues during market access negotiations and evaluate a wide range of options for managing pest risk. This would be achieved by enhancing the competency and confidence of countries in applying Systems Approach through refining the Beyond Compliance tools and making them widely available; training of facilitators to support the use of tools by NPPOs; and demonstrating and embedding the use of the tools using selected trade cases. In the longer term, the project outcomes would strengthen SPS capacity and facilitate safe trade.

The key program elements are based on the call, selection, use and extension of the trade cases to train facilitators, engage NPPOs in the use of the BC tools and use the outcomes of trade negotiations to promote wider awareness and use of the tools and systems approaches to managing pest risks in trade. The list of trade cases is in Annex 5.

The STDF/PG/503 [FAO/MTF/INT/336/STF] project was implemented from July 2018 to the end of June 2021. A summary timeline is in Table 1.

Table 1. Summary timeline of STDF/PG/503 [FAO/MTF/INT/336/STF] project.

Date	Action
March 2017	Project application approved by STDF Working Group
1 July 2018	Project commenced FAO/ICL Letter of Agreement
September 2018	First international call for trade cases by the IPPC Secretariat.
November 2018	Call for facilitator trainees
December 2018	Screening facilitator applicants Trade case applications received
February to May 2019	Facilitator pre-training, including monthly tele-meetings throughout the project

April 2019	7 selected trade cases notified – in support of a range of trade outcomes
2 – 7 June 2019	Trainee workshop (Windsor, UK. 13 participants). All passed evaluation
June to August 2019	Trade cases framed
November 2019	Second international call for trade cases by the IPPC Secretariat. One additional accepted
December 2019	Two BC tools refined and adopted; BayesNet elements removed
January 2020	Two initial trade cases commenced
April 2020	Progress on trade cases, sharing material by the portal. Travel impacted by COVID-19. Peru, Uganda, Fiji trade cases ended
January 2021	Mexico seed trade case commenced
May 2021	Trade case production chains and DSSA provided to the IPPC Secretariat by Facilitators
30 June 2021	Project end date
September 2021	Trained facilitators validated and received IPPC accreditation for two years
15 September 2021	Final report drafted
1 – 30 September 2021	End-of-project review

In summary, the call for facilitators resulted in 25 applications, of which 15 were accepted with reference to the selection criteria in Annex 7. Visa problems resulted in only 13 trainees participating in the workshop at Windsor in the UK, in June 2019. One trainee subsequently left their position leaving 12 trainees eligible for accreditation. Of these, all but two were funded through the project. Two trainees were self-funded. The learning objectives for training of facilitators are also in Annex 7. All trainees completed preparatory tasks, passed the training workshop assessment, and continued to participate in regular teleconferences throughout the three years of the project.

The trainees contributed to refinement of the two Beyond Compliance (BC) tools and associated manuals, to ensure they were practical and effective. The tools and their respective manuals have been published as downloadable Microsoft Excel™ spreadsheets on the IPP. They can be found with other contributed resources and two short videos that introduce systems approaches, as described in ISPM 14, through the Systems Approach landing page at SYSTEMS APPROACH - International Plant Protection Convention (ippc.int). This page also makes provision for frequently asked questions (FAQs), testimonials or success stories and other contributed resources that may be developed or provided in the future.

Two calls for project trade cases were made by the IPPC Secretariat. These would be used to disseminate and demonstrate the tools to proposing NPPOs, as well as providing an element of the assessment to validate the trainees. Seven trade cases were accepted and allocated to the trainees to progress. Three of the trade cases ended before their completion by the NPPO. The reasons for their cessation are outlined later in this report.

All trainees completed the development of a production chain and DSSA analysis for a trade case as part of their validation requirements.

The IPPC Secretariat has accredited 12 BC facilitators for a two-year period based on validation criteria including 'passing' the training workshop, participating in pre- and post-workshop activities, using the tools to develop and document production/ pathway chains and DSSA for at least one trade case. Ten are from NPPOs and two are from RPPOs.

The accredited facilitators, together with the team from Imperial College London, are available to answer questions about the BC tools and how they support Systems Approach, as well as providing support for the use of the tools for a specific trade case or pathway analysis. The list of facilitators and their contact information has been posted on the IPP at BEYOND COMPLIANCE FACILITATORS - International Plant Protection Convention (ippc.int).

In addition, the project achieved:

- Facilitator training materials and their use
- An assessment framework and methodology for validating facilitators developed by the workshop trainers in collaboration with training consultants
- A facilitator network that was mentored through regular teleconferences on the use of the tools and the application of outcomes to market access submissions
- Development of cases and identification of stakeholders for each trade case progressed by trainees
- Translation of the BC manuals and tools into all FAO languages
- A glossary of terms not in ISPM 5 that are relevant to the BC tools and their application
- Many published articles and other communications materials and presentations promoting systems approaches, the tools and their use
- Web pages on the IPP as the basis for promoting use of the tools, including two videos, the Excel-based tools and associated manuals, and FAQs
- A range of forms and templates that may have application to other IPPC or STDF processes including statements of commitment and confidentiality, NPPO roles and responsibilities in relation to using the tools, trade case information template, trade case report template, trade case feedback template, meeting planning template, facilitator application form, facilitator evaluation criteria and recording forms
- Testing new approaches and strategies to improve virtual stakeholder discussions including:
  - Pre-populating production chains and capturing discussion – limits input by stakeholders
  - Using polls during virtual session – does not work in Zoom
  - Surveying participants – not effective
  - Using smaller discussion groups – more effective
  - Small groups within NPPO - most effective
  - Engaging with organisations representing farmers – liaison is easier when farmers are organised
  - Online meetings – are impacted by internet connectivity

Comprehensive six-monthly progress reports were provided to FAO and the STDF Secretariat in accordance with funding obligations. These communicated progress against planning milestones and shared outputs including documents and templates, any variations to address

project risks, trade case updates, delays, challenges, and lessons learned. They have been a major input into this review. Progress updates were provided to the IPPC Implementation and Capacity Development Committee (IC) at their November meetings in 2019 and 2020.

5. Outcome findings against end of project review ToRs

The onset of the COVID-19 pandemic, with its impact on NPPO operations, international travel restrictions and face-to-face meetings, has had a significant impact on some planned project activities and several outcomes. Travel restrictions prevented the planned second workshop for trainee facilitators from going ahead and impacted their ability to meet with and engage NPPO and industry stakeholders to progress the trade cases through use of the BC tools. This required changes to the validation method for trainee facilitators as projected assessment by NPPOs was no longer achievable across the cohort.

Adapting to the changed operating environment resulted in greater input by trainees into refining the BC tools and manuals for their use, and the use of monthly teleconferences between the trainees and their ICL trainers as a forum for ongoing learning, discussion, information exchange and problem solving on the tools and their application to the trade cases.

The following sections consider the project and its outcomes against the review ToRs.

5.1 The performance of the project considering both its inter-regional, regional, and national dimensions

The facilitators selected for training represented all but two FAO regions, excluding Asia, which had already been introduced to the tools in the STDF/PG/328 project. Although not part of the facilitator cohort, the Pacific region was represented through a trade case. A mix of age, gender and experience within the facilitator cohort enabled strong sharing of ideas and experiences. One interviewee noted that each country and region represented had a different view and approach, which enriched discussion during the training workshop and in subsequent virtual meetings. This was applied to problem solving and information sharing. One interviewee commented that this has generated a strong network among the facilitators both within the project and outside of work.

The original project plan proposed that facilitator training materials would be translated into FAO languages. It was decided instead that the translation effort was better applied to the tools and manuals, to facilitate their use and uptake. They are published in the FAO languages on the IPP. The IPPC Secretariat reported that this material is already being downloaded in Spanish, French and English.

Similarly, efforts were made to select a range of trade cases that reflected a representative sample of new export market access, traded commodity, market maintenance and dispute resolution with regard to geographic distribution and economic development status. Two cases used the tools to identify pest risk management options on an import pathway. The small number of trade cases was disappointing, particularly as three ended early. However, each will provide experiences and lessons, which should be captured and used by facilitators as they are involved in future trade cases.

The STDF Secretariat noted with some concern that NEPPO had withdrawn its in-kind commitment and coordination role early in the implementation of the project, even though they were a proponent and supporter of the project. While NEPPO has continued to work with Tunisia on its trade case, including through a strongly influential regional workshop, a strong connection to other Regional Plant Protection Organisations has been lost. It also called into question the level of support for the project that NEPPO had. NEPPO should be

well placed and is encouraged to provide a report on the use of the tool and its potential benefits to countries in other regions through the Technical Consultation of RPPOS to assist further global dissemination.

The project had to adapt to a virtual operating and consultation environment and has done so with reasonable success, particularly given regional and national challenges with the availability and experience in using virtual tools as well as internet speeds and stability. Other factors, including the impact of the pandemic on NPPO operations such as deployment to other areas of Government to assist public health operations, had an impact on the ability of the project to secure and maintain a focus on progressing the trade cases. One interviewee reflected that the trade cases that had most progressed were export market access proposals that were well supported by the NPPO and the benefiting industry, or an import case of significant importance and potential risk to the importing NPPO. One interview felt strongly that a contemporary pest risk analysis was critical to the successful use of the tools to an import trade case.

The project team has ensured that national, regional, and international considerations have been applied to the project implementation. The pandemic has and will continue to impede the active dissemination of the tool and its use while travel restrictions remain in place. The facilitators have been well supported in their training, but also through the network of facilitators that has evolved and should continue to look for and use opportunities to extend the tools and their use within their own organisations, but also within their regions.

5.2 Its results, their sustainability and transformational changes occurred in the access to System Approach for pest risk management, including its contribution to the IPPC work

The best planning in the world could not have predicted the advent and impact of the COVID-19 pandemic. As such, the transformational changes envisaged by the project will not be achieved. The active involvement of NPPOs and industry stakeholders in progressing the selected trade cases was key to demonstrating and achieving impact through use of the BC tools and greater operating knowledge of systems approaches to managing pest in traded plants and plant products. The application of the tools enables active communication and engagement on pest risk management options to achieve practical and economically feasible trade outcomes. The pandemic significantly impacted the ability of the NPPO to play their part. The trade cases that are still progressing with strong stakeholder support should achieve some of the anticipated trade and market access outcomes, but this will take time.

The lack of trade outcomes from the project significantly limits the active dissemination and extension of the BC tools and associated processes in support of market access to any ongoing promotion by the facilitators, ICL and others closely associated with the project, leaving the material posted on the IPP as a passive means of information sharing. Even when there is a positive trade outcome, the usual confidentiality surrounding market access submission and negotiations will likely impact the publication of case study reports or success stories. Hopefully confidentiality considerations can be accommodated so that NPPO experiences can be widely shared and still be meaningful.

It is not clear whether there will be sufficient momentum retained from the project and ongoing activities to drive transformational change without further investment. Similarly, it is not clear whether the limited use of the tools in the IPPC community has offered enough proof of efficacy to actively drive IPPC contracting parties to use them. The inclusion of Frequently Asked Questions (FAQs) on the IPP should provide NPPOs with the information on the tools, their application in support of market access, what they can offer and what they can’t do and direct them to facilitators for more in-depth knowledge and experience of the tools and their use.

Generating action from information on a website is beyond the role of the facilitators and is a challenge that is not limited to this project. Publishing materials on the IPP makes them visible and available, but additional guidance may be needed to give a contracting party the confidence to apply them as they were intended.

The residual low level of awareness and understanding of systems approaches amongst NPPOs is concerning and will likely prove a barrier to the wider use of the BC tools in the short to medium term. Many countries find the concept of systems approaches confusing when they are really a product of pest risk management in the production system. Several interviewees reflected that they came to recognise the value and opportunities presented by systems approaches through their training and use of the tools. In promoting the global use and uptake, the BC tools might be better promoted as tools for identifying and assessing pest risk management options for all trading pathways and the current, limiting emphasis on their use for systems approaches downplayed until ISPM 14 is better understood.

The BC tools for facilitator training were provided by ICL. They were refined with input from trainees and have been published as downloadable Microsoft Excel™ files on the IPP. The initial IT platform for the tools was no longer free to users so they were transitioned over to the free and globally available Microsoft Excel™ platform to facilitate their global use.

With consideration to their accessibility and maintenance, the development of the BC tools as online tools progressed during the project to the point of drafting a 'business requirements document' and obtaining a quotation for its implementation. The costs of producing and maintaining an online tool were beyond the scope of the project budget so this was not progressed, but the document is available should this option be revisited in future. Translating the tools into languages was costly and time consuming, with issues arising from broken links and macros. With uploading of the tools onto the IPP, the performance of the tools can be monitored by the IPPC Secretariat so that stability and access issues can be addressed as they arise. The Secretariat will also use web metrics to collect and analyse site access data and track tool downloads.

The logframe included verification actions that were not achieved during the project, largely from the stalling of the trade cases. These include:

- Case study reports (in project template). There were completed by the trainees to the extent possible, and confidential reports provided in relevant progress reports.
- Survey of beneficiaries that have used Beyond Compliance tools in designing pest risk management plans/proposals or trade negotiations on selected cases
- Case study reports acknowledge role of facilitators
- Evaluation of beneficiaries on ability to use Beyond Compliance tools
- Reports from existing periodic meetings on plant health acknowledge sharing of these experiences – partially achieved by promoting the BCG project and tools, not for sharing experience of use and trade outcomes

5.3 Shortcomings as well as good practices of project implementation

Impacts of the pandemic aside, this project has been effectively managed in alignment with the original project document and despite the rather complex administration and governance model under which it operated.

Several interviewees remarked on the slow start to the project activities. The small number of trade cases received from the first call required a second call. The number of applicants for facilitator training and the time taken to confirm their selection delayed the initial training workshop. This was offset somewhat by 'homework' that each trainee was given prior to the

workshop and benefits they have gained from ongoing virtual discussions. The redeployment of the trainees to refine the tool in the face of the pandemic was commendable and ultimately contributed to its simplification.

The strong feedback from trainees was that the training program, while intensive, was extremely well run and effective. The content was relevant, informative, and appropriate to the audience and they learned a lot about themselves and from each other. The trainers were knowledgeable and very helpful. They have also greatly appreciated the follow-up discussions amongst themselves and with the ICL technical experts, which have contributed a lot to their confidence with the tools and their understanding of systems approaches.

The emphasis of the first half of the project was on refining the BC tools and ongoing training and mentoring the facilitators to optimise their confidence in the tools and their use. The onset of the pandemic and the lack of access to the refined BC tools until 2020 impeded their intended use in trade cases by proponent NPPOs. The release of the tools was also impacted by actions to scope their development as online tools. This delayed finalisation of the tools into their final Microsoft Excel™ platform and ultimately their availability to the facilitators and NPPOs.

A condition of funding by the STDF was that the IC was to act as a Steering Committee for the project. While the IC was introduced to the BC tools and updated on project progress several times, it provided little strategic input into the project apart from suggesting that it would be of interest to the SPS Committee analysis of 'equivalence'. The start of the project coincided with the transition of the former Capacity and Development Committee (CDC) into the IC and the development of strategic directions and prioritised work plans. Many existing capacity development projects administered by the IPPC Secretariat at that time were rolled over into their work program by the IC. They were monitored but there was little strategic governance provided.

A small and active Steering Group was established towards the end of the project and provided direction during the last year. It enabled a clear decision on whether to progress the online tools proposal and engagement of a communications consultant to design and contribute content to the web pages in support of project outcomes. The Group including the project manager, an IC lead and members of the IPPC Secretariat operated well and is a good model for other projects. The IC is too large to be an effective steering body and the Steering Committee role is beyond its mandate and skill set.

A more effective model might be for the IC to provide input and strategic guidance in the preparation of an STDF project proposal to ensure it aligns with IPPC priorities and outcomes. This is essential if the outputs of the project are intended to be used by the IPPC community. Ongoing strategic input would fall to the IC lead within the smaller steering group and the IPPC Secretariat.

Funding approval by the STDF Working group took several years and there were residual concerns within the STDF Secretariat that the project bordered on academic and was not well connected to IPPC processes in support of Convention outcomes. There was also no apparent imperative from countries for help to implement systems approaches. This seems to have been the driver for project implementation through the IPPC Secretariat and with the oversight of the IC. It also resulted in an unusual and arguably inefficient management structure.

The project manager was employed by Imperial College London and the IPPC Secretariat provided the Lead Technical Officer. The project manager was contracted in a Letter of Agreement (LoA) between FAO and ICL. Two LoAs were required to span the length of the project, with the second running out several months before the end of the project and

effectively cutting off funds to ICL, as outlined in the final project report. This may warrant discussions between the FAO and STDF to determine whether an alternative process for project contractors is possible or it is sufficient to ensure that sub-contractors fully understand the application of the LOAs to avoid such situations in future.

Positioning the project within the IPPC framework was totally appropriate given the project goals and outputs. However, the role of the IPPC Secretariat and the integration of the project into the IPPC framework appear not to have been articulated in the Secretariat budget and work program and there were no resources allocated to the Secretariat from the project budget to perform this role. Staff movements in the Secretariat impacted continuity and added to a lack of clarity of the Secretariat role, which, in practice, seems to have been somewhat removed from the project activities. In addition, the complex of reporting requirements by the STDF, FAO and the IC was unnecessarily onerous and, if this governance model is used again, should be streamlined.

Future projects should be directed by IPPC priorities and ideally endorsed as such by the IC before a funding application is made. This endorsement should be reflected in the application when it is made. Where IPPC Secretariat support of the project implementation is required, there must be clear and adequate allocation of resources for the entirety of the work. The visibility that comes from this process should also support the integration of project outcomes into the IPPC framework and assure its legacy, as well as providing the STDF additional confidence that the project is both valuable and necessary.

There was a lack of clarity to the IPPC Secretariat around the interpretation of the STDF rules on IPPC staffing that might have resolved the resourcing challenges related to this project faced by the Secretariat. The STDF rules clearly say that regular staff cannot be funded from project funds. However, if it is permissible to backfill IPPC regular staff who are leading or contributing to a project beyond the identified FAO in-kind contribution, then this should be made clear and reflected in the project budget. In this case, appropriate IPPC Secretariat resources were not included in the budget at project design but were provided as an in-kind contribution drawn from FAO's non-regular budget when the project was ongoing. To avoid this situation in future, the role and funding of IPPC Secretariat staff in STDF and other projects should be clarified during the project design and captured in the budget.

This project differs from many other development projects in that central to it were relatively new tools that had not been widely tested or used within the IPPC community. Some pre-project or preliminary project activities to demonstrate the utility of the tools in support of pest risk management and communication may have brought forward more trade cases. Training facilitators in the use of the tools is valuable but may have been premature in the context of socialising the tools across the wider IPPC community. This will start to happen with the tools and supporting resources available on the IPP, but an earlier focus may have generated stronger interest and demand. A strategy for introducing new tools or technologies in the future would probably be helpful. As an example, the introduction of high throughput sequencing technology into the IPPC community as an innovative diagnostic tool was made through a CPM Recommendation No. 8 (FAO, 2019) and in the context of a general CPM Recommendation No. 7 on diagnostics (FAO, 2016). More general consideration and guidance for NPPOs on pest risk management as a core function, like diagnostic capability, could establish an appropriate context for the BC tools.

5.4 Trade cases involving Tunisia, Kenya and Mexico

Four trade cases involving the three countries are progressing, albeit slowly, due to impacts of the pandemic. Two cases involved importing plant propagation materials (seed and plants for planting) and the others involved exporting fresh fruit for human consumption. The primary focus of the two Kenyan cases was the management of several pests on mango and

avocado, including the false Codling moth and fruit fly. For Mexico it was management of the tomato brown rugose fruit virus (ToBFRV) in small seed lots for breeding or screening. Tunisia is seeking to develop permanent measures to replace emergency provisions for imports of grapevine planting material to prevent the introduction of *Xylella fastidiosa*.

All cases have completed production chains and DSSA analysis, which were prepared by the responsible trainee facilitators in consultation with their ICL trainers. The Tunisia case was also supported by technical advice and a field visit by ICL staff and progressed by the Facilitator and the Tunisia Coordinator. The effective management of Xylella holds significant interest for other countries in the Near East and North Africa region.

Most activity to date is being driven by the facilitators themselves although the involvement of their organisations is increasing as they use the tools and their knowledge of ISPM 14 to promote both within the context provided by the trade case. The strongest progress has been made where the trade case is strongly supported at the highest levels of the NPPO and where the NPPO has experience of systems approaches through their own imports or exports. One interviewee noted that the motivation of the countries involved is critical for success.

All cases have been impacted by travel and meeting restrictions during the pandemic. The case facilitators recognise the value of the production chain to provide visibility of the production system, pests and their management and the use of controls points to focus regulatory actions. While some virtual training and communication of stakeholders has occurred, it is not as effective as face-to-face meetings for actively engaging them in documenting the production system, identifying and considering the efficacy and practicality of pest management options, and seeing the whole process from beginning to end. Where engagement with industry has occurred, the production chains have enabled communications and established a common understanding of the trading pathway. Stakeholders have included, as relevant, farmers, researchers, regulators, inspectors, exporters, importers, and the importing and exporting NPPOs. Engagement with stakeholders will increase as COVID-19 restrictions allow.

The facilitators of the import cases noted that a contemporary pest risk analysis was imperative to direct and underpin the use of the BC tools. For exports, the focus was more on the biology and behaviour of the pests, production system controls, and the efficacy of those controls. The DSSA tool helped to objectively identify control points, noting that their selection enabled the pathway to be monitored for failure through the growing season and early remedial actions taken to ensure that the importing country conditions could be met.

Most of the facilitators involved in the trade cases had little understanding of ISPM 14 prior to their training. They learned to apply the production chain easily but found the DSSA more taxing. The use of the tools in a viable trade case that was strongly supported by the NPPO enhanced the training outcome for facilitators and generated enthusiasm for its further promotion and use.

All welcomed and expressed their appreciation of the strong support provided by the ICL team and the opportunity to discuss and progress their cases with the other trainees. They have developed a high level of confidence in using the tools and applying them to promote trade.

Several interviewees commented that they had successfully used the tools and training in recent trade negotiations to better manage pests on a pathway, and others advised that they had approval from their organisation to work with other areas to demonstrate the tool and pilot it in a real trade situation. The trainees, through close knowledge of the tools from their role in revising and simplifying them and the associated manuals early in the project and through the ongoing training and mentoring they received from ICL, expressed a level of comfort in their use. None reported the rejection of the concept of a systems approach by a

major trading country, which served to confirm to them that this is both a valuable and accepted option for managing pests in traded goods.

The four trade cases require further actions to progress from a documented production or value chain into export or import access. However, there was a high level of confidence across interviewees that trade would eventuate. In the meantime, the cases have been used as examples or opportunities to raise awareness of systems approaches for managing phytosanitary risks in trade and to demonstrate the tools within their respective regions and international forums.

5.5 Consideration of STDF review criteria

The criteria applied to ex-post project evaluations by the STDF include relevance, coherence, efficiency, effectiveness, impact, sustainability, and issues such as gender and environmental considerations. Most of these criteria are covered in this report but some additional commentary is provided here.

Coherence refers to the compatibility of the intervention with other interventions in a country, sector, or institution. This includes internal coherence and external coherence:

- Internal coherence addresses the synergies and interlinkages between the intervention and other interventions carried out by the same institution/government, as well as the consistency of the intervention with the relevant international norms and standards to which that institution/government adheres.
- External coherence considers the consistency of the intervention with other actors' interventions in the same context. This includes complementarity, harmonisation and co-ordination with others, and the extent to which the intervention is adding value while avoiding duplication of effort.

The evolution of the BC tools and their application through the two STDF projects, albeit with refinement and simplification, ensures consistency of the current tools with those developed and used in Asia. There may be other tools or approaches for implementing systems approaches using production chains, but they are unlikely to differ greatly from the BC tools in that they likely have their foundation in identifying and assessing pest risk management measures through PRA processes and implementing ISPM 14.

Financial management was provided by the IPPC Secretariat as an in-kind contribution to the project. Financial reports have been provided to the STDF Secretariat through the regular project reports and a final financial report provided by FAO. Unspent funds, largely from the travel budget, have been returned.

As noted above, a decision was taken by the IPPC Secretariat in consultation with the STDF Secretariat to not pursue the development of BC online tools as this was outside the scope of the budget and residual time of the current project. It remains an option for the future if it is warranted by stakeholder demand. This would require the agreement of the CPM as ongoing maintenance costs would need to be funded.

The residential facilitator training workshop in 2019 was reported to have been intense and immersive. Trainees considered it well run and efficient, and there is reference to lessons learned and applied from the training of PCE facilitators through an earlier STDF project. This approach to training gave the trainees ongoing access to their trainers during the week and the opportunity to practice their skills in a supportive environment. Many interviewees reflected that this increased their personal and professional confidence in engaging with others and leading interactive sessions. The ongoing teleconferences reinforced the residential training outcomes and provided ongoing access to the ICL trainers. This was greatly appreciated by the facilitators in their feedback to this review.

As mentioned elsewhere, a balance of gender, age and experience was achieved through selection of the trainee facilitators, as well as due regard to geographic origin. One case study highlighted the challenge of applying the BC tools to smallholder farmers, compared with large commercial enterprises. This is a risk to the application of the tools, but also offers potential benefits in bringing smallholders together with a focus on more sustainable and efficient crop production and pest risk management options. In these situations, NPPOs may be able to work with any development program that is operating in that area to good effect.

Many interviewees referred to the use of systems approaches as a way of protecting crops and natural environments. The DSSA tool can help stakeholders identify management options that used less chemicals and reduced pesticide residues in food. As such, systems approaches may be a useful strategy to reduce and address the risks of antimicrobial resistance in crop production systems and for responding to bans on the use of specific pesticides.

6. Conclusions

The main objectives of the review were to:

- Identify if the tools provided to implement systems approach were used by the NPPO for pest risk management
- Evaluate the contribution of the tools to help developing countries increasing opportunities for export plants and plant products
- Evaluate the sustainability of the project with respect to the use of the tools
- Identify project contribution to the IPPC work with respect to promoting the systems approach for pest risk management to the NPPO and the public
- Identify lessons learnt for possible project activities and increased uptake of the tools.

Analysis of this project against the logframe and review ToRs indicates that the BC tools, as they have been refined, are extremely useful in exploring, documenting, and communicating a systems approach for pest risk management. However, the concept of a systems approach, as defined in ISPM 14, is still not well understood by NPPOs. This may stop NPPOs from using the tools until something drives them to do so, such as a trading-partners uses them or requires them to be used in market access negotiations or they see others benefitting from their use. Introducing the tools in the context of 'pest risk management', rather than the less well understood 'systems approach' may encourage wider use.

Access to information on the IPP and to accredited facilitators will assist their use but may not encourage them to try them out in the first instance. Promotion of the tools through regional and sub-regional meetings using real trade cases and pre-prepared production chains might shine a light on the benefits of their use. The facilitators would then help to get the processes of using the tools rolling.

Interviewees involved in the ongoing trade cases were enthusiastic about the opportunities the tools offer in facilitating trade negotiations based on transparent production chains and the selection of science-based pest risk management options that were both effective and feasible. This had already facilitated discussions with some trading partners, leading to more use of risk management within the system rather than a focus on expensive or unavailable end-point treatments. These experiences, if captured and published as testimonials or success stories, will help with dissemination and uptake of the tools.

The pandemic has severely impacted the wider dissemination and use of the tools, which was a key measures of project sustainability. The 18-month hiatus on travel and face-to-face meetings has effectively halted most of the planned actions to demonstrate the value of the

tools in opening trade opportunities using real case studies. Progress will be made on the active trade cases as the pandemic recedes. In fact, the preparations made through documenting the production chain and DSSA analysis may accelerate it. However, this is beyond the scope of the current funding and will need to be captured through some other process.

Access is provided to the published BC tools in languages on the IPP, together with other supporting materials and the accredited facilitators. These products are sustainable and can be promoted for systems approaches and more broadly, for the mission in the IPPC Strategic Framework. While the contracting of a communications expert has assisted planning and implementation of the web pages, several interviewees felt that this would have been of more benefit earlier in the project and may have shaped a more active dissemination and engagement strategy with NPPOs.

Interviewees were invited to suggest ways of further promoting the use of systems approaches and the BC tools to NPPOs and the public. They provided a long list, and several offers of assistance in extending information on the work, the tools and their benefits were made. They suggested:

- Ensuring contracting parties are easily directed to the systems approach pages on the IPP – through promotion of links; news items with links; developing a 'pop up' to IPPC Contact Points to briefly describe tools, use, benefits; promoting the links to the facilitators (national, regional, and international)
- Using RPPO-led regional workshops – either as a topic for discussion or as a workshop session, such as that by NEPPO in the 2021 Regional Workshop; learn from the processes used to promote and facilitate adoption of the ePhyto solution
- Developing and promoting case studies and success stories as a resource for contracting parties – on the web pages; at CPM; through regional and bilateral meetings between CPs; through RPPOs; donor organisations; training workshops
- Integrating the use of the tools into e-learning packages – develop BC tools e-learning; integrate the tools and their use into PRA e-learning packages
- Integrating the use of the tools and their function into new and existing guidance documents such as market access negotiations (IPPC, STDF/WTO, other organisations including AID development agencies)
- Using the accredited facilitators as extension agents in their country, region and internationally; maintain the facilitator network as a community of practice to maintain their skills; attend and potentially present information on the tools, experience of using them etc. at international and regional meetings eg. WTO-SPS Committee, FAO regional meetings; profile some or all facilitators and let them tell their stories through news items, interest items
- Establishing a help desk function to channel requests for information and help using the tool by accredited facilitators
- Webinars – an active but virtual way of extending use and benefits of the tool. Best in small groups; record, post and share webinars; target webinar audiences eg. Plant health experts and/or regulators and/or farmers or their representative bodies
- Integrating into relevant IPPC processes including pest risk management, commodity standards; IC and Standards Committee to actively consider wider application of the BC tools and potentially others; capture risk management policies in a CPM Recommendation

- Using other organisation's programs and forums to disseminate information – such as STDF Public-Private Partnerships where relevant; seminars including STDF Events; links from STDF project pages; relevant international partners of the IPPC Secretariat
- Raise awareness about the Systems approach and BC tools by presenting one of the successful trade cases during an IPPC/STDF event. For example, something similar was done with the World bank in food safety: https://www.standardsfacility.org/systems-approaches-food-safety-and-plant-health-sps-committee-side-event, at which links to the BC project and related tools were shared.
- Integrate the tools into a risk management module to facilitate safe trade outcomes for implementation by capacity donor/provider organisation such as the World Bank and AID organisations, in conjunction with other phytosanitary tool makers such as CABI, COLEACP
- Promote use of the tools on the IPP and gather data; review usage after 12 months; review and revise.

It was suggested that the publication of the systems approach web pages should be considered a 'soft launch'. Web analytics will capture data and provide information on use, access, location, language etc that could be considered together with feedback from countries progressing trade cases, ICL, the accredited facilitators and the IPPC Secretariat, in a formal review in September 2022. This would allow time for the trade cases to progress and outreach activities to further promote the tools and their use. The review could make recommendations to the IC regarding the use, benefits, wider integration, retention, further development, and ongoing resourcing of the tools.

In summary, the project has achieved refinement of the tools and supporting manuals and has published them on the IPP for all to use. It has trained and validated 12 facilitators, who have been accredited by the IPPC Secretariat to assist NPPOs apply the tools to support export and import market access.

The project initiated seven trade cases to demonstrate the use and value of the BC tools. Four of these are progressing and will likely facilitate trade negotiations between importing and exporting NPPOs. Early indications are that these will apply systems approaches to manage pest risks as a direct result of using the tools.

These outputs support the outcomes and impacts outlined in the project logframe. However, there will likely be an extended lag time in the wider uptake of the tools and consequent application of systems approaches to increase opportunities for trade due to the impact of the pandemic on the timely completion of the trade cases.

Hindsight is a wonderful thing. The impacts of the pandemic have been wider and longer than could have been imagined in early 2020. If they had been known, the project team might have considered suspending the project until stakeholder engagement and international travel could recommence. Nevertheless, there has been progress, albeit slow and steady, on the active trade cases and they are providing useful experience to the facilitators that are directly involved in them, and to their extended network. The project has provided a good foundation for future impact.

7. Recommendations

The following recommendations are drawn from the analyses in this report, so it is best read in full to ensure the context of each recommendation is interpreted correctly. They are primarily made in relation to this project and to others of a similar nature that may be

considered in future. Their application will contribute to sustain and enhance the outcomes from the project.

This project

It is recommended that:

1. The IC actively drives the wider dissemination and update of systems approaches and the BC tools, and particularly pursues opportunities with the STDF Secretariat to promote their use to facilitate market access negotiations and enhanced trade opportunities. They might also identify and disseminate lessons from the respective trade cases in collaboration with participating NPPOs, when these are completed. This would enable confidentiality and trade sensitivities to be accommodated.
2. Guidance and/or training materials are developed through the IC that guide NPPOs on the use of the BC tools to enable and support better management of pests in production and trade pathways. This should include but not be limited to implementation of systems approaches and draw from the facilitator training program and materials, as well as the e-book published from the earlier STDF Beyond Compliance project. This could be supplemented by relevant trade cases, including testimonials or commentary from NPPOs that have participated in and benefited from using the tools to achieve better trade outcomes.
3. The IPPC Secretariat should consider opportunities for the wider use of the BC tools to progress the mission of the IPPC including through the relevant strategic and development goals in the IPPC Strategic Framework 2020-2030 with input from the IC and other CPM bodies, as relevant. The IPPC Secretariat should also consider how resources should be mobilised to encourage this. This could include:
    - Referencing the BC tools and their use in standards that provide guidance on pest risk management including ISPM 11 (PRA – potentially as an Annex or Supplement for risk management and risk communication); ISPM 14 (developing and validating Systems Approaches for pest risk management); pest risk management terms in ISPM 5 (Glossary) or the draft standard on audit
    - Describing the application of the tools in implementation guides relevant to pest risk analysis, risk communication (FAO, 2019), negotiating market access, operating an NPPO etc.
    - Integrating the BC tools and implementing methodology into PRA e-learning tools to direct pest risk management analysis and communications
    - Raising awareness of the BC tools to assist bilateral market access negotiations by providing transparency of production and pest management systems; providing confidence to the importing country that measures are applied and are effective; offering opportunities for increasing their use through training and capacity development programs offered by the WTO and other trade-enhancing donor programs
    - Linking the application of the tools to phytosanitary treatments standards and pest management options
    - Integrating evaluation of pest risk management capability in the relevant PCE module. The use of these tools by an NPPO may be an indicator of capacity or provide a platform for further capacity development in pest risk analysis, including management and communication through national capacity development plans

- Integrating them, as relevant, into actions that implement the strategic and development goals in the IPPC Strategic Framework 2020-2030 (FAO, 2020) including:
  - Sustainable pest risk management options, such as systems approaches, are implemented widely to minimize pest impacts right through the production process and harvesting, and to minimize the need for end-point treatments (Strategic objective A4)
  - All NPPOs have pest risk analysis capacity in place to identify and mitigate pest risks to crop production (Strategic objective A5)
  - Pest risk prevention is integrated throughout the production, processing and trade chain of plants and plant products. Sustainable pest risk management options (Strategic objective A6)
  - Contracting parties have mechanisms in place to control the spread of environmental contaminating pests on non-plant trade pathways (eg. invasive ants on vehicles and machinery, or gypsy moth egg masses on sea containers and vessels) (Strategic objective B2)
  - Documenting commodity standards – by defining a pathway, documenting pest risks from published PRAs and identify risk management options (Development Goal 7.2)
  - Management of e-commerce and postal and courier pathways by using the tools to define the respective pathways, opportunity, and options for risk management options (Development Goal 7.3)
  - Enabling the transparent integration of authorised entities (Development Goal 7.4) into the production chain with reference to ISPM 45
  - Connecting assurance, verification, and evidence elements to the BC-enabled production chain to form an audit framework based on critical control points (ref. draft ISPM on audit)
  - Assessment and management of climate change impacts on plant health. The transparency of pests, their controls and production chains provide a platform for monitoring changes in pests and their impacts (Development Goal 7.6)

4. The IC review and consider whether the systems approach pages and content on the IPP and, with regard to the promotion and uptake of the BC tools, should establish a 'pest risk management' tile on the phytosanitary systems landing page and consider the structure and content of the new page to best achieve this. The 'Systems Approach' landing page could be retained or could be integrated into the new tile.

5. The IC, SC, and IPPC Secretariat, after one year of initiation of the tool, should consider evaluating the project outcomes achieved and make recommendations to the Strategic Planning Group on the opportunities offered by broader integration of the tool into CPM processes to progress the IPPC mission and strategic and development goals (recommendation 3), and the activities and resourcing that would be required to achieve this.

6. Other organisations involved in SPS capacity development and trade facilitation, particularly for plants and plant products, should be made aware of the benefits of integrating systems approaches and the enabling BC tools and accredited facilitators into their programs.

7. The role, function and expertise of BC facilitators should be better defined and made clearer, including any boundaries or limits of their role. This should be published and direct the training of more BC facilitators in the future, should they be needed. The baseline skills and knowledge of trainees, the learning objectives and the competency and assessment criteria should have been documented in the training program together with the criteria for official accreditation of their competency to undertake the facilitator role by the IPPC Secretariat. Engaging the facilitators in promoting the wider use of the BC tools, as outlined in Recommendation 3, would have an added benefit of sustaining the facilitator network and potentially maintaining and expanding their skills.

8. Should a larger user base become established over time, the development of the BC tools as an online tool should be reconsidered. A 'community of practice' might also be established, like the current facilitator network, to further enable consistent use of the tools. Resources will need to be mobilized for training in the use of the tool. The approach used by the IPPC Secretariat to promote the use of the Online Comments System, including through providing training at regional workshops, might be a useful model for expanding the uptake and use of the BC tools.

Additional recommendations for future projects

For projects proposing the development and deployment of tools, it is recommended that:

9. The IC should consider developing a policy on forming and managing steering groups for external projects that are implemented under the auspices of the IPPC framework, including by the IPPC Secretariat and any CPM subsidiary bodies. This should include a process for assessing project proposals that require the use of IPPC resources against IPPC priorities before they are submitted to funding bodies. A commitment of IPPC Secretariat resources to the project should be secured, even if initially in principle, and included in the relevant budgets.

10. Requirements for the ongoing operational maintenance and support of any new tool should be defined and secured prior to approval for its development and deployment. This should include a clear view of the projected use of the tool as core to the hosting organisation that will ultimately be required to provide the resources for its upkeep.

11. Communications expertise is used during project planning as well as through its implementation to optimise the dissemination and uptake of tools. For future projects, a communication strategy should be developed by the implementing entity that includes activities that should be undertaken after project completion. A communications strategy would inform a project plan and ensure that communications materials are developed as the project progresses. Guidance on project communications relevant to project implementation is included in Annex 2 of the STDF Communications plan 2020-2024 that may assist implementing entities [STDF, 2021].

12. E-learning or other web-based mechanisms may be better options for facilitating the uptake and use of new tools, given the continuing reliance on virtual communications for the next few years. Where a key element of the end use is not widely understood, such as systems approaches, the strategy may need a capacity development component.

13. The STDF and FAO should consider the project management and administration issues raised in the project final report and identified in this review to reduce the administrative burden and costs on project managers. Particularly whether a Letter of Agreement is the best vehicle for contracting external staff for a three-year project, what constitute appropriate in-kind contributions by FAO, how STDF rules are applied

to fund project management costs, including reimbursement of FAO staff costs from STDF project funds, and ensuring these matters are addressed during the negotiation of the STDF-FAO project and funding agreement. The role and funding of IPPC Secretariat staff in STDF and other projects should be clarified during the project design and captured in the project budget.

14. The project should actively monitor project risks identified in the logframe and trigger an analysis of these and any unforeseen risks to determine and address their impacts on planned project outcomes. This role could be included in the role and function of the project team and any steering committee that provides project oversight, including the donor organisation as there may be a need to adjust budgets to accommodate project changes (e.g. budget reallocations due to Covid19-related travel restrictions).

15. Guidance or strategies on how to optimise the use and benefit of virtual tools for SPS capacity development activities in the post-COVID era are developed by the STDF with other AID organisations. With opportunities for international travel and face to face meetings likely to be limited for several more years, some guidance on the tools that are available and how they might be used to undertake group development training and engagement would be extremely useful.

16. The STDF program rightly targets developing countries. The active promotion by developed countries of global tools that assist developing countries achieve more and better market access would generate a 'pull-through' to complement the 'push-through' by a development project and achieve wider adoption and use. A project model that actively promotes partnerships between developing and developed countries for these types of projects through the STDF mechanism would strongly enhance and expedite project impact. This is consistent with the STDF 2020-2024 strategy and should be actively implemented to increase dialogue, learnings, create synergies and share available know-how, tools, and good practices to facilitate safe trade.

8. Lessons learned

There are many lessons that can be learned from this project. Some have been identified in this report and others are touched on here. The progress reports provided to the STDF Secretariat identifies these and others. Some major lessons are as follows:

Project management

The logframe is a powerful project management tool and should more actively direct project planning, implementation, monitoring, adaptation, and review to ensure the outcomes proposed are achieved. For example, the assumptions and risks identified in the logframe for this project have proven to be accurate. General conditions for facilitating trade, and particularly new trading opportunities, are far from normal due to the pandemic and its impact on government resources and priorities, the ability to engage with stakeholders and the global shift to remote or virtual communications. This impacted the progression of trade cases beyond the theoretical except where there was a strong commitment of key parties to the trading outcome offered by the case and the means to keep them moving.

The logframe proposed a measure of project impact for five years after its completion. The indicator would be a 25% decrease in time taken for market access negotiations between NPPO's after 5 years from project completion. This presupposes the rapid uptake and use of the BC tools to help facilitate these negotiations. In the absence of completed trade cases, it

is likely that the lag phase for adoption and use of the BC tools will be longer than anticipated so this is more likely a ten-year assessment measure, with many dependencies.

Facilitators

Face-to-face meetings work best and the training workshop for facilitators helped to form the cohesive network that continues to provide benefits to both the trainers and trainees. This cohesion also made the ongoing mentoring of trainees through regular discussions highly productive.

Selecting trainees with the right skills and experiences, cultural diversity, gender, age etc. provides a rich learning environment and ensures that facilitators have the necessary knowledge to effectively apply the tools.

A facilitator may find it difficult to facilitate in their own country due to ongoing work commitments but play a valuable role in extending their knowledge within their NPPO and their region.

The role and function of the facilitator in assisting a trade case needs to be clearly defined with the NPPO they are assisting. Their focus is on using the tool, not the market access process unless this is agreed and supported by the facilitator's own NPPO.

The validated facilitators should be, and many are, promoting the use of the tools in their own country, and where possible, their region. This seems to be initially limited to raising awareness of the relevant material on the IPP but should expand to more proactive engagement as the pandemic eases. Several of the facilitators interviewed have promoted the use of systems approaches and the BC in regional forums and are actively pursuing opportunities to test them with others in their organisations including risk analysts, risk managers and inspectors.

Trade cases

A perceived failure still provides valuable lessons. The three trade cases that ended early provided useful information that can be applied in the future. The conceptual set up of all trade cases is being used to tease out strategic issues. This will help to avoid delays and failures. For example, assessing the economic feasibility of the proposed trade can avoid wasting efforts on pursuing a non-viable market access proposal; confidentiality concerns will direct how a country might want to use an accredited facilitator in use of the BC tools; and trade cases involving small farm-holders may require a different engagement strategy.

The delays in progressing the trade cases provides real life insight into implementation challenges for the facilitators. These experiences have clarified that the facilitator role is to support strategic thinking and communication on pest risk and combined risk management measures through the tool. The role of the NPPO or country coordinator is to develop, coordinate and drive the market access strategy in which the tool would be used. They can be very busy people and need to have sufficient time and higher-level support to undertake this role effectively.

The publication of outcomes of trade cases in which the BC tools have been used is yet to occur. Publishing at least one success story on the IPP will likely lead to others and should be encouraged by the facilitators, ICL, the STDF and the IPPC Secretariat as they become aware of them and if the confidentiality concerns that often surrounds trade can be addressed.

The small number of trade cases indicated the low level of knowledge of the tools and systems approaches in NPPOs. The development of relevant communication materials and how to use instructions will be crucial to support future uptake. Had this material been developed and deployed early in the project, the engagement of contracting parties may have been greater resulting in more and diverse trade cases. The earlier selection of trade cases might also have

enabled participating NPPOs a role in project design leading to greater ownership of the project, the tools and the trading outcomes achieved.

Tools

IT platforms evolve and there is a cost associated with maintaining them and updating them. Development costs may be far less than ongoing maintenance costs and this needs to be considered for sustainability of the tool. Free and widely available platforms that are reliable and accessible are an important consideration when an outcome is global dissemination and uptake.

The success of the tool outputs is dependent on the inputs including knowledge of production systems, identifying stakeholders and technical knowledge of the target pests and their controls.

Dissemination and promotion

A communications expert improved the quality and volume of dissemination materials. Their involvement earlier in the project for longer duration would have reduced the impact on technical staff who provided and checked content and improved planning for developing and disseminating quality output throughout the project.

The Trainees encouraged the development of a video on the IPP to explain systems approach and the role of the BC tools as part of the communications strategy.

9. Acknowledgements

This review was conducted over a short time frame. I am very grateful to the 25 people who were willing to be interviewed and share their thoughts and experiences of the project – even at 2.00 am! Thank you also the IPPC secretariat for their assistance. Your contributions are greatly appreciated.

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Annex 1

Review Terms of Reference

OED PROJECT EVALUATION MANUAL FOR DECENTRALIZED OFFICES

Terms of Reference (TORs)
For Evaluation of FAO's role and work on Rolling out Systems Approach globally

PROJECT EVALUATION SERIES

Terms of Reference for the Review of Rolling out Systems Approach globally MTF/INT/336/STF

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

OFFICE OF EVALUATION

[*2021-06-22*]

Contents

Acronyms and abbreviations

BC	Beyond Compliance
BH	Budget holder
BN	Bayesian Network
CPF	Country Programming Framework
CPM	Commission on Phytosanitary Measures
DSS	Decision Support System
EM	Evaluation Manager
EOI	Expression of Interest
EPPO	European and Mediterranean Plant Protection Organisation
ET	Evaluation team
ETL	Evaluation team leader
FAO	Food and Agriculture Organization of the United Nations
FAO	Food and Agriculture Organization
FPMIS	Field Project Management Information System
FR	Follow-up Report
IAEA	International Atomic Energy Agency
ICL	Imperial College London
IPM	Integrated Pest Management
IPPC	International Plant Protection Convention
IRSS	Implementation Review and Support System
ISPM	International Standards for Phytosanitary Measures
LTO	Lead technical officer
LTU	Lead technical unit
MR	Management Response
MTE	Mid-term evaluation
NEPPO	Near East Plant Protection Organisation (Plant Protection Organization of the Middle East)
NPPO	National Plant Protection Organisation
OED	FAO Office of Evaluation
OIRSA	Organismo Internacional Regional de Sanidad Agropecuaria
PC	Programme Committee
PCE	Phytosanitary Capacity Evaluation
PEC	Project Evaluation Coordinator
PPPO	Pacific Plant Protection Organisation
PRA	Pest risk analysis
PTF	Project Task Force.
RO	Regional office
RPPO	Regional Plant Protection Organization
SO	FAO Strategic Objective
SPS	Sanitary and Phytosanitary Measures
SRO	Sub-regional office
STDF	Standards and Trade Development Facility
TCI	FAO Investment Centre

TCSR	Donor Liaison and Resource Mobilization Team
ToC	Theory of Change
ToR	Terms of Reference
WTO	World Trade Organization

Introduction

These Terms of Reference (TORs) have been developed to guide the evaluation of FAO project "' Rolling out Systems Approach globally (MTF/INT/336/STF)"**,** sharing tools for enhanced application of Systems Approach and market negotiation on plant pest risk. This project was funded by the Standard and Trade Development Facility. The document presents key elements that will shape the proposed final evaluation by offering a roadmap for the Evaluation Team (ET) and clarifying the roles of all stakeholders.

The TORs present in order: (i) background and context of the evaluation with a summary project portfolio; (ii) purpose of the evaluation; (iii) evaluation scope; (iv) evaluation objective and key questions; (v) methodology; (vi) roles and responsibilities; (vii) evaluation products and (viii) evaluation timeline.

Background and Context of the Project/Program

Most developing countries with any agricultural base identify export of plants and plant products as a key to economic development and inflow of hard currency. However, the capacity of developing countries to meet international plant health standards (ISPMs) in regards phytosanitary export certification, is quite variable amongst those countries. International trade, as well as domestic trade and travel can introduce regulated and invasive pests that pose a threat to both natural plant resources and managed crops, biodiversity and forest production. An effective plant health system, operating in each country by national plant protection organization (NPPO), can prevent the introduction of new plant pests while still allowing movement of goods and people without undue restrictions.

The use of pest risk management measures that are justifiable and in proportion to the threat posed is a critical factor in the balance between preventing the introduction of regulated and invasive plant pests and allowing movement of goods and people. Beyond this point, measures may be considered to be non-tariff trade barriers. Under the harmonized regimes of the International Plant Protection Convention (IPPC) and the World Trade Organization (WTO) Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement), NPPOs use Pest Risk Analysis (PRA) to estimate the risk from specific trade or other pathways and to propose phytosanitary measures to reduce that risk to a level acceptable to the importing country. The framework for PRA and steps to be followed are described in the International Standards on Phytosanitary Measures (ISPM) 2 Framework for pest risk analysis, ISPM 11 Pest risk analysis for quarantine pests and ISPM 21 Pest risk analysis for regulated non quarantine pests.

The goal of the proposed project is to increase opportunities for export trade in plant products by developing countries through better capacity to deal with phytosanitary issues during market access negotiations and more options for managing pest risk. The greater opportunities will be based on the wider inclusion of more effective and efficient options for managing the pest risk, as estimated by the importing country NPPO, and for resolving issues when trade is disrupted. The project aimed to achieve this by enhancing competency and confidence in applying Systems Approach through the use of innovative decision support tools which are applied to real, priority trade cases. That in turn, will facilitate better implementation of the ISPMs 2, 11, 14, 21 and 24.

The application of the Systems Approach tools was meant to contribute to the development of trade proposals, the mapping of phytosanitary risks and actions to be undertaken along the whole production chains. That in turn should ensure high quality production of plant products, the identification of the most feasible and efficient pest management options, as well as strengthening collaboration among stakeholders involved in the international trade.

The project has the following expected outcome: an increased uptake of the Systems Approach (Beyond Compliance) tools as a means of increasing understanding and confidence in use of combinations of

pest risk management measures. The tools were already tested, improved and validated on limited cases in the subregion of South East Asia. The project *Rolling out a Systems Approach Globally* will be extending the cases while embedding expertise to additional countries and regions, which also helps to disseminate experiences through existing regional networks and meetings on plant health. The use of these tools will directly support deeper understanding of ISPM 14 by those participating.

The project has also three expected outputs:

1. practical tools that demonstrate predicted efficacy of alternative plant health risk management measures produced for promising trade cases from developing countries;

2. systems approach tools more broadly accessible, in particular to developing countries; and

3. countries assisted in market access negotiations for plant products.

The oversight of the management and delivery of the project has been placed under the responsibility of the IPPC. Imperial College London, and more specifically the Centre for Environmental Policy, has been engaged under a Letter of Agreement (LoA) to deliver the technical aspects of the project. The IPPC subsidiary body Implementation and Capacity Development Committee (IC) throughout the project cycle supported project activities. This body served as the project Steering committee. The project was approved by the STDF working group in March 2017.

This is a final evaluation requested by the donor and included in the project document. Under STDF Operational Rules, the implementing organization (i.e. FAO under this project) is required to carry out an end of project assessment (with budget specified in the project budget). The end of project assessment will be carried out by an independent evaluator. Report of the assessment will be made available to the STDF Secretariat by 30 November 2021.

Evaluation purpose and users

In line with STDF's MEL Framework, STDF funded projects are subject to an independent end-of-project assessment, budgeted in the project application. The implementing agency (i.e. FAO under this project) is required to contract an external evaluator to carry out this assessment, which will evaluate the final project results, based on the project logical framework and indicators. This would be expected to include the extent to which the project strengthened SPS capacity and facilitated trade, among other benefits. It will be included as part of the final project report, submitted by the implementing organization to the STDF Secretariat. See paragraph 63-66 of the STDF Monitoring Evaluation and Learning Framework (especially those that refer to independent end-of-project assessments) for guidance.

The end of project evaluation will be carried out by an independent evaluator. Report of the assessment will be made available to the STDF Secretariat by 30 November 2021. The Budget size and specific needs with respect to the assessment, will be conducted as an internal review with the support of OED and not as a full-flagged evaluation.

Evaluation scope

The end of project assessment will evaluate the period of project execution that goes from 1/7/2018 until 30/06/2021, covering the activities in all project components. The evaluation will assess i) the performance of the project considering both its inter-regional, regional and national dimensions; ii) its results, their sustainability and transformational changes occurred in the access to System approach for pest risk management , including its contribution to the IPPC work; iii) shortcomings as well as good practices of project implementation.

Regarding geographic coverage, the evaluation team will cover case studies concerning Tunisia, Kenya and Mexico by conducting a remote assessment whilst ensuring a proper data triangulation. Due to budget constraints and most importantly to the current COVID-19 pandemic no field visits are foreseen.

Evaluation objective and key questions

The objective is to know if the tools provided to implement systems approach are known, understood, appropriately used and found useful by the NPPOs. In addition, the input of the facilitators should be evaluated.

The evaluation objectives and main questions have been identified in consultation with STDF The main assessment objectives are:

- Identify if the tools provided to implement systems approach where used by the NPPO for pest risk management,
- Evaluate the contribution of the tools to help developing countries increasing opportunities for export plants and plant products
- Evaluate the sustainability of the project in particular with respect to the use of the tools
- Identify project contribution to the IPPC work in particular with respect to promote the systems approach for pest risk management to the NPPO and the public
- Identify lessons learnt for a possible project activities and results upscale.

Evaluation questions

The anticipated project outcome is increased uptake of the Systems Approach (Beyond Compliance) tools as a means of increasing understanding and confidence in use of combinations of pest risk management measures.

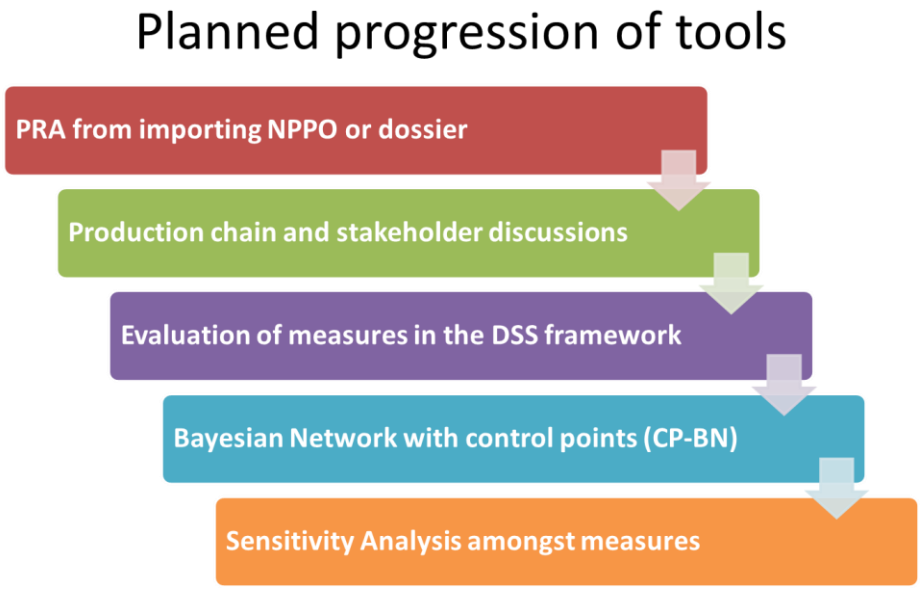

Figure 2. Original plan for progressive use of tools, whereas experience showed that individual tools may be used alone, or applied in a different sequence

The *Beyond Compliance* tools can be used together to develop an overall analytical framework for Systems Approaches (Figure 5), as was the original design. Experiences in SE Asia showed that descriptive tools (Production Chain, DSS) can be used without constructing a BN. As with the

Phytosanitary Capacity Evaluation (PCE) tool, the tools from *Beyond Compliance* benefit from facilitation or initial training. Even the most intuitive and popular *Beyond Compliance* tool of mapping a Production Chain, which could be done using a blackboard or a piece of paper, can be more useful by using free software that permits the user to indicate causal and interacting relationships.

In general, there are three expected outputs of the project:

- practical tools that demonstrate predicted efficacy of alternative plant health risks management measures produced for promising trade cases from developing countries;
- Systems Approach tools more broadly accessible, in particular to developing countries; and
- countries assisted in market access negotiations for plant products.

Outputs will vary by the context of the trade case. The Beyond Compliance approach is to create a Bayesian network (BN) for each significant pest or pest guild, using figures straight out of the DSS or quantification. The BN is based in the freely available GeNIe (Graphical Network Interface) software package (https://dslpitt.org/genie/) and has proven effective to debate a point of disagreement with sophisticated trade partners. However, less developed cases might benefit from developing a Production Chain with private sector without further application of tools until the feasibility and potential value of the proposed export can be determined.

The main evaluation questions listed below are meant to guide the evaluative work in order to reach the above-mentioned assessment objectives. These questions have also been drafted taken into consideration specific expected results and objectives of the project at interregional, regional, and national level. These will be further developed and broken down into sub-question by the evaluation team. Listed in an evaluation matrix with related indicators and means of verification, they will also capture specific features of project implementation at country level.

Questions

1) To what extend has the project been implemented efficiently, cost-effectively, and management been able to adapt to any changing conditions to improve the efficiency of project implementation, in particular ?

   What factors fostered or hindered the efficient implementation and execution of project activities? To what extent it was actually possible to adapt to them?

   To what extend the project was to be adapted as a consequence of the COVID 19 pandemic?

   Where they other factors than the pandemic which hindered the implementation of the project?

   Were the funds used appropriately, taking in account the circumstances ? Where they appropriately reallocated when necessary and possible?

2) To what extend the objectives of the project were reached? What intended or united results can be identified?

   Were the tools made available to all NPPO?

   What were the actions taken to explain and promote the use of these tools?

   Is there a team of validated facilitator ready to support the use of the tools by the NPPO

   How did the competence of facilitators was verified?

Does NPPOs, beneficiaries of the project, know and are satisfied by the outcome of the project?

Was the help of facilitators actually demanded? Was their input well appreciated by NPPOs?

3) What is the likelihood that the project results will continue to be useful or will remain even after the end of the project?

   What process has the project generated or supported that ensure economical and environmental sustainability? If none, what processes should be put in place?

   What are the key risks which may affect the sustainability of the project benefits?

4) What lessons can be identified from project design, implementation and management that may be useful for a follow-up phase or for other current and future projects?

   What could be the lessons learned from the implementation of this project, with respect to adaptation to major circumstances, in matter of management and relations among the organizations involved?

   Are the tools, as they are customized, the best means to promote the implementation of system approach?

   What remains to be done in the sector of systems approach in order to ensure pest risk management?

5) Were gender equality considerations taken into account in project implementation and management?

Methodology

The evaluation will adhere to the UNEG Norms & Standards and be in line with OED Manual and methodological guidelines and practices. The evaluation will adopt a consultative and transparent approach with internal and external stakeholders throughout the evaluation process. Triangulation of evidence and information gathered will underpin its validation and analysis and will support conclusions and recommendations.

To answer the key questions, an evaluation matrix will be developed in which the indicators, the evaluative criteria, the sources of information to monitor said indicators. The evaluation team will further develop the main evaluation questions presented in this ToR and break them down into sub-questions able to capture specific features of project implementation at country level, taking into consideration specific features of the systems approach sector and project workplan.

In general, the following methods and sources will be used to collect primary and secondary data to answer the evaluation questions:

- Desk review of the MTE report, project documents, the same project information platform, semi-annual and country progress reports, PIRs, national strategic documents, regional / local governments and the organizations and institutions involved related to the issue of systems approach technical reports and reports from FAO support missions, and any other that is identified in the course of the evaluation;

- Semi-structured interviews (remotely) with facilitators, stakeholders and participants at the regional, national and local level, public and private, based on interview protocols developed by the evaluation team.

- Focus group discussions (remotely) with Project participants and stakeholders, including local communities involved in artisanal fishery, also supported by interview protocols;

- Online surveys if deemed necessary by the evaluation team;

- Technical knowledge and experience of the evaluation team

Due to the current COVID-19 pandemic and budget constraints the plan for the investigation phase does not foresee field visits.

At the beginning of the investigation phase, a protocol for the interviews will be developed according to the type of actor to be interviewed and the topic to be addressed.

Beyond the methodological elements outlined above, final decisions about the specific design and methods for the evaluation should emerge from consultations among the project team, the evaluators, and key stakeholders about what is appropriate and feasible to meet the evaluation purpose and objectives and answer the evaluation questions. A detailed methodology should be elaborated in by the evaluation team and presented together with an evaluation matrix before launching the investigation phase.

Roles and responsibilities[1]

This section describes the different roles that key stakeholders play in the design and implementation of the evaluation in the case of evaluations conducted under the BH responsibility.

The **Budget Holder** is responsible for launching the evaluation, informing OED, and assigning key responsibilities throughout the process. The BH should appoint an independent Evaluation Manager, who will be responsible for:

- ensuring all steps of the evaluation are carried out.
- developing the first draft evaluation ToR, ensuring inputs from all project stakeholders (including the donor);
- incorporating OED's comments and finalizing the ToRs;
- identifying and recruiting the Evaluation Team, with backstopping as needed from OED;
- briefing the ET at the beginning of the evaluation on process, methodology and tools, with support from OED focal point;
- ensuring wide availability of all project information and documentation, including available baselines, progress reports, monitoring data, background information on project context, stakeholder analysis, etc.;
- organizing meetings with relevant stakeholders and partners for the ET;
- organizing the field mission(s), including all logistical aspects;
- circulating draft evaluation report for comments to OED and to all project stakeholders and make sure these are addressed by the Evaluation Team;

1 See more details about roles and responsibilities in the OED project evaluation Manual

- ensuring communication among all evaluation stakeholders, as well as for timeliness of key evaluation deliverables.
- sharing the final report with OED and with the BH

The BH is responsible for leading and coordinating the preparation of the FAO Management Response and Follow-up Report to the evaluation, with support and inputs from PTF members and other FAO or non-FAO stakeholders, as relevant.

The Office of Evaluation (OED) will appoint an OED evaluation focal point to provide technical backstopping in launching the review process, including guidance and support to the EM and to the PTF on technical issues related to key evaluation steps. In particular, OED shall support the EM/PTF in the identification of the evaluation team members, may participate in interview panels, brief the ET on the evaluation process.

In addition, OED reviews the draft ToR and draft report for Quality Assurance purposes to review presentation, coherence with the ToR, and finally review the quality, clarity and soundness of evidence and analysis upon which evaluation conclusions and recommendations are based.

The Evaluation Team (ET) is responsible for further developing and applying the evaluation methodology, for conducting the evaluation, and for producing the evaluation report. All team members, will participate in briefing and debriefing meetings, discussions, field visits, and will contribute to the evaluation with written inputs for the final draft and final report. The evaluation team will agree on the outline of the report early in the evaluation process, based on the template provided by OED. The ET will also be free to expand the scope, criteria, questions and issues listed above, as well as develop its own evaluation tools and framework, within time and resources available and based on discussions with the EM, consults the BH and PTF where necessary. The ET is fully responsible for its report which may not reflect the views of the Government or of FAO. An evaluation report is not subject to technical clearance by FAO although OED is responsible for Quality Assurance of all evaluation reports.

The Evaluation Team Leader guides and coordinates the ET members in their specific work, discusses their findings, conclusions and recommendations and prepares the final draft and the final report, consolidating all inputs received from the ET.

Evaluation team composition and profile

The evaluation team will be made up of one international independent consultant consultant.

The evaluator skills mix will comprise:

- Experience evaluating international cooperation development programs;
- Technical background on plant health
- Knowledge of the issues linked with Phytosanitary controls in international trade, in particular market access
- Knowledge of impact of biodiversity of plant pests
- Knowledge on phytosanitary measures
- Knowledge of IPPC standards, especially ISPM 14
- Knowledge of developing countries regarding their National Plant Protection Organization
- Familiarity with FAO and GEF policies and project implementation/ evaluation requirements.

The evaluation team will not have prior direct involvement in the formulation, execution or support of the project and will sign the FAO / OED Declaration of Interests form.

Evaluation products (deliverables)

This section describes the key evaluation products the evaluation team will be accountable for producing. Based on the STDF Project report guideline (see in annex) At the minimum, these products should include:

a. *Evaluation Matrix and investigation phase methodology*

b. *Draft evaluation report—the project team and key stakeholders in the evaluation should comment on the draft evaluation report.*

c. *Final evaluation report[2]: should include an executive summary and illustrate the evidence found that responds to the evaluation questions listed in the ToR. The report will be prepared in English, with numbered paragraphs, following the OED template for report writing. Supporting data and analysis should be annexed to the report when considered important to complement the main report. Translations in other languages of the Organization, if required, will be FAO's responsibility.*

d. *Evaluation brief and other knowledge products or participation in knowledge sharing events, if relevant.*

Evaluation timeframe

The evaluation will take place during September 2021. The following table provides more details on the tasks to be carried out.

Task	**Dates**	**Duration**	**Responsibility**
Launch of the evaluation	6 months before the project NTE		BH/PTF
ToR finalization			PTF and OED for comments and quality control
Team identification and recruitment			PTF
Reading background documentation provided by PTF			ET
Briefing of ET			PTF, supported by OED when necessary
Evaluation mission			ET

[2] See Annex 3 of the STDF Project Evaluation Manual .

Evaluation Report first draft for circulation			PTF and OED for comments and quality control
Evaluation Report final draft for circulation			PTF and OED for comments and quality control
Final Report, including publishing and graphic design			PTF
Management Response	1 month after the Final report is issued		PTF
Follow-up report	1 year after the MR is issued		PTF

Annexes

Annexes can be used to provide additional detail about evaluation background and requirements to facilitate the work of evaluators. Some examples include:

1. *Project evaluation report outline:* Here their main outline for the evaluation report should be provided, with reference to the outline for project evaluations.
2. *FAO Strategic Objectives, Results and core functions, 2010-2019*: Outcomes that are related to the strategic objectives are described here: http://www.fao.org/docrep/meeting/027/mg015e.pdf
3. *STDF Project Evaluation guideline :* www.standardsfacility.org/sites/default/files/STDF_214_Evaluation_Guidelines_2021_Final.pdf

Annex 2

Extracted from Final Report: STDF/PG/328: BEYOND COMPLIANCE: INTEGRATED SYSTEMS APPROACH FOR PEST RISK MANAGEMENT IN SOUTHEAST ASIA, May 2015

10.1. Logical Framework

Outputs and Activities were reviewed and revised in the Project LogFrame at the Project Meeting at Ha Noi in July 2012. Progress on the completion was considered at each project meeting. This is a final summary, as of the close of the project. Subsequent progress is not represented here.

Output / Activity	**Indicator/Target**	**Actual performance (% complete)**	**Comments (results and challenges faced)**
Output 1: Decision tools for implementing Beyond Compliance (BC) framework in the region			
Activity 1: Develop Beyond Compliance (BC) tools for Systems Approach	Indicator: Tools produced and demonstrated within the region. Targets: Guidance notes, documents or publications on concepts and project tools: production chains, decision support system, Control Point-Bayesian Networks	100%	The three tools are instructions or templates for development of the Production Chain, completion of the Decision Support System (DSS) for selecting measures, and the Control Point-Bayesian Network (CP-BN) for determining the impact of measures, their relationships and points where monitoring and correction can take place. The Production Chain tool is completed. The DSS was refined, in a more user-friendly format, and is being used as a template within an EU project on responses to introduced pests. Extensive work was put into refining the CP-BN and this enhanced version is now ready for application. The format of the Production Chain and DSS leads directly into a CP-BN, making additional networks much easier to generate. The regional import Case Studies may raise other issues to address in revision of tools, or these issues may simply be documented for future consideration. In the coming period summary documents explaining the use of the tools will be updated and finalised; technical publications describing each of the tools are in preparation.
Activity 2: Conduct Case Studies in project country for potential exports, and for two	Indicator: National and regional Case Studies of Systems Approaches are identified and described. Targets: Demonstrations and reports of	90%	The four country case studies and one regional study have production chains and DSSs completed. Model CP-BNs have been developed as part of the tool development. The enhanced CP-BN tool (template) was finalised in December 2012. Case Study CP-BNs have been developed with NPPOs for each national case study. One regional case study (South American Leaf Blight, which could enter on

Cases for import to the region as a whole	national and regional Case Studies of Systems Approach		a variety of pathways) has developed a Production Chain, but no DSS or CP-BN. The oil palm import case study has developed Production Chain, DSS and CP-BN A common format for reporting on Case Studies has been drafted
Activity 3: Determine institutional needs, acceptability and the potential for Systems Approaches	Indicator: Stakeholder meetings and evaluations by NPPOs on use and potential are held Targets: Results of stakeholder meetings and evaluations by NPPOs on use and potential are reported	100%	Institutional arrangements for trade negotiations were discussed at the final project meeting in Ha Noi. Partners are aware of challenges of inter/intra-agency coordination. The potential for Systems Approach lies directly with the value perceived by the growers/exporters. Further work on clarifying acceptance by this sector is needed, because ultimately growers are the group that must implement and in most cases pay for Systems Approaches. Each of the four national partners held stakeholder meetings. Additional project funds were reallocated to NPPOs to allow for more stakeholder meetings in each country during the project after initial meetings proved useful. Guidance on the organisation of stakeholder meetings related to the use of the Beyond Compliance tools was drafted by WP3 following discussions at the Ha Noi meeting in July 2012. There was strong feedback from NPPOs that the Production Chain and DSS tools had been useful in structuring discussion on Systems Approaches with stakeholders. WP3 (ICL) linked with an IAEA-funded initiative that was also directed at dragon fruit exports and met private stakeholders in Viet Nam to review the details of the CP in particular. Further IAEA-funded stakeholder meetings were held in conjunction with Viet Nam NPPO in 2013.
Activity 4: Raise awareness about the BC method for Systems Approaches amongst targeted plant health stakeholders	Indicator: Tools are discussed and used in national and regional plant health meetings, in stakeholder discussions and in trade negotiations Targets: Presentations at international, regional and national meetings of plant health and trade specialists; web publicity; technical papers on development and use of tools; mention of tools and Systems Approach in trade negotiations and agreements	100%	All the NPPO partners have discussed the concepts within their Departments at national level. Awareness has been raised through stakeholder contacts at national level in the partner countries. WP3 (ICL) reported at Ha Noi the response to the STDF side event presentation at CPM in 2012 and the internal meeting there for SE Asia country delegations. Target market country NPPOs are aware of the project and its support from the IPPC. Reference to the project has appeared on the IPPC website. The project blog featured updates. New Zealand NPPO heard of initial results in a workshop to explore BN tools for Systems Approach. One project resource person (staff of NZ NPPO) reported to Ha Noi project meeting the development of a BN based Systems Approach for a trade entering NZ, developed expressly as a result of the BC project discussions at the first project meeting. AusAID provided funds to develop an Australian Case Study linked to Beyond Compliance, and to extend the Viet Nam Case Study to include costing of measures, from Beyond Compliance during 2013. The project was described in the EPPO Bulletin which featured results of the PRATIQUE project, an edition that will

			be widely accessed by all NPPOs. The Production Chain, DSS and CP-BN templates are being used and developed further in the EU project DROPSA on imported Asian horticultural pests in Europe. The Beyond Compliance tools have been presented at the International Congress of Plant Pathology in Beijing in 2014 and at the New Zealand Plant Protection Society Conference in 2013. Reference to the tools in trade negotiations may arise more after the time of this project. (The emphasis also has been on the tools for building confidence of the negotiating team, rather than as something simply handed over for review by the target market NPPO.)
Output 2: Relevant NPPO staff and stakeholders with capacity to put tools into use			
Activity 5: Technical resources for developing capacity of NPPO staff and other stakeholders in the use of BC Systems Approach tools	Indicator: NPPO staff and other stakeholder make effective use of tools Targets: Explanatory materials and guidance on stakeholder interactions are available	80%	A summary description of the tools and their use has been prepared as an e-book, as well as in several international conference presentations. NPPOs have discovered their own preferred use of tools in some stakeholder meetings (e.g. to compare different risk management measures along the same production chain, or to show all measures regardless of the targeted pest). One NPPO has applied the Beyond Compliance experience to other cases and has used Production Chains as part of the case for measures to restore two cases of trade interrupted due to interceptions. Another of the partner NPPOs has applied some of the tools in ongoing trade discussions. NPPO partners have been supported in developing plans to use Beyond Compliance tools in stakeholder discussions. Additional materials such as power points, posters and spreadsheets have facilitated understanding and uptake.
Activity 6: Establish and develop a regional network for Systems Approach linked to existing wider plant health network	Indicator: Common regional Systems Approach concepts and tools appear Targets: Common regional Systems Approach concepts and tools are demonstrated in several NPPOs within the region; promotion of Systems Approach concepts and tools within RPPO	60%	NPPO partners have been actively engaged with each other and with UK, Australia, NZ, IPPC and FAO partners and participants in developing tools and talking with national stakeholders. The S Korean NPPO attended the final project meeting. Additional case studies have developed in Australia and NZ. NPPOs of other SE Asian countries have attended a closed door pre-CPM session to understand the upcoming tools. NPPOs are discussing the activities of Beyond Compliance beyond the project participants. Information has been provided for the 2013 Technical Consultation of the RPPOs and specifically to the APPPC for this RPPO meeting

Annex 3

LOGFRAME MATRIX [Extract: Final project report]

Project Logical Framework Matrix

Results Chain	Assumptions	Indicator	Means of Verification
Impact : Increase in opportunities for exports of plant products from developing countries through better capacity to deal with phytosanitary issues during market access negotiations and more options for managing pest risk	General conditions for facilitating trade (e.g. political stability, national commitment to trade, government support and allocation of resources, participation of the NPPO in regional and international plant health for a, sufficient production for export etc.) Plant health situation is sufficiently clear and agreed between trade partners to apply tools and progress negotiations (e.g. identification of pests and/or diagnostics, pest status of country, etc.) Collaboration of external stakeholders obtained by NPPOs (e.g. industry, other sectors of government, importing country NPPO). Mechanism to receive reports of trade proposals is in place (countries will share information).	Over 75% of all those participants in the cases who are directly involved in market negotiation rank a higher confidence due to use of tools. A 25% decrease in time taken for market access negotiations between NPPO's after 5 years from project completion.	Results from questionnaire on confidence in market negotiations.
Outcome : Uptake of Systems Approach tools (based on beyond compliance) is increased beyond SE Asia resulting in increased understanding of measures related to pest risk management. The advantages, appropriateness and components of ISPM14 are better understood	Potential role of Systems Approach tools based on "Beyond Compliance" recognised by export trade negotiation teams, which may extend beyond the NPPO staff involved in project. Acceptance of concepts by trade partners encourages uptake. Any disagreement on basic concepts relating to pest risk, risk management and phytosanitary measures will be taken up by the IPPC or Commission on Phytosanitary Measures to reach agreement.	At least **four selected cases**, from at least two developing countries, of proposed trade or disrupted trade or proposals for new risk management options for existing trade (equivalence), reaching submission to targeted market country NPPOs. At least 75% of the participating NPPOs use Systems Approach after involvement in the project. At **least four regional facilitators** are trained for the use of the BC tools.	Case study reports (in project template). Survey of beneficiaries that have used Beyond Compliance tools in designing pest risk management plans/proposals or trade negotiations on selected cases. Project reports and records.

Results Chain	Assumptions	Indicator	Means of Verification
Outputs: Practical tools for alternative plant health risks management measures produced for promising trade cases from developing countries. Beyond Compliance tools more broadly accessible, in particular to developing countries. Countries assisted in market access negotiations	Sufficient interactions with producer stakeholders occur and technical information on performance of measures exist to allow full descriptions of production systems and estimates of predicted efficacy. Agreement with funder on best way to ensure IP or commercial confidentiality respected when posting outputs on related Web sites. Candidates for facilitators are identified within the first months of the project and trained. Existing periodic meetings on plant health that provide opportunities for discussion, proceed during the course of the project.	Existing tools will be adapted to any new conditions presented for all of the cases selected from participating NPPOs. By the end of project, simpler tools made broadly available for use by any country. By the end of the project, Beyond Compliance tools are used successfully in at least half of the selected cases (as a result of facilitators' guidance/assistance) and where relevant in languages other than English. Market access experiences shared with additional countries in the region or subregion where exchange on plant health issues is already established.	Demonstration materials and report templates distributed to participating NPPOs. Case study reports (in project template). Evaluation of beneficiaries on ability to use Beyond Compliance tools. Refined tools and guidance are posted on widely accessible website. Refined tools and guidance are posted on widely accessible website. Translation of materials in the chosen language is available at the end of the first year of the project, if translation appears useful. Case study reports (in project template) acknowledge role of facilitators. Reports from existing periodic meetings on plant health acknowledge sharing of these experiences.

Annex 4

Review matrix

The review matrix identifies performance indicators, the objectives and the means of verification and includes the project objectives, outcomes, activities and risks described the project logframe matrix in Annex 1 of the Project Document, 2018.

Project outcome

The project outcome is increased uptake of the Systems Approach (Beyond Compliance) tools as a means of increasing understanding and confidence in use of combinations of pest risk management measures.

Review objective

The objective of this review is to determine if the tools provided to implement systems approach are known, understood, appropriately used and found useful by the NPPOs.

Results	Review objectives	Assumptions/Risks	Indicator	Means of Verification
Impact Increase in opportunities for exports of plant products from developing countries through better capacity to deal with phytosanitary issues during market access negotiations and more options for managing pest risk	Evaluate the contribution of the tools to help developing countries increasing opportunities for export plants and plant products	General conditions for facilitating trade (e.g. political stability, national commitment to trade, government support and allocation of resources, participation of the NPPO in regional and international plant health for a, sufficient production for export etc.) Plant health situation is sufficiently clear and agreed between trade partners to apply tools and progress negotiations (e.g. identification of pests and/or diagnostics, pest status of country, etc.) Collaboration of external stakeholders obtained by NPPOs (e.g. industry, other sectors of government, importing country NPPO) Mechanism to receive reports of trade proposals is in place (countries will share information)	Over 75% of all those participants in the cases who are directly involved in market negotiation rank a higher confidence due to use of tools A 25% decrease in time taken for market access negotiations between NPPO's after 5 years from project completion Increased awareness about types of barriers to market access leads to specific broad actions or funding to address these barriers A classification of priority trade is developed to distinguish when market access is not reliant on phytosanitary issues but rather other barriers prevent it	Results from questionnaire on confidence in market negotiations

Results	Review objectives	Assumptions/Risks	Indicator	Means of Verification
Outcome Uptake of Systems Approach tools (based on beyond compliance) is increased beyond SE Asia resulting in increased understanding of measures related to pest risk management The advantages, appropriateness and components of ISPM14 are better understood	Identify project contribution to the IPPC work in particular with respect to promote the systems approach for pest risk management to the NPPO and the public Identify lessons learnt for possible project activities and results upscale	Potential role of Systems Approach tools based on "Beyond Compliance" recognised by export trade negotiation teams, which may extend beyond the NPPO staff involved in project Acceptance of concepts by trade partners encourages uptake Any disagreement on basic concepts relating to pest risk, risk management and phytosanitary measures will be taken up by the IPPC or Commission on Phytosanitary Measures to reach agreement	At least **four selected cases,** from at least two developing countries, of proposed trade or disrupted trade or proposals for new risk management options for existing trade (equivalence), reaching submission to targeted market country NPPOs At least 75% of the participating NPPOs use Systems Approach after involvement in the project At **least four regional facilitators** are trained for the use of the BC tools	Case study reports (in project template) Survey of beneficiaries that have used Beyond Compliance tools in designing pest risk management plans/proposals or trade negotiations on selected cases Project reports and records
Output Practical tools for alternative plant health risks management measures produced for promising trade cases from developing countries Beyond Compliance tools more broadly accessible, in particular to developing countries. Countries assisted in market access negotiations	Identify if the tools provided to implement systems approach were used by the NPPO for pest risk management Evaluate the sustainability of the project in particular with respect to the use of the tools, the efficacy of facilitator training and lessons learned from the trade cases Evaluate the contribution of the tools to help developing countries increasing opportunities for export plants and plant products Identify opportunities for wider awareness and uptake of the BC tools by the IPPC community	Sufficient interactions with producer stakeholders occur and technical information on performance of measures exist to allow full descriptions of production systems and estimates of predicted efficacy Agreement with funder on best way to ensure IP or commercial confidentiality respected when posting outputs on related websites Candidates for facilitators are identified within the first months of the project and trained. Existing periodic meetings on plant health that provide opportunities for discussion, proceed during the course of the project	Existing tools will be adapted to any new conditions presented for all of the cases selected from participating NPPOs By the end of project, simpler tools made broadly available for use by any country By the end of the project, Beyond Compliance tools are used successfully in at least half of the selected cases (as a result of facilitators' guidance/assistance) and where relevant in languages other than English Market access experiences shared with additional countries in the region or subregion where exchange on plant health issues is already established	Demonstration materials and report templates distributed to participating NPPOs. Case study reports (in project template) Evaluation of beneficiaries on ability to use Beyond Compliance tools Refined tools and guidance are posted on widely accessible website. Refined tools and guidance are posted on widely accessible website. Translation of materials in the chosen language is available at the end of the first year of the project, if translation appears useful Case study reports (in project template) acknowledge role of facilitators Reports from existing periodic meetings on plant health acknowledge sharing of these experiences

Annex 5

Key stakeholders

Roles and responsibilities:

Organisation	**Role** (per project document FAO, 2018)
IPPC Secretariat	Oversight of the management and implementation of the project
Centre for Environmental Policy, Imperial College London	Project Management
IPPC Implementation and Capacity Development Committee (IC)	Project Steering Committee
Near East Plant Protection Organization (NEPPO)	Liaise with regional participants and provide guidance on engagement with regional plant protection organization (RPPOs)
Standards and Trade Development Facility (STDF)	Donor

Trade cases

Hosting country	**Facilitator in training**	**Trade partner**	**Plant material/Pest**	**Status**
Tunisia (import)	Mekki Chouibani and Sadek Abbas	Europe – Italy, Spain, France	Planting material e.g. grapevine, but other crops may be added once it is possible to engage with production sector more	Progressing
Uganda	Theo Pongolo (Robert Solar, who started training, is National Coordinator)	Europe	Capsicum	**Ended**
Kenya	Eunice Kagendo and Kenrick Witty	China	Avocado	Progressing
Kenya	Ephrance Tumuboine and Phyllis Githaiga	Europe	Mango	Progressing
Mexico (import)	Ulises Garcia Romero and Nelson Laville	Netherlands	Tomato seeds	Progressing
Peru	Ramon Canizares Amoros	USA and Australia	Asparagus	**Ended**
Fiji	Nelson Laville	USA	Papaya	**Ended**

Review key stakeholder list

	Role	Responded/ interviewed	Interview		
			Email	Video	Phone
	Project implementation support – Centre for Environmental Policy, Imperial College London				
1	Megan QUINLAN on behalf of all at ICL	Y		Y	
	IPPC Secretariat				
2	Brent LARSON	Y		Y	
3	Paola SENTINELLI	Y		Y	
4	Tomasso TETI	Y		Y	
5	Denis ALLEX	Y	Y		
6	Ketevan LOMSADZE	Y		Y	
7	Natusumi YAMADA	Y		Y	
	IC Members				
8	Dominique PELLETIER (Chair), Canada	Y		Y	
9	Chris DALE, Australia	Y		Y	
10	Sally GRIFFIN, New Zealand	Y		Y	
	Facilitators in training				
11	Mekki CHOUIBANI, NEPPO, Morocco	Y	Y		
12	Sadek ABBAS, Iraq	Y	Y		
13	Theo PONGOLO, South Africa	Y		Y	
14	Eunice KAGENDO, Kenya	Y		Y	
15	Kenrick WITTY, Belize	Y		Y	
16	Ephrance TUMUBOINE, Uganda	Y		Y	
17	Phyllis GITHAIGA, Kenya	Y		Y	
18	Ulises Garcia ROMERO, Mexico	Y		Y	
19	Nelson LAVILLE, Dominica	Y			
20	Ramon Canizares AMOROS, Comunidad Andina	N			
21	Astra GARKAJE, Latvia	Y	Y		
22	Xubin PAN, China	N			

	Role	Responded/ interviewed	Interview		
			Email	Video	Phone
23	Camilo BELTRAN, Comunidad Andina	Y	Y		
	Country coordinators				
24	Robert SOLAR, Uganda	N			
	National Plant Protection Organisation				
25	Javier TRUJILLO, Mexico	Y		Y	
26	NPPO, Tunisia	Y	Y		
	STDF				
27	Roshan KAHN	Y			Y
28	Angelica Cottica GRISUK	Y		Y	
29	Marlynne HOPPER	Y		Y	

Annex 6

Questions Matrix

The review ToRs included an indicative list of questions, which have formed the basis of this review and the final report. They are listed in the Questions Matrix together with project-specific and stakeholder-specific questions. The Matrix was used to guide the interviews and analysis.

Topic	Questions ex ToR	Follow up	Supplementary	Who for?
Project management and implementation efficiency	To what extent has the project been implemented efficiently, cost-effectively, and management been able to adapt to any changing conditions to improve the efficiency of project implementation, in particular?	· What factors fostered or hindered the efficient implementation and execution of project activities? Eg. funding, staffing, resource availability, IT access and support · To what extent was it possible to adapt to them? · To what extent did the project need to adapt due to the COVID 19 pandemic? · Were there factors other than the pandemic that hindered the implementation of the project? · Were project funds used appropriately, taking in account the circumstances? · Were they appropriately reallocated when necessary and possible?	What changes should be made to the tools and/or their use to adapt to a post-Covid operating environment? What might this environment look like? Were any aspects or elements of the project adversely impacted by fac	IPPC Secretariat Project Coordinator ICDC NPPOs Facilitator trainees
Objectives and outcomes achieved	To what extent were the objectives of the project reached?	*With reference to the specific trade case you were involved in:* Which tools did you use? Were they any you didn't use? Why? Were the tools practical? In what way? Was the approach relevant to progressing the specific trade case? Did the tools enable identification of effective (practical, cost-effective,	Was the trade case process useful? Was it easy to use? What worked well? How could it be improved? Did you find it an effective learning tool? Has it made a difference? Do you feel confident in using the tools again?	Trade case participants Facilitators IC NPPOs RPPOs

Topic	Questions ex ToR	Follow up	Supplementary	Who for?
		operationally feasible) pest risk management measures for plant products for export? How? Did they help to develop a trade proposal? How? Was the selected trade case a good one? If not, why not? If so, why? Which cases were most successful? Why? Has the trade case resulted in actual trade? Has the proposal progressed? How?	By yourself? With help in using the tools? With help to facilitate the process with stakeholders? Can you think of situations where this approach would have helped resolved trade issues? In what way? Would you advise other countries to use the tools? How should they go about accessing and using the tools? What would help them most in getting started and then using the tools? What are some of the key benefits you got from using the tools? How would you make the tools and the processes for using them more widely available? What guidance, training, support etc. do you think is essential to getting the best outcome from using them?	
	What intended or unintended results can be identified?	· Were the tools made available to all NPPOs? · What were the actions taken to explain and promote the use of these tools? · Is there a team of validated facilitators ready to support the use of the tools by the NPPO?		All

Topic	Questions ex ToR	Follow up	Supplementary	Who for?
		· How was the competence of facilitators verified? · Do NPPOs and beneficiaries of the project, know and are satisfied by the outcome of the project? · Was the help of facilitators required? Was their input appreciated by NPPOs?		
Project legacy and sustainability	What is the likelihood that the project results will continue to be useful or will remain even after the end of the project?	· What process has the project generated or supported that ensures economic and environmental sustainability? · If none, what processes should be put in place? · What are the key risks which may affect the sustainability of the project benefits?	Will the application of the Systems Approach tools contribute to the ongoing: · Development of trade proposals · Mapping of phytosanitary risks and pest management actions to be undertaken along the whole production chains · Production of high-quality plant products · Identification of the most feasible and efficient pest management options · Strengthening collaboration among stakeholders involved in the international trade. What changes have you made to ensure this?	Trade case participants NPPOs Facilitators IPPC Secretariat IC
Lessons learned	What lessons can be identified from project design, implementation and management that may be useful for a follow-up phase or for	· What lessons can be learned from the implementation of this project, with respect to identifying and responding to project risks impacting project management and relations among the organisations involved?	Do the tools have other potential applications eg. Identifying risk management options outside of Systems Approach as defined in ISPM 14?	All

Topic	Questions ex ToR	Follow up	Supplementary	Who for?
	other current and future projects?	· Are the tools, as they are customized, the best means to promote the implementation of Systems Approach (ISPM 14)? · What remains to be done in the sector of systems approach in order to ensure pest risk management?	What impact could this have on the wider adoption and use of the tools? What ongoing role do you see for facilitators trained in the use of these tools?	
Other considerations	Were gender equality considerations taken into account in project implementation and management?	Were any gender issues identified during the project? Are the tools and methodology as applicable to small farmers as large corporate enterprises? Should they be modified for a range of implementation scenarios? How?		All
	Were any environmental or biodiversity issues or considerations identified?	Were any risks or benefits identified through the trade cases? What were they? How should the tools or their use be modified to identify and address these issues as they arise?		All

Annex 7

Facilitator skills and learning objectives

A. Facilitator skills and expertise

The selection criteria and their relative priority for Beyond Compliance facilitator trainees

Priority	**Selection criteria for Beyond Compliance Facilitators**
1	Strong phytosanitary knowledge as a principle requirement for ensuring the success of future use of Beyond Compliance tools by countries
1	Evidence of being conversant with NPPO work in national and regional phytosanitary systems
1	Extent of experience (including years, level and depth) in phytosanitary work including previous/current involvement in phytosanitary issues and/or trade negotiations at country/regional levels
2	Evidence doing work related to training in phytosanitary and related fields, including skills in process facilitation and adult education
3	Ability to use graphical representations of processes, such as flow diagrams and matrices, in facilitation
3	Ability to understand rating scales and uncertainty distributions, based on training
3	Demonstrated working-level proficiency in at least one of the UN languages, and English
3	Ability to work effectively with diverse groups and in other cultures

(Ref. final report)

B. Learning objectives for training of Facilitators

	Topic	**Learning objectives** (covered in meetings and assignments prior to in-person training)
A	**Market Access for agricultural goods**	**To understand the issues around gaining market access for agricultural goods (or other regulated material) that may present a pest risk** • Overview of various factors affecting trade beyond phytosanitary ones

		• Ability to understand negotiation environment and principles (what do we need to deliver to get the trade?) • Knowledge of the key principles of WTO-SPS and the IPPC, including regionalization and justification • Explain why most agricultural trade is still under bilateral agreements
B	**Phytosanitary principles, in particular Pest Risk and its Management**	**To master key phytosanitary concepts in order to easily interpret and apply them in your role as facilitator** • Master concepts of risk, ALOP, equivalence and proportionality of measures • Knowing how phytosanitary treatments have been used to manage pest risk • Understanding a number of other phytosanitary measures, not treatments • Knowing the components of risk and what determines pest risk • Understanding the concept of residual risk, after measures have been applied • Master the probability aspect of risk and how uncertainty affects risk • Understanding what poses a low phytosanitary risk and what trade is allowed without a PRA • Understanding of pathways and how movement of travellers, post, goods and other materials that may pose a phytosanitary risk fits in with the risk of spread of pests or disease via trade • How do these principles relate to protection of domestic plant resources? Apply same ideas to pathway risk management or import perspective • When is pest risk management not complying with the SPS and IPPC rules and standards? If time allows • Regulated non quarantine pests • Pest free areas • Pest free places of production or production sites • Areas with low pest prevalence
C	**Role of the NPPO**	**To know, respect and be able to defend the role of the NPPO in all relevant trade negotiations, or for review of compliance on measures required in such agreements** • Knowing the key responsibilities of an NPPO, especially in regard to trade negotiations • Knowing the role of the private production sector in terms of proposed trade • Understanding how GAP certification, commercial practices, requirements from a buyer, sustainability indicators etc. fit in with official requirements for trade

	Topic	**Learning objectives** (focus of in-person training)
D	Systems approach and stakeholder relations	**To master key concepts regarding the use of Systems Approach in line with ISPM 14 and the practices established over decades of implementation** • Knowledge of independent and dependent measures, and redundancy and examples in pest risk management • Ability to describe and explain to an audience, combinations of measures and each measure's role in risk reduction • Confidence in presentation of systems approach and its performance • Ability to describe phytosanitary constraints and systems approach options • Ability to describe risks in systems approach and effective mitigation
E	Beyond Compliance specific	**To gain confidence in the explanation and application of Beyond Compliance tools as a means to support market access in cases where Systems Approach is proposed** • Confidence in use of tools to achieve systems approach plan • Ability to use and demonstrate key concepts with tools • Master entry of information into tools
F	Facilitation skills	**To strengthen facilitation skills**