

# INVASIVE ALIEN SPECIES RISK ASSESSMENT

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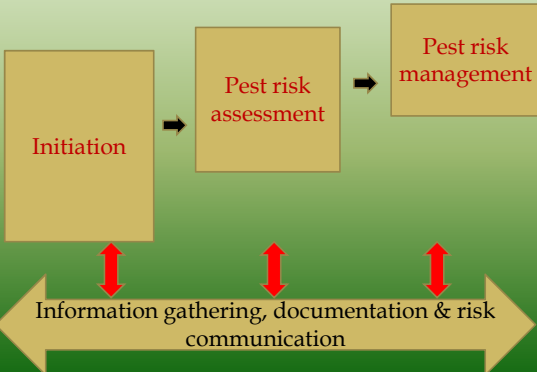
## International standards for pest risk assessments

- ▣ ISPM 2  
Frame work for Risk Analysis
- ▣ ISPM 11  
Pest risk Analysis for Quarantine pests  
including analysis of environmental risks  
and living modified organisms
- ▣ ISPM 21 Pest risk Analysis for regulated  
non-quarantine pests

## Types of risk assessments

- ▣ Pest- Pine wood nematode, stem borer
- ▣ Commodity/ pathway- pest associated  
with Teak logs from Malaysia
- ▣ Commodity itself- plants for planting,  
biological control agents

## Stages of PRA



## PRA Process

Not always linear  
iterative



## RISK ASSESSMENT METHODS

- Qualitative
- Quantitative
- Semi quantitative



## Initiation

- What are the triggers?



Pest

Pathway

Policy review



Organism



## Pest

- Is it a pest? - scientific evidence, history, impacts
- Define PRA area-  
whole country, separate states or island  
in a country, several countries, regions



## Pathway

- A list of pests likely to be associated with the pathway
- E.g. Pests associated with pine logs from  
New Zealand

## A Critical check

- ▣ Is there a PRA ? is it valid,

Networking

## Pest risk assessment

- ▣ Pest categorization
- ▣ Probability of introduction and spread  
Require in-depth analysis
- ▣ Economic and environmental impacts

## Pest categorization

- ▣ Can do with little information if sufficient
- ▣ Quick assessment (full assessment but done in less detail)
- ▣ Can decide a PRA requires or not ?
- ▣ If pest list - can eliminate organisms before a full PRA is undertaken

## Main aspects

- ▣ Identity
- ▣ Presence/absence in PRA area
- ▣ Regulatory status
- ▣ Potential for establishment and spread
- ▣ Potential for economic consequences

## Risk Assessment

- ▣ Assessment of  
Introduction and spread in the  
endangered area ( e.g. importing  
country)  
economic and environmental impacts

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**Overall pest risk**

## Risk Management

- ▣ Identification of Phytosanitary  
measures to reduce the risk to an  
acceptable level

Critical control points, System  
approach, treatments

**Cost effective & feasible**

## How to find information?

- Scientific publications or databases
- Pest records
- Pest reports
- Data from surveys
- Specimens
- Other risk analyses

## TERMINOLOGY

ISPM 5

Invasive species

Invasive alien species

Pest

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## Examples of Risk assessments

- **Pathway assessment -Eucalyptus chips & logs from Australia to the united states**  
<http://www.fpl.fs.fed.us/documnts/fplgtr/fplgtr137.pdf>
- **PRA Pine wood nematode**  
<http://www.biosecurity.govt.nz/files/regs/imports/risk/pinewood-nematode.pdf>
- **EPPO PRA**  
<http://www.eppo.org/QUARANTINE/quarantine.htm>

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Questions?

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