



Food and Agriculture
Organization of the
United Nations



International
Plant Protection
Convention



Department
for Environment
Food & Rural Affairs

Emerging threats to plant health and food security A view from the seed sector

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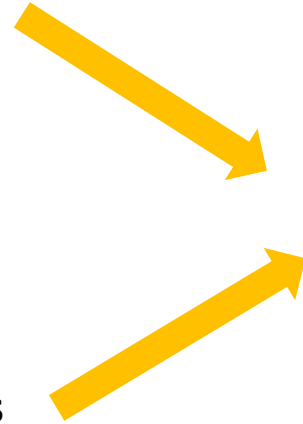
Countries

Risk Assessment
Implementation of phytosanitary measures
Surveillance



Seed companies

Deliver healthy seed, free from diseases
Follow national phytosanitary requirements



Common goal, shared need

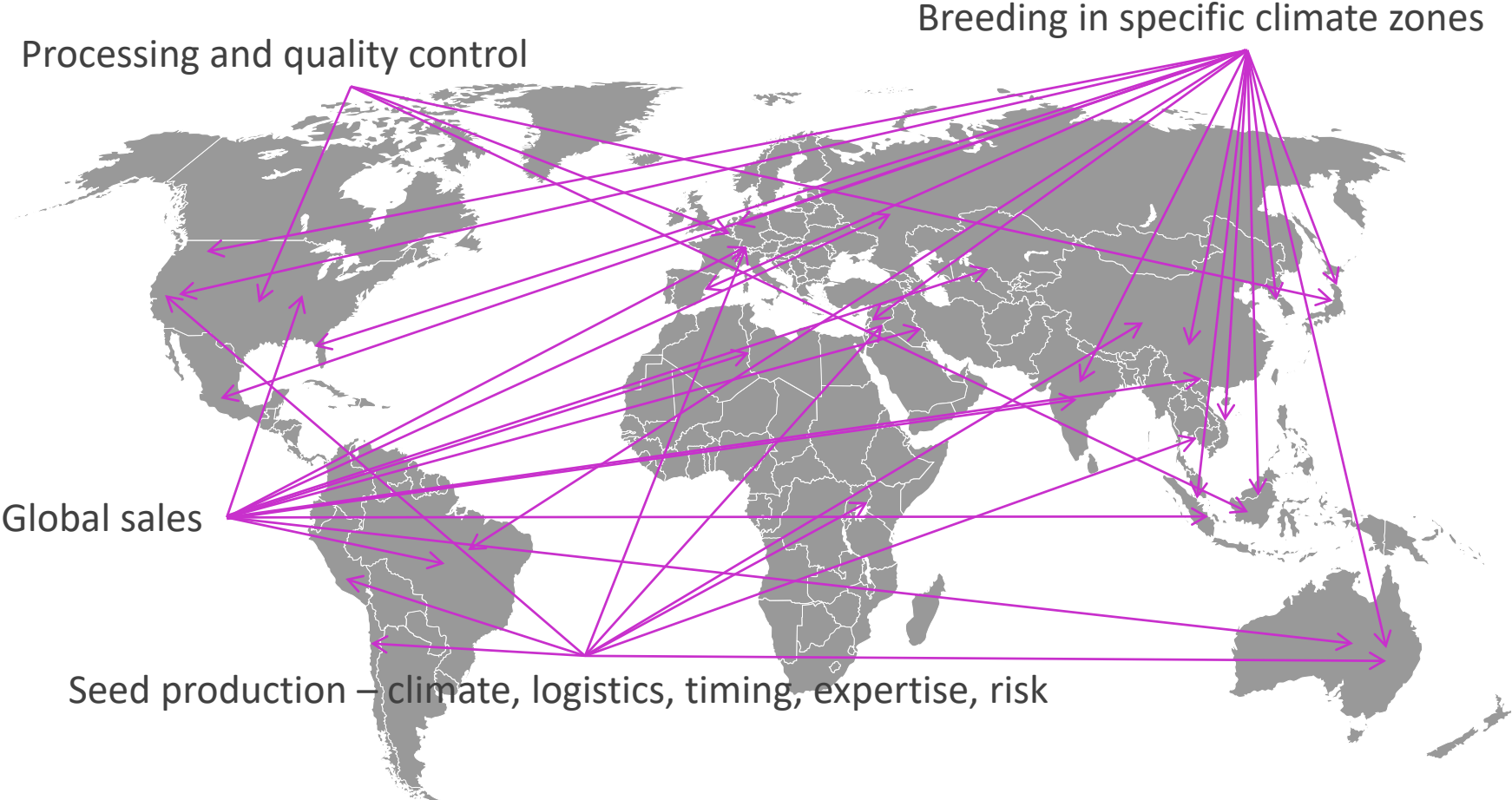
- Prevent pests from being introduced /established in new territories
- Facilitate trade



- It is in the interest of the seed industry to find mechanisms that ensure the safe movement of seeds in international trade in order to protect agriculture, human health and the environment and guarantee food security
- The IPPC recognizes the necessity for international cooperation in controlling pests of plants and plant products and in preventing their international spread

COLLABORATION IS KEY!

Vegetable seed business is global - import and export are essential



Quality control during the whole process

- Choice of seed production location (avoidance of pests), use of specialized and experienced seed producers
- During seed production – field inspections for diseases, off-types
- On arrival at the seed company – sampling by officially authorized samplers and testing
- Sampling and testing after processing steps when needed
- Information is kept in a database
- Analysis of data to take decisions about next steps



The GSPP Standard can be seen as a system that operates as described in the International Standard for Phytosanitary Measures No. 14 ‘The use of integrated measures in a systems approach for pest risk management’ (FAO/IPPC, 2017), which reduces the phytosanitary risk of *Clavibacter michiganensis* subsp. *michiganensis* (Cmm) infection by applying various measures in the chain of production.



This process was developed by Industry.

Four Main Threats:

Water – Disinfect

People – Training & Protective Clothes

Propagation Material – Compliant

Materials & Equipment - Disinfect



■ Principles of the system:

- isolation of the seed and seedling production location from the environment
- prevention of infection by managing the risk factors *)
- constant monitoring during the growing season of both seeds and young plants
- check before delivery: all seed lots must be tested by seed tests approved by GSPP
- independent audits





Training Aides and Precautions State of the Art Greenhouses

Attention to detail on sanitation and
registration of all personnel

Stringent Greenhouse Sanitation and

Management to reduce the risk of Cmm infection
during the entire seed production process.



Challenges in seed trade and possible solution

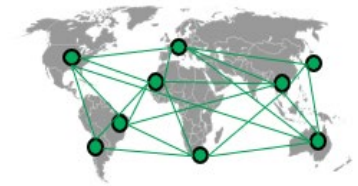
Challenges in the current trade system

- Consignment-by-consignment certification
- Increasing number of specific requirements and variation between Member States
- Import requirements
- Requirements for specific pests associated with seed
- Pesticide use as a business practice - not always aligned with the needs of all countries
- Lack of a common seed chain
- Lack of a consistent lot of small lots of seeds for research and breeding purposes increasingly difficult

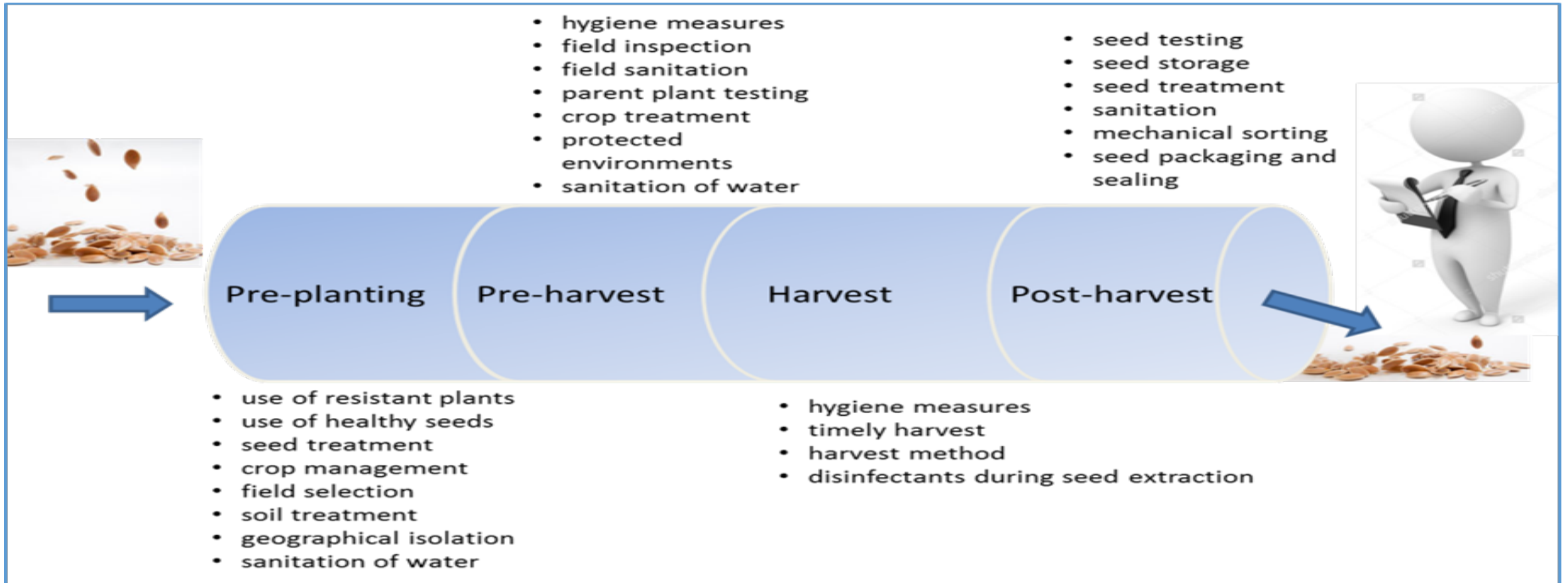
COMPLEXITY

Systems Approach as possible solution


- Approved companies produce 'Systems Approach-seed'
- Multilateral acceptance: seeds move easily between all countries where a systems approach has been agreed
- Phytosanitary certificates without the specification of individual pests
- An alternative option for countries to participate



Examples of pest risk management activities



THE VISION

A grayscale world map with a yellow rectangular box overlaid on the center, containing text.

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

Global acceptance via IPPC

HOW CAN WE GET THERE?

The Proposal

<https://www.youtube.com/watch?v=qwmow2mRRfc>



Seed is Life