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# IPPC Global Workshop on Systems Approaches

Santiago, Chile  
1 – 4 December 2025

In partnership with:



Australian Government  
Department of Agriculture,  
Fisheries and Forestry

## Applying Systems Approach Principles in the Seed Sector: Experiences, Opportunities, and Pathways Forward

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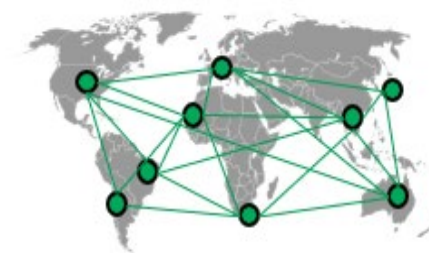
## Why Systems Approach Matters

Global seed movement is increasing in scale and complexity

Current testing practices — including frequent changes in requirements, inconsistent protocols between countries, and testing for pests that are not seed-transmitted — create operational delays and uncertainty for both NPPOs and industry.

Systems Approach aligns risk management with real production practices

Improves predictability, transparency, and trust between NPPOs and industry





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## Seed Sector Perspective: Applying a Systems Approach

Recognition of industry pest-management practices already implemented across the seed production chain

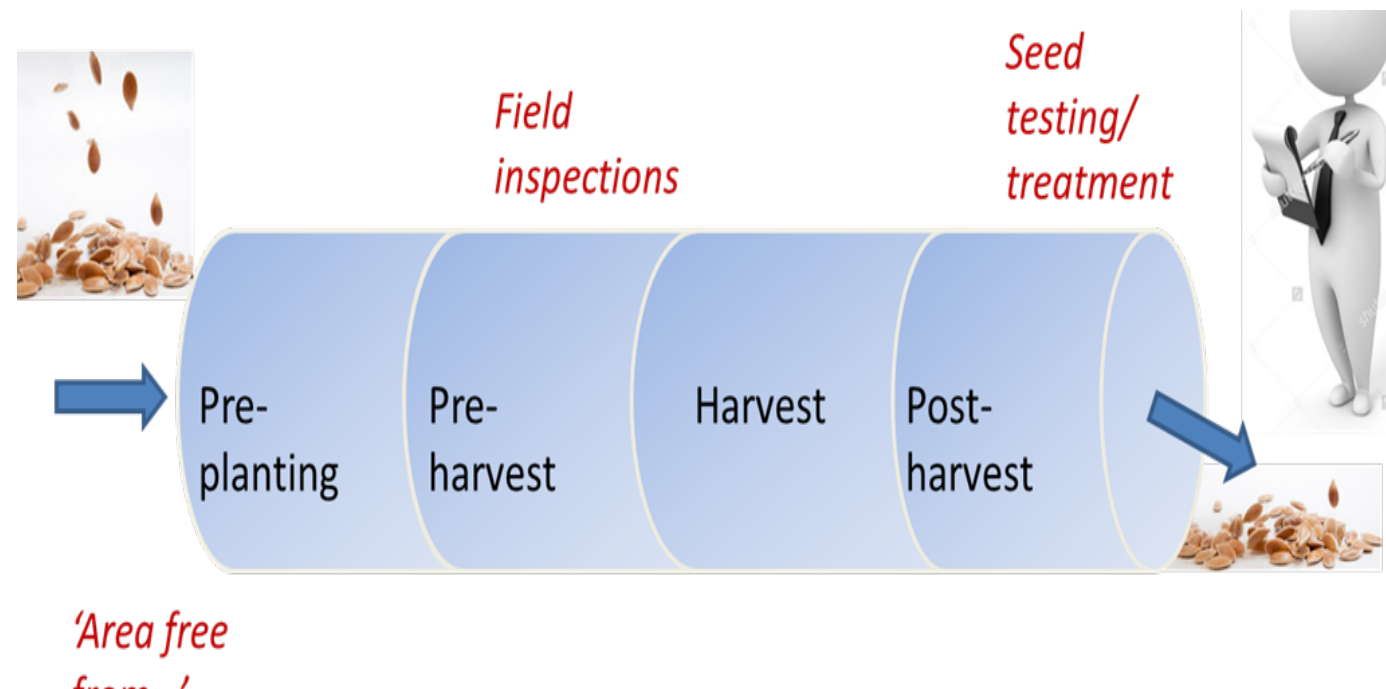
Offers a credible, alternative certification pathway grounded in verified systems rather than consignment-by-consignment testing

Consistent with international agreements (WTO SPS) and ISPM guidance, particularly ISPM 14

Supports global harmonization through science- and risk-based decision-making

Provides flexibility across species and company sizes, enabling broad participation

Can be applied to both experimental (R&D) and commercial seed movements







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## Key Components in Seed Production

Pest risk identification

Implementation of mitigation measures in the seed production chain

Seed production practices (field management, monitoring, sanitation)

Post-harvest handling and seed processing steps (seed health testing)

Quality management systems

Audit and traceability mechanisms

Documentation and oversight by NPPOs



# System Approach



2024 - COSAVE & SAA

DNPV/SENASA, SENASAG/MDRyT, DSV/MAPA,  
SAG/MINAGRI, SENAVE/MAG, SENASA/MINAGRI,

DGSSAA/MGAP

ASOSEMILLAS, APESEMILLAS, APROSEMP, ANPROS,  
ANAPROSE, ASA & ABRASEM

Plan piloto regional para la certificación fitosanitaria  
de semilla de Zea mays con uso previsto propagación y  
propósito experimentación bajo un enfoque de  
sistemas (PPCF)

Corn R&D/experimental seed for propagation



2023 - ISF - Chile, Netherlands, Philipines & South Africa

SAG/MINAGRI, NVWA & DALRRD

ANPROS, PLANTUM & AFSTA

System Approach - IPPC based  
at the global level

Cucumber commercial seed



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## THE VISION

A faint, light gray world map serves as a background for the central text box.

One globally accepted Systems Approach that serves as an alternative to existing pest risk management options to secure phytosanitary certification for the international movement of seed

- Safe
- Predictable
- Science-based
- Efficient
- Supported by modern, transparent Systems Approach frameworks



## Collaboration between NPPOs and industry - a shared need for a global phytosanitary system



Countries

**Prevent the introduction and spread of new pests**

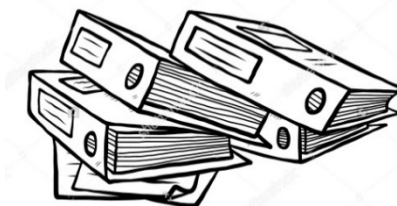
- facilitate trade
- maintain access to high quality starting material and innovations for farmers – timely and at reasonable costs



Seed companies

**Highly motivated to deliver seed free from diseases**

- fulfill the needs of the customer
- compliance



**Shared need for a good phytosanitary system**

- to protect countries from new pests
- that enables global trade in a fast business model



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## Systems approach for seed – ISF pilot

**Goal:** work out how a systems approach for seed could work in practice.

Small number of NPPOs - Chile,  
Netherlands, Philippines, South-Africa

Easy model crop – cucumber

1. Define pests in scope - seed is a pathway for transmission, science-based.
2. Define baseline set of mitigation measures ('ISPM38 level')

- Focus on pathways of pest introduction
  - Pest management practices applied in the country of production should adequately address phytosanitary concerns in different countries of import / (re-) export
3. Build systems approach framework (QMS, audits, documentation, tracking tracing, ...)





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## Systems approach for seed – ISF pilot

- Ideas about the content of a harmonized framework (e.g., ISPM38 Annex) as the basis for confidence in a systems approach for seed
- Clear guidance for NPPOs on how to evaluate pest management practices applied by the seed companies
- Guidance on which elements should be present in the QMS.
- Guidance on the process of audits and certification.
- Roles and responsibilities of NPPOs and participating seed companies.
- Recognition of the clearly described framework in the Annex for the ISPM 38 should be sufficient for countries to adopt a systems approach for seed



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## Lessons Learned

- Early alignment between NPPOs and industry is essential
- Field-level engagement is a cornerstone of success. NPPOs who have visited seed fields and processing sites gain a deeper understanding of how mitigation measures are applied, resulting in stronger alignment, clearer expectations, and smoother implementation.
- Building trust takes time
- Documentation must clearly define roles and responsibilities
- Training and capacity building strengthen implementation
- Transparent data-sharing reduces uncertainty
- Communication is key when multiple stakeholders are involved



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## Building Global Confidence

### Systems Approach for seed

- contributes to efficiency and effectiveness of global seed trade while maintaining stringent phytosanitary standards
- enables regulatory oversight and immediate corrective actions in partnership with NPPOs
- provides increased transparency of industry practices
- reduces the need for border inspections
- supports countries with strained NPPO-resources



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# Seed is Life



Chemin du Reposoir 7 | 1260 Nyon | Switzerland

[www.worldseed.org](http://www.worldseed.org)

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# Thank you