

8<sup>th</sup> Meeting of the G20 Agricultural Chief Scientists  
(25th April 2019, Tokyo, Japan)



# Concept Paper:

## International Research Collaboration to Tackle Transboundary Plant Pests causing serious damage globally

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Ministry of Agriculture, Forestry and Fisheries

**MAFF**  
Ministry of Agriculture, Forestry and Fisheries

# Introduction

Damage caused by plant pests is responsible for loss of 20 - 40 % of global food production

Climate change

Global warming

Globalized movement  
of people and goods



Fall armyworm



*Schistocerca gregaria*



Wheat blast



*Xylella fastidiosa*

Source: CABI, Invasive Species Compendium

Increasing threat of transboundary plant pests

The latest  
information

Early detection

Prompt actions  
for control

# Collecting and sharing information on pest occurrence

Occurrence

Outbreak

Spread

What, When, Where, How many, ...

Information



Control

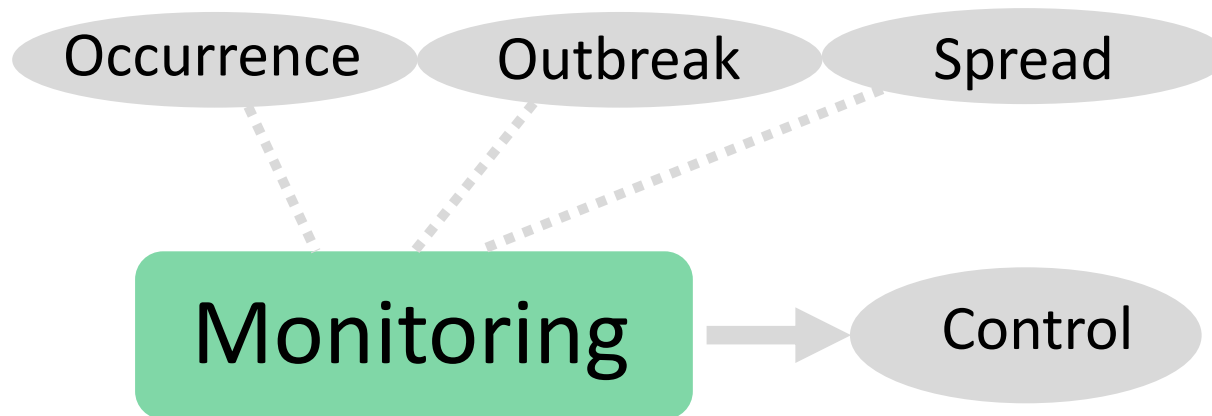
Once pests are established, their eradication is difficult and it requires a significant effort to control them



Necessary to collect timely information on pest occurrence, spread or outbreaks to take prompt and early actions to prevent

IPPC put Global Phytosanitary Research Coordination and establishment of network of diagnostic laboratory services among its priority areas under new IPPC Strategic Framework

# Monitoring technologies in the countries of pest occurrence



Developing countries have insufficient monitoring technologies

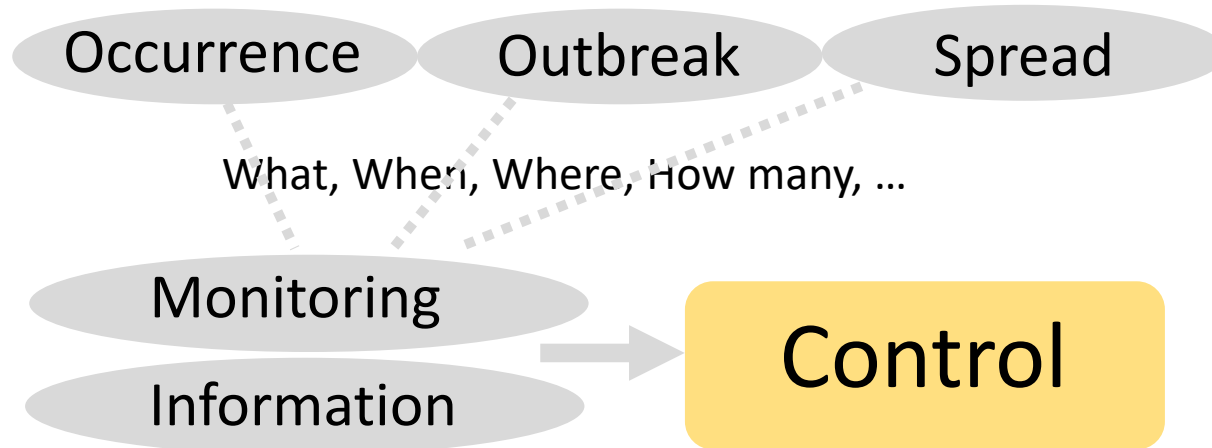
G20 member countries have useful technologies and  
valuable information for monitoring pests

e.g. to forecast migration of flying pests, to monitor insecticide resistance, databases of pests



Beneficial for all countries to increase their  
collaboration to reduce costs and increase  
response capacities

# Prompt actions to prevent the spread of pests and promote appropriate measures for their control



**Newly emerging pests**  
e.g. break down of resistant varieties,  
resistant to previously effective agrochemicals

**Necessary to promote research cooperation  
with countries of pest prevalence**

# Proposed actions for international research collaboration at G20 MACS 2019

- Hold a workshop to share experience and the latest information, and to facilitate research collaboration in Japan in 2019.
- Encourage core diagnostic laboratories and research institutes to establish networks, and other voluntary interactions.
- Promote research cooperation among interested members on some targeted transboundary plant pests.
- Strengthen collaboration with relevant international organizations and networks.