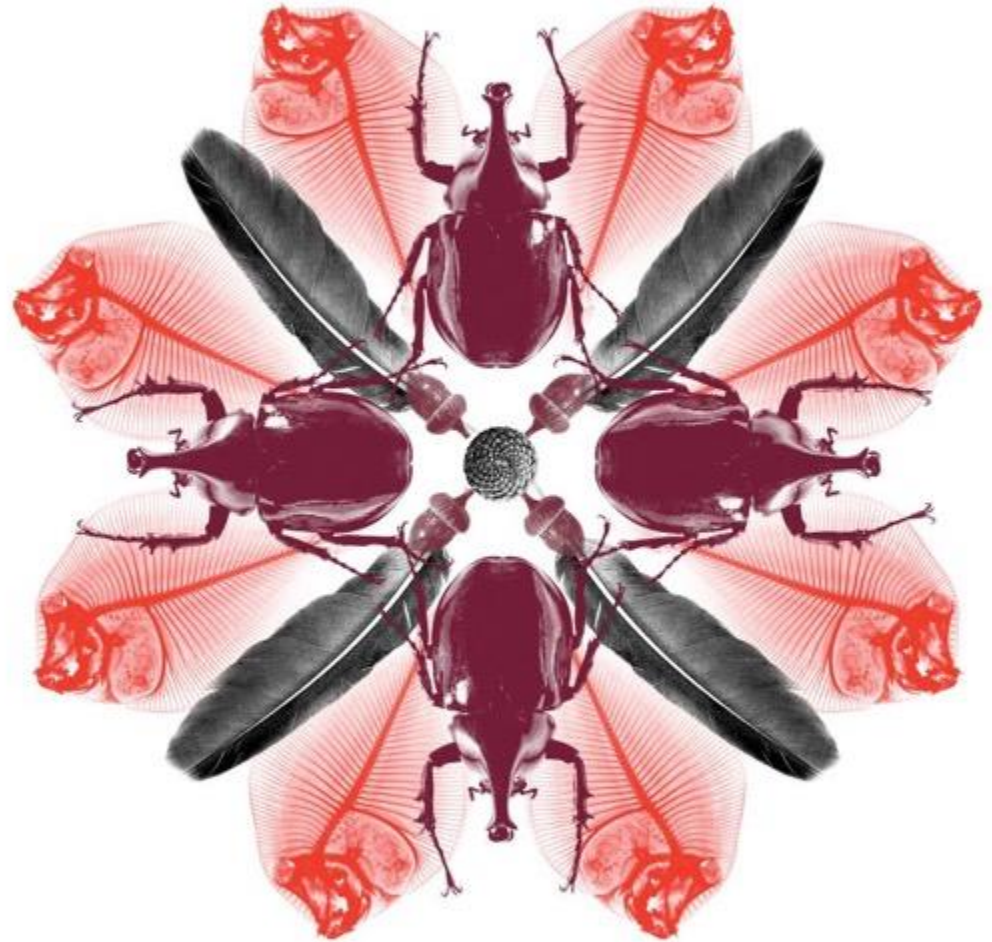


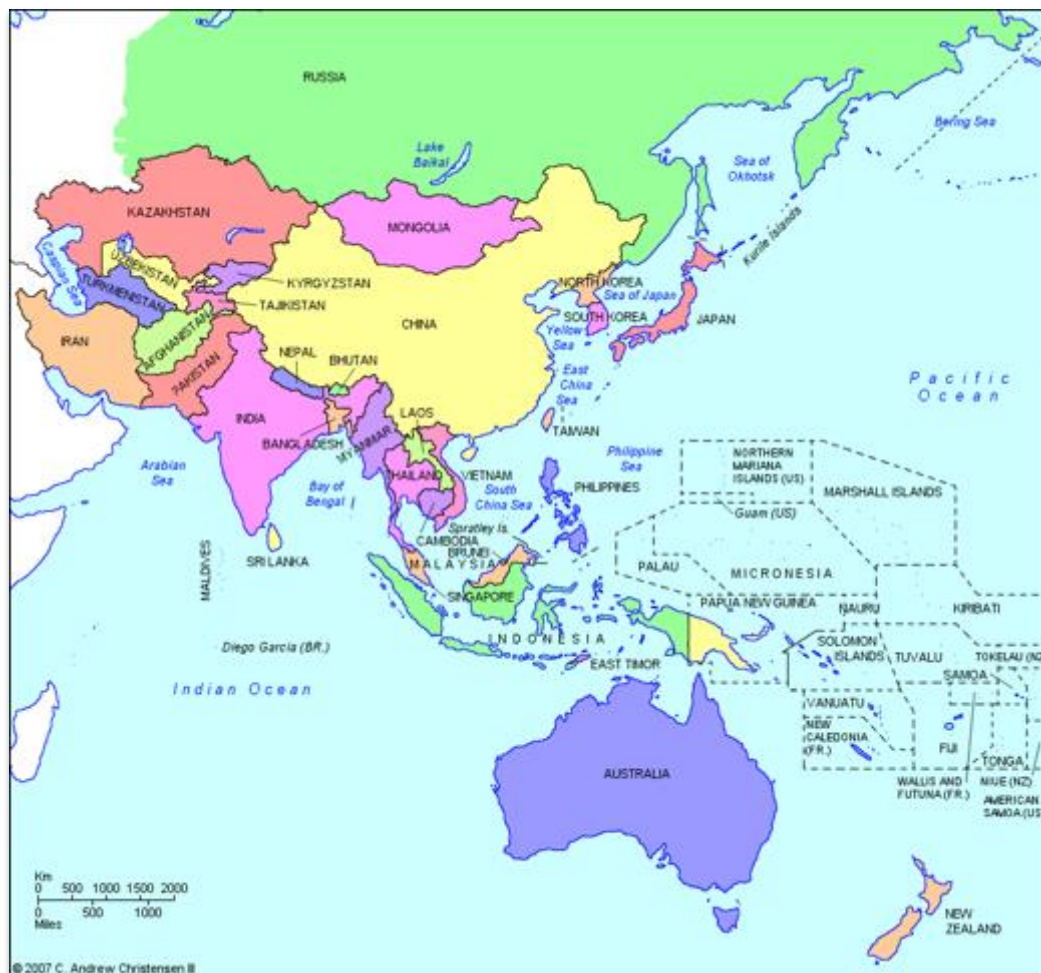
APPPC Surveillance Implementation Strategy

A Regional Perspective



*IPPC International Symposium
on PFAs and Surveillance*

Asia Pacific Plant Protection Commission (APPPC)



- **Twenty five** countries are currently members of the Commission:
- Australia, Bangladesh, Cambodia, China, Democratic People's Republic of Korea, Fiji, France, India, Indonesia, Laos, Malaysia, Myanmar, Nepal, New Zealand, Pakistan, Papua New Guinea, Philippines, Republic of Korea, Samoa (Western), Solomon Islands, Sri Lanka, Thailand, Timor-Leste, Tonga, Vietnam

Asia Pacific Plant Protection Commission (APPPC)



- The Asia-Pacific Plant Protection Commission (APPPC) was convened in 1956 and administers the Regional Plant Protection Agreement for Asia and the Pacific.
- The commission coordinates and promotes the development of regional plant protection systems, assisting member countries to develop effective plant protection regimes, setting standards for phytosanitary measures, and facilitating information sharing are among its key objectives.
- The Commission provides a regional forum for cooperation and the full implementation of the Plant Protection Agreement for the Asia and Pacific region.

Global Symposium on Plant Pest Surveillance, 29 October - 2 November 2012 Republic of Korea

REPORT OF THE GLOBAL SYMPOSIUM ON PLANT PEST SURVEILLANCE

29 October – 2 November, 2012

Anyang, Seoul, Republic of Korea

Executive summary

This symposium was established to develop assistance for countries in the implementation of International standard on phytosanitary measures (ISPM) 6: *Guidelines for surveillance*. It also set up for the first time priority setting for the development of manual guides based on comprehensive questionnaire results and manual framework description by an expert group with global representation.

Countries were to be assisted in the production of national manuals on surveillance. This was done by:

- Identifying the priority areas for attention. Information gathered by the IRSS questionnaire on ISPM 6 was used for this purpose.
- With these areas identified, manual frameworks were constructed by the meeting participants. These frameworks contained chapter headings with additional outline material included as appropriate.

Three basic areas of manual frameworks on surveillance were covered. These were:

- Surveillance operational guidance
- Surveillance technical support
- Surveillance management support.

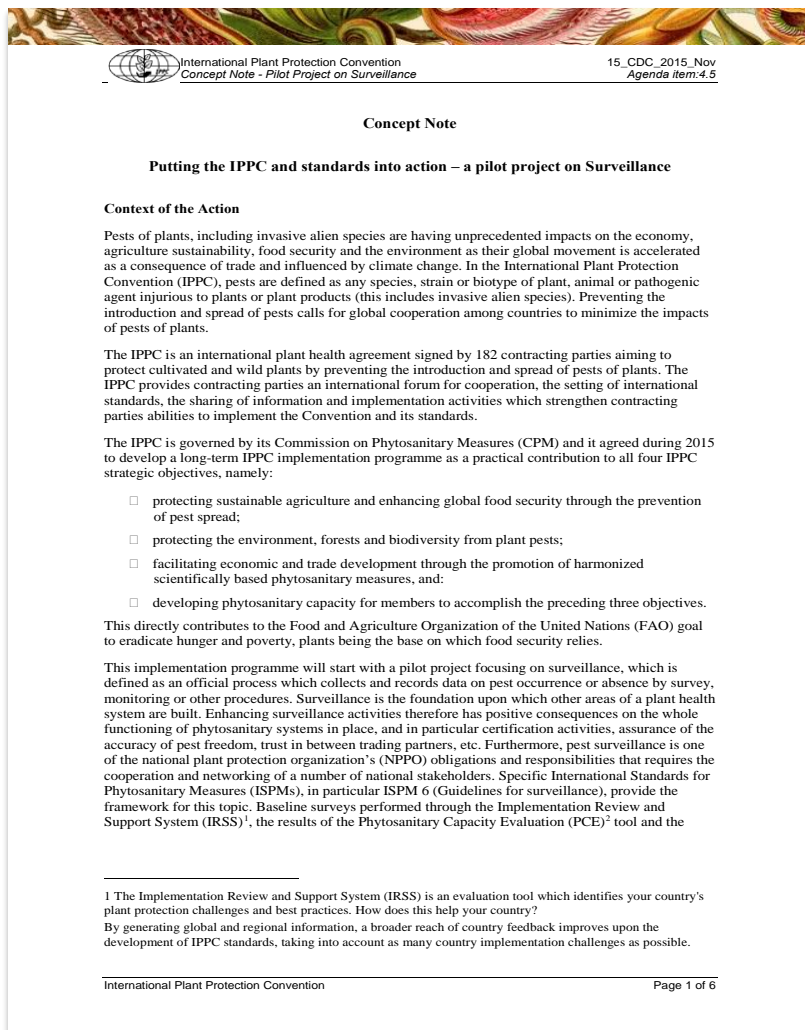
Under these headings, twenty manual frameworks were constructed:

1. Plant pest surveillance development
2. Training manual guide for field surveys
3. Information sharing and reporting (including warning)
4. Auditing and verification
5. Databases
6. Response surveillance (plan/planning) including delimitation and trace-back
7. Prioritisation – target pests
8. Trapping
9. Sampling and inspection
10. Procedures for traceability
11. Operational mapping/modelling
12. Crop loss-damage assessment
13. Response threshold
14. Plant pest diagnostics
15. Surveillance tools
16. Information management
17. Training (lab procedures and diagnostics)
18. Policy and management

Report of the Global symposium on plant pest surveillance / October-November 2012/ page 1

- The symposium discussed and addressed the issue of implementation of International standard on phytosanitary measures (ISPM) 6: *Guidelines for surveillance*.
- The symposium set priorities for the development of manual guides based on NPPO questionnaires.
- The symposium Identified priority areas for national and regional attention. Information gathered by the IRSS questionnaire on ISPM 6 was used for this purpose.
- With these key implementation areas identified, manual frameworks were constructed by the meeting participants. These frameworks contained chapter headings with additional outline material included as appropriate.

IPPC Surveillance Implementation Pilot

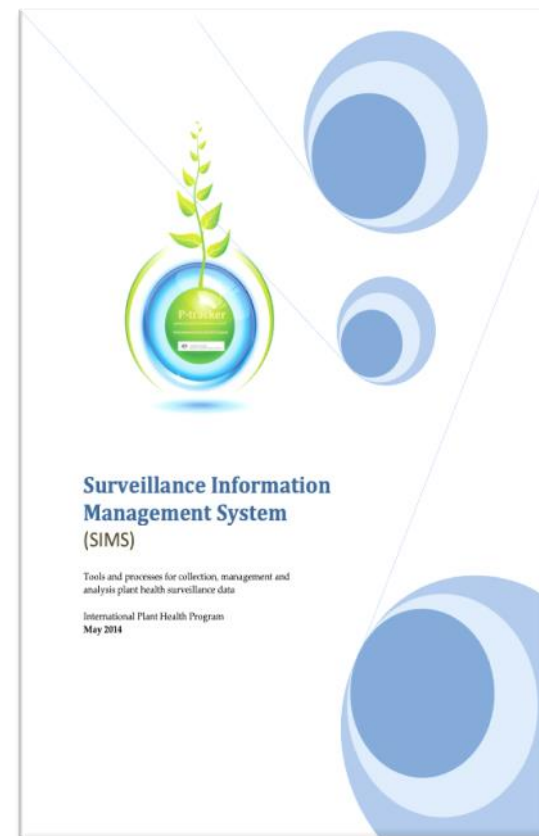
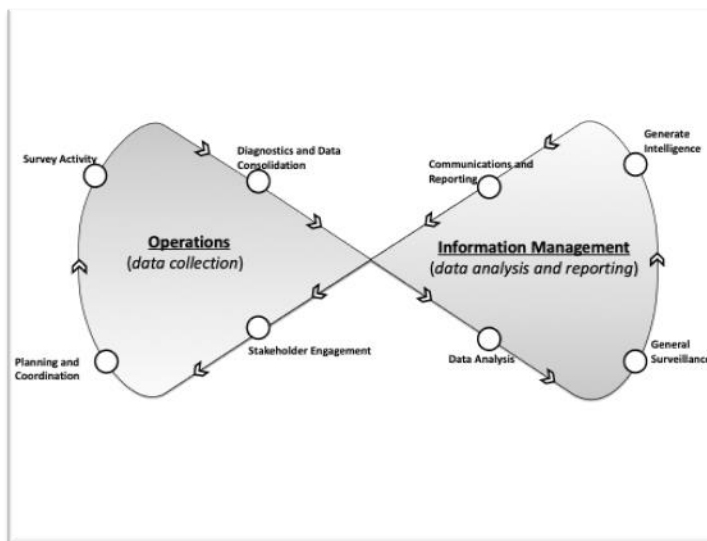


- Biosecurity and National Plant Protection Organisations within the Asia Pacific region initiated several activities from the surveillance implementation pilot including hosting a workshop to develop surveillance reference materials for three global priority pests.
- APPPC and IPPC surveys and workshops also identified implementation and adoption gaps and prioritised the development of plant pest surveillance manuals and new tools for the implementation of these priorities (i.e. data collection, management and reporting).

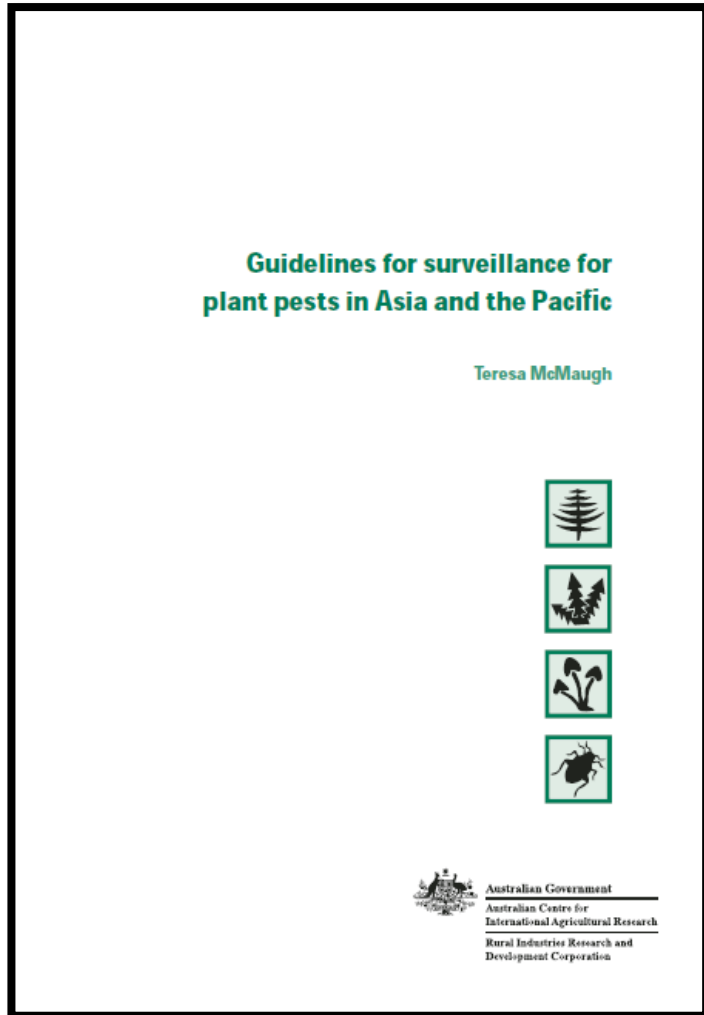
2014 APPPC Surveillance Information Management Systems (SIMS) Workshop

IPHP Field Surveillance Sequence (P-tracker) 2015

Field Name	Pre-Populated Field Values
SurveyID	- Country / Location / Year
CollectionID	- TBC (Collectors Unique Collection Id Code)
CollectionDate	- Date of Record
HostCommon	- Eg. Rubber Tree
HostGenus	- Eg. Ficus
HostSpecies	- Eg. Brasiliensis
PestOrder	- Eg. Caprimulgidae
PestFamily	- Eg. Mamestridae
PestGenus	- Eg. Mamestra
PestSpecies	- Eg. rileyi
PestCommonName	- Eg. South American Leaf Miner (SALB)
PestCategory	- Fungus
Location_Level1	- Country Location / District or Province Location
Location_Level2	- Immediate Location (Suburb, Town, Village)
Latitude	- GPS coordinate
Longitude	- GPS coordinate
Collector	- Participant Details
CollectionMethod	- Hand Collection - Trapping - Observation
RecordType	Specimen: a physical specimen has been collected. Observation: present: visual inspection indicates the pest is present Observation: absent: visual inspection indicates the pest is absent
DiagnosticResult:	Positive: positive diagnostic result for the pest (present) Negative: negative diagnostic result for the pest (absent) Unknown: unable to identify the pest Pending: the result of diagnostics are not yet confirmed/complete
Unit	- Individual Plants - Hectare - Square Meter - Transect
NumberInspected	- Total Number of Host Plants Identified
NumberPositive	- Total Number of Host Plants with Pest Positively Identified
IdentificationMethod	- Visual Inspection - Isolation - DNA
IdentificationDate	- Date of Formal Identification
Identifier	- Name of Scientist / Officer Performing Identification
References	- Taxonomic Reference
Notes	- Any additional information of relevance to the record



APPPC 6-Year Surveillance Implementation Strategy



- APPPC approved the coordination and delivery of a series of six annual regional surveillance implementation workshops for the regional harmonisation of ISPM6 (*Guidelines for Surveillance*).
- The strategy aimed to strengthen regional surveillance systems and management capabilities, supporting the implementation of international and regional surveillance standards (ISPM 4, ISPM 6, ISPM 26 and RSPM No.3) through the provision of technical training, supporting reference documents, online learning resources and field surveillance tools.

APPPC Surveillance Implementation Strategy (2016-2022)



THE SURVEILLANCE SYSTEMS AND MANAGEMENT WORKSHOP

6th - 10th June 2016

CONCEPT PAPER FOR THE SURVEILLANCE SYSTEMS AND MANAGEMENT WORKSHOP

6th - 10th June 2016

1. Background

Biosecurity and National Plant Protection Organisations within the Asia Pacific region have been involved in several activities with an aim to identify issues and priorities for implementing international standards associated with biosecurity surveillance. Recent APPPC and IPPC workshops have identified gaps and prioritised the development of plant pest surveillance manuals and new tools for the implementation of these priorities (i.e. data collection, management and reporting).

Recent capacity needs assessments of IPPC members have identified biosecurity surveillance activities as being both a priority and capacity development need throughout the Asia Pacific region. In recognition of this capacity development need and the recent development of surveillance manuals, biosecurity surveillance specialists will deliver a series of annual workshop activities (over a six year period), on the implementation of ISPMs (*Guidelines for Surveillance*) and include management of national surveillance systems.

The initial workshop on 'Plant Health Surveillance Systems and Management Workshop' will introduce participants to the fundamentals of surveillance systems and management responsibilities of an NPPO. This will also be relevant to establishing and maintaining plant health surveillance systems in accordance with ISPM 1 (revised Oct '15) and the IPPC obligations. It is proposed that this workshop will be delivered in June 2016, funded by the APPPC and delivered by the Australian Department of Agriculture and Water Resources (DAWR).

The 'Plant Health Surveillance Systems and Management Workshop' will be coordinated by the APPPC Secretariat and delivered by DAWR plant health surveillance specialists over a five-day workshop in a location TBC. The Australian Department of Agriculture and Water Resources has significant experience in the development and implementation of surveillance systems and has considerable experience in the delivery of biosecurity capacity development activities throughout the South East Asia and Pacific region.

Biosecurity surveillance managers from each of the members of the APPPC are invited to participate in the workshop.

Concept paper for workshop on Surveillance Management Systems - June 2016 page 2

- Plant Health Surveillance Systems Management (2016)
- Surveillance Planning, Coordination and Delivery (2017)
- Surveillance Information Management Systems (2018)
- Surveillance Statistical Analysis, Mapping and Intelligence (2020)
- Surveillance Communication, Reporting and Response (2021)
- Plant Health Surveillance Pest-Free Areas Case Study (2022)

APPPC Regional Surveillance Workshops (Thailand & China 2016-2018)





FAO Regional Surveillance Programs



CMD CASSAVA FIELD SURVEILLANCE



Cassava Mosaic Disease Survey Methodology (Draft)



CMD Surveillance Background

- CMD is transmitted by whiteflies (*Bemisia tabaci*) and also through planting infected cuttings. The virus is not seedborne in cassava. However, the virus is disseminated in the stem cuttings used routinely for propagation. As part of the effort to mitigate the effects of these diseases and guide control interventions, surveys are conducted regularly to monitor changes in disease incidence, severity and spread.
- The symptoms of CMD in cassava are usually conspicuous and obvious, and much of the evidence on the occurrence, incidence and spread of disease is based on visual observations.
- Symptoms are sometimes indistinct, especially in dry conditions when vegetative growth is restricted, or when plants develop symptoms of mineral deficiency, or are severely attacked by cassava green mite (*Mononychellus tanajoa*) or cassava mealybug (*Phenacoccus manihoti*).



Disease Symptoms


- The symptoms of CMD occur as characteristic leaf mosaic patterns that affect discrete areas and are determined at an early stage of leaf development.
- Leaf chlorosis may be pale yellow or nearly white with only a tinge of green, or just discreetly mottled rather than normal.



APPPC Surveillance Implementation


STDF SIMS Project







Post-Entry Plant Quarantine Center No. 1
Vien Street, Duc Thang ward
Bac Tu Liem district
Hanoi, VIETNAM

MENTORING AND TRAINING WORKSHOP PROGRAM



Standards and Trade Development Facility



Future Opportunities for Regional & Global Surveillance Implementation

- APPPC regional surveillance initiatives and experience is now being used to promote broader global surveillance implementation and harmonisation. These include;
 - Development of an e-Learning surveillance training course based on APPPC workshop materials and group exercises
 - Development of a APPPC regional surveillance reference and resource portal (linked through IPPC Web Site) to support, maintain and promote the regional network and new surveillance members
 - Development of a Global Surveillance Project Register to include regional APPPC projects and promote NPPO and regional projects (FAO TR4, FAW, CMD regional initiatives)
 - Development of a Global Surveillance Experts Register to promote regional NPPO surveillance specialists and subject matter experts (surveillance data collection, training etc.)
- Future opportunities to roll out the APPPC surveillance implementation model across other RPPO's utilising regional subject and training experts