

INTERNATIONAL STANDARDS FOR PHYTOSANITARY MEASURES  
ISPM No. 6  
GUIDELINES ON PEST SURVEILLANCE

## SURVEY RESPONSES FROM APPPC COUNTRIES

Yongfan Piao

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- Identification of Challenges and best Practice  
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## Survey responses

Country	Questionnaire	Technical Resources	Best Practices
Australia	x	x	5
Bangladesh	x	x	1
China P.R.	x	x	1
Fiji	x	x	1
India	x	x	1
Indonesia	x	x	1
Japan	x		
Korea, Republic of	x	x	1
Laos P.D.R.	x	x	1
Malaysia	x	x	1
Myanmar	x	x	1
Nepal	x	x	1
New Zealand	x	x	1
Philippines	x	x	1
Sri Lanka	x		1
Thailand	x	x	1
Vietnam	x	x	1
<b>Total</b>	<b>17 countries</b>	<b>13 countries</b>	<b>14 countries 17 best practices</b>

### A. Policy and legislative environment

Regional norm (>2/3 of countries)

- Policy setting: trade (50%), pest management (30%) and quarantine (20%)
- Primary pest surveillance responsibility with NPPO
- There are other organizations that are officially mandated to conduct pest surveillance by law, mission or job descriptions
- NPPO is the national coordinator of mandated organizations
- NPPO can mandate other organizations in emergencies
- Collaboration with other organizations is based on written agreements
- Pest surveillance follows a strategic and operational plan
- NPPO is responsible for surveillance of regulated and non-regulated pests

### B. Organizational structure, competence and culture

Regional norm:

- Pest surveillance is centralized under a national manager
- On average, probably more than 10 organizations are involved in pest surveillance
- NPPO maintains formal linkages to external sources and engages them to support and improve pest surveillance
- In emergencies, stakeholders are included in the planning team
- NPPO surveillance program has a well developed and compatible data system to collect, store and report information
- NPPO pest surveillance programme has procedures to review its performance

### C. Documented procedures

Regional norm (> 2/3 of countries):

- Majority of NPPO use a computerized retrieval system
- NPPO records include
  - Scientific name of pest
  - Scientific name of host
  - Plant parts affected
  - Date and name of collector
  - Date and name of identifier
  - Location
- Locations are specified by GPS coordinates
- NPPO has an operational manual for general pest surveillance

### D. General surveillance

Regional Norm (>2/3 of countries)

- There is an easily accessible national database of plant pest records
- <75% of records are verified
- Plant pest records are compiled from NPPO, research institute and university information
- Sufficiency of resources is rated *intermediate* to *sufficient*
- Pest identification service is open to the public

## E. Specific surveys

Regional norm (>2/3 of countries):

- There is a specific, trained manager with overall responsibility for surveillance
- Plant species/products regularly surveyed range from 1 to about 250
- Rice is most often surveyed
- There are no agreements between NPPO and private institutions to cover expenditures for surveys
- There are agreements between NPPO and public institutions to cover expenditures for PFA, ALPP, etc.
- Pest survey procedures are described in operational manuals
- These manuals are periodically evaluated

## F. Resources

Regional norm (>2/3 of countries):

- NPPO annual surveillance investments range from \$600 to >\$10 million
- Other annual surveillance investments range from \$0 to <\$50 million
- Percent of NPPO budget for pest surveillance salaries range from 0% to 40%
- There are no private sector contributions
- Sufficiency of other resources is rated *marginal to intermediate*
- The number of human resources is rated *weak to average*
- The qualifications of human resources is rated *average*
- In the majority of countries, only about 25% of the surveillance staff have been trained to do so
- Training programs for staff are carried out once every 1-3 years

## Things that affect the ability to conduct pest surveillance

- Lack of (skilled) personnel = 17 times (first priority = 1 time)
- Lack of funding = 12 times (first priority = 7 times)
- Lack of infrastructure/research = 11 times
- Lack of cooperation and participation = 8 times (first = 1 time)
- Unclear central/federal responsibilities = 4 times (first priority = 2 times)
- Lack of clear policies = 3 times (first priority = 1 time)

## Things to improve in ISPM 6

- More detailed procedures
  - Case studies/examples
  - Report format/standard phrases
- Note: many answers related to improving the country's surveillance program rather than improving the ISPM guidelines themselves.

## TECHNICAL RESOURCES

- Many of the technical resources listed by one country may also be of interest to another country. An exchange of relevant resources among countries is encouraged.

Note: Many of the categories are not easily distinguishable. For example, a resource may be listed as training material, manuals, guidelines dependent on one's point of view.

## BEST PRACTICES

The best practice examples submitted cover a full range of surveillance applications:

- Early detection of new pests
- Surveillance methodology for high risk sites
- Pest status reports
- Pest management and population dynamics
- Pest control

## CONCLUSIONS

- The responses to the survey provide an excellent and representative view of ISPM 6 implementation in the region.
- There are huge differences between the countries in terms of available human, financial and material resources which inevitably affect the implementation of ISPM 6
- The list of technical resources will be an excellent source for the exchange of ideas, training materials and operational manuals between APPPC countries
- The submitted best practices provide excellent examples for pest surveillances under ISPM 6

## LIMITATIONS

- Some country responses may have been affected by a different understanding of "pest surveillance"
- The differences in definition between general surveillance, specific surveys, pest surveys, host surveys, targeted and random sampling may have been difficult to understand
- The questionnaire may not have brought out some of the obvious differences between countries; for example, the responses of New Zealand and Laos to Yes/No questions were identical in 70% of the cases despite the huge differences between the two countries (for comparison: New Zealand and Australia responses were identical in 83% of the cases)

## ISSUES (1)

- National plant protection organizations (i.e departments, agencies, services, etc.) are usually organizations that have other responsibilities besides acting as NPPO for IPPC. Giving the same name for a very limited IPPC function as for the wider national function of plant protection creates confusion and misunderstanding.
- Likewise, giving a very limited definition to the widely practiced activity of pest surveillance and surveys creates confusion and misunderstanding

## ISSUES (2)

- To assess the performance of IPPC pest surveillance in a country, it would also be important to know
  - The number of pest records collected
  - Number of declarations of pest freedom issued
  - Number of new pests detected
  - Number of IPPC/NPPO pest lists produced
  - Number of Pest Risk Analyses performed