



Food and Agriculture
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International
Plant Protection
Convention



IPPC Global Workshop on Systems Approaches

Santiago, Chile
1 – 4 December 2025

In partnership with:



Australian Government
Department of Agriculture,
Fisheries and Forestry

Overview of the tools on the IPP

Megan Quinlan, Senior Research Fellow, Imperial College London



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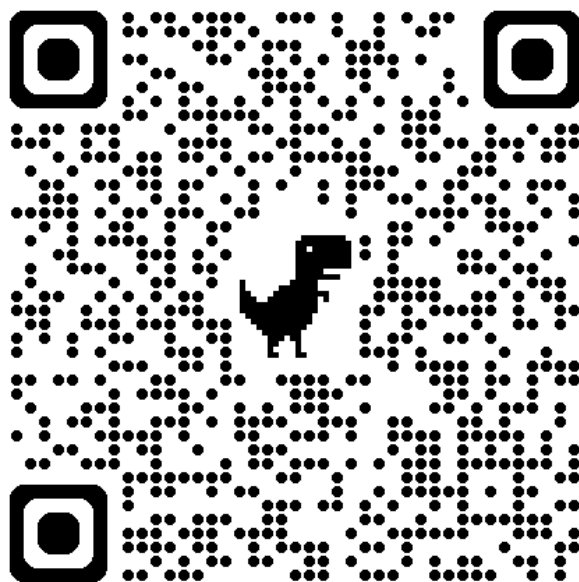
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Centre of Excellence/Phytosanitary Systems/Systems Approach

<https://ippc.int/en/centre-of-excellence/phytosanitary-systems/contributed-resources-systems-approach/systems-approach-online-tools/>



IPPC Global Workshop on Systems Approaches | 1–4 December 2025

IPPC / Centre of Excellence / Phytosanitary Systems / SYSTEMS APPROACH

SYSTEMS APPROACH

In plant health, a Systems Approach plan (as detailed in ISPM 14) integrates different measures for pest risk management, at least two of which act independently to meet a predetermined level of protection with its cumulative effect. This approach already has a significant volume of trade taking place.

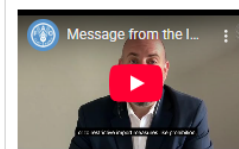
In the below you can find introductory videos explaining Systems Approach and why it's key for the IPPC Community, in addition you can access international standards of particular relevance and other resources to help you implement Systems Approach.

The following link takes you to the Online Tools area. You can also access it using the sidebar on the right.

Two Excel-based tools have been developed by STDF-supported projects in order to support the design and evaluation of Systems Approaches. The aim of the tools is to build confidence and competence in this area by supporting critical thinking around issues such as why each measure is included and if there is an opportunity for real-time monitoring and adjustment of the system. You can freely download the tools to use, they are available in Arabic, Chinese, English, French, Russian and Spanish. Facilitators to support the use of these tools are presented there as well.

[read more](#)

Introduction to Systems Approach



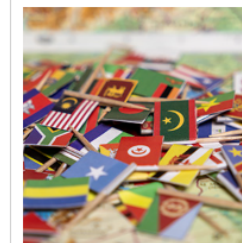
Find out more about key topics



Basic Concepts for Systems Approach



Selecting Phytosanitary Measures



International Standards for Phytosanitary Measures (ISPMs) of particular relevance to Systems Approach

Available in Arabic, Chinese, English, French, Russian and Spanish.

Unofficial translations are also available: ISPM 14 in Portuguese, ISPM 24 in Portuguese and Vietnamese, ISPM 38 & 39 in Korean

- ISPM 14 The use of Integrated Measures in a systems approach for Pest Risk Management
- ISPM 24 Guidelines for the determination and recognition of equivalence of phytosanitary measures
- ISPM 35 Systems approach for pest risk management of fruit flies
- ISPM 38 International movement of seeds
- ISPM 39 International movement of wood

SYSTEMS APPROACH

1. Main page
2. Online Tools
3. Facilitators
4. Contributed resources

See also



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Centre of Excellence

IPPC / Centre of Excellence / Phytosanitary Systems / SYSTEMS APPROACH / SYSTEMS APPROACH ONLINE TOOLS

SYSTEMS APPROACH ONLINE TOOLS

Beyond Compliance tools

The Beyond Compliance tools (developed with STDF funding) are offered as templates, with instructions for use, in order to build a Systems Approach, as described in ISPM 14 (The use of integrated measures in a systems approach for pest risk management). The aim is to help NPPOs go beyond simply complying with pest risk management plans proposed by trade partners, towards a more informed and confident stance of negotiation. Their use also supports the development of combinations for managing pest risk associated with pathways, since single measures are often not sufficient to prevent introductions. The templates allow users to save multiple versions for an iterative development of plans. Facilitators have been trained to support the use of the Beyond Compliance tools for those wishing to employ Systems Approach. Two tools are provided: the Decision Support for System Approach (DSSA), and the Production or Pathway chains.

Decision Support for Systems Approach (DSSA)



Production or Pathway Chain



Tools & Manuals

Decision Support for Systems Approach (DSSA)

- Tool: [EN](#) [ES](#) [FR](#) [RU](#) [AR](#) [ZH](#)
- Manual: [EN](#) [ES](#) [FR](#) [RU](#) [AR](#) [ZH](#)

Production or Pathway Chain

- Tool: [EN](#) [ES](#) [FR](#) [RU](#) [AR](#) [ZH](#)
- Manual: [EN](#) [ES](#) [FR](#) [RU](#) [AR](#) [ZH](#)

VERY IMPORTANT: Read [here](#) about regional settings before opening the DSSA template

SYSTEMS APPROACH

- [1. Main page](#)
- [2. Online Tools](#)
- [3. Facilitators](#)
- [4. Contributed resources](#)

FAQs

See also

- [IPPC Plant Health Campus - Market access](#)
- [Implementation & Capacity Development](#)
- [Adopted ISPMs](#)
- [CPM Recommendations](#)
- [Guides and training materials](#)
- [Contributed resources](#)

- These tools on the IPP were developed collaboratively by NPPO staff from each FAO region.
- Both the tools and guidance are in all FAO languages: English, Spanish, French, Arabic, Chinese and Russian.
- To download the tools, you register on the IPP so that the Secretariat can track use of the tools.
- Your downloaded, completed tools are confidential to your own country but may be useful to share in trade negotiations.



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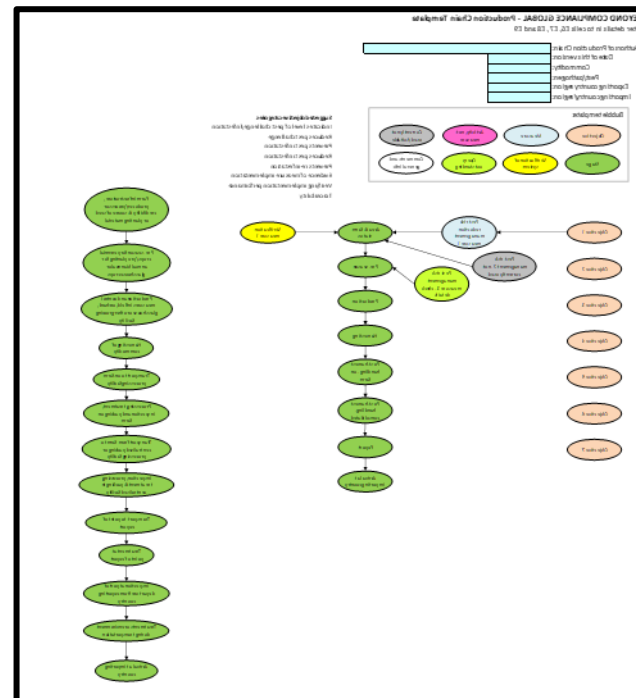


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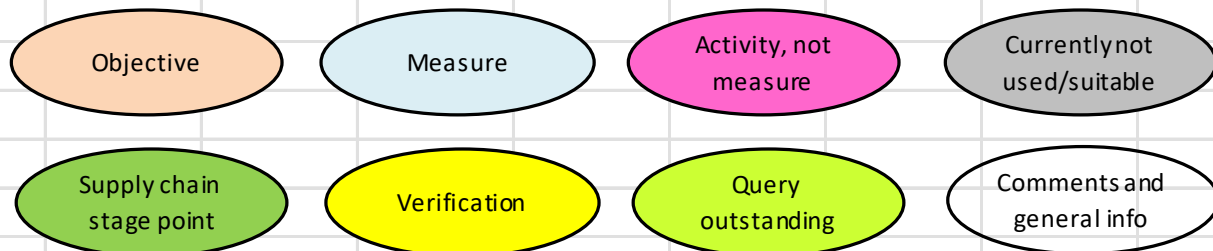
Systems Approach tools on the IPP (see Online Tools)





Production chain or pathway

Bubble template:



SUGGESTED OBJECTIVE CATEGORIES

Indicates level of pest
challenge/infestation

Reduces pest challenge

Prevents pest infestation

Reduces pest infestation

Prevents re-infestation

Evidence of measure implementation

Verifying implementation performance

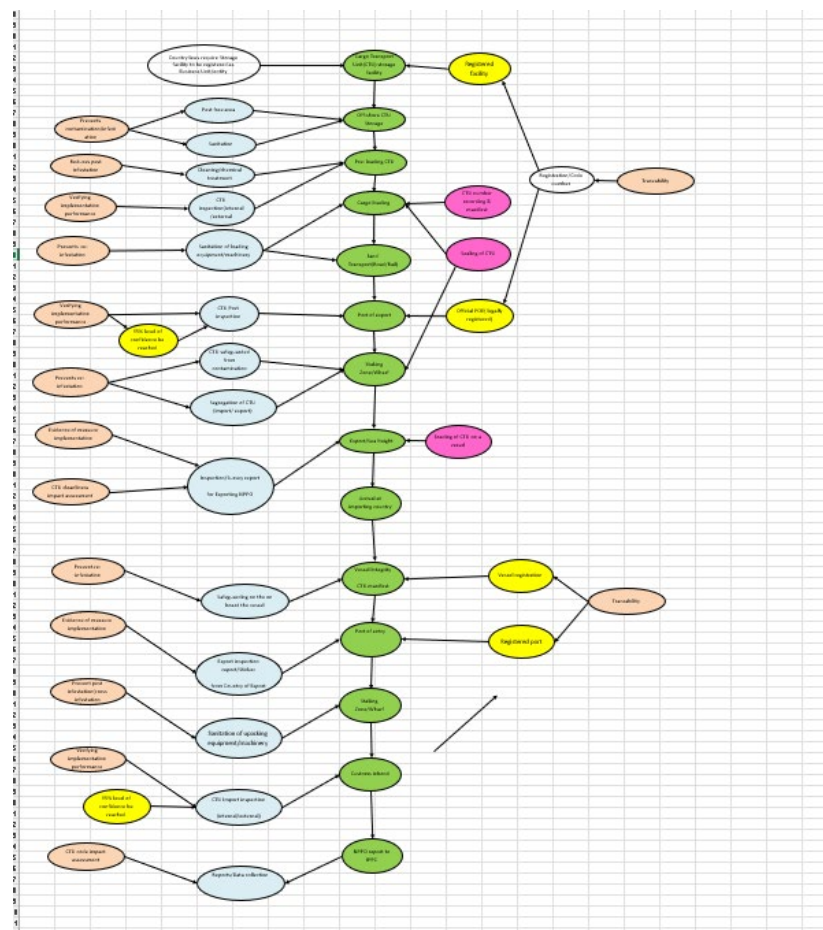
Traceability



The robust tool works for export or import trade, generally showing one pest challenge at a time – or a group of pests with similar mechanisms of harm (e.g., surface feeder)

However, it may also be applied to pathways for more generic pest challenges.

It was not designed for trade in biocontrol agents.



**Sea container pathway
chain using same simple
layout**



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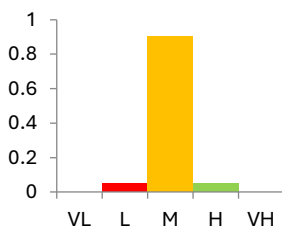
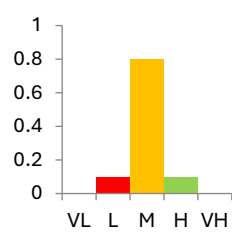
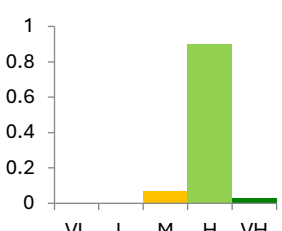
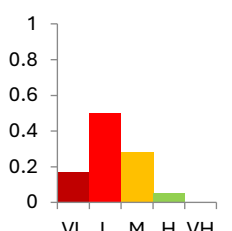
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Systems Approach tools on the IPP (see Online Tools)





C1. Indicators of Measures (Pest risk reduction and Implementation standard)

Systems Approach measures available	Contribution to pest risk reduction of infestation in exported consignment			Implementation standard		
	Maximum contribution to pest risk reduction achievable by the measure is:			Implementation standard of the measure in the field is:		
	Rating	Uncertainty	Graphic	Rating	Uncertainty	Graphic
indicator traps	Medium	Very low		Medium	Low	
field sanitation land preparation	High	Very low		Low	Medium	

**The DSSA is
also on an
Excel file but
avoid cut and
paste in order
to keep the
macros
functioning.
Return to the
original each
new case.**

**Controlling false
codling moth in
Capsicum for export –
Uganda case**



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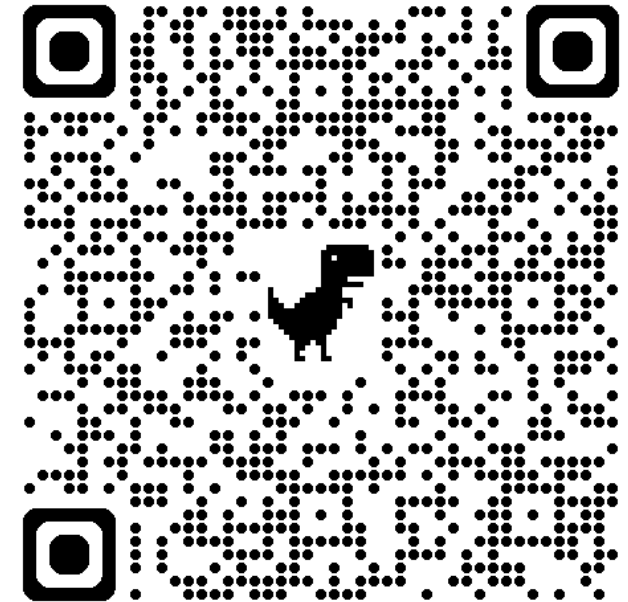


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Good description of the development and use of these tools

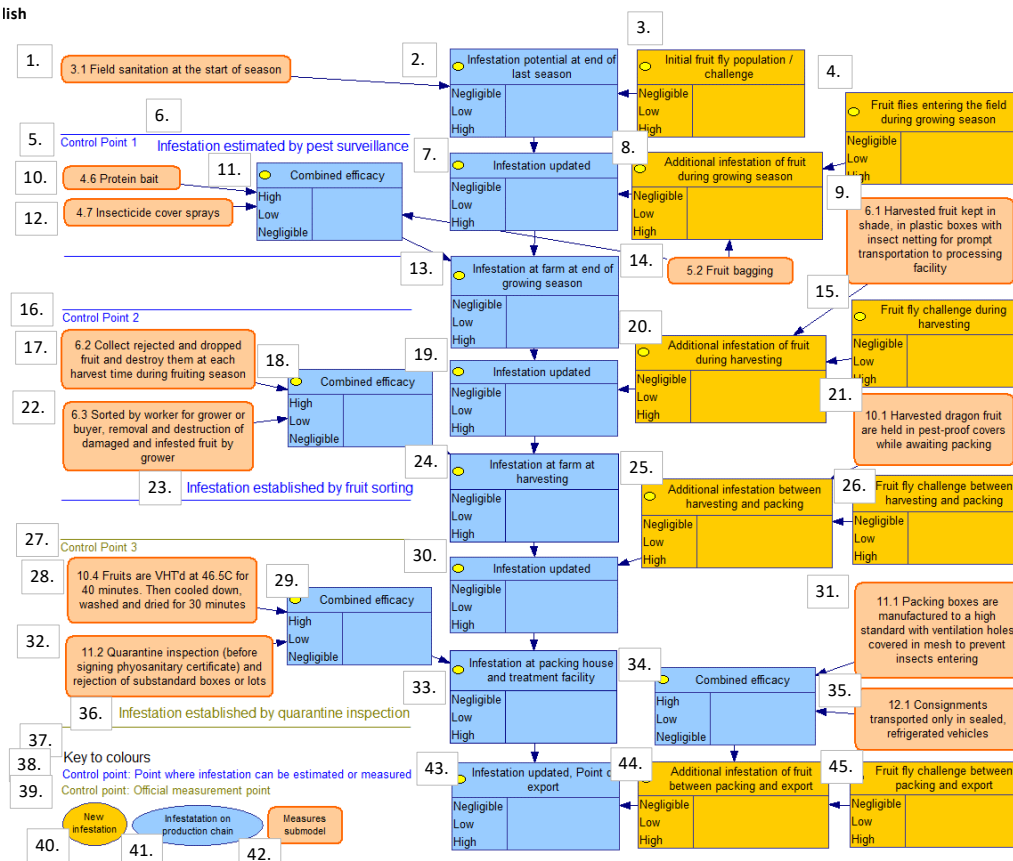
- CPM 19, March 2025

Nelson Laville presented (minutes 22:00 to 40:13)





lish



The initial work in SE Asia demonstrated that most NPPOs were uncomfortable assigning values in a Bayesian Network type model (left) although the concept of mapping objectives, measures and verification or control points made sense.

The new production chain or pathway tool visually represents all the components of a functioning Systems Approach – official measures, activity, outstanding query etc – to support planning and discussions within an NPPO, with stakeholders, and in trade negotiations with easily manipulated shapes on an Excel file. The cut and paste template simplifies and allows focus on any areas requiring further analysis (with the DSSA or other quantitative tools) or additional measures, such as verification of the performance of a measure. It is an effective planning and communication tool that can be replicated on a piece of paper or white board if internet is not available.



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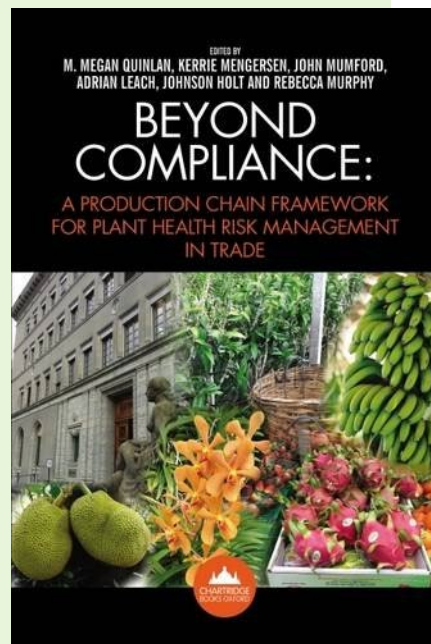
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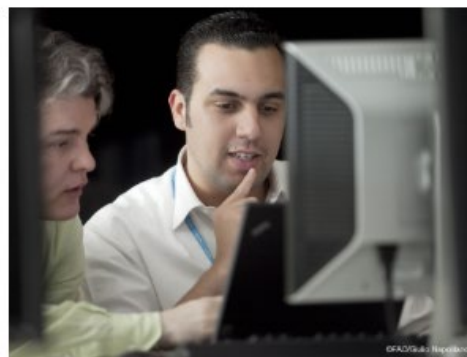
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Finally, there are also PowerPoints on the IPP with simple messages for planning use of Systems Approach

Under contributed resources is the eBook from the first *Beyond Compliance* project reflecting methods for engagement and planning that took place in SE Asia



Find out more about tools



Tools for accessing the trade



Introducing tools to donors



Practical tips for using tools



Tools support management of pathways



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Time to update, based on your input this week

- Build on these resources – minimal funding to maintain these easy access tools in the latest microsoft Excel or other readily available software?
- New facilitators – to maintain available support in each FAO language?
- Revised or additional support messages for those new to Systems Approach or newly engaging with stakeholders?



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Thank you